SAVANNAH STATE UNIVERSITY
4TH ANNUAL RESEARCH CONFERENCE AND RIMI SYMPOSIUM
Creating change while seizing the future

April 8, 2014
Savannah State University • Savannah • Georgia

CONFERENCE PROGRAM
Conference program cover design and Program Design by
Recha R. Reid, NIH/NIMHD Research Infrastructure in Minority Institutions (RIMI) Program
Pictures taken by Litus Marshall, Database Administrator, IT Department

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Savannah State University

4th Annual Research Conference (ARC) and RIMI Symposium

Tiger Arena
Savannah, GA 31404

Sponsored by the
Office of the President
Office of Sponsored Research Administration (OSRA)
Quality Enhancement Plan (QEP) ‘The Write Attitude’
NIH-NIMHD Research Infrastructure in Minority Institutions (RIMI)
NSF Historically Black Colleges and Universities - Undergraduate Program (HBCU- UP)
Overview of the Conference and Committee Members

Welcome Letters

Dr. Cheryl D. Dozier, President
Dr. C. Reynold Verret, Provost and Vice President of Academic Affairs
Dr. Chellu S. Chetty, Assoc. Vice President of Research and Sponsored Programs

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Overview of the Conference and Committee Members

The one-day event seeks to highlight the research of Savannah State University (SSU) undergraduate and graduate students and their mentors both on and off campus. The objectives of this conference are to help undergraduate and graduate students to enhance their research communication skills and to better understand how to prepare for careers in the global marketplace.

The general format for this conference is networking sessions, poster presentations, and research faculty oral presentations. Exhibitors present graduate opportunities and job opportunities for SSU graduates. This is an important platform for students to present their findings to both SSU and Savannah community. In addition, through workshops and keynote speakers, this one-day conference will be vital in stimulating the interest of students, faculty, and community members in the area of research.

Annual Research Conference and RIMI Symposium Committee Members

The Organizing Committee consists of individuals who contribute to various aspects of conference organization.

Dr. Chellu S. Chetty
Associate VP for Research and Sponsored Programs
Conference Director

Ms. Recha R. Reid
NIH-NIMHD RIMI Program Manager
Conference Coordinator

Dr. Lisa Yount
Associate Professor and QEP Director
QEP Representative

Dr. Tara Cox
Associate Professor
Department of Marine and Environmental Sciences

Dr. Sue C. Ebanks
Assistant Professor
Department of Marine and Environmental Sciences

Dr. Dionne Hoskins
Fishery Biologist, NOAA Fisheries
Director, NOAA Sponsored Programs, SSU

Dr. Marilyn Hutchinson
Educational Consultant
Co-Manager of Exhibitors and Prizes

Mr. Kenneth Williams
MAGEC-STEM Plus Program Manager
STEM Representative

The Organizing Committee would like to extend our THANKS to the many persons who contributed in so many ways to make this conference a reality. These persons include, but are not limited to Mr. Patrick Dean, STEM 360 Coordinator, Ms. Linda Hansen, NIBIB Program Coordinator; Dr. Shinaz G. Jindani, Professor and MSW Program Coordinator, and Mr. Bryan Knakiewicz, Engineering Instructor.
Welcome Research and RIMI Scholars!

On behalf of our students, faculty and staff, it gives me great pleasure to welcome you to the fourth annual Research Conference and RIMI Symposium on the beautiful and historic campus of Savannah State University.

With the growing number of cutting edge research projects being conducted at Savannah State, we are proud to host this special event. We look forward to the opportunity to showcase the hard work of our talented students and their faculty mentors.

This conference gives students the opportunity to demonstrate their research and communications skills while strengthening their understanding of how best to prepare for careers in the global marketplace. Savannah State undergraduates and graduate students will present approximately 220 research projects that span a variety of fields -- from engineering, management and marketing to marine science, mathematics, political science and social work.

Organizers have planned an event that will be exciting, enlightening and memorable for all involved. I thank the members of the Research Conference and RIMI Symposium for their hard work and look forward to joining our faculty, friends and partners throughout the community as we explore this year’s theme “Creating Change While Seizing the Future.”

Again, welcome to Savannah State University, where we celebrate curiosity, scholarship and creativity.

Best Regards,

Cheryl Dozier
President
Welcome to the fourth annual Research Conference and RIMI Symposium at Savannah State University, “Creating Change While Seizing the Future.” As a university known around the state and the world for highly regarded degree programs in a wide range of disciplines, we pride ourselves in nurturing the gifts of a talented and diverse student body. Additionally, education at Savannah State goes beyond the classroom, to collaboration, and practical investigations of the natural world.

This conference is intended to deepen student centered learning and research at SSU. It also signifies an important juncture in the growth of the students as scholars. Please join me in congratulating them.

Sincerely,

C. Reynold Verret, Ph.D.
Provost and Vice President of Academic Affairs
Welcome to the Savannah State University’s 4th Annual Research Conference and RIMI Symposium. The Office of Sponsored Research Administration has been striving to increase the research endeavors of Savannah State University (SSU) faculty, academic staff and students.

In the recent past SSU has significantly strengthened the research infrastructure through major extramural funding from the NIH and NSF which has enabled more faculty and students to participate in both on- and off-campus research internships.

SSU is committed to providing the necessary resources and support to sustain the needs of students and faculty in new and rapidly developing research areas. The work of our students and their research mentors demonstrates a commitment, not only to investigative reasoning, but also to learning from the past to broaden our role in future research at both the undergraduate and graduate levels.

My special thanks to the faculty mentors for their continued participation in ensuring that this event continues to be a success. I extend a special welcome to our exhibitors for taking the time to meet with our students. Finally, thanks to the faculty and community partners who have donated their time and support to judge the posters.

Sincerely,

Chellu S. Chetty Ph.D.
Associate Vice President for Research and Sponsored Programs
Research Programs at Savannah State University

**DOEd (Department of Education) Title VII:** With the enactment of the Higher Education Opportunity Act (HEOA) of 2008, Savannah State University was one of 18 historically black colleges and universities (HBCUs) that received funding to improve graduate education opportunities at the master's level in mathematics, engineering, physical or natural sciences, computer science, information technology, nursing, allied health or other scientific disciplines where African American students are underrepresented.

**HHTP (Housing Health Training Program) partnered with HUD Lead Hazard Control Program partnered with HUD HBCU Community Development Grant:** HHTP is an integral part of SSU’s Urban Studies and Environmental Justice Project (USEJ). The Project addresses the relationship between the socio-spatial distribution of environmental risk and disparities in health outcomes experienced by low-income communities. The current strategic focus concerns lead hazards in Savannah’s older inner-city neighborhoods. USEJ activity modules include workforce development, curriculum design, community outreach and applied research. All HHTP Student Assistants are EPA/EPD licensed Lead Inspectors, Risk Assessors and Renovators. Credentialled students participate in applied research; public health education in low-income communities and perform community outreach with underemployed workers. They participate in HHTP in conjunction with their two-year enrollment in the Master of Science and Urban Studies and Planning Program (MSUSP); thereby securing the minimum 2 year work experience requirement for industry employment.

**Housing Authority of Savannah Choice Neighborhood Planning:** This grant is to support the development of a comprehensive neighborhood transformation plan for the East Savannah Gateway neighborhood targeting the Robert Hitch Village and Fred Wessels Homes public housing sites. The Housing Authority of Savannah along with key stakeholders will use the transformation plan to change the lives of public housing residents and families in the surrounding community. The students will assist the Principal Investigator of the grant (Dr. Deden Rukmana) to prepare sampling methodology, conduct neighborhood surveys, analyze the findings and prepare a report.

**NIH MARC-U-STAR (Minority Access to Research Career Undergraduate Student Training in Academic Research):** The NIH/NIGMS MARC U-STAR Honors Program at Savannah State University provides minority students, who are traditionally underrepresented in biomedical and behavioral sciences, a rigorous research training preparedness program during the junior and senior years. The program will prepare them to be admitted and successfully complete Ph.D. programs at top-tier institutions. MARC Scholars must be majoring in biology, behavior analysis, chemistry, marine science or mathematics with a minimum 3.25 GPA.

**NIH MBRS-RISE (Minority Biomedical Research Support- Research Initiative for Scientific Enhancement):** The goal of this program is to increase the number of graduates in RISE relevant undergraduate programs and to increase the number of underrepresented minorities in the biomedical/behavioral sciences pursuing and completing Ph.D. programs. The program will facilitate curriculum enhancements to benefit all STEM students. Each scholar will be placed with a mentor and actively engaged in research on- and off-site. RISE scholars must be majoring in biology, chemistry, marine science or behavior analysis.

**NIH NIBIB (National Institute of Biomedical Imaging and Biotechnology):** The NIH-NIBIB “Expanding Diversity” Research Training Program is to increase the number of minority students who earn a degree in science, technology, engineering, or mathematics (STEM) and enter into a STEM graduate program and research career.

**NIH-NIMHD RIMI (Research Infrastructure in Minority Institutions):** The focus of the Research Infrastructure in Minority Institutions (RIMI) program is to strengthen the research infrastructure of SSU and contribute to the knowledge base in bio-medical/behavioral science/health disparities fields by developing junior faculty to become independent investigators under the mentorship of external collaborators, strengthening shared core research labs, and strengthening STEM curriculum by infusing health disparities topics. Each semester, the RIMI program engages 10-14 research assistants (undergraduate and graduate students) in mentored research training with SSU faculty (on-campus) and community research partners (off-campus) such as the Coastal Health District.

**NOAA LMRCSC (National Oceanic and Atmospheric Administration Living Marine Resources Cooperative Science Center):** The Living Marine Resource Cooperative Science Center is a collaborative effort between NOAA and the University of Maryland Eastern Shore (UMES), its lead institution, in collaboration with the University of Maryland Institute of Marine and Environmental Technology, the University of Miami, Delaware State University, Hampton University, Oregon State University, and
Research Programs at Savannah State University

Savannah State University. This new 5-year award builds on the accomplishments of two prior five-year LMRCSC awards since 2001 that have totaled over $3 million dollars. Its mission is to “train a diverse body of students for careers in NOAA and other resource management agencies and conduct cutting edge research in fisheries sciences in the areas of fisheries socioeconomic, quantitative fisheries, essential fish habitat and aquaculture.” Among the programs it sponsors, the community is probably most familiar with the research internships and fellowships, and the annual marine science camp that is offered free of charge. The LMRCSC also provides resources to the Georgia-South Carolina Ocean Sciences Bowl, GIS Day in Savannah, the Savannah Black Heritage Festival and the Savannah Ocean Exchange.

**NSF EDGE (Enhancing Diversity in the Geosciences):** The goal of the Opportunities for Enhancing Diversity in the Geosciences (EDGE) program is to attract minority students to marine science/geoscience education and career tracks. It supports 10 undergraduate students each semester (20 per year), and 4 full time summer internships for a total of 24/year. The program includes support for freshmen/sophomores who may be struggling to find direction in the shorter, low-commitment academic year positions. The full time summer positions are more competitive and targeted to the best and most dedicated students. There are opportunities to participate in research cruises monitoring the Savannah River estuary. In addition, undergraduates can be placed in internships with community partners at local schools, aquaria, and outdoor education facilities.

**NSF GK-12 (Graduate STEM Fellows in Kindergarten – Grade 12 Education):** The NSF GK-12 Ocean Literacy Program is a collaboration between SSU, the Skidaway Institute of Oceanography (SkI0), and the Savannah Chatham County Public School System. The goal is to develop graduate students’ research and communication skills while supporting local science education and enhancing ocean literacy in this coastal community. Master's students serve in local science classrooms weekly. They learn from their teacher mentors and develop teaching modules based on their research. In turn, the science teachers are engaged in summer research with SSU and SkI0 researchers, participate in summer workshops, and participate in research cruises. One undergraduate intern is supported annually to enhance marine-related outreach to the Savannah community.

**NSF MAGEC-STEM Plus:** The goal of this program is to develop and implement a comprehensive model to strengthen SSU’s undergraduate STEM education and research infrastructure and increase STEM undergraduate enrollment, retention and graduation rates. From 2003-2009, 103 students were supported, 85 were engaged in mentored summer research, and 66 presented at conference. The graduation rate for Historically Black Colleges & Universities – Undergraduate Program (HBCU-UP) scholars has been 80% compared to the average SSU rate of 29%. SSU’s renewed HBCU-UP award has added innovative elements, including international research and interdisciplinary research (forensic science, computational biology, and environmental engineering). In Summer 2013, students will conduct international research in China, India and Malaysia.

**NSF PRISM (Proactive Recruitment for Introductory Science and Mathematics):** The goal of the Proactive Recruitment for Introductory Science and Mathematics (PRISM) Program is to stimulate freshman and sophomore interest in STEM majors through mentoring, seminars, curriculum enhancements, and demonstration of real-world applications through discovery learning. PRISM is an interdisciplinary program that includes the mathematics, environmental science, and engineering technology programs. The program has established relationships with local industries that serve as host sites for summer field trips. The program supports 30-40 students each year.

**NSF PSLSAMP (Peach State Louis Stokes Alliance for Minority Participation):** The Peach State Louis Stokes Alliance for Minority Participation (PSLSAMP) is an alliance of 7 Georgia institutions: Savannah State University, Fort Valley State University, Georgia Perimeter College, Southern Polytechnic State University, Kennesaw State University, GA Tech, and the University of Georgia (lead institution). The program goals are: (1) Build the academic and research capacity of these institutions, which have significant enrollments of minority populations underrepresented in STEM professions and, (2) Increase the number of minorities contributing to and advancing the frontiers of research and education in STEM fields. Over the past 5-year program, 104 SSU students have been supported.

**Office of Naval Research (ONR) Students Engaged in Naval STEM Research (SENSR):** The goal of the ONR-funded SENSR project is to give first research opportunities to Freshmen and Sophomores with Science, Technology, Engineering, and Mathematics majors. This low-stakes research opportunity provides a modest stipend for part-time research during the semester. If successful, this first research experience could lead to additional full-time summer or part-time year-long internships.
Speakers Biographies

**Dr. Cheryl D. Dozier**, President, Savannah State University

Cheryl D. Dozier, DSW, was named the 13th president of Savannah State University on May 9, 2012, after serving one year as interim president and quickly instilling a culture of service, strength and unity across the Savannah State campus. An experienced and highly regarded university-level professor, researcher, author and administrator known throughout the University System of Georgia for her intellect, charisma and leadership abilities, Dozier is firmly committed to advancing the legacy of academic excellence and community engagement set in place when SSU was founded in 1890.

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**Dr. Kimberly S. Holmes**, Associate Provost and Associate Vice President for Academic Affairs, Savannah State University.

Kimberly S. Holmes, Ph.D., duties include senior leadership over the enrollment management function of Academic Affairs as well as leadership over campus-wide assessment initiatives. Prior to joining SSU in June of this year, Dr. Holmes served as Associate Vice President for Inclusion and Innovation, Director of the Certified Public Manager Program and Assistant Professor of Public Administration at Kentucky State University. She has received numerous leadership awards and recognition.

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**Dr. Chellu S. Chetty**, Associate Vice President for Research and Sponsored Programs and Regents Distinguished Professor of Biology, Savannah State University.

Since 1993 Chellu S. Chetty, Ph.D., has received more than $15 million to conduct biomedical research and support faculty and students in the STEM disciplines. Currently, he is directing three major NIH-funded Biomedical Research and NSF-funded STEM Programs with a budget of $6.6 million. These programs provide scholarships/stipends for approximately 100 STEM majors each year.
Speakers Biographies

**Lt. Colonel Willie B. Williams**, OZ2/ISS Research Portfolio Manager, NASA Research Office, National Aeronautics and Space Administration (NASA)

Mr. Williams manages the Space Operations Research Payloads Integration activities at NASA and serve as the Export Control Representative (ECR) for the International Space Station Payloads Office. He has worked in the ISS Payloads Office since 1998 and has worked in the areas of Payloads as a Payloads Flight Controller since 1982. His other positions include Payload Flight Controller in JSC Mission Control, Developer of the ISS early payload training strategy for the ISS Flight Crew, NASA, Johnson Space Center/ DM and recipient of a prestigious two-year fellowship in the NASA Administrators Fellows Program at NASA Headquarters. He is the Portfolio Manager for the NASA/ISS funded UR-1 project awarded to Savannah State University.

**Dr. Sujin Kim**, Assistant Professor of Mathematics, Savannah State University

Sujin Kim, Ph.D., is an Assistant Professor of Mathematics at Savannah State University where she began teaching in 2007. Her current area of interest is the use of mathematical calculations to increase the health of individuals within the area of health disparities. Dr. Kim has presented her work concerning the Stochastic Processes to a number of audiences and continues to work on getting students involved in the complex world of mathematics. She currently serves as the co-PI for a NIH sub award through the Research Infrastructure in Minority Institutions (RIMI) program concentrating on identifying risk factors that contribute to obesity within Chatham County.

**Dr. Deden Rukmana**, Associate Professor and Coordinator, Urban Studies and Planning Program, Savannah State University

Deden Rukmana, Ph. D., is an Associate Professor of Urban Studies and Planning at Savannah State University where he began teaching in 2006. His work within the community in understanding the prevalence of homelessness have been published in various academic journals, including Area, Planning Practice and Research, Children and Youth Service Review and Critical Planning. Dr. Rukmana has worked as PI on a number of research grants including the W.K. Kellogg Foundation through Harambee House, Inc., Step Up Savannah, Inc., Housing Authority of Savannah and the Savannah Youth Futures Authority. He currently serves as the co-PI for a NIH sub award through the Research Infrastructure in Minority Institutions (RIMI) program concentrating on identifying risk factors that contribute to obesity in low-income neighborhoods in Chatham County.
Georgia Southern University
Magnolia Coastlands Area Health Education Center (AHEC)

Morehouse School of Medicine
Master of Public Health Program
***See our ad on p. 68***

North Carolina State University
The Graduate School

Northern Illinois University
The Graduate School
***See our ad on p. 26***

Savannah Fire & Emergency Services

Savannah State University
***See our ad on p. 19***

University of Tennessee, Knoxville
College of Arts and Sciences
***See our ads on p. 31 and 72***
## Program of Events

### Session 1: Pre-conference
**Tiger Arena**

**7:30 – 8:15**
- Registration
- Exhibitor set-up

**8:00**
- Judges orientation

  *Tiger Arena, Classroom 1024*

### Session 2: Opening Session
**Tiger Arena**

**8:30 – 9:15**
- Call to Order
  - Opening Remarks: Dr. Kimberly S. Holmes, Associate Provost and Associate VPAA
  - Welcome: Dr. Cheryl D. Dozier, President
  - Remarks: Dr. Chellu S. Chetty, Associate VP for Research and Sponsored Programs
  - Speaker Introduction: Dr. Karla Sue Marriott, Associate Professor and Forensic Science Program Coordinator

**9:15 – 9:45**
- Keynote Speaker
  - Lt. Colonel Willie B. Williams, OZ2/ISS Research Portfolio Manager, NASA Research Office, National Aeronautics and Space Administration (NASA)

### Session 3: Faculty Presentation
**Tiger Arena**

**9:45**
- Introduction of Orals: Dr. Lisa M. Yount, QEP Director

**9:50 – 10:05**
- NIH-NIMHD Research Infrastructure in Minority Institutions Oral Presentations
  - Presentation by Dr. Sujin Kim and Dr. Deden Rukmana on *Identifying Risk Factors Contributing to Obesity in Chatham County Neighborhoods*

### Session 4: Poster Presentations
**Tiger Arena**

**10:05 – 12:00**
- Poster Presentations
  - Exhibits by graduate schools and organizations

### Session 5: Graduate School Q&A Session and Lunch
**Tiger Arena and Student Union**

**12:00 – 12:45**
- Lunch
  - Working lunch for Student Presenters, Student Volunteers, and Middle & High School students only
    *Tiger Arena*

  - Speakers and Judges Lunch
    *Student Union, Event Room A and B*

### Session 6: Awards Ceremony
**Tiger Arena**

**1:00 – 2:00**
- Awards for Poster Presentations and Prizes
  - Awards: Dr. Lisa M. Yount, QEP Director
  - Prizes: Dr. Marilyn Hutchinson, Educational Consultant
Judges

Dr. Adegboye Adeyemo  
Savannah State University

Mrs. Dedra Andrews  
Savannah State University

Ms. Jacqueline Awe  
Savannah State University

Mr. Keith Bacon  
Parent University

Dr. Kameswara Rao Badri  
Savannah State University

Mr. Mark Baggett  
Coastal Nonprofit Resources

Ms. Cameshia Bailey-Mayes  
Agape Hospice Care, Inc.

Mrs. Sandy Baker  
COPE Childhood Obesity Prevention and Education

Ms. Bernadette Ball-Oliver  
Sol C. Johnson High School

Dr. David Bell  
Savannah State University

Dr. Earl Berksteiner  
Savannah State University

Dr. Bernita Berry  
Savannah State University

Dr. Pascal Binda  
Savannah State University

Mrs. Seketa Bing-Nelson  
Savannah State University

Dr. Benn L. Bongang  
Savannah State University

Mr. James A. Broberg  
Savannah State University

Ms. Mary Jo Carver  
Chatham County Juvenile Court

Dr. Carla Curran  
Savannah State University

Dr. Samuel Dolo  
Savannah State University

Dr. Dwight Ebanks  
Savannah State University

Dr. Chukwudi Obi Emeh  
Savannah State University, retired

Mrs. Helen Emeh

Mrs. Andrea M. Epting  
Heads-Up Guidance Services (HUGS), Inc.

Dr. Naomi Farber  
University of South Carolina College of Social Work

Dr. Vanessa Gary  
Fort Stewart Social Work Service

Dr. Matthew Gilligan  
Savannah State University

Mrs. Rose Grant-Robinson  
S.A.F.E. Shelter Outreach

Prof. Susan Grayson  
Savannah State University

Dr. Randy Gunter  
Savannah State University

Mr. Nehemiah Harden

Ms. Katina Hardy  
Woodville Tompkins High School

Dr. Nat Hardy  
Savannah State University

Dr. Mir Hayder  
Savannah State University

Ms. Wanda Hobson  
Riverview Health & Rehab Center

Mrs. Wanda Hopkins  
DeRenne Middle School

Dr. Marilyn Hutchinson  
Savannah State University

Pastor Samuel Hutchinson, III  
AACC

Dr. Otilla Iancu  
Savannah State University

Ms. Shobana Jayaraman  
Savannah State University

Ms. Autumn M. Johnson  
Savannah State University

Dr. Johnny Johnson  
Savannah State University

Dr. Cecil Jones  
Savannah State University

Mrs. Ellisha M. Jones  
Family Advocacy Program

Mrs. Ruby Jones  
SCCPSS Board 8th District
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tr>
<td>Mrs. Joline Keevy</td>
<td>Savannah State University</td>
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<td>Ms. Ruth Keith</td>
<td>Dept. of Veterans Affairs Savannah VA Primary Care Clinic</td>
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<td>Dr. Harshavardhan Kenche</td>
<td>Savannah State University</td>
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<td>Mrs. Sarah Kirley</td>
<td>Savannah State University</td>
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<td>Mr. Patrick LaPollo, Jr.</td>
<td>The STEM Academy at Bartlett</td>
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<td>Dr. Mulatu Lemma</td>
<td>Savannah State University</td>
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<td>Ms. Teri Liles</td>
<td>Helen's Haven Children's Advocacy Center</td>
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<td>Mrs. Theresa Luciano</td>
<td>The STEM Academy at Bartlett</td>
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<td>Dr. Karla Sue Marriott</td>
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<td>Ms. Elouise Mells</td>
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<td>Mrs. Teneka G. Miles</td>
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<td>Dr. Andrea L. Moore</td>
<td>Savannah State University</td>
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<td>Dr. Jolvan Morris</td>
<td>Savannah State University</td>
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<td>Mr. Quentin Morris</td>
<td>DeRenne Middle School</td>
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<td>Dr. Keenya Mosley</td>
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<td>Dr. Mohamad Mustafa</td>
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<td>Mrs. Connie Naniuzeyi</td>
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<td>Dr. Emmanuel Naniuzeyi</td>
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<td>Dr. Olarongbe Olubajo</td>
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<td>Mrs. Robin Perrtree</td>
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<td>Dr. Carol Pride</td>
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<td>Dr. Sharlet Rafacz</td>
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<td>Dr. Dorothy Roundtree</td>
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<td>Mrs. Rose Shaw</td>
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<td>Dr. Kai Shen</td>
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<td>Ms. Kimberley Simon</td>
<td>Savannah State University Counseling Center</td>
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<td>Dr. Paramasivam Sivapatham</td>
<td>Savannah State University</td>
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<td>Ms. ZaDonna Slay</td>
<td>Savannah/Chatham CASA, Inc.</td>
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<td>Mrs. Tracie Smith</td>
<td>Willingway Hospital</td>
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<td>Dr. Stallworth-Clark</td>
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<td>Ms. Penny Stone</td>
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<td>Mrs. LaTashia Swain-Gilliard</td>
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<td>Mrs. Elizabeth L. Thomas</td>
<td>Savannah Vet Center/Savannah State University</td>
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<td>Dr. Chiquetta Thompson</td>
<td>Savannah Chatham County Public Schools</td>
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<td>Dr. Mare Timmons</td>
<td>UGA Marine Extension</td>
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<td>Mrs. Vannie Walker</td>
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<td>Mrs. Del Willis</td>
<td>DeRenne Middle School</td>
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<td>Dr. Jiayun (Gavin) Wu</td>
<td>Savannah State University</td>
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<td>Mrs. Dana Yeckley</td>
<td>LMSW</td>
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<td>Dr. Hua Zhao</td>
<td>Savannah State University</td>
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### Off-Campus Research Conference Award Recipients

<table>
<thead>
<tr>
<th>Name of Presenter</th>
<th>Type of Award</th>
<th>Conference</th>
<th>Type of presentation</th>
<th>Title of presentation</th>
<th>Faculty mentors</th>
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<tbody>
<tr>
<td>Brigette Brinton</td>
<td>First Place (graduate)</td>
<td>2013 Savannah GIS Day Poster Contest</td>
<td>Poster</td>
<td>The distribution of <em>Probopyrus pandalicola</em> and its palamnonid shrimp hosts</td>
<td>Dr. Tara Cox (Savannah State University)</td>
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<tr>
<td>Jasmine N. Butler</td>
<td>3rd Place</td>
<td>2013 Annual Peach State Louis Stokes Alliance for Minority Participation (Peach State LSAMP) Conference</td>
<td>Poster</td>
<td>Utilizing Dijkstra's Algorithm to Determine the Shortest Route to Savannah State University (SSU)</td>
<td>Dr. Alfredo Villanueva (Savannah State University)</td>
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<tr>
<td>Racheal S. Daniels</td>
<td>3rd Place</td>
<td>2013 Annual Peach State Louis Stokes Alliance for Minority Participation (Peach State LSAMP) Conference</td>
<td>Poster</td>
<td>Investigating the Role of PipiY In Regulating KCNQ5 Protein Levels</td>
<td>Dr. Kevin Duignan (University of Connecticut); Dr. Anastassios V. Tzingounis (University of Connecticut)</td>
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<tr>
<td>Marion D. Johnson</td>
<td>1st Place</td>
<td>2013 Annual Peach State Louis Stokes Alliance for Minority Participation (Peach State LSAMP) Conference</td>
<td>Poster</td>
<td>Synthesis and Characterization of Cationic Porphyrin: A Potential Candidate for Photodynamic Therapy of Tumor</td>
<td>Dr. Adegboye Adeyemo (Savannah State University)</td>
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<td>Vanda Johnson</td>
<td>1st Place</td>
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<td>Oral</td>
<td>The Digital Elevation Model in Expenditure for Climbing up a Mountain</td>
<td>Dr. Hyounkyun Oh (Savannah State University)</td>
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<td>Kiara L. Miller</td>
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<td>Exploring the Role of Catecholamines in Ultrasonic Vocalization Production in Parkinsonian rats</td>
<td>Dr. Cynthia Kelm-Nelson (University of Wisconsin-Madison)</td>
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<td>Eric M. Parks</td>
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<td>Analysis of Sea turtle humeri for Trace Element Composition</td>
<td>Dr. Selena Heppell; Matthew Ramirez (Oregon State University)</td>
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<td>Jasmine Roberts</td>
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<td>2014 Emerging Researchers National (ERN) Conference</td>
<td>Poster</td>
<td>Development of the Personalized Sign Language Translator Utilizing the Motion Sensing Device</td>
<td>Dr. Hyounkyun Oh (Savannah State University)</td>
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Name of Presenter: **Diamond Rogers** (undergraduate)
Type of Award: 3rd Place
Conference: 2013 Annual Peach State Louis Stokes Alliance for Minority Participation (Peach State LSAMP) Conference
Type of presentation: Oral
Title of presentation: Expression and Purification of Sigma-1 Receptor
Faculty mentors: Dr. Kai Shen (Savannah State University)

Name of Presenter: **Amanda Schuelka** (undergraduate)
Type of Award: First Place (undergraduate)
Conference: 2013 Savannah GIS Day Poster Contest
Type of presentation: Poster
Title of presentation: Social associations and spatial patterns exhibited by common bottlenose dolphins *Tursiops truncatus* that interacted with a research trawler near Savannah, GA
Faculty mentors: Dr. Tara Cox (Savannah State University)

Name of Presenter: **Renee’ F. Smith** (undergraduate)
Type of Award: 3rd Place
Conference: 2013 Annual Peach State Louis Stokes Alliance for Minority Participation (Peach State LSAMP) Conference
Type of presentation: Oral
Title of presentation: Spring-Neap variation in egg-length correlations and embryonic development for the daggerblade grass shrimp *Palaemonetes pugio*
Faculty mentors: Dr. Sue Ebanks (Savannah State University)
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Proud sponsor of the research by Savannah State University students.
Guilt Appeals in Advertising

Briyoni Bester (Junior)
Dr. Anshu Arora and Dr. Jun Wu (Savannah State University)

This research focuses on the relationship between Guilt appeals in advertising and corporate social responsibility (CSR). Corporations are tailoring how they advertise their brand or product in effort to produce an emotional attachment. Whether the product has a hedonic or utilitarian purpose for the customer, companies expect to have a helping and self-gratification response from customers. Research shows that CSR directly effects how companies position a product or brand in a customer's mind. In spite of the active role of corporate social responsibility in today's firms, guilt advertising has an adverse effect on a customer's ideal self-congruence. The research addresses the following questions:

• What roles do hedonic and utilitarian values play in guilt advertising?
• Does corporate social responsibility include psychological effects on a customer’s state of mind, especially related to “guilt”?
• At what point does an emotional (guilt) attachment to a product become defective to a customer’s congruence in relation to a firm’s social responsibility efforts?

Warehouse Management: Voice Recognition Raising Firm Performance and Increasing Efficiency

Jeffrey Iwanski (Senior)
Dr. Suman Niranjan (Savannah State University)

Warehousing has evolved tremendously over the years, and companies are continuously looking for ways to innovate and streamline their warehouse processes. For businesses with large and extensive warehouses the process improvements can be daunting, however there are many options to both save money and lower the percentage of errors. This purpose of this paper is to identify the benefits of implementing a voice recognition system into a warehouse environment. The research is focused on companies, both large and small, that have implemented a form of the voice recognition software. The hypotheses designed will focus on four main aspects, which are: inventory accuracy, standardizing the process, eliminating wastes, increasing inventory accuracy and cutting training time. Structural Equation Modeling and One-way ANOVA analysis will be utilized to conduct the analysis of the research. The expected results will have several comparisons with businesses that have different size warehouses operating in multiple industries. The results will also focus on providing evidence for the designed hypotheses via data collection in the warehousing industry. The purpose of this paper is to show how implementing a voice recognition system into a warehouse or distribution center could have positive affects in many different areas. The research has shown that when voice recognizing systems were used a company could improve in many areas, specifically: standardizing the process, eliminating wastes, increasing inventory accuracy and cutting training time. By improving these areas a warehouse would see significant improvement in performance and efficiency.

SUBLIMINAL ADVERTISING: The Real Life Status Quo

Wynitta Lee (Junior)
Dr. Anshu Arora and Dr. Jun Wu (Savannah State University)

We’ve all seen those commercials that depict the ideal family, lifestyle, or extra powerful men and thin women. Every so often there is a commercial that challenges that ideal image by showing the mixed family, alternate lifestyle, and the plus-sized man and woman. The research paper addresses how advertisements have subliminally trained the consumer’s mind to challenge what is normal. The study focuses on how advertising has molded consumers’ mindsets to reject the everyday reality. Internationally, advertising has had a different affect on cultures outside the U.S. because of varying customs and values. This study examines how stereotypes differ from those in the U.S. to those in developing countries such as China and India. The research will address the following questions.

• How does subliminal advertising affect consumers in the U.S. and internationally?
• Why do advertisements show these types of stereotypes?
• Why subliminal advertising has taken a life of its own?
• How are the subliminal advertisements different from international advertisements in developing countries?
• How developing countries’ customs, traditions and values change the way subliminal advertising is done.

Do Counterfeits Raise the Appeal of Luxury Brands?

Shawana Rapp (Junior)
Dr. Anshu Arora and Prof. Amit Arora (Savannah State University)

Counterfeiting is commonly used worldwide. The research
Abstracts

focuses on both the positive and negative effects of counterfeits with respect to luxury brands. Previous research has indicated that brand awareness plays a moderating role in the positive relationship between counterfeiting and willingness to pay (WTP). In this paper, we investigate how and why counterfeiting may actually benefit certain luxury brands by increasing brand awareness of the original luxury brands, which has a direct impact on consumers' WTP. We subsequently discuss the managerial implications of using counterfeits to raise the appeal of luxury brands. This research addresses the following questions:

• How counterfeiting benefits luxury brands?
• Why counterfeiting may actually benefit certain luxury brands?
• How do hedonism and utilitarianism needs of consumers moderate the relationship between?

U004
Supply Chain Metrics for Potable Water Distribution in Middle East Refugee Camps

Benjamin Schwengel (Senior)
Dr. Suman Niranjan (Savannah State University)

The purpose of this paper is to propose applying specific key performance indicators from commercial supply chains to a humanitarian relief chain; in particular, the delivery of potable water to refugee camps. This paper suggests key performance indicators to evaluate the effectiveness of this particular type of humanitarian relief chain. This paper describes the issues facing humanitarian organizations in the Middle East and North Africa and it provides an applicable method for evaluating the supply of potable water for relief logisticians so that they may address the most significant constraints. The chosen key performance indicators meet the criteria set forth in the framework by Beamon and Balcik. They were selected among the Supply Chain Operations Reference (SCOR) key performance indicators that were relevant to the operation of sourcing, filtering, transporting, and delivering groundwater in and near the refugee camps. Developing performance indicators to evaluate the effectiveness of this particular type of humanitarian relief chain. Expected result would be to test the performance indicators by collecting data in humanitarian relief camps at specific points in time. Future work would include collection of data to confirm its validity or suggest a redesign with other metrics. This paper presents to humanitarian relief professionals a measurement system applicable to the supply chain of potable water to civil war refugees in arid regions based upon the ongoing crisis in Syria.

Management and Marketing

Graduate Abstracts

G005
Domestic Violence in College Students: The Effects of Male dominance and Substance Abuse

Vida Marshall (Graduate)
Dr. Suman Niranjan (Savannah State University)

Domestic violence is a serious problem for today's college students. The Center for Disease Control and Prevention defines intimate partner violence as actual or threatened physical, sexual violence, or psychological abuse committed between member of the opposite sex who live together in the same household or who have lived together in the past, and even those who are in or formerly were in a dating relationship. This paper explores domestic violence in college students, specifically at Savannah State University. It also examines the paradigm of male dominance and substance abuse. Structural Equation Modeling and One-way ANOVA analysis was employed to conduct the analysis of the research. Specific hypothesis related to the influence of domestic violence were designed and tested through empirical analysis by collecting information via surveys at Savannah State University. We found that substance abuse influenced domestic violence. The results also showed that male dominance predicted domestic violence. We found that there is a difference between males and females with respect to the rate of violence. Our findings contribute to the existing body of knowledge by considering factors that may influence domestic violence in college students. Another contribution of the present research is that we used a large sample from a historically black university which adds to the current literature. Identifying the factors that influence domestic violence may be useful to offices of student development.

G006
Trusting Electronic Commerce in Business to Consumer Relationships

Kitra Rainey (Graduate)
Dr. Anshu Arora and Dr. Jun Wu (Savannah State University)

The research focuses on trusting electronic commerce between B2C (business to consumers) relationships. When handling transactions through a company website consumers feel wary about putting their personal information on the internet. Companies feel that it is essential in this new technology era to create a website in order for their customers to purchase products online wherever they may be. This creates greater competition within certain industries while building a brand. Having strong brand loyalty and trust is what will possibly help consumers feel more comfortable with their transactions. It only
takes one bad transaction experience to leave a bad taste in buyers’ mouths for that particular company which could be fatal for doing business locally and internationally. This study addresses the following questions:

• How are electronic transactions handled internationally?
• What are some ways companies are building back trust in online environments?
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MASS COMMUNICATION

UNDERGRADUATE ABSTRACTS

U007
Race and Product Choice: Exploring the Role of Race in Choosing Makeup Brands in Magazines

Justice Dilworth (Junior)
Dr. Julianna Trammel (Savannah State University)

The purpose of this study is to determine whether women, particularly African-Americans, choose makeup brands based on the ethnic background (or appearance) of magazine advertisements. Previous studies show that advertisers use race as a tool to engage their target audience. This suggests that race is influential in the role in a consumer's choice, but does not provide details of how or why. This study will seek to inquire further into the relationship between consumer choice and race. Two questions will guide this investigation: Q1: How do African American women perceive the role of race on how they select makeup brands? Q2: Do other cultural factors play a role in this perceptual process? To answer these questions, a triangulation method will be employed. I will conduct a quantitative survey with 50 African American Women aged 18-25, non-randomly selected using convenient sample. A qualitative reception focus group study will also be employed to further explore the topic at hand.

U009
Whether Juvenile Diversion Programs are Successful

Tyler Block (Senior)
Dr. Christie Richardson (Savannah State University)

Juvenile violence is a hot issue in today's world and Juvenile diversion programs are at the head of a very popular debate. Do these programs help or hurt our youth. There are so many different arguments about how successful these programs really are. Juvenile delinquency is a growing social problem in America, and in recent years the problem has gotten much worse. There has been an influx of youth joining gangs and committing crimes. Many Politicians and law officials have tried to come up with solutions, but most of them involve only incarceration and the idea of treating these juveniles as adults. This approach contributed to the overcrowding of most corrections institutions nationwide, at both the adult level and the juvenile level, even though research showed that this type of approach would only cause more problems.

U010
Women In Politics: Overcoming Oppression

Ariel Brooks (Senior)
Dr. Christie Richardson (Savannah State University)

It is now the year of 2014 and the United States has still failed to elect a woman as a higher elected official into the white house. In past elections there have been female candidates such as Sarah Palin and Hilary Clinton from opposing political parties and neither was elected. The goal of this research is to figure out what is it going to take in order for women to overcome gender inequality and oppression in the political spectrum and be elected as a higher elected official into the white house and what is the underlying issue as to why female candidates do not make it to the primary ballots when running for office. If gender inequality is not solved in politics, democracy cannot truly be carried out if over half of the country's population is underrepresented.

POLITICAL SCIENCE AND PUBLIC AFFAIRS

UNDERGRADUATE ABSTRACTS

U008
The Patriot Act: Looking Beyond Protection

Larry Belton (Senior)
Dr. Christie Richardson (Savannah State University)

Privacy rights and civil liberties are at risk with Title 2, Section 215 of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act) of 2001. Unreasonable search and seizure is authorized by federal, state, and local law enforcement officials infringing on the rights of United States (U.S.) citizens. Issues such as surveillance and search and seizure by law enforcement officials without proper legal citations are not deemed unconstitutional for our society. The element of right to privacy is an inferred right leaving argument to an individual's privacy. The primary focus for the Act was to protect the U.S. during the Global War on Terror; however, it is misused to inhibit the protection of Americans. Clarification is needed for law enforcement agencies to see the USA PATRIOT Act strictly for the use of combating terrorism and not an excuse for government to abuse the right of privacy for its citizens.
Abstracts

U011
Storm Surge Category 1-5 v. Location of Elderly & Disabled

Jonathan Clowers (Senior)
Dr. Tara Cox (Savannah State University)

A hurricane is a tropical storm that brings high winds, heavy rains, storm surge (the pushing of sea water onto land), and even tornados. Savannah, GA and Chatham County are geographically located in such a way that storm surge alone can place them both under water. Chatham Emergency Management Agency or CEMA tracks hurricanes as they approach the eastern coastline and begins getting ready for the possibility of evacuation. CEMA’s Emergency Operations Plan (EOP) states that an evacuation will be called when landfall of a hurricane reaches 72 hours. In these 72 hours all of Chatham County must be evacuated starting from Tybee Island, which will be the first under water when the storm surge from a hurricane hits. The elderly and the disabled who require assistance, such as those in nursing homes, need more time to prepare for an evacuation and should receive a warning if landfall reaches at least 78-84 hours. The objective of this poster is to display the different storm surge levels and then plot the location of the elderly and disabled across the different surge levels in ArcGIS 10.0. The maps will help county and city officials develop a plan for evacuating disabled individuals.

U012
Food Stamps: Evaluation of the Government Hand Out

Courtney Davison (Senior)
Dr. Christie Richardson (Savannah State University)

President Lyndon B. Johnson implemented the Food Stamp Act of 1964 for individuals to transition from government dependency to self-sufficiency. In 2008 President Barack Obama expanded the Act with the Supplemental Nutrition Assistance Program (SNAP). This program extended the Act for more individuals to receive food stamps and improve healthy nutrition guidelines for the public. The Food Stamp Act has changed its policy implementation 10 times during its 50-years of existence. From the 1960s to 2014 the program has expanded and reached new heights to fight the war on food insecurity and farmers surplus. Comparing the SNAP program of 2008 to the original Food Stamp Act of 1964 will evaluate SNAP’s effectiveness to the original Act. From President Lyndon B. Johnson to President Barack Obama, the food stamp program has been amended to address the needs of the people during its specified period of time.

U013
Marine Response Vessel Operations

Robert Dickensheets (Senior)
Daniel Stowers (City of Savannah)

This project will design a formal map for the City of Savannah to supplement existing maps in the Coastal Marine Fire Fighting Plan. The scope of the project is to identify marinas, fuel docks and shipyards that may require shipboard fire fighting assistance. These locations, the fuel range of the vessel and the duration of on scene assistance by the responding vessel are the primary focus. The outcome will be in ArcGIS 10.0 map displaying the given characteristics with the hope of support to existing functional annexes.

U014
Propaganda Impact

Devin Dudley (Senior)
Dr. Christie Richardson (Savannah State University)

The impact of propaganda through a social movement during the civil rights era in the United States has been the most effective tool in the importance of education, religious beliefs, and propaganda. The impact influenced the mindsets of a targeted audience due to the lack of proper information. The influence of propaganda especially in politics is a way of life and most people communicate differently through art with the aim of changing a whole opinion or lifestyle. In research strategy the mix methods will be used collecting data from scholarly journals, Internet, and interviews. These results illustrate the importance knowing and understanding propaganda use during civil rights was a key factor in segregation and desegregation.

U015
International Probability of Terrorism Victimization

Jacob Hesting (Junior)
Dr. Tara Cox (Savannah State University)

The 2001 September 11th attacks have given the people of the United States a clear idea of what terror networks are capable of, but little is known about what kind of scope these terrorist networks hope to achieve. The intent of this project is to provide a visualization of where terrorist attacks are likely to occur globally based on social, historical, demographical, and geographical information. Countries will be mapped in ArcGIS 10.0 in a color-coded system to indicate the likelihood of an imminent terror attack from an Islamist Fundamentalist/ Nationalist Terrorist Organization (IFNTO). The attack probability will be based on the following criteria:

- Countries in which a terrorist suspect, wanted by the Department of Justice (DOJ), was last known to have been located.
- States that have suffered a terrorist attack by an IFNTO that
resulted in the death of at least one person within the last 15 years.  
• Countries with 25% of the population Shia and/or Sunni Muslims living under secular governments.  
• Countries on the Department of Homeland Security’s (DHS) Third Agency Check (TAC) list.  
• Countries that currently have Travel Warnings issued by the U.S. Department of State.

U016  
Nuclear Power Plants in Relation to Fault Lines: The Silent Hazard

Warren Inge (Senior)  
Dr. Tara Cox (Savannah State University)

Nuclear power plants make up a large amount of the electric infrastructure of the United States; approximately 20% of the energy produced comes from nuclear power. The nuclear industry is governed by the Nuclear Regulatory Committee who are responsible for maintaining a safe environment in which nuclear plants operate. Just as the Fukushima Nuclear Plant was built in a tectonically active location, many nuclear power plants in America are built close to fault lines. In this study I plan to map power plants and faults in ArcGIS 10.0 and analyze which plants are at risk of experiencing a quake of 7.3 or greater. The key factors that will affect my project is determine the magnitude of quake a facility can take as well as determine which plants I will target in the study. This study will help emergency planners build better risk analysis as well plans for the areas affected. The outcome expected is to make sure that our nuclear industry is safe from earthquakes.

U017  
No Child Left Behind Act: Graduation Rates and Economic Growth in Georgia

Kenisha Lowe (Senior)  
Dr. Christie Richardson (Savannah State University)

The No Child Left Behind Act (NCLB) for the state of Georgia has educational stake holders worried about the implementation of this Act. The focus has turned to teaching standardized test instead of all pertinent subjects to create the well-rounded student. Funding is being stripped away from public schools in the Dekalb, Clayton and Henry county public school systems in the Atlanta metro area. Reading proficiency has decreased for fourth grade students, twelfth graders have difficulty solving mathematical problems and student concept for science is at a defined low. The purpose of this Act was to create a governmental role for academic achievement and to evaluate teacher performance. This role and evaluation process was aimed to making a competitive environment for students and faculty; however, it has created a divide for students unable to compete in the competitive market for higher education and prosperous careers. A barrier has been created between the state government and the public school systems resulting in higher property taxes for the taxpayers, as well as decreased funding for public schools.

U018  
Empowering the Powerful: Improving Overseas Voting in the United States Military

Jonathan McLaughlin (Senior)  
Dr. Christie Richardson (Savannah State University)

The Military Overseas Voting Empowerment Act of 2009 (MOVE) lacks the means for providing a fair and equal opportunity for military personnel to vote due to state regulated policies resulting in untimeliness of ballots with sporadic services of internet voting. Each state must abide by MOVE; however, only 16 states are in compliance. Department of Defense (DOD) should regulate all submitted ballots from military personnel through the innovation of internet voting and the Federal Write in Absentee Ballot (FWAB); however, the submission of internet voting ballots are sent to the service member’s voting state leaving them decrypted and removing the voter’s signature. The lack of timeliness for absentee ballots, and technical issues with internet voting, leads to discrepancies resulting in the loss of the validation of the vote. The DOD should monitor the internet voting as the primary voting process while reserving the FWAB as the secondary voting source; therefore, excluding state powers from monitoring military personnel ballots. This method is both a comprehensible and efficient process of improving military voters experience overseas.

U019  
U.S. Drone Policy: al Qaeda’s recruitment/influence tool

Tyler Pool (Senior)  
Dr. Christie L. Richardson (Savannah State University)

President Obama placed a Red Tape on the policy of limiting the number of drone strikes in the Middle East. Collateral damage of civilian deaths has been the result of drone strikes, regardless of its intended target. The number of drone strikes has been criticized both negatively and positively, as American drone strikes have assisted al Qaeda in recruiting more members into its terrorist organization with spreading their influence and hatred for the West. The issue is that the Red Tape may be equal to or greater than the number of deaths prior to the implementation of the Red Tape. Unannounced drone strikes are being performed without congressional approval; therefore, it is unclear if the Red Tape policy is for political standing or if it is truly effective to reduce civilian causalities as well as terror organization recruitment efforts.
Abstracts

U020
U.S. Government Funding Private Prison Corporations

Marty Scott (Senior)
Dr. Christie Richardson (Savannah State University)

The United States (U.S.) government provides services for correctional facilities that control the prison systems and the incarceration of criminal offenders. Over the past 60 years there has been a shift in the American government policies that's changing government's role in providing these services to correctional facilities, and to the inmates that occupy the facilities. The U.S. government has increased sentences for violating drug laws and drug-related crimes. The government has also allowed the private sector to take government's role in providing prison services to its citizens. As a result of these policy shifts, the government has reduced the amount of funding for social and educational programs that are geared towards low-income and minority communities. Changes in laws for drug-related crimes and fiscal budget cuts for social programs will increase the amount of resources provided to the private prison corporations, allowing these private corporations to monetize the prison industry and maximize their companies' profits. The combination of these two factors has created a Prison Industrial Complex (PIC), a network of correctional facilities run by private firms that provide housing, nutritional, medical, and rehabilitation services to inmates with the help of government funding.

U021
NCAA: Corrupt, Politics, and Student Athletes

Maurese Stanley (Senior)
Dr. Christie Richardson (Savannah State University)

The National Collegiate Athletic Association’s (NCAA) extra benefits policy reflects that college athletes are prohibited from receiving gifts, monetary compensation, and product sponsorships, as long as they are students within the higher learning institution. Most athletes are on some form of athletic scholarship; however, universities usually have rules about athletes obtaining part-time employment during the sport's season. The NCAA receives student data from the universities, but places a stronghold on athletes receiving a living allowance for everyday expenses. This division boosts the economic growth for the participating universities leaving athletes forced to live as regular college students with little financial aid resources. A double-standard further exists with the NCAA providing universities with compensation for a college football bowl game due sponsorship versus no compensation for March Madness basketball tournaments. The state politicians, Federal Communications Commission (FCC), and the NCAA fuel these games between the universities with additional sponsorships leaving athletes with no compensation.

U022
U.S. Aid to Haiti: Clinton and Obama

Gertrose Toussaint (Senior)
Dr. Christie Richardson (Savannah State University)

Operation Restore Democracy (ORD) would be considered a huge military success; ORD was the 1994 restoration of power to Jean-Bertrand Aristide. Other's praise President Obama's Operation Unified Response (OUR) as a smart move. OUR was the United States (U.S.) military response to the 2010 Haiti earthquake under Obama's administration. The research question the researcher will seek to answer is, Whether President Clinton's ORD in 1994 and President Obama's OUR in 2010 have created a stable democracy and state of relief in Haiti after the 1994 elections and 2010 earthquake? Which was more effective? The study is to explore how the Clinton administration & Obama administration stepped in Haiti when they were dealing with the Aristide administration & the 2010 earthquake. The sole focus on Aristide's second term in office, in the year 1994, and the aftermath of the 2010 earthquake. The events the researcher explore, shows us how much U.S. aid has impacted Haiti. With the help of the Clinton administration & Obama administration, Aristide was put into office and Haiti received aid after the earthquake.

U023
The Effects on Illegal Immigration on The U.S

Joseph Williams (Senior)
Deleon Hollinger (Savannah State University)

The United States of America is believed to be one of the best countries to live in within the world. It provides opportunities for every citizen that resides within the country. Some of the opportunities that are provided are financial stability, economic growth and development, better healthcare, and education opportunities. Since all of these things are provided to the people many individuals from other countries are drawn to the United States and many of these people become habitants of the United States. This process is known as illegal immigration. Illegal Immigration is an extremely prevalent problem within the country of the United States. It is a rapid growing problem therefore it should be addressed accordingly. However when it comes to the question of providing things such as healthcare and emergency management to these undocumented citizens an issue arises. Within this research I plan to analyze the impact of illegal immigration on the United States as it relates to public healthcare and emergency management systems.
GIS Analysis: Assessing the Social Capital of the Savannah State University Host Community

Kenyatta S. Spiller (Graduate)  
Dr. Tara Cox (Savannah State University)

Social capital refers to the socioeconomic networks that increase availability of public and social services, employment, and/or municipal, state, and/or federal developmental investments. The accessibility to these resources holistically enhances the quality of life of a community. The United States Department of Housing and Urban Development identified Historically Black Colleges and Universities, or (HBCUs), as magnets for social capital resources and anchors of their underserved and disenfranchised immediate surrounding host communities. With the use of ArcGIS 10.0, locations of public libraries, schools, parks, transportation bus stops, hospitals, and social services were analyzed for proximity to SSU and determine the application of the social resource model.

College Students and Their Mental Health

China Brown (Senior)  
Dr. Cecil Jones (Savannah State University)

College dropouts and student attrition has greatly plagued numerous educational institution worldwide. Every year there seems to be a steady incline in college dropouts and decrease in student retention. An increased in college dropout and student attrition can be attributed to mental and emotional stress caused by the college experience. First year and first generation students appear to seem greatly afflicted by the college conditions. By utilizing valid testing material and questionnaires, depression and stress levels were assessed to see if there was a correlation between these stressors and the college experience. Research concluded that there were definitely prominent stressors within the college community, none of which is statically significant to attribute to college dropout and student attrition. As a solution to alleviate stress, many of the campuses are advised to create a diverse nurturing environment by providing student support services, counseling centers, and establishing faculty and student connections.

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Abstracts

U026
Low Socioeconomic Status and Poverty Impact on Psychological Behaviors in the United States
LaToya Brown (Senior)
Dr. Cecil Jones (Savannah State University)

Poverty is a complex subject and it has been widely debated in the United States. Studies have found several correlations between individual’s socioeconomic status and poverty level with psychological problems, social problems, violence and crime, and substance abuse. According to the American Psychological Association socioeconomic status is defined as the social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation. According to a study based on the Census the survey of population data reported that 15 percent of Americans (approximately 46.5 million) lived below or at the poverty line. Many people believe that the issues of poverty are often overlooked or just simply ignored. However, in this study I conducted a secondary data analysis and investigated how individuals of low socioeconomic status and who live in poverty are at greater risk of developing psychological disorders. As well as is there a correlation between states with high poverty rates and states with high reported psychological problems such as depression disorder. In this research I will also be focusing on how poverty levels have changed since the recession (2008) period until the present and the effects of these changes.

U027
The Greater You Sleep, The Less You Weep
LaToya Brown (Senior)
Dr. Sujin Kim and Dr. Deden Rukmana (Savannah State University)

To find a relationship between the levels of depressive symptoms and sleep quality in older adults who are members of caregiving dyads. Method: Data was collected by using the Center for Epidemiological Study of Depression scale (CESD-10), Pittsburgh Sleep Quality Index (PSQI), and Actigraphy. The CESD-10 assessed the frequency of depressive symptoms. PSQI measured subjective sleep quality and actigraphy measured objective sleep quality. Actigraphy was measured using an activewatch over seven consecutive 24 hour periods. Results: 62 dyads, or 124 participants, were recruited for this study. 89.5% (111) completed evaluations for CESD-10 and PSQI. 97.6% of participants completed evaluations for CESD-10 and Actigraphy. In this study people who are members of caregiving dyads with high quality of sleep have lower depressive symptoms and people with low quality of sleep have higher depressive symptoms. 30% of individuals who reported high depressive symptoms reported high quality sleep. 70% of individuals who reported high depressive symptoms reported low quality of sleep. People with low quality of subjective sleep have five times the odds of reporting depressive symptoms than those who have high quality of sleep. In this study there was no relationship between subjective and objective sleep. Conclusion: There is a relationship between subjective sleep and depressive symptoms. There was no relationship between objective sleep and depressive symptoms. One explanation for these findings is that a person with depressive symptoms may tend to have a negative perception on activities such as sleep. More research is needed to support this explanation.

U028
Reported Crime Trends on the Campus of Savannah State University
Cherrica Smith (Senior)
Dr. Tara Cox (Savannah State University)

The purpose of my project is to assess crime trends on Savannah State University’s campus in 2013. Using the information provided by Savannah State University’s Department of Public Safety, the crimes are divided into two categories: felonies and misdemeanors. I have also divided the 2013 year into categories: fall semester, spring semester, and the summer semester. The months January through April are included in the spring semester. The months May through July are included in the summer semester. The months August through December are included in the fall semester. I will assess which semester had the most crimes and where they took place in ArcGIS10. I hypothesize that the fall semester will have the highest reported crimes, with the highest spatial concentration in the University Commons.

U029
Contributing Factors of Obesity in Chatham County, Georgia
Courtney Wright (Senior)
Dr. Sujin Kim and Dr. Deden Rukmana (Savannah State University)

The purpose of this experiment is to accumulate information to form a conclusion about the contributing factors of obesity in Chatham County, Georgia neighborhoods. These factors include socioeconomic standards of living and environmental stimuli that influence the behaviors that lead to obesity. The socioeconomic standards of living include inequalities in government assisted living arrangements, availability to safe weight training environments, and lack of encouragement. The primary technique used to collect data is a method of survey. Information is gathered via survey from households in Chatham County, Georgia about their nutritional and isometrics, or lack of. Each survey is then entered into an excel spreadsheet for data comparison. Thus far, the measurement of nutrition consumption and isometrics are directly correlated to the socioeconomic limitations of households in Chatham County, Georgia. The inequality of exposure to positive environmental stimuli produces an area-based outcome of obesity.
Forgotten Fathers

Bridgette Adkins (Graduate)
Evelyn Denard (Savannah State University)

Approximately 81 percent of all substantiated abuse cases in the United States for children under the age of 3 are for neglect (Administration for Children and Families, 2011). Infant Safe Haven laws are designed to prevent the deaths of newborns whose mothers are unable or unwilling to care for them. Infant Safe Haven laws allow newborns to be surrendered to designated locations, mostly hospitals and medical centers, up until a designated age, most often 7 days (Cornett, 2009). The laws are most often worded such that the mother may surrender the child anonymously. The biological fathers of the children who are surrendered are often unable to be found, due to a lack of information about the child and mother, or the laws stipulate that surrendering the child renders parental rights null and void, allowing them little opportunity or recourse to take primary custody of the newborns rather than have their parental rights terminated (Parness, 2007). Studies have suggested that children under the age of 1 placed with their kin have measurably better outcomes and spend less time in the Child Protective Services system (Stacks, 2011) suggesting that a re-evaluation of the Infant Safe Haven laws to promote contacting the biological father may be in the best interests of the child.

Advance Social Work Practice in Clinical Social Work

Justine Andrews (Graduate)
Janet Mayne (Memorial Health Hospital Center of Behavioral Medicine)

The Center for Behavioral Medicine provides kind care for mental health and addiction disorders. They address the physical, psychological, emotional, social, and spiritual needs of people mental health disorders. The goal is to help patients deal with their illness and return to a better life. The APS unit is a program for people age 18 and older. The program seeks to stabilize the patient and provide necessary skills to prepare them for an optimal level of functioning. The professionals at the Center for BM provide intensive treatment to help patients achieve mental, physical, emotional, and social wholeness. Using clinical practice behaviors within my field agency I learned certain aspects that advanced my social work practice in clinical setting. I was able to observe assessments and group therapy session as well as individual therapy session. Throughout this experience at my field agency I gained confidence to assess my own session with clients as well as group and family sessions. I also gained confidence within my clinical knowledge. I learned a lot from clients and was able to better understand clinical diagnosis such as schizophrenia, bipolar and major depression disorders. I was also able to identify and understand how and what can trigger clients to become non compliant. While working at my field agency I gained a lot of confident. I am able to assess my own clients and I am able to help my clients identify and articulate their strengths and vulnerabilities. I am able to develop interventions to accomplish systemic change, select and modify appropriate intervention strategies based on continuous clinical assessments. Lastly, I am able to critically evaluate, select and apply the best practices and evidence-based interventions and I am able to provide my clients with the best social resources and support needed to continue growth.
G033
Significance of Family Involvement and Medication in Major Depressive Disorder Patient

Justine Andrews (Graduate)
Janet Mayne (Savannah State University)

The Center for Behavioral Medicine provides benevolent care for mental health and addiction disorders. They address the physical, psychological, emotional, social, and spiritual needs of people with mental health disorders. The goal is to help patients deal with their illness and return to a better life. The Senior Care program is the only psychiatric program in the area dedicated to the geriatric population. The program is an acute, short-term program for patients age 65 and older in need of secure, therapeutic environment 24 hours a day. The purpose of this project was to increase medical compliance due to family engagement. The participant in this single subject research study was an 80 year old male with diagnosis of major depressive disorder, manifested as “Suicide Ideation”. Using person in environment perspective, during the period of 14 days, 6 group therapy sessions, 14 individual therapy sessions and 4 family engagement sessions were conducted. To track the effectiveness of the treatment, a 10 item instrument was designed with a 4 point Likert scale where 1 was strongly disagree and 4 was strongly agree. Eight data points were gathered. The data was tested using SINGWIN. Due to the short time frame there was no statistical significance between pre and posttest phases. However Delta noted 48% increase in desired direction noting improvement in his daily living and the improvement in depressive symptoms. In conclusion, the reported findings contribute to my knowledge in this respective field because it allowed me to understand the diagnosis of major depressed patients and what therapeutic techniques is needed to better help the patient to return to their healthier life.

G034
Child Support and The Implementation of Time Spent With Child

Alganon Askew (Graduate)
Dr. Shinaz Jindani (Savannah State University)

In the United States of America the Division of Child Support Services (DCSS) helps children by enforcing parental responsibility to pay financial support, according DCSS retrieved from http://dcss.dhs.georgia.gov (2014, February 17). The purpose of this research is to identify the need for time spent with child(ren), and the need for implementation to enforce parental involvement with child(ren). It is understandable why child support was created for children to have financial support for food, shelter, clothing, and funds for daily activities of all kinds. However, a child also needs quality time spent with both parents if they are available to the child. Parents provide guidance, moral and emotional support, foundation, discipline, and communication. All of these things contribute to a child growing up to be a responsible adult. Research shows how children suffer with neglect and how it affects their life, and how much a difference time spent with child can really help a child's growth. Research demonstrates how child neglect impacts the lives of children. De Bellis states, “Child neglect is the most prevalent form of child maltreatment, is associated with adverse psychological and educational outcomes”, according to De Bellis (2005). Studies emphasize the necessity for parent-child interaction. Moreover, the need for lawmakers and DCSS to mandate time spent with child in addition to financial support by the parent.

G035
Research on WIC and its Effect on Low Birth Weight

Alganon Askew (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Currently in the world there is a major health disparity that is affecting all walks of life. That disparity is Low Birth Weight (LBW) of babies being born all over the world, especially in developing countries. In many countries around the world LBW has and still remains a public health issue. Contributing factors such as poor nutrition and lack of prenatal care has been the cause of LBW. According to the March of Dimes, “low birth weight is when a baby weighs less than 5 pounds, 8 ounces at birth.” The purpose of this research is to identify if Women, Infants, and Children (WIC) is effective on LBW. Research shows that women, who do not attend their doctors regularly during the course of their pregnancy for crucial prenatal medical care, may result in a LBW. Also, research shows that expecting mothers who do not eat proper nutrition's from fruits, vegetables, low-fat foods, lean meats, and food that are enriched with vitamins and minerals, may also add problems in their pregnancy. WIC was established for the public as a resource to answer to LBW and other disparities. WIC provides an excellent nutritional plan for mothers that are expecting, as well as mothers with newborns. It is my belief that my research will demonstrate how WIC impacts the lives of women who are pregnant from of all socioeconomics groups.

G036
Evolution of Foundational Military Social Work Practice Behaviors

Melissa Balazs (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Demonstration and mastery of military social work practice behaviors is essential when providing competent and comprehensive intervention strategies with service members, veterans and their families. Interventions provided to individuals and families who present with domestic abuse or child abuse or neglect incidents through Social Work Services and the
Family Advocacy Program (FAP) are person and family centered, strength based and solution focused. The program assesses and addresses risk factors associated with abuse and provides clinical intervention to strengthen families. Systems and ecological theories are applied when linking clients to support resources and social learning models are incorporated into educational interventions that are designed to improve protective factors and social supports. This project focuses on 10 practice behaviors experienced by the Master of Social Work student intern with FAP that are integral to the military social work setting and serve as independent foundational practitioner skills. Practice behaviors emphasize culturally responsive intervention strategies that reflect potential risk and protective factors among diverse populations and the military community and also involve the incorporation of research-based knowledge and practice wisdom. Attention to self-reflection of biases and the recognition of the ethical conflicts that arise between military cultures and social work values and ethics, as well as demonstration of clear communication of professional judgments with clients and colleagues through advanced oral and documentation skills are critically important behaviors that reflect competence in practice in clinical military social work settings.

G037
Psychoeducational Family Group Work for Substance Abusing Parents

Melissa Balazs (Graduate)
Dr. Shinaz Jindani (Savannah State University)

This research looks at the use of psychoeducational family group work for families affected by parental drug use. The goal is to demonstrate that family group work can improve positive attitudes towards parenting, family relations and overall improvements in feelings of general contentment. This single-subject designed project focused on a parent attending a court mandated psychoeducation group with lessons designed to assist in the development of constructive and assertive communication techniques and emotional management abilities, while improving resiliency, parenting skills and parent-child interactions. To measure intervention effectiveness a fifteen point survey, nine statements for parental attitudes and family relations and six statements for general contentment, was provided to the client once a week for 6 weeks after group sessions, as well as four additional surveys to complete once a week independently post-intervention. Answers were scored using a Likert scale of 1 through 4, 1 = none of the time through 4 = all of the time, with lower the score the better. Due to the fact that the parent was unable to complete post-group surveys, the data was broken down into Phase One (week 1 - 3) and Phase Two (week 4 – 6) for more meaningful evaluation. Using SINGWIN the data was tested for autocorrelation and no trend was detected. However, proportion frequencies, measured through D-Index, detected adequate changes in the desired direction over the full assessment period. While this may indicate an effective intervention statistical shortcomings are present in the absence of baseline and follow-up measurements.

G038
Organizational Context of Creative Community Services

Reva M. Bowers (Graduate)
Kathy Boggs (Creative Community Services)

The purpose of this analysis is to provide a summary of personal learning experiences in the field practicum. The use of multiple theories that propel the role of social worker in a context of an organization is examined, as well as the student’s understanding of the links between the organization’s mission, program objectives, policies, service delivery system and client outcomes. Practice behaviors implemented by the student are analyzed. There are ten competencies identified by CSWE which serves as the foundation of practice behaviors developed by both the student and field instructor:

- Identify as a Professional Social Worker and Conduct Oneself Accordingly
- Apply Social Work Ethical Principles to Guide Professional Practice
- Apply Critical Thinking to inform and communicate professional judgments
- Engage Diversity and Difference in Practice
- Advance human rights and social and economic justice
- Engage in research-informed practice and practice-informed research
- Apply Knowledge of Human Behavior and the Social Environment
- Engaged in Policy Practices to advance social and economic well-being and to deliver effective social work services
- Respond to the context that shape practice
- Engage, assess, intervene and evaluate with individuals, families, groups, organizations and communities

The goal is to ensure the student is able to conceptualize the links between theory and practice, and also ensure the student has gained professional development from the field practicum and Savannah State University’s MSW Program.

G039
Reducing Truancy by Promoting Positive Peer Relationships

Reva M. Bowers (Graduate)
Kathy Boggs (Creative Community Services)

The purpose of this research is to measure the effects of positive peer relationships as it relates to truancy reduction. This project conducted research involving a single subject: Client-D. Cousins/Creative Community Services. Client presenting issue conducted research involving a single subject: Client-D. Cousins/Creative Community Services. Client is noncompliant with the Official Code of Georgia (O.C.G.A.) 20-2-690.1. Client is consistently not attending her classes. The goal was to reduce school truancy by implementing an intervention involving the encouragement of positive peer interaction. The questionnaire used in this study, “Index of Peer Relations”
by W. Hudson, was designed to measure the way a person feels about the people they work, play, or associate with most of the time— the person’s peer group. The questionnaire consists of twenty-five questions, with a scale ranging from one to seven (seven being the highest). The questionnaire was administered over a ten week period. Client would complete each form using the rating scale, based on her perception of peer relationships she currently encounters at school. Informed consent was given to all participants (client, CCS, Foster Parent). SINGWIN was used for analyzing the data for the single subject design. Given this client’s extensive history of abuse and developmental delays it was appropriate to address the most immediate need. Truancy was an issue which began in the client’s school setting. Thus, social environment behavior took presidency over client’s natural environment behavior. Therefore, the practical significance indicated truancy would be reduced as a result of improvement with peer relations. However, truancy would not be completely rectified.

G040
Anger and Aggression Treated with Cognitive Behavioral Therapy

Georgette Brown (Graduate)
Douglas Kyle (The Salvation Army)

No one denies anger as a normal human emotion, but when it interferes in an individual’s personal relationships and results in incarceration special attention needs to be given to anger management. This single subject research study measured the effect of Stress Inoculation on Anger Management. The participant was a 24-year old male who was mandated for anger management. Using Cognitive Behavioral Theory and Stress Inoculation, ten one-on-one sessions were conducted with the client that included cognitive restructuring, homework assignments and three-phase treatment. This three-phase treatment fostered Conceptualization, Skills Acquisition and Rehearsal and Application of the newly learned techniques and skills to manage anger and aggression towards others. With continuous use, this technique was to alleviate issues of anger, aggression and stress. Two instruments; “Anger Management Questionnaire” and “How Good is Your Anger Management? Controlling Your Anger Before It Controls You” was utilized on ten (10) separate occasions to measure perceived anger and the implication of anger management skills and techniques. The data was tested for autocorrelation using SINGWIN. The results show that the Proportion Frequency noted significant change between phases (p<0.00). The Delta Index indicated that the scores increased by 48% in the desired direction. Stress Inoculation Training was an effective method to help the participant adapt coping strategies and regulate his anger. The participant affirmed this as well.

G041
Extensive Learning Process: Attaining Core Compete

Georgette Brown (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this presentation is to describe the process by which ten core competencies were attained at The Salvation Army emergency night shelter in Savannah, Georgia. These competencies are currently mandated by the Council on Social Work Education (CSWE, 2008), which were operationalized through various practice behaviors that resulted into personal growth and development as a professional Social Worker. Using theories such as Person in Environment, Need Gap Analysis and Resource Distribution. I preformed two major roles; generalist case management and goal oriented case management. As a generalist case manager I provided basis assistance such as referrals to various agencies within the city, housing opportunities and employment counseling. As a goal oriented case management I provided therapeutic and counseling services to the clients who were identified with substance dependence issues. Combining theory, practice, measurement and research methods to maximize client outcomes resulted in a sense of self-efficiency and competence as a professional Social Worker. As a result of this extensive learning process, I am fully prepared to practice independently as a professional Social Worker.

G042
The Return to Readiness Treatment Program

Jenise Bryant (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Return to Readiness Treatment Program (RTR) is designed to provide integrated treatment services for active duty service members who are dealing with substance abuse and suffering from stressful or adverse situations resulting from deployment and reintegration (2013). This single subject research tests the effectiveness of the Group Therapy for one client who suffered from opiate dependency. Using Cognitive Behavior Theory (CBT) the goal of this project was to restructure thoughts to regulate her emotions to control opiate behavior. To track the impact of this intervention, a 25 items instrument was designed that measured Clinical Anxiety (11 items) and Life Contentment (14 items) and used 4 point Likert Scale from Strongly Disagree to Strongly Agree. Seven data points were gathered and tested for autocorrelation using SINGWIN. The data did not show statistical significance between phases. However the client did graduate from the RTR program and mandated to attend 90 Narcotics Anonymous (NA) for 90 days (90:90).
G043
Gun Control Policies

Marsha Buckson (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Gun-control policies are a continuously debated in America. This is based on the assumption that fewer guns will lead to fewer crimes and murder in America. Many citizens believe that the current gun-control policies fail to protect victims from violence. However there is some evidence that the opposite is true. According to Harvard Study, “If more guns equal more death and fewer guns equal less death, areas within nations with higher gun ownership should in general have more murders than those with less gun ownership in a similar area. But, in fact, the reverse pattern prevails.” (Harvard University). According to Hawkins (2011), important aspects to look at in relation to gun policies are gang violence and suicides rates, while others authors like Killough and Mukherjee, consider the mental health of the shooter. Suicide rate have a direct relation to mental health. Advocates have emphasized the need that there should be more gun restrictions policies due to the suicide rates in America. Legislation has started to take precautions to prevent mentally ill individuals from owning firearm. According to a press release, “The Department of Justice (DOJ), is proposing a regulation to clarify who is prohibited from possessing a firearm under federal laws for reasons related to mental health and the Department of Health and Human Services (HHS), is issuing a proposed regulation to address barriers preventing states from submitting limited information on those persons to the federal background check system” (Mukherjee, 2014). A 10 item survey instrument was designed to gather data about neighborhood violence, education, gun- training, and personal experiences. Using the sample of convenience three visits were conducted at Forsyth Park and 30 data sets were gathered and two visits were conducted Savannah State University and 20 data sets were gathered. Findings indicate lower to middle income whites are more likely to own a guns v/s other races. Majority of the sample believed stricter gun-control policies were needed. The researcher recommendation would suggest mental health should be considered in distributing guns to the public for personal ownership.

G044
Communication Intervention for Relationships

Jared Campbell (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research is to validate the Campbell Communication Scale (CCS) that includes four subscales: Apprehension, Efficacy, Competence, and Thoughtfulness. In this study, the CCS was used to correlate with the Satisfaction with Life Scale (1993), the Relationship Assessment Scale (2003), The Couples Satisfaction Index (2007), The State Trait Anxiety Inventory (1983), and the Generic Job Satisfaction Scale (1997). Using a sample of convenience, 284 individuals responded to the survey. The CCS produced good internal reliability (α = .810), acquired simple structure using numerous factor analysis methods (KMO = .806, and Bartlett’s Test of Sphericity p < .001), met the requirements of multiple Structural Equation Modeling goodness of fit tests (CMIN/DF = 1.895, P Value < .001, CFI = .96, RMSEA = .046, & PCLOSE = .276), and validated with the Sojourner’s Scale (2011), the Wong & Law Emotional Intelligence Scale (2004), the Cognitive Flexibility Scale (1995), the Interpersonal Communication Competence Scale (1994), The Social Desirability Scale (2001), the Communication Apprehension Scale (1995), and the Mindfulness Attention Awareness Scale (2003). The results indicate the CCS measures communication and is an adequate predictor of anxiety, emotional intelligence, life satisfaction, relationship assessment, couples satisfaction and career satisfaction.

G045
Family Preservation

Jared Campbell (Graduate)
Evelyn Denard (Savannah State University)

Family preservation was created out of the need for direct intervention in at-risk families. This report examines four studies on the effectiveness of various interventions. Strengths-based early intervention programs reported reduction in stress and depression and an increase in parental satisfaction and efficacy. It was also reported that intervention in single parent families and homes where substance misuse was present were less effective. Programs used to prevent out-of-home placement for children at risk of child maltreatment found qualitative themes of service content, service delivery, emotional support, and tangible support. Relational intervention programs were found to recreate a sense of family environment. This supports the need for social workers with excellent communication, relationship, and engagement skills. In-home family intervention returned intermediate outcomes over an intensive six-week program. Results for all articles reviewed support in-home intervention with engaged social workers who possess strong interpersonal skills with the ability to forge relationships with the families they serve. Modeling strong parental skills during intervention allows for peer mentoring between the social worker and caregiver and is more effective and less intrusive.

G046
Electroconvulsive Therapy as a Means of Depression Treatment

Maria Christoforatos (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research focused on the biological factors of depression and how to effectively treat and relieve depressive symptoms by stimulating the chemical processes in
the brain. The goal of the investigator was to measure whether electroconvulsive therapy reduced client’s depressive symptoms and improved overall quality of life. The research was a single subject design. Subject was a 30-year-old, female receiving electroconvulsive therapy in an inpatient setting in a psychiatric hospital. The client responded to a 12 question, likert scale rated questionnaire that was administered both in person (3 times) and over the phone (7 times). Using Singwin, the data was tested for autocorrelation. No trend was found. The Proportion Frequency noted no change between phases (p>3.0). However the effect size Delta noted 13% change in the desired direction. Given the brief duration of the intervention and the small data set of 9, the readers need to use caution before considering these results. Although the investigator’s scientific techniques did not show a statistically significant change in the patient, the patient did report feeling that the ECT therapy was helping her symptoms and had been beneficial in enhancing her daily life. Future research should include a questionnaire for rating anxiety, self-harm and suicidal tendencies.

G047
Practice Behaviors in an Acute Inpatient Psychiatric Hospital Setting

Maria Christoforatos (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Clark Center at Memorial Health University Medical Center in Savannah, Georgia is an acute crisis stabilization unit for adult behavioral health medicine. The task of this facility is to help stabilize clients who are experiencing a mental health crisis. The average length of stay is 3-7 days in which time clients will receive group and individual therapy and recreational therapy, as well as becoming stabilized on any necessary psychiatric medicines. The Clark Center works with a wide variety of adults from varying backgrounds. As an intern, I worked with my field supervisor to develop specific competencies that I will focus on during my practice; these are based off the educational guidelines set forth by the Council on Social Work Education. These competencies focus on using the strengths perspective, an ecological approach, social learning theory, group therapy, individual therapy and person in environment approach. These theories are used in tandem to help meet each individual patient’s needs. This self-reflection has helped target areas of practice that are believed to be most beneficial to this population.

G048
Child Welfare/Foster Care

Stephanie Collier (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The reason for this paper is to explore the services offered by the Welfare department with an emphasis on foster care. Foster care is motivated to provide safety, permanency, and wellbeing of children and families. Welfare service agencies provide parent training, intervention techniques, and child involvement case planning as part of their legally mandated responsibility. Child Welfare/Foster Care provides services to assist families with permanency and/or to achieve reunification. As intern ten competencies were utilized from the Council on Social Work (CSWE). The intern used the Cognitive Behavior Theory and Psychodynamic Theory while serving parents and children who are in foster care. Working for Child Welfare has given me greater insight on the importance of ethics and morals set forth by the National Association of Social Workers. Possessing a unique style of strength and knowledge has equipped this intern with the ability to withstand all obstacles. Many of the practice behaviors were applied during the intern’s stay. Interning at this site has allowed the intern to respect the cultures and beliefs of all client’s. This intern has grown professionally and will continue to disperse the knowledge obtained to see the growth of those she serve. My practice philosophy is to share the knowledge you have to make someone else a better them.

G049
Coping With Hemodialysis: Use of Talk Therapy, Medication and Meditation

Stephanie Collier (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this single subject research was to study the effect of hemodialysis on the client’s Life Contentment. The client was 79 years old African American Female with renal failure. In order to facilitate coping the researcher used Cognitive Behavior Theory and implemented Talk Therapy, Medication and Meditation as an intervention package. To track the progress a 10 item instrument was designed that measured Life Contentment on a 4 point Likert Scale from Never to Always. The therapeutic interventions were implemented after the dialysis. Nine data points were gathered and analyzed using SINGWIN. The data was tested for autocorrelation. No trend was found. D Index noted 28.5% increase in desired direction. Even though there was no statistical significance, Cognitive Behavior Theory did facilitate the treatment. Talk therapy helped the client process her thoughts and contributed to the compliance with medical treatment. Medication helped her relax and produced an open mind, every time the client was to receive Hemodialysis. This client incorporated talk therapy, utilized medications, and practiced acceptance to cope with her new way of living to include dialysis.
Brief Therapy and Case Management: An Integrative Therapeutic Approach to School Social Work

Jerome F. Cornwall (Graduate) and Melinda P. Miller (Graduate)
Dr. Shinaz Jindani (Savannah State University)

School Social Workers work with students and families to eliminate the barriers to learning. They serve as a liaison, or links between school, home, and community. Students can encounter crisis at any time which can impede learning. Working with students often requires brief therapeutic and case management skills. Through tracking, the student intern was able to serve over two hundred and fifty children over the course of the school year through case management, crisis intervention, and prevention services in two elementary schools, and one high school. This intern realized the importance of crisis intervention skills on a daily basis. Moreover, the need to monitor and track progress of the student helps to employ collaborative skills of case management skills, as well. Client-centered, Ecological, and Systems theories serve as the basis of Brief therapy and Crisis Intervention. Moral Development, Person-in-environment, and Learning theories promote Case management. The unique school setting requires the integrative approach of Brief Therapy and Case Management’s overlapping approach of Client-Centered, and Systems Theories. The School Social Work intern assisted the School Social Worker in collaborating with professionals, conducting group work, developing needed resources, and providing crises intervention and brief therapy for students. This opportunity has transformed evidenced-based practice behaviors into professional social work practice.

Volunteering in an Advocacy Role: Working with Resistant Volunteers

Jerome F. Cornwall (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Court Appointed Special Advocate serves children who are victims of abuse and neglect. Volunteers are trained and appointed as advocates for children. The purpose of such advocacy is to empower children and provide them with a voice via the volunteer engagement. As volunteers have their own mind and agenda, they are at times less likely to follow the policy and procedures which may endanger the well-being of children. This single subject participant was a 65 year old female, a retired educator, full of compassion but somewhat less compliant with the policies and procedures. Her conversations with children were more confrontational and strict in tone. Using Cognitive Behavioral Theory, Behavior Modification was implemented through one-on-one counseling sessions and the client had to be restrained. To track changes due to this intervention, an instrument was designed, that had 20 items measuring Training, Personal Attributes, Experience and Intervention. All four data sets were tested for autocorrelation. Training (49% increase) and Experience (19% increase) noted changes in the desired direction, while Personal Attributes (19% increase) and Intervention (29% decrease) noted the changes in the opposite direction. Irrespective of training and counseling final decision rests with the volunteer, to make behavioral changes or not. In this study, the social worker encountered resistance and therefore the intervention did not bring about any change. In the interest of the children’s well-being, such volunteers should be terminated from serving the agency.

Beyond Sex Education

Adina Crawford (Graduate)
Dr. Shinaz Jindani (Savannah State University)

There is no debate about the benefits of Sex education, as it helps us to understand our reproductive rights and developmental changes such as puberty, menopause and aging. It provides a safety net for young people and fosters safe sex habits that can prevent HIV and other sexually transmitted diseases. This research gathered data from the college going populations about their experience in receiving sex education when they were in high school. Using sample of convenience an 18 item questionnaire was administered inquiring about their overall experience with sex education, its delivery and content. Self-reported findings states that majority of the participant did benefit from the education and was able to apply it to their daily life. Implications for Patient Protection and Affordable Care Act on March 23, 2010 are discussed as some schools may be able to obtain funds to support and enhance sex education programs, which can be expanded to include, self-esteem, good health habits, peer relationship, decision-making skills and career aspirations.

Organizational Context Of The Field Agency: The Integration Of Core Competencies In Advance Clinical Practice

Fatima Crayton (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The field practicum serves as a vehicle to produce competent Social Work Practitioners who can effectively work with individuals, families, groups, communities and organizations. This presentation intends to summarize the learning experiences that include the attainment of 10 core competencies common to all social work practice (2008 CSWE.org), and the selection of theoretical frameworks applied through the field practicum. The intern selected two practice behaviors with the assistance of the field instructor operationalizing 10 competencies that support the intern’s social work evolving identity over the course of
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Savannah State University’s Master of Social Work program, into an independent practitioner. Each practice behavior established draws upon the intern’s involvements at Georgia Regional Hospital at Savannah and the Coastal Children’s Advocacy Center. Implications for this project will directly contribute to the advancement of such institutions with a clinical competencies in the field of Social Work.

G054
The Blending Of Play And Cognitive Strategies On Behavior Outcomes In A School Setting: A Single Subject Design

Fatima Crayton (Graduate)
Dr. Shinaz Jindani (Savannah State University)

This study presents the theoretical rationale and the efficacy of individual therapy in Social Work practice. The study involved a 9 year old female subject with a past history of sexual abuse and has been in therapy for almost 2 years. The client participated in 9 therapeutic intervention sessions; each session involving the blending of play therapy with cognitive strategies. During the initial session, the client engaged in an activity in creating two distinctive hats; a “home hat” and a “school hat.” The overall objective of the intervention was to disengage the client’s feelings about her home life from her feelings about school. Each session involved the use of positive self-talk, cognitive coping, affect regulation, and role play. The client’s progress was tracked using a 10 item questionnaire with response ratings on a 4 point Likert scale using smiley faces that matched: Everyday=4, Sometimes=3, Not Really=2, Not At All=1. With the application of SINGWIN the data was tested for autocorrelation. No trend was found. Using the median of 40 or higher, proportion frequency noted significant changes between Phase I and Phase II (p=0.00). D index noted that the 49 % of scores moved into desired zone. The child’s classroom behavior showed improvement over the course of the intervention however in Phase II, the client experienced a new crisis and scores began to dwindle into undesired zone.

G055
Beliefs of Single Mothers about Missing Male Role Models in Their Children’s Lives

Anna Drayton (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Traditionally, men were the bread winners, and women were home makers. However, more women are raising children on their own; they are forced to assume both roles. Single mothers juggle many responsibilities including; financial constraints, housekeeping, and parenting. In addition, they lack a supportive spouse to turn to for consultation, cooperation, and comfort. Irrespective of financial stability, single mothers face difficulties in balancing their multiple roles. Research suggests that single parents are two – three times more likely to seek out emotional help as compared with two parent families. According to Rose Mackey (2011) children who come from single parent home tend to have behavior issues. Therefore the purpose of this study was to explore the impact on children who come from single parent home, where the male role model is absent. Sample of convenience was used and prospective participants were approached in the churches, parking lots and communities. A 20 items questionnaire was administered that inquired about their family status and their belief about the impact of missing male role model on their children. Questions such as “Children who do not have a male role model do poorly in school” were measured on 4 point Likert Scale. This research was based on a tenet that if parent/parents believe that the male role model does contribute to the socialization of a given child, then they are more likely to seek out resources and participate in the community to broaden the enabling environment for their children.

G056
Child Abuse Prevention and Treatment Act

Anna Drayton (Graduate)
Evelyn Denard (Savannah State University)

Each year, millions of children around the world are the victims and witnesses of physical, sexual and emotional violence. Child maltreatment is a major global problem with a serious impact on the victims’ physical and mental health, well-being and development throughout their lives and, by extension, on society in general (Pala, B., Unalacak, M., & Unluoglu, I, 2011). With child maltreatment, also known as child abuse being long in existence, sufficient evidence shows that it can be prevented. Ultimately, the goal is to stop child maltreatment before it starts. The paper will further explain examples and types of abuse that children go through. The paper also goes into details about two policies that are in place to help children who are experiencing child abuse in some shape or form. The policies are Advancing Children’s Rights to be Heard and Protected: The Model Representation of Child Abuse, Neglect, and Custody proceedings Act as well as the Child Abuse Prevention and Treatment Act. These two policies go hand and hand when it comes to helping individuals/children who are being abused. In addition the policies help act as a voice for children who cannot speak on their behalf. The policies also help advocate and provide lawyers on the behalf of the children. It is also the policies duties to assure that the children are protected and that they have the right to be heard. Furthermore, gaps in the policies will be taken into consideration as well as new programs that were enacted to that assure the protection of children. The overall objective of the two policies is to make sure that children are protected from Child Abuse.
G057
**CSWE Core Competencies and Practice Behaviors in a Psychiatric Hospital Practicum Setting**

**Erica Dyal (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**

The Council on Social Work Education’s (CSWE) ten core competencies support the knowledge, value, and skills necessary for professional social work practice to ensure that MSW graduates are adequately trained and prepared to work in the field. Student membership with professional organizations such as the National Association of Social Workers (NASW), the Clinical Social Work Association of Savannah (CSWA-S), and the National Organization of Forensic Social Workers (NOFSW) allowed for familiarization with ethical standards and principals, which served as guides for the practicum experience. MSW practicum experience in a psychiatric hospital setting provided many opportunities for practice and understanding of the required competencies as detailed by the listed practice behaviors and supportive social work perspectives and theoretical frameworks. Additionally, the field experience instilled a strong sense of self-efficacy, confidence, and preparedness for professional social work.

G058
**The Effectiveness of Mindfulness-Based Interventions on Symptoms of Schizoaffective Disorder**

**Erica Dyal (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**

This research focuses on the effectiveness of mindfulness-based interventions on symptoms of schizoaffective disorder. Mindful practices such as meditation, art, and expressive writing promote the fundamental activities of consciousness: attention and awareness. Evidence-based research supports the theory that mindful practices decrease anxiety, depression, anger, and impulsive behavior and increase mental and physical health, interpersonal relationships, and behavior regulation. The single-subject research participant is a 57-year-old male diagnosed with schizoaffective disorder and receiving inpatient, forensic treatment in a psychiatric hospital. The client’s primary goal was to reach the next level of security within the forensic unit, which would allow for additional privileges. In order to achieve his primary goal, treatment goals were created, including: a decrease in episodes of anger and impulsivity and an increase in compassion for self and others. Statistical data from 10-item Likert scale surveys completed over the ten weeks of treatment were calculated in two phases: phase A (meditation intervention) and phase B (meditation and art intervention). The client showed limited decreases in anger and impulsive behavior over the ten weeks he received therapy; however, he did report an increase in interpersonal relationships and kindness toward self and others. Although the results show the interventions had a mild effect on the client’s symptoms of schizoaffective disorder, the research was beneficial because the client demonstrated a deeper understanding of mindfulness and creative techniques of practice including meditation, art, and expressive writing.

G059
**Building Confidence in Clinical Social Work Practice through School Social Work**

**Shavonne Franklin (Graduate)**  
**Chequeta Riles (Savannah-Chatham County Public School System)**

Through my internship at a local high school, I wanted to gain confidence in practicing clinical social work. Having a Bachelor’s degree in Psychology, I am extremely knowledgeable of various theories and treatments but I have had very little hands-on practice integrating these theories into real life. By going on home visits, I was able to readily identify myself as a professional social worker to members of the community. I was seen as a figure of authority, rather than a student. I have had the opportunity to apply social work ethical principles to guide me by remaining impartial to confidential information entrusted to me. I found my voice by working collaboratively in multidisciplinary team meetings. I gained confidence in using bio-psycho-social assessments through a case involving a potentially schizophrenic client. Using the Strengths Perspective, I was able to bolster the trust and self-esteem of a male African-American preteen. The importance of the Person-In-Environment Theory and understanding a client’s relationship dynamics was demonstrated by working with a student who felt brainwashed by her family. Through my work with juvenile court mediators, I was well prepared to develop plans of action with students to improve their academic standing. In the beginning of this MSW program, I struggled with seeing myself as a professional as opposed to the novice I felt like. Through this internship, however, I developed my own style of building rapport with clients and the confidence to be respected as a professional social worker.

G060
**The Use of Psychotherapy to Raise the Self-Esteem of an African American Teen**

**Shavonne Franklin (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**

The purpose of this research was to explore the effectiveness of psychotherapy on the self-esteem of a teenage African American female. This was a single-subject design that followed one high school student’s self-esteem. Given the client’s history of self-mutilation and sexual abuse, it was hypothesized that free association would be the most beneficial form of treatment in improving her self-esteem. The subject's self-esteem was measured using a state self-esteem scale which consisted of the client’s symptoms of schizoaffective disorder, the research was beneficial because the client demonstrated a deeper understanding of mindfulness and creative techniques of practice including meditation, art, and expressive writing.
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twenty questions to be answered using a five point Likert scale. The state self-esteem scale assessed three types of self-esteem: performance, social, and appearance self-esteem. As hypothesized, the subject’s self-esteem improved as the psychotherapy continued. Although the client’s self-esteem did not cross over from the “neutral zone” into the “desired zone” in a consistent manner, it was moving in that direction. With more time, it is reasonably believed that the subject’s self-esteem will move into the desired zone with the continuance of psychotherapy. IRB Approval No. 13-2-334

G061
Promoting Resiliency with Victims of Domestic Violence

Dana Frasier (Graduate)
Ellisha Smith-Jones (LCSW Army Community Services' Victim Advocacy Program)

I was placed at Victim Advocacy Program (VAP) on Fort Stewart, Georgia. Victim Advocacy Program is designed to provide comprehensive assistance to all the parties involved in the cases of domestic violence. It also provides training for its staff members, so that they can develop an effective response case by case basis. VAP in particular and Fort Stewart in general has provided me with a context to practice social work competency and grow as a social work professional. It exposed me to the victims who received direct counseling. I acted as a liaison to the commanders who in turn were responding to the perpetrators. Using Cognitive Behavior Theory and an Ecological Perspective, Strengths based social work interventions were designed. During these interactions I was able to demonstrate "Clinical Practice Behaviors" that implement 10 mandated competencies of Council on Social Work Education. My confidence as a social worker soared as I saw client outcomes. The client’s demonstrated “resilience” as they accepted their situations, left the abuser and found a new life for themselves. I do believe that with the appropriate support and access to the resources clients can be empowered to solve their own problems.

G062
The Impact of Domestic Violence on Military Spouses

Dana Frasier (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Domestic violence impacts the victim physically, emotionally/ psychologically, financially, and sexually. It is not unusual for military families to face Domestic Violence, after the arrival of the deployed spouse back to the family. It is worse, when a spouse already experienced domestic violence before deployment. The purpose of this single subject design was to study the relationship between Domestic Violence and its impact on Self Esteem. The participant was a 27-years old, military spouse. Using Cognitive Behavior Theory, Cognitive Behavior Therapy was used to help restructure thought pattern that empowered the client to not accept her spouse’s abusive behavior. In all eight one-on-one counseling sessions were conducted and eight data points were gathered. In order to track fluctuations in Self Esteem an instrument was designed with 10 items that used 4 point Likert Scale, where 1 was strongly agree and 4 strongly disagree. Lower scores noted higher self-esteem. Using SINGWIN, the data was tested for autocorrelation. The Proportion Frequency noted positive changes in Self Esteem (p=0.00) and the Delta noted the effect size of 50% changes in the desired direction.

G063
Level of Socioeconomic Status and Parental Involvement

Vernell Gaines (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research was to study the socio economic level of the parents and their engagement level with their child. It was hypothesized that the parents who are overworked and have a difficult time adequately providing are less likely to be involved as parents. A 16 items questionnaire was designed that inquired about the income and socio economic status of the parents of school going children. It also inquired about their involvement in their children’s lives academically and socially. Using sample of convenience 50 completed questionnaires was obtained and analyzed using IBM SPSS Statistics program. Preliminary findings suggest that due to hard economic times faced by our country, more families are facing financial difficulties than one would assume. Families are also faced with inconsistent income, which creates stress and therefore pressure on parenting itself.

G064
Anger Management Treated with Psychotherapy

Jessica Geddis (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Anger has become gradually common issue for adults in today’s society. This study evaluates the effectiveness of psychotherapy for a 25 year old African American female experiencing anger. The study will show if talk therapy, journaling, and/or relaxation techniques will help the client control her anger and learn adaptive coping skills to address stressors. Psychotherapy process is to help the client look at their specific concerns and learn how to use their emotion skillfully and appropriately in their everyday lives. The Clinical Anger Scale was used, over a 6 week period. The data was tested for autocorrelation using SINGWIN. The findings suggest that journaling is an effective intervention for anger management.
G065
Using Social Work Competencies to strengthen Self Efficacy in a Diverse Population

Jessica Geddis (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Competency-based education is significant to social work practice. The Council on Social Work Education uses 10 competencies to measure practice behaviors. These competencies will help social workers successfully apply ethical principles, critical thinking, engage effectively with members of diverse populations and perform an appropriate assessments and use crisis interventions (CSWE, 2008). At St. George Middle School, 21st Century Community Learning, I co-facilitate weekly parenting workshops with partners and their children, advocate for students when needed, perform individual, family and group counseling, perform assessments for referrals to other agencies and manage crisis situation which may occur in the homes or school. Using behavior theory, person in environment, and being knowledgeable in Erikson’s stages of psychosocial development, helps me to serve clients effectively. As a Professional Social Workers, I have mature in the areas of service delivery, policy formation, culture competency, and empathy toward at risk population. I also strive for economic and social justice and believe that with opportunity and proper resources, all members of society are capable of living excellent lives. My practice philosophy is centered on having a strong desire for individuals to a prosperity life.

G066
Burnout Prevention and Maintenance In Caregivers

Amanda Grant (Graduate)
Barbara L. Williams (The Office of the Public Defender)

Burnout is a situation in which a person uses their physical and emotional energy to the point of becoming exhausted from continuous hassles. The purpose of this single subject research was to explore how cognitive behavioral therapy (CBT) along with a mindfulness practice (MP; meditation) together ameliorate feelings of burnout and stress in a 45 year old, Caucasian Caregiver who was engaged in a multitude of roles. Acting as direct caregiver to a new born, caring for a financially dependent adult child, and holding a full time job had caused consistent stress and had resulted in burnout. In order to measure the client’s progress throughout the intervention, a tool was designed using 5 items from Maslach’s Burnout Inventory (MBI, 1981) and 5 items from the Perceived Stress Scale (PSS, 1983). This tool was administered three times a week via email. During the first phase (5 data points) no intervention was implemented. During the second phase (5 data points) CBT and MP was implemented. Using SINGWGN the data was tested for autocorrelation, no trend was found. The proportion frequency noted significant change between phases (p=0.00). Delta noted the effect size of 49.7% in desired direction. Both CBT and MD worked well together, as CBT could have influenced change due to reflection at a cognitive level and MD may have helped client practice behavior that may have yielded into new perspective about life and daily stressors. IRB: 13-2-359

G067
Questing for Experiences that Lead to Competency in a Challenging Agency

Amanda Grant (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Chatham County Public Defender’s Office (PDO) serves indigent citizens who have been charged with felonies by providing them with legal representation. The office is populated by twenty-one attorneys (defenders) and one Forensic Social Worker (FSW). The FSW acts as a case manager, accepting referrals from the defenders. She also intervenes for clients appointed to the office by providing them with linkages to services in the community. This link is an alternative sentencing plan. In the agency, the FSW does not conduct initial assessments and contact with client is minimal. As a Master of Social Work student intern, these issues became barriers to truly engaging in clinical practice with clients and attaining competency as mandated by the Council on Social Work Education (CSWE), by performing certain practice behaviors. As someone who actively seeks knowledge, it was my duty to diligently quest for competency and a means to exhibit the practice behaviors in an agency that I found challenging. In utilizing Person-In-Environment (PIE) and looking to the Systems Theory, I found a way to identify the kind of theory based practices I was using to advocate for my clients. In actively looking and questing for experiences that would lead to my competency, I feel I was challenged to become a better social worker.

G068
Bullying and Cyber-Bullying: Keeping Our Children Safe

Semaj Grant (Graduate)
Evelyn Denard (Savannah State University)

Bullying occurs in many forms, from traditional face-to-face bullying to a more modernized technological advanced cyber-bullying. Regardless of the form, bullying can have a profound effect on the both the perpetrator and victim. The widespread of bullying among adolescents has increased school violence and the rates of self-harm. Given the idea that the school systems spends majority of the day providing guidance over our children, programs should be implemented which provide preventative steps and address the physical, emotional and psychological impact of cyber-bullying and bullying alike. Through an analysis of previous research studies, literature review and current legislation, this study will examine the type and
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degree of adolescents’ experiences with any form of bullying. Strategies to combat bullying will be explored from an ecological framework to gain insight on the relationships of individual behaviors, increased susceptibility to violence as it relates to the impact of bullying. This research study will explore the relationship between harassment and increased mental health illnesses among adolescents: (1) outlining and defining types of bullying, (2) examining bullying, victimization and perpetration experiences, (3) exploring the emotional and psychological impacts of bullying and (4) identifying current legislation and gaps, preventative measures and programs within school systems. The Illinois Bully Scale was utilized which has an 18-item scale with 3 subscales assessing the frequency of bullying behavior, fighting, and victimization by peers. The preliminary findings suggest implementation of federal and state legislation and prevention programs would decrease in the frequency of bullying and serious school violence.

G069
Patterns of Social Media Use Among College Students and the Effects on Self Esteem

Semaj Grant (Graduate)
Dr. Shinaz G. Jindani (Savannah State University)

Social Media Sites consists of virtual communities in which users create personal profiles, connect and interact with associates, friends and others that share a commonality. The social media has a profound influence on the behavior of self-worth and the overall emotional well-being of an individual, especially that of a college going student. Social work conceptualizes the behavior patterns of college students in the context of “persons-in-environment (PIE)”. This theoretical framework may explain relationship between the behavior and mental health issues faced by the college students. This research study explores the relationship between self-esteem and frequent use of social media: (1) outlining social media usage patterns, (2) examining social desirability as a motivator for usage, (3) exploring self-esteem issues and comorbidity of underlying psychological disorders and (4) examining negative consequences of social media usage. A 22-item instrument was designed using a 4-point Likert scale where 1 is Strongly Agree and 4 is Strongly Disagree. The preliminary findings suggest that the frequent use of social media present a significant decrease in self-esteem.

G070
Building Upon Masteries with the Integration of Social Work Competencies

Cassandra Green (Graduate)
Ruth Keith (Department of Veteran Affairs)

The purpose of this presentation is to disclose this Master of Social Work (MSW) Intern’s practicum experience while mastering ten Social Work competencies as required through the Council of Social Work Education (CSWE). This MSW intern used Cognitive Behavior Theory, Psychodynamic Theory and Person-in-Environment (PIE) while serving veterans and persons impacted by the Human Immunodeficiency Virus (HIV). Understanding the National Association of Social Work (NASW) code of Ethics has allowed me to govern my thoughts and behaviors while in practice. Having strong self-efficacy has allowed me to accept challenges and complete goals while still performing at my finest. This MSW Intern has gained more self-confidence in facilitating groups, providing individual psychotherapy, and demonstrated understanding of symptomology while educating clients. The knowledge of Social Work practice behaviors was demonstrated throughout the practicum. It was imperative to keep confidentiality while being respectful of individualized cultural beliefs. As a Professional Social Worker, I have matured gracefully, utilizing professional skills to meet clients where they are. The use of evidence based knowledge has allowed me to give superior service while building upon individual strengths. My practice philosophy is simple, “Believing a person when they show their true selves and build upon it.” Keywords: social worker, cognitive behavior theory, person in environment, practice philosophy.

G071
The Effects Of Brief Psychodynamic Therapy to Increase Low Self Esteem

Cassandra Green (Graduate)
Ruth Keith (Department of Veteran Affairs)

The Department of Veteran Affair serves and honors those men and women who have dedicated their lives to protect and preserve our freedom. It is no secret that many of our veterans are impacted by an mental illness due to combat exposure that tends to create long term trauma. This single subject participant was a 64 year old African American male with Pervasive Depressive Disorder; Anxiety and prior history of Substance Abuse Disorder, which resulted into low levels of self-esteem and low levels of life contentment. Brief Psychodynamic Theory was used to help client understand how the influence of past life events can impact present behavior. The researcher implemented Talk Therapy, self-determined positive affirmations and journaling techniques to increase self-esteem and life contentment. To measure the progress throughout the intervention, The Rosenberg Self Esteem Scale (15 items) and Life contentment Scale (15 items were used). In all, 10 data points were gathered. SINGWIN was used to test the data for autocorrelation. No trend was found. Statistical analysis noted no significance implicating no changes between phases as the client was faced with unforeseen financial constraints during the second phase. However, there is consistent evidence that Brief Psychodynamic theory and the incorporation of Talk Therapy does yield positive results. As with a small sample size of 10 data points, no conclusion could be reached. It is therefore recommended that the treatment and measurement both continue until changes are noted.
G072
Becoming Efficacious through the use of Theory and the Practice Experience “Being the Change I Want To See In Others”

Frederic T. Green (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The new behaviorist approach to human behavior is viewed as the interplay between personal, behavioral, and environmental factors. Self-efficacy helps one to believe in his/her own abilities to accomplish a desired goal. Self-efficacy theory a construct of Social Cognitive Theory asserts that people will only attempt to do what they can accomplish and will not attempt things they know they will fail. It has to with a mind-set. However, when a strong sense of efficacy is built, individuals believe they can accomplish even the most difficult of tasks, they see the challenges as an opportunity for mastery. When a person is efficacious they will set challenging goals and maintain a strong commitment to complete them. The synthesis of my collegiate experience has built for me a stronger self-efficacy thus far, through mastery, vicarious learning, and verbal persuasion. As a first generation student and being totally oblivious to the collegiate experience, because of environmental factors, I am reflecting back on how far I’ve come as it relates to matriculating through the halls of Academia. I have been efficacious in my efforts in college, through internship, my personal life, and being a change agent. Through internships I have been effective as a Professional Social Worker while maintaining ethical principles, critical thinking, engaging in diversity, infusing the knowledge of human behavior, research, policy, intervention with family, groups, and individuals, and the advancement of human rights. All of the above precepts have shaped and developed me into “being the change I want to see in others”.

G073
Facilitating Academic Achievement

Frederic T. Green (Graduate)
Dr. Shinaz Jindani (Savannah State University)

In this research study, a single subject participant was a college going non-traditional student who was diagnosed with Schizophrenia, low academic achievement, anxiety and low self-esteem. Besides taking medication, the client participated in individual counseling that used Stress Inoculation Therapy informed by Cognitive Behavioral Theory. These counseling sessions offered adaptive coping and study skills. The researcher also mobilized collaborative effort between the various class instructors, peers and counselor to generate an enabling environment. To assess the impact of treatment, an instrument was generated with 10 items that used 4 point Likert Scale that measured his Sense of Self-Efficacy. Thirteen data points were gathered. The data was tested for autocorrelation. There was no significant difference between phases. However Delta noted 10% increase in desired direction. The participant noted growth and confidence. Finally this participant completed first semester of college, without withdrawing after 18 years. IRB #13-2-328

G074
Critical Thinking, Theory and Professional Preparation

Kiera Green (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Field Education is an integral component of social work education anchored in the mission, goals, and educational level of the program. It occurs in settings that reinforce students’ identification with the purposes, values, and ethics of the profession; fosters the integration of empirical and practice-based knowledge; and promotes the development of professional competence (CSWE). My field agency has provided me with a context to gain social work competencies and grow as a professional. One thing that I have learned is to apply critical thinking skills while intervening with various systems; may it be with individuals, families, small groups and change in organizations and neighborhoods. Field education has prepared me to integrate practice methods, social policy, research, human behavior and clinical theories. Effective Social work practice rests on the assumption intentional use of theory and reflection informs the practice outcome. Therefore the practice that is informed by a theory distinguishes professional social work from informal forms of helping.

G075
Quality of Life in Hemodialysis PT

Kiera Green (Graduate)
Dr. Shinaz Jindani (Savannah State University)

A Quality of Life Survey (QOL) was conducted on a renal patient registered to a dialysis support group to discover their psychological, social, and spiritual needs. This study conducted a series of weekly surveying and counseling. Each week the surveys were analyzed using SINGWIN. There were different themes that identified the quality of life of people with End Stage Renal Disease (ESRD). Physiological impact, impact of treatment, impact on daily life, psychological impact, impact on relationships, social impact and coping responses were the major themes identified and discussed. The QOL survey identified that ESRD comes with emotional, physical, psychological, social, and existential burdens. The client began with a baseline for six weeks to measure quality of life. This was the first phase (Phase I). Intervention at Phase II consisted of activities such as journaling, homework assignments, and psychotherapy to support, help client cope, and increase quality of life. This study highlights the decline in QoL in patients once they start dialysis over time. As time passed, the patient began to become more burdened by her kidney disease. The study also highlights how interventions help increase self-esteem and social relationships. By focusing on QoL in ESRD patients that are low, it may be possible to plan interventions within the...
social work field that could improve patient's QoL. Based on results of this study, all interventions are effective in practice.

G076
Paradoxical Note: Low Socioeconomic Status and Obesity in Children Ages 3 to 16

Felicia A. Greene (Graduate)
Dr. Shinaz G. Jindani (Savannah State University)

According to the Center for Disease Control the Obesity Rate for US Low Income Pre-School Children reduced slightly from 15.2% - 14.9% (2003-2010), yet it is impossible to ignore the problem of childhood obesity in our society as childhood obesity has tripled since the 1980’s. It is paradoxical to note that the children from low socio economic families are more likely to be obese than those who are from middle income or upper income families. This research explores the relationship between socio economic status and childhood obesity. Using the sample of convenience 50 completed questionnaires were administered at outdoor venues within the city limits of Hinesville (Liberty County, GA.). This 30-item questionnaire used the Likert scale and inquired about the their views on community gardens, school meals, safe neighborhoods that foster outdoor play, outdoor play activities and sufficient income that will foster nutritious meals. Preliminary findings suggest that most parents do support community gardens, nutritious meals and outdoor play activities. Since parents play a primary role in assuring their child’s health, it is recommended that parents receive education and hands-on skills in cooking, grocery shopping, reading labels, calculating calories along with child’s sleep patterns, peer relationships and school achievement. IRB Number: 13-2-273

G077
Does Training Satisfaction Among DFCS Case Managers Promotes Better Retention and Decrease the Level of Errors in Case Management

Tressie Hall-Mitchell (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research is to examine the training satisfaction among Department of Family and Children Services (DFCS) case managers promotes better retention and decrease the level of errors in case management. It is not unusual for DFCS to offer training to the new workers; however due to shortage of staff and increase in caseload, the case managers are receiving caseloads before they are completely trained. This causes higher error rate and higher stress levels for the workers resulting in workforce turnover rate. This research explored the view of case managers at one DFCS office, which examine the preparation and satisfaction levels with the training. A 30 items Likert-scale questionnaire was designed and administered to 50 Child Protection Investigators and Foster Care Case Managers. Results revealed that DFCS Case Managers will remain employed in child welfare when proper training is provided; therefore it is significant relationship between training satisfaction and recruitment retention that was found. Implications of the findings for practice and recommendations for future research are discussed.

G078
What is Good for the Client Is Also Good for the Professional Social Worker

Jane Hamill (Graduate)
Dr. Shinaz G. Jindani (Savannah State University)

I was able to conduct part of my internship at a residential skilled nursing facility and a rehabilitation center. This agency primarily serves elderly who need post-operative care that demands skilled nursing services. Besides visiting residents in their rooms, I conducted one-o-one casework (micro), connected them to the off campus resources such as doctor’s appointments (mezzo) and charted their daily mental health needs (clinical practice). I also participated in their care plan and interacted with their family members (mezzo). I also participated in the Utilization Review meetings with the staff members that anchored quality control protocols (administrative practice). I conducted direct resident assessment that was incorporated in Minimum Data Set (MDS) that is required by The Centers for Medicare and Medicaid Services, which in turn feeds into a Resident Assessment Instrument (RAI) (macro). RAI essentially facilitates the payments to the Nursing Homes. Thus I was able to participate at all levels of social services, from micro to macro and demonstrate practice behaviors that were clinical as well as administrative, which for the most part were informed by Existential Reframing. This provided me with a learning context that frequently demanded that it be informed by theories along with reflective thinking that would yield into positive client outcomes. Reflective practice helped me strengthen my sense of Self-Efficacy as what is good for the client it is also good for the professional social worker.

G079
Exploring the Role of Situational Stress and the Development of Positive Self Esteem

LaTasa M. Hawkins (Graduate)
Andrea M. Epting (Heads-Up Guidance Services (HUGS))

The purpose of this study is to determine how effective behavioral therapies are on the treatment of situational stress and self-esteem. Single-Subject Design follows a 27 year old female African American; additional barriers identified were low self-esteem and situational stress. Client referred to HUGS/SSU for individual counseling sessions (10 sessions). A 25-item survey administered after individual sessions and on the weekends to measure: Situational Stress (12 items) lower the better and Self-Esteem (13 items) higher the better. The results of this study, all interventions are effective in practice.

Abstracts
Treading Diversity as Groundwork for Social Work Practice

LaTasa M. Hawkins (Graduate)
Dr. Shinaz Jindani (Savannah State University)

My field practicum is grounded in the values and ethics of the social work profession and upholds the six core values defined by the NASW code of ethics. This presentation will focus on how I used the Council on Social Work Education (CSWE) 10 core competencies while selecting 2 Practice Behaviors under the direct supervision of Andrea Epting, LPC, MAC, CST at Heads-Up Guidance Services (HUGS). I incorporated theories and methods to address psychosocial problems experienced by individuals, families, and groups. These theories include human development theories within a psychosocial context, psychological theories, and theories that place emphasis on social and economic justice. Each practice behavior provides framework that allowed me to examine every system that may impact the client within their environment. This perspective emphasizes my understanding of human diversity and its influence on the client's culture based on their social class, gender, religion, sexual orientation, or disability. By having a clear understanding of a client's views, I am able to provide assistance throughout all phases of treatment. This allows me to have an appreciative outlook on the client's behavior and change. I am able to incorporate a strengths and empowerment approach that supports resiliency which promotes growth and change. Due to this I have an increased level of cultural humility and intersectionality when engaging various populations. This has allowed me to support them in overcoming the adversities they are faced with.

“Stop and Frisk”: One More Way to Justify Racial Profiling

Nicole Henry (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The citizens are generally protected by the fourth amendment to the constitution of the United States against unreasonable searches and seizures. The “Stop and Frisk” policy as implemented by police departments led the citizens to question the fourth amendment. Many are concerned about the implementation of the policy and the absolute discretion that the police have in determining who to stop and frisk. This study explores the cultural competencies of the Police Officers in Chatham County. Using the sample of convenience 50 completed data sets were gathered from the police officers. A 21-item questionnaire inquired about their personal belief related to various ethnic immigrant groups, their daily interactions informed by their biases and their interactions with the citizens as police officers. Findings suggest that although police officers are trained in cultural competency yet there is no guarantee that they will be objective in implementing “Stop and Frisk” policy. A large part in the policy implementation is the Police Officer's own perception of his/her culture, perception of the culture of the person they are investigating, their own biases gained during childhood and their current level of confidence in their job. As the number of “Stop and Frisk” increases, there are more questions about the racial characteristics of those who get stopped. Without a doubt, African Americans and Latinos are frequently selected, as racial profiling is not new to the policing practices. Implications for Fourth Amendment and human rights are discussed. IRB number: 13-2-285

The McKinney-Vento Homeless Assistant Act

Nicole Henry (Graduate)
Evelyn Denard (Savannah State University)

This paper examines the McKinney-Vento Homeless Assistant Act of 1987. The Act seeks to protect the rights of homeless students and to ensure that they receive the same quality and appropriate education that other students receive. The paper looks at the effect of homelessness on the education of homeless children and what impact the McKinney-Vento Homeless Assistant Act of 1987 has on educating these children. Data was drawn from scholarly papers, books and government documents. The study shows that there were some improvement in the education of homeless youths but more study of the impact of the McKinney-Vento Homeless Assistant Act of 1987 is required.
Substance Abuse and the Workplace

Kale M. Herndon (Graduate)
Evelyn Denard (Savannah State University)

Substance Abuse is a nationwide epidemic. There is estimated to be 22.2 million Americans, twelve years of age or older which meet the criteria for substance use disorder. At least 12% of these individuals are not getting the proper treatment they need. It is not unusual for employers to encounter employees with substance abuse problems (ESAP). These employers may be hesitant to provide accommodations and services to these ESAPs. ESAPs may display absenteeism, frequent disappearances from the work site, long unexplained absences, poor judgments, and bad decisions. Employers besides failing to provide accommodations to these employees under Title I of the Americans with Disabilities Act (ADA) they are losing the opportunity to provide services to these ESAPs before it is too late. Employers who do not retain workforce are faced with high recruitment and training costs, which could be curtailed if they provided services to these ESAPs. This is a win-win proposal. If the employers encouraged their employees to seek services, this will not only save our workforce but also save high cost of treatment and rehabilitation services. It might even save a generation only if we as a society work with each other. To explore further, a 15 item instrument was designed for the employers, that used a 4 point Likert Scale where 1 was strongly disagree and 4 was strongly agree. Using sample of convenience, 25 employers in Savannah-Chatham County responded.

Effectiveness of the Animal Assisted Therapy in Treatment of the Client With Autism Spectrum Disorder

Tatyana Hickman (Graduate)
Dr. Shinaz Jindani (Savannah State University)

LightHorse, Inc. is a non-profit behavioral center that offers a variety of mental health services to the individuals, families and groups. It recognizes the importance of the mind, body and spirit connection and uses holistic approach in treating its patients. While completing my internship at this organization I have learned and practiced new skills such as completing multidimensional bio-psycho-social assessments, developing of the mutually agreed –on intervention goals and objectives, and selected and implemented appropriate intervention strategies. While practicing these skills I identified clinical practice behaviors that operationalize 10 mandated competencies of the Council On Social Work Education. I have also learned how to use strategies, techniques and approaches based on specific practice theories. I was introduced and practiced alternative experiential therapies such as Animal assisted therapy, Play therapy and Art therapy. Demonstration of my learned practice behaviors were informed by the Client-Centered and Experiential Theories. During my internship I have learned new practice skills and gained confidence as a clinical social worker.
G087
Childhood Sexual Experiences and Adult Relationships

Lineon Irvin (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Child Abuse Prevention and Treatment Act (CAPTA) was enacted to protect children from being abused. However, the enactment of CAPTA has not improved child safety or welfare. The purpose of the research was to investigate the relationship between childhood sexual abuse and its effects on adult relationships. Adults who have been victims of childhood sexual abuse may have difficulty forming meaningful, long-term relationships as sex may not be considered pleasurable. There is evidence that the children who have been sexually abused are more likely to engage in risky sexual behavior, do illicit drugs, have a high probability of being incarcerated (Easton, Cooney, O'leary, Zhang, & Hua, 2010) and are more likely to know and live with the perpetrator (Childhelp.org). Unfortunately, thirty percent of abused children later become abusers themselves perpetuating the erroneous cycle. To understand this phenomenon further, an instrument with 20 items was designed using 5 point Likert Scale. This instrument gathered the opinions of the respondents on their level of sexual satisfaction and childhood sexual experiences. Using the sample of convenience the data was collected in the community and the participants were recruited through the word of mouth. Forty completed responses were gathered. Majority of the respondents (87%) reported no Childhood Sexual Abuse which created uneven sampling distribution. Therefore hypothesis could not be tested. However age seems to be a predictor of sexual satisfaction. Younger respondents reported lower levels of sexual satisfaction.

G088
Field Placement Competencies

Loretta Jackson (Graduate) and Ray King (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this poster presentation is to identify MSW Candidate practice behaviors outcomes achieved based on The Council on Social Work Education (CSWE) approved Educational Policy and Accreditation (EPAS) ten competency areas. Field Instructor, Ray King assisted MSW Candidate in identifying competency areas achieved through direct practice as an Intern at the Brunswick Judicial Circuit Drug Court. Methodology used to identify practice behaviors included direct observations of practice and staff development trainings. Two practice behaviors for each competency area was achievement resulting in twenty practice behaviors obtained by the MSW Candidate through Internship at Brunswick Judicial Circuit thus meeting the CSWE requirements for EPAS.

G089
Using Agency Context to Become a Life Long Learner

Loretta Jackson (Graduate) and Ray King (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Brunswick Judicial Circuit Drug Court is a treatment facility specifically designed to facilitate treatment and rehabilitation of non-violent felony offenders who have been diagnosed with alcohol or substance dependence or abuse. Successful completion of the Drug Court program relies on the participant’s motivation for change and the treatment modalities used within the clinical setting. Using this context, I along with the Field Instructor have identified Clinical Practice Behaviors that operationalize the 10 mandated competencies of Council on Social Work Education. Demonstration of these behaviors was performed utilizing the Empowerment Model of change along with the integration of Cognitive Behavior Theory. In addition to working with the clients on individual basis, group therapy was conducted to enhance the overall effectiveness of therapeutic intervention. What I have learned from performing individual sessions and group therapy is that client’s possess the “locus of control.” They determine what behaviors will change. Furthermore, my engagement in Staff Development Training has provided intervention techniques as well administrative experience. As a result of this eclectic learning experience, I have been awarded the opportunity to learn how individuals, agencies and other social systems function within an ecological perspective. Consequently, using this agency context has enhanced my practice commitment to being a life-long learner which will continue to contribute to my sense of self efficacy.

G090
Competencies Gained Through Field Practicum in an Agency Setting

Samantha Klepper (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research was to identify key CSWE competencies learned by an MSW II intern while completing required practicum hours in a community agency setting. COPE Childhood Obesity Prevention + Education is a tax exempt 501(c) (3) charitable organization whose mission is to combat childhood obesity with a threefold approach - nutrition education, fitness and behavioral health. The behavioral health component of the COPE program was the main focus of this internship. Multiple theories and interventions were utilized throughout the learning process.

The field instructor and the intern collaborated in the final weeks of the Spring 2014 semester and, using a ten-question rubric adapted from the Council on Social Work Education’s core competencies, agreed upon the most-observed and most
frequently implemented practice behaviors on the part of the intern. The results of this research confirmed the intern's effectiveness when engaging with clients and her desire to pursue interventions that combine holistic-based yoga therapy and traditional, Rogerian-style talk therapy. It also solidified the importance of community partnerships between social service agencies and the graduate students beginning their professional journey in said field.

G091  
Yoga Therapy as a Treatment for Obesity in Adolescent African-American Females

Samantha Klepper (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research project was to obtain information about the benefits of yoga therapy as a form of treatment for obesity in teenage girls. The client was a 14-year old African-American female referred to COPE by her pediatric cardiologist for supplemental treatment of obesity. The study focused specifically on the correlation between mindfulness practices and the potential for increased self-esteem along with a decrease in maladaptive eating behaviors. Six one-hour yoga sessions were conducted, once per week, for six weeks. Each session began with Rogerian-based talk therapy and was followed by 45 minutes of guided posture sequences and breath exercises. A Likert-scale questionnaire adapted from the BASIS-24® Scale and the Minnesota Eating Behavior Survey (MEBS) was administered prior to the start of each session. Using SINGWIN Analysis Software, the data for both independent variables was tested for autocorrelation. Proportion frequency detected a significant difference between the baseline and intervention scores. The yoga therapy intervention was effective. This conclusion is drawn from the effect size yielded in both subcategories, Self-Esteem (ES +41.8%) and Maladaptive Eating Behaviors (ES – 35.2%). By the end of treatment, 50% of the client’s scores in both categories had moved into the desired zone. Based on the findings from this study, further research involving alternative therapies is not just warranted, but critically necessary.

G092  
Personal Growth Initiative

Peri Kyriacos (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

Are Cognitive Behavior Therapy and Motivational Interviewing effective in treating Substance Abuse Disorders? The purpose of this single subject research was to test the effectiveness of an intervention to impact substance abuse problems of one client. The participant was a 20 year old male Caucasian college student. He is on probation at school for being arrested while under the influence of alcohol. Cognitive Behavior Theory informed the social work techniques of Motivational Interviewing and helped design the intervention that used a combination of education classes, individual counseling, group therapy and attendance at AA meetings. These addressed major lifestyle changes and attitudinal and behavioral issues that are relevant to facilitating coping with daily life. The overall goal was to help the client graduate from the treatment program successfully and to track changes due to interventions. An instrument was designed using the Hope Scale and the Personal Growth Scale. The scales were combined to create one instrument. The instrument was a 16 item scale. The views captured through a Likert scale that ranges from 1-6, definitely disagree to definitely agree. 10 data points were obtained. Due to Motivational Interviewing, the client had begun to verbalize his pseudo confidence in regulating his alcohol consumption and showed a beginning level interest in planning how to regulate and control his alcohol consumption. The client graduated from the treatment program successfully and was able to return to school.

G093  
Social Work Practice in the Prevention and Treatment of Substance Use Disorders

Peri Kyriacos (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

There are currently over 23 million Americans that are in recovery from addiction to alcohol and other drugs. In addition, there are over 20.7 million Americans with substance use dependence. Substance use, misuse, abuse, dependence and prevention are relevant to all fields of social work practice. This study examined the 10 core competencies that are required by the Council on Social Work Education (CSWE) on the “Advanced Social Work Practice in the Prevention of Substance Use Disorders” at my field practicum. I was able to put into practice substance use disorders theories, models and research to appropriate client systems and circumstances. Also, through the practicum I was able to engage, assess, intervene and evaluate with individuals, families, groups, organizations and communities about the prevention and treatment of addiction. Moreover, my field experience made me delve into the National Association of Social Work (NASW) code of ethics and how these codes affect and guide my practice of social work in the field of substance disorders. Finally, this exploration into my learning experience at my field practicum allowed me to determine my own self efficacy in the field of social work and helped me to grow professionally and personally.

G094  
Relationship between Education and Tolerance

Christiaan Layer (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

This study was designed in order to potentially develop an intervention to address the social problem of intolerance...
towards homosexuals. The hypothesis of this study was that individuals whom have a higher level of education, which is often associated with access to resources, will be more tolerant towards homosexuality than those individuals with lower education. The participants (n=50) used during this study were a sample of convenience collected in public places with the only qualifier for taking part being over 18 years of age. Participants were given a questionnaire packet which included an informed consent, demographics page, and a 10 item survey. The independent variable conditions were if participants had completed a post high school degree (n=26), or if they had not (n=24). The dependent variables analyzed during this study were the scores related to participant’s general tolerance (x̄=7.98, M=8.00, MODE=8, SD=1.33, æ=.178) t (47) =3.16, p=.003, and tolerance towards homosexuality (x̄=9.68, M=10.00, MODE=10, SD=1.68, æ=.013) t (48) =2.82, p=.007. Although an independent T Test showed significant between conditions, neither conditions questions showed reliability as evidence by their Cronbach’s Alpha score. Due to the unreliability of the questions used in this study it is impossible to state that there was a difference between the dependent variables. This study has raised questions and begun the process of potentially finding a relationship between education and tolerance towards homosexuals which could lead to an intervention to address this issue.

**G095**

**Motivation for Change: Substance Abuse Single Subject Study**

**Delores D. Liston (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**

Utilizing Cognitive Behavior Therapy (CBT) and Motivational Interviewing (MI) through a Strengths Perspective, this study explored the efficacy of social work intervention, on the progress of one client in treatment for substance abuse. Two instruments were used to track the progress; Single Question Motivation and Motivation for Change questionnaire. SINGWIN was used to analyze the data and the data was tested for autocorrelation. The Motivation for Change Questionnaire noted 39.1% increase from Phase I (Baseline) to Phase II (Intervention) in desired direction. T-Test revealed statistical significance (p=0.042). Single Question Motivation also noted 36.2% increase from Phase I (Baseline) to Phase II (Intervention) in desired direction. However T-Test did not detect significant change between phases. Theoretical framework; Cognitive Behavior Therapy, Motivational Interviewing and Strengths Perspective provided the foundation for change, applied by the counselor/s and carried through by the client. Due to this social work practice project, the client noted positive change in her attitude and continues to abstain from drugs and alcohol. Through measurement, I gained confidence that the client was progressing in a positive direction. This gave me the evidence of practice effectiveness. IRB Approval number: 13-2-266

**G096**

**Social Work Core Competencies and Substance Abuse**

**Delores D. Liston (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**

Affiliation: Willingway Hospital Field placement at Willingway Hospital was the context for the development of clinical competencies for social work practice. Willingway is a drug and alcohol treatment facility located in Statesboro, Georgia. Ten mandated competencies addressing all aspects of social work practice, provided an introduction and induction to the social work profession. Through engaging in clinical practice at Willingway Hospital, I was able to develop professional self-efficacy through social work practice with people suffering from drug and alcohol addiction. The primary theoretical underpinnings for development of these competencies drew upon Cognitive Behavior Therapy and Motivational Interviewing through a Strengths Perspective. All ten of the mandated competencies were put into practice with consumers facing difficulties stemming from alcoholism and substance abuse, contributing to my professional development within the context of social work.
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G098
Parent's Attitude towards the Individual Disability

Christopher Maxwell (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Individuals with Disabilities Education Act (IDEA) is a law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities. Even though the policy purports that every child, irrespective of their levels of ability, is supposed to receive free appropriate public education in a least restrictive environment. However this cannot occur without parental engagement and advocacy. The purpose of this research is to explore parent’s attitudes towards the IDEA. Using Unidimensional Theory it was hypothesized that the children of parents who do not support the IDEA policy lacks education. A 20 items questionnaire was designed that inquired about parent’s attitudes towards the Individual with Disabilities Education Act in respect to their own personal experience with the act. The questionnaire was administered to the parents who attended a support group that was conducted by a private non profit agency in Chatham County. These parents were faced with advocating for their children who were classified as “Disabled”.

G099
Homeless and HIV Positive: Transition from Residential to Independent Living

Fabayo M. McFarlane (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Any individual who faces multiple challenges will need resources and help to maintain equilibrium. This is especially true for HIV positive individuals without permanent housing. This single subject research participant was a 62 year old African American female who was living in transitional housing and faced with low self-esteem, dysthymia, HIV positive status and in long term recovery from cocaine addiction. The purpose of this research was to measure the impact of Cognitive Behavioral Therapy, Group Therapy and the Phoenix Project Supportive Housing Program on transitional issues. During this study the client transitioned into independent living. The goal of intervention was to enable the client to maintain long term sobriety, health and quality of life. An instrument was designed with 10 items on Self-Esteem that measured on a 4 point Likert Scale and 15 items on Quality of Life that measured on 7 point Likert Scale. In all, 20 data points were gathered. The data was tested for autocorrelation. Both Self Esteem and Quality of Life noted significant change between phases (p=0.00). Delta noted 20% change in desired direction.

G100
The Development of Self-Efficacy through the Integration of Social Work Theory and Personal Experience

Fabayo M. McFarlane (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Having worked at homeless and supportive housing programs for the field experiences required for the Master of Social Work (MSW) program, I have been able to observe the issues that commonly led people into homelessness. Often times these issues are multi-systemic and the result of a disruption within the homeostasis of the system. While working in the capacity of case manager for these programs I aim to be solution focused and strengths oriented. I view my clients from a person-in-environment perspective taking into account that they are individuals connected to families, communities and cultures each with their own unique personal histories. I assessed the lives and social conditions of my clients in relation to each of these domains. Like the clients I now serve, I too have experienced personal challenges during my tenure in the MSW program. In working toward my goals I remain focused on solutions rather than obstacles. I have assessed the behaviors and resources within my environment that contribute to success while planning goals for myself and for my clients. I have learned to utilize the social supports that were already in place and I teach my clients to do the same. By putting theory into practice and thereby meeting challenges with success, I have witnessed the development of self-efficacy in the lives of my clients and my own professional social work practice.

G101
Integrating Theory and Ethics in Daily Social Work Practice

Sheila McGirt (Graduate)
Dr. Shinaz Jindani (Savannah State University)

As a professional social worker, it is important to me that I integrate theories with ethical framework to maximize client outcomes. The field practicum has enabled me to think critically, while integrating theory and ethics while demonstrating practice behaviors. My agency serves middle and high school students in the Savannah area. As this age group of “Teens” transit into adulthood, they present several challenges. More often than not, they are seeking independent living situations and need services such as food, clothing and permanent residential homes. As a professional social worker, I network with other agencies, make referrals and help them access resources. The goal is to create a stable environment so that they can complete their high school education. All this is informed by my evidence based practice knowledge and a set of competencies that integrate theories. Using the core competencies in social work fosters professional conduct, ethical principles, and professional judgments. These core competencies allow me to practice as a professional social
worker, and develop therapeutic relationships with my clients. My position as a professional social worker in the field agency is to build on clients strengths while advocating for their human rights. Using Strength Perspective as an all-encompassing framework I combine Social Learning Theory and Psychodynamic Theory, as Social Learning suggests that human behavior is learned as individuals interact with their environment and Psychodynamic Theory considers individual’s internal processes such as needs, drives, and emotions that motivate behavior. These theories help to me to develop intervention plans for my clients to accomplish systematic change in their daily lives. This ongoing process helps me grow as a professional and creates continuous opportunities to integrate theories and ethics in my social work practice.

G102
The Effