Spring 2013

Honors Research Symposium Program [Spring 2013]

University Honors Program Students and Staff

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2013 Honors Research Symposium
Nessmith-Lane Conference Center
Georgia Southern University

Program Schedule

Reception and Poster Presentations 12:00 noon - 1:15 pm
Nessmith-Lane Ballroom

Welcome 12:30 pm
Dr. Steve Engel
Director, University Honors Program

Dr. Jean Bartels
Provost and Vice-President for Academic Affairs

Dr. Brooks Keel
President

Thesis/Capstone Presentations 1:30 pm - 5:00 pm
Nessmith-Lane 2nd floor classrooms

Session I 1:30 pm - 2:30 pm
Session II 2:45 pm - 3:45 pm
Session III 4:00 pm - 5:00 pm
NESSMITH-LANE BALLROOM

1. Elijah Anderson
United States Humanitarian Intervention: When and Why?

2. Jade Boykin
Early to Bed and Early to Rise Makes One Smile? An Examination Between the Amount of Sleep and Subjective Happiness

3. Laynie Brown
An Examination between Swimming Ability, Gender, and Race - An Exploratory Investigation

4. Haley Cronon
An Examination of a Motor Imagery Intervention to Improve Pedaling Symmetry in a Post Stroke Hemiparesis Patient: A Case Study Approach

5. Emily Dodd, Helen Barrett, Chris Kimbrell, and Jenna Florence
Animal-Assisted Therapy with Prisoners and Substance Abuse

6. Caroline Greene
Evaluating Service Learning of Freshman Honors Students

7. Claire Goodwin
The Effects of Psychological Intervention on Anxiety and Confidence Levels of First-Year Athletic Training Students during Emergencies

8. Zo Haynes
An Exercise using the Program “Vectorworks”

9. Emily Hulsey
Sex (still) Sells: How Trafficking in the United States and Thailand Perpetuates Minority Repression

10. Corinna Miller
Little Emperors and an Army of Orphans: The Government’s Control over the Idea of Family in an Overpopulated World

Poster Presentations
12:00 noon - 1:15 pm
11. Paola Robelo
Is Facebook Divorcing the World from Social Life?

12. Joshua Rogers
Are You Russian? The Case of a National Identity Crisis in Moldova

13. Mikaela Shupp, Sarah Holmes, and Trey Robertson
Animal Assisted Activities with Children and Special Needs Population

14. Jana Simmons
The Impact of Gubernatorial Shifts in Power on State Health Care Policy

15. Sarah Simpson
An Examination of Healthy Eating across Cultures: An Existential Phenomenological Approach

16. Tyler Stone
Women In Law Enforcement

17. Dora Suarez
Latin American Women in the Eye of the Beholder: A Hermeneutic Reading of García Márquez and Rosario Ferré

18. Shawna Wade
Dogs and Paw Dominance: Do They Relate to their Owners as Much as One Would Think?
Session I
Thesis/Capstone Presentations
1:30 pm - 2:30 pm

ROOM 2911

Angelika Foucher  International Studies
When Cultural Narratives Collide: The Role of the Homosexual Community in Defining French Identity
Danielle Smith
This research analyzes how two competing narratives can lead to clashing ideas in government and society, thus affecting identity and inclusion/exclusion of a certain group. The case study is one of sexual orientation in France, a country where the movement to define a single national identity is becoming more prominent.

Neanus Anton Hughes  International Studies
Complementary Colors: Perceptions of College Students Towards Interracial Dating
Dr. Sun-A Lee and Dr. Darin Van Tassell
The objective of this study is to examine the perceptions of college students concerning Black-White relationships. An “Interracial Dating Survey” and modified K-IDPQ form was administered to 507 university students. The results indicate that ethnicity, gender, and type of childhood neighborhood are related to attitudes towards interracial dating.

Sydney Robinson  Political Science
The Role of Sovereignty in the Implementation of United Nations Security Council Resolutions by the United States and the European Union
Dr. Jamie Scalera
This paper examines Resolution 1373 and Resolution 1973 in a most similar design and a least similar design. I propose that goals of the U.S. and E.U. are similar and it is a fear of loss of sovereignty that causes hesitancy by the U.S. in full cooperation with the U.N.
Matthew Earnest  
Civil Engineering
Evaluation of Crumb Rubber Modified Asphalt with Vestenamer TOR  
Dr. Junan Shen
Crumb rubber is a product processed from scrap tires and has been introduced into asphalt binders. To enhance the compatibility and stability of the crumb rubber modified asphalt binders, Vestenamer TOR is added. The goal of this research is to evaluate the performance of crumb rubber modified binders with TOR.

Efadul Huq  
Civil Engineering
Making Ultra-High Performance Concrete without Extreme Treatments and with Rudimentary Equipment  
Dr. Gustavo Maldonado
Concrete is the most widely used building material in the world. This research developed Ultra High Performance Concrete without any extreme pressure or temperature treatment and with rudimentary equipment. Results show compressive strengths reaching over 19 ksi at 28 days of curing, which is 4 times stronger than typical concrete.

Amy Pressley  
Chemistry
Synthesis, Characterization, and Catalysis of Manganese-Amino Acid Complexes within Faujasite-type Zeolite Compounds  
Dr. L. Shannon Davis
Oxidation catalysis is a reaction necessary for the production of plastic intermediates. Unfortunately, the process of oxidation catalysis is poorly selective, creating unwanted byproducts and a low yield. A catalyst made from inorganic analogs of enzymes could provide a more efficient, selective method for oxidation of organic compounds.

Vincent Dattilo  
Economics
The BCS Effect: Analyzing Differences among Spending Patterns by Universities in Collegiate Athletic Conferences  
Dr. Anthony G. Barilla
This paper examines the relationship between conference performance and yearly operating expenditures of collegiate athletic programs. The goal of this study was to determine when yearly budget increases impact performance and to what extent, as well as when diminishing returns begin to impact the results gained from budgetary expansion.

Samantha Hairston  
Accounting
The Harmonization of International Auditing Standards and U.S. Generally Accepted Auditing Standards  
Dr. Leslie Fletcher
This paper presents an overview of international auditing standards and U.S. Generally Accepted Auditing Standards (GAAS) and assesses the options of partial or full adoption of International Standards on Auditing (ISAs) or convergence with U.S. GAAS by examining the current efforts in harmonization of other nations.

Charles-Robert Riebel  
Accounting
Tax Rate Arbitrage and its Effect on the U.S. Market  
Dr. Cheryl Metrejean
The high U.S. corporate income tax rate of thirty-five percent encourages U.S. businesses to establish operations abroad to utilize favorable tax jurisdictions and stockpile cash overseas. If the U.S. rate were lowered, it is possible that our corporations would have more incentive to invest domestically, thus stimulating the U.S. economy.

Hayley Spencer  
Mathematics
Making Connections: How Trigonometric Concepts are Connected to Geometry and Arithmetic  
Dr. Joy Darley
This research focuses on the missed connections between mathematics courses. An assessment with “families” of related problems from arithmetic to trigonometry was given to college level trigonometry students. In many cases, mistakes made with trigonometry problems were linked with corresponding errors made with arithmetic or algebra.
ROOM 2904

Devin Cifu
Depictions of Hell in Literature: Pre- and Post-Dante
Dr. Hemchand Gossai
This thesis explores the development of the idea of Hell in its various iterations from the time of Homer through Sartre with a particular focus on Homer's Iliad and Odyssey, Virgil's Aeneid, Dante's Inferno, John Milton's Paradise Lost, and Jean Paul Sartre's No Exit.

Garrett Litton
The Evolution of Governance and Policy in Tudor England
Dr. Robert Batchelor
Previous scholarship in Tudor politics has focused on the bureaucracy and the top-down management style that G.R. Elton hypothesized in The Tudor Revolution in Government; however, the true nature of Tudor politics was in the flexibility, innovation and continuity of Tudor governance, based around the Privy Councilors.

Kurt McGee
Portrayals of Mental Disorders in the Novels of William Faulkner and Virginia Woolf
Dr. Hemchand Gossai
This thesis examines three novels, The Sound and the Fury, As I Lay Dying, and Mrs. Dalloway, as a platform from which to explore the similarities and differences between the portrayals of psychopathy and schizophrenia in several characters created by Faulkner and Woolf.

ROOM 2905

Elijah O'Cain
The Impact of Private Boat Docks on Meiofaunal Abundance and Diversity in Georgia Salt Marshes
Dr. Daniel Gleason
I measured the impacts private boat docks have on benthic meiofaunal communities in Georgia salt marshes by taking core samples from under boat docks and in areas where boat docks are not present. Boat docks had no impact on meiofaunal community structure, but did have negative impacts on meiofaunal abundance.

Sarah Farmer
Bipedalism in the Florida Scrub Lizard, Sceloporus woodi
Dr. Lance McBrayer
Bipedal locomotion has been observed in many species, including lizards. Here, we have used frame-by-frame digital analysis to monitor the lizard Sceloporus woodi's foot falls and bipedal transition in order to better understand why and when they start into the bipedal motion as compared to quadrupedal running.

Donald Vickers
Aquatic Invertebrates Associated with Beaver Dams in a Southeastern Coastal Plain River System
Dr. Checo Colon-Gaud
Beaver dams are known to produce changes in stream physical habitat that result in changes in water flow, organic matter standing stocks, and consumer diversity. We sampled benthic macroinvertebrate communities and organic matter standing stocks along the Ochopee River to test the degree in which the dams affect the system.
<table>
<thead>
<tr>
<th><strong>Leslie Fouraker</strong></th>
<th>Psychology</th>
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<tbody>
<tr>
<td>Images and God</td>
<td>Dr. Michael Nielsen</td>
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<td>Recent research into God as an attachment figure reveals the capacity of God (or divine figure) to function in relationship with individuals similarly to the way humans interact with and conceptualize one another. This research considers the ebb and flow of God to human relationships as manipulated by image cognition.</td>
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<tr>
<th><strong>Kylie Hall</strong></th>
<th>Psychology</th>
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<tbody>
<tr>
<td>The Relationship Between Stigma Consciousness and Empathy</td>
<td>Dr. Amy Hackney</td>
</tr>
<tr>
<td>Stigma consciousness is the extent to which a member of a stereotyped group expects to be stereotyped, and empathy is a recognition of or emotional response to the situations of other people. The present study is the first to test empirically the relationships between these constructs.</td>
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<th><strong>Nadim Khatib</strong></th>
<th>Psychology</th>
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<tbody>
<tr>
<td>Effects of Negative Gender Stereotypes on Implicit Affect and Females’ Leadership Aspirations</td>
<td>Dr. Amy Hackney</td>
</tr>
<tr>
<td>This research investigated the effects of negative stereotypes about female leaders on implicit affect and leadership aspirations. Participants in the experimental groups read one of two negative stereotypes about female leaders that were embedded in a newsmagazine article. Participants then completed measures of implicit affect, leadership aspiration, and personality.</td>
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Ashton Green  
**Philosophy**  
On Betrayal  
Dr. Hemchand Gossai  
This project examines betrayal in its different aspects – betrayal of the other, of the self, of society, and of the non-human – while exploring the relation of betrayal to truth and forgiveness, and morality. The elucidation of betrayal allows for an understanding of emotions, ethics, and of the human condition.

David Greenberg  
**Political Science**  
Empathy’s Role in Creating Citizens: An Analysis of Aristotelian Themes in Ridley Scott’s *Blade Runner*  
Dr. Robert Pirro  
*Blade Runner* offers a case study of a society operating under Aristotelian political structures. Aristotelian scholarship notes that a proper connection between intellectual and practical reasoning is necessary for citizenship. Empathy, through tragedy, creates this connection. Analysis of the film provides insight into the creation of empathy.

John Whetsell  
**Philosophy**  
Culprit of Double Ignorance: Enslavement to Fear of the Unknown  
Dr. Hemchand Gossai  
What could the golden force behind the ideal, well-living individual be? It is most definitely a quality of understanding in the pursuit of this seemingly elusive ideal. The inquiry, as to why some persons make mistakes, and only some persons live well and do good, is given a probable answer.
**ROOM 2903**

**Stephen Onks**  
**Sport Management**  
*An Analysis of Social Media In Collegiate Athletics*  
**Dr. Todd Hall**  
How does Georgia Southern rank against its competitors in terms of social media impact and how many new fans can on the field exposure attract to an athletic department’s fan page? Data was gathered on the number of followers on the school’s social media sites, Facebook and Twitter.

**Zachary Riddle**  
**Finance**  
*Riddle Technology Solutions - Providing Innovative Technology Solutions to Residential & Commercial Clientele*  
**Dr. John Hatem**  
This work discusses one kid’s journey from the neighborhood tech geek to technology entrepreneur. It is a story of his progression from simple computer repair to I.T. advice and counsel for commercial enterprises.

**Anna-Marie Thompson**  
**Management and Marketing**  
*The Showrooming Effect and the New Look of Retail for Consumers*  
**Dr. Kathleen Gruben**  
Explores the issue of Showrooming, which is a retail concept defined as when a consumer uses brick-and-mortar stores to try out products, but then uses a different channel to buy the product later. What is being done to confront this issue and how will retail evolve from this?

**ROOM 2904**

**Sara Curry**  
**Recreation**  
*What Motivates Adults with Physical Disabilities to Participate in Competitive Sports?*  
**Dr. Brent Wolfe**  
The research examines what motivates adults with physical disabilities to participate in competitive sports. Seven motivational themes were explored through specific subthemes from data gained via face-to-face interviews with 14 athletes with physical disabilities. The results will inform the development and adjustment of sports programs for adults with physical disabilities.

**Krystina Johnson**  
**Health Education and Promotion**  
*Correlates of Physical Activity with Health Risk Behaviors and Academic Achievement in College Students*  
**Dr. Ashley Walker**  
College students are among the most physically active in the U.S., but are more likely to participate in health risk behaviors such as binge drinking and tobacco use. The purpose of this study was to examine potential relationships among physical activity and health risk behaviors, as well as academic achievement.

**Genevieve Lyke**  
**Exercise Science**  
*A Qualitative Analysis of what Admission Departments of Doctor of Physical Therapy Programs Consider the Ideal Physical Therapy Student*  
**Dr. Daniel Czech**  
The purpose of this study is to examine what admission offices consider to be the optimal candidate for physical therapy programs. This data will be collected by interviewing ten accredited Doctorate-level physical therapy schools. The results from this study will help undergraduate students and undergraduate schools prepare for the future.
**Matthew Campbell**  
**Chemistry**  
Study of Potential Several Porphyrin Molecules as Potential Photodynamic Therapy Reagents  
**Dr. James LoBue**  
Photodynamic therapy is a relatively new form of chemotherapy that has less negative side effects for the patient. This study was conducted to find which tetraphenyl porphyrin had the best characteristics to be used in photodynamic therapy.

**Janessa Dunn**  
**Chemistry**  
Microwave-Assisted Synthesis of Biologically Active Spiroindoline Derivatives  
**Dr. Shainaz Landge**  
Spiroindoline derivatives, which are comprised of benzothiazole moieties, have shown significant antioxidant and anti-cancer activities. The microwave-assisted organic synthesis (MAOS) of biologically active spiroindoline derivatives using a solvent-free method is described. The inexpensive and commercially available Montmorillonite K-10 was an excellent catalyst for the synthesis of the desired compounds.

**Kaitlyn Roussert**  
**Chemistry**  
Synthesis and Characterization of Novel Complexes of Dicarboxylic Acids and Co(III)  
**Dr. Jeffery A. Orvis**  
This research focused on the utilization of two Co(III) complexes and various dicarboxylic acids to form novel structures with cyclic ligands, free carboxylic acid components, and the potential of attaching two of the respective cobalt groups.

**Michael Samiratedu**  
**Chemistry**  
Thermal Investigation of Loggerhead Sea Turtle on St. Catherines Island, Georgia  
**Dr. Robert K. Vance**  
Loggerhead sea turtles (Caretta caretta) have been on threatened species list since 1978. Monitoring nesting environments aid in determining the sex of the offspring. Cooler temperatures result in males and warmer temperatures result in females. There were 14,191 hatchlings released during the 2012 nesting season from St. Catherines Island.

**Christine Fite**  
**Nursing**  
Nurses’ Perceptions of Humor and Laughter  
**Dr. Rose Mary Gee**  
This study investigates how nurses perceive the use of humor and laughter in their practice.

**Anna McGaughey**  
**Nursing**  
Diabetes Education in Bulloch County  
**Dr. Rose Mary Gee**  
An assessment of the need for health education for low-income individuals with chronic diseases in Bulloch County and the creation of educational materials on living with diabetes for free health clinics in Bulloch County.

**Amber Swinwood**  
**Nursing**  
Adverse Effects Caused by Non-Steroid Anti-Inflammatory Drugs Directly Influenced by Deficient Patient Education  
**Dr. Linda Upchurch**  
This project analyzes the knowledge deficit associated with the use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and their dangerous adverse effects. NSAIDs include aspirin and ibuprofen, which are widely abused by our generation. Through patient education, we may be able to curve the statistics and reduce the amount of NSAID-related diagnoses.
Professor Christina Belge, from Public Relations, will present on "Problem Definition & General Semantics in Environmental Tax Reform: Assessing Language in Policy". She will explore the connection between language and policy, using tools of analysis such as proximity, novelty, and "non-identity" to analyze environmental tax regulation. The presentation will also evaluate specific policy alternatives to environmental taxes.

Professor Christina Beslin, from Sociology, will discuss "Southern Sustainability". Her research examines students' thoughts and attitudes towards sustainability and sustainable behaviors.

Professor Anni Rainio, from Marketing, will present on "Are Environmental Interests Sustainable? Presence of Environmental Themes and Cues in The Wall Street Journal". Her study examines the relationship between the prevalence of environmental themes and cues in corporate advertising and the economy's overall state. The results show a quadratic relationship indicating a decline in the cues during the Great Recession and an increase during recovery.
Natalie Demarko  
**Journalism**
The Use of Twitter in Sports Journalism Sourcing  
Dr. S. Camille Broadway  
Analysis of sports coverage in *Sports Illustrated* and *The Washington Post* found journalists are basing breaking news stories on Twitter, using Twitter for direct quotes and to replace face-to-face interviews. The findings reveal differences in the way journalists use Twitter to source, indicating that Twitter has entered into journalistic routines.

Timothy Hunt  
**Information Technology**
Best Practices for Developing Websites for Small Businesses/Organizations with Uncertainty  
Dr. John O’Malley  
The object of this study is to provide best practices for future web developers in similar situations. These practices intend to provide direction during web development and increase a website development project’s chance of success in these situations.

Jayson Treadway  
**Information Systems**
Research into Potential Satisfaction Factors into the Adoption of Massive Open Online Courses  
Dr. Geoffrey Dick  
This research aims to identify potential satisfaction factors relevant to the adoption of massively open online courses (MOOCs). MOOCs are a potentially disruptive technology affecting education. They have had considerable publicity- this paper seeks to shed light on what factors will influence acceptance by students, professors, and universities.

Amy Bryan  
**Art**
An Elemental Exploration of the Ceramic Arts  
Jeff Schmuki  
Rare earth elements are not extremely rare in geological formations, but their use in ceramic glazes is almost mythical. These elements are seldom used due to inadequate glaze information and high costs of these elements. These untested elements could increase the color spectrum and other qualities for the ceramic arts.

Zoë Campbell  
**Theatre**
The Skeletal Remains of an Unjust World: Designing the Scenery for *The Triangle Factory Fire Project*  
Kelly Berry  
This paper discusses the scenic design process of a senior theatre student. It follows the student throughout the development of her design for the production of *The Triangle Factory Fire Project*.

Alexandra Serlin  
**Fashion Merchandising and Apparel Design**
Natural Dyes: The ART of Experimenting with Nature  
Dr. Lissa Leege  
As an artist, I see Mother Nature as one big canvas of color. As a designer, I see nature as my main ingredient to create color. The earth is one giant box of Crayolas. Who needs artificial dyes, paints, and craft store pigments? I'll use the real stuff, thanks.

Jeffery Silvey  
**Theatre**
*Angels in America*: Breaking the Trajectory  
Dr. Sarah McCarroll  
Since its premiere in 1991, Tony Kushner’s *Angels in America* has been considered an exemplary work of gay theatre. This study examines how Kushner uses the theatrical elements of time and character to advantageously construct his plays to break the trajectory of what gay theatre was.
Joshua Bloodworth  Biology
Assessing Genetic Variation Within and Between Populations of *Wyeomyia smithii*, the Pitcher-Plant Mosquito
Dr. William Irby
This study investigated the genetic variability in populations of *Wyeomyia smithii* from Tattnall County, Georgia. Nine local populations were compared by determining the variability of Isocitrate Dehydrogenase in order to determine the level of inbreeding and risk of extinction of the populations.

Bradley Corbin  Biology
Invasive Species Interactions in New Environments: *Richardia spp.* (Mexican clover) and *Brachymyrmex patagonicus* (rover ants) Possible Symbiotic Relationship in North America
Dr. Alan Harvey
Many plants exhibit extra floral nectaries (EFNs), which secrete nectar at various sites to attract ants. *Richardia spp.* is one of these which have EFNs at the base of its flower, attracting *Brachymyrmex patagonicus* (rover ants). This mechanism does seem to provide the plant with protection from seed predators.

Casey Wesselman  Biology
Comparative morphology of antennal sensillae of three disjunct populations of *Wyeomyia smithii* (Diptera: Culicidae)
Dr. William Irby
Northern populations of the mosquito are autogenous, producing eggs without bloodmeals. Southern populations require blood for egg production (facultative anautogeny). The Georgia population of mosquitoes over the last 16 years reveals a reappearance of facultative anautogeny that may be reflected in changes in sensory receptor structure that respond to host odors.

Rachel Dunn  Early Childhood Education
Integrating Manipulatives to Improve Fraction Concepts
Dr. Michelle Reidel
This study explored the effect of manipulatives on students’ understanding of fraction concepts and the students’ conceptions of the unit of reference when working with fraction word problems. I learned that students can increase achievement with the integration of various representations of manipulatives with fraction concepts.

Courtney Smith  Early Childhood Education
“Finally! A Hispanic Person Who is Actually Special!”: Making Connections with English Language Learners Using Multicultural Children’s Literature
Dr. Michelle Reidel and Dr. Meca Williams-Johnson
In response to the growing need for effective and culturally responsive instructional strategies, this study investigated the effects of using multicultural children’s literature with English Language Learners. The study found positive results in improving students’ interest in reading and also establishing a greater sense of connection with stories and characters.

Katrina Vader  Middle Grades Education
Characteristics of a Good Middle Grades Teacher
Dr. Michelle Reidel and Dr. Meca Williams-Johnson
This study serves as a tool for teachers looking for jobs or hoping to improve their characteristics in the classroom. The data collected from teachers, students, and parents was analyzed to determine which type of characteristic they deem is most important in a teacher: personal, pedagogical, or professional.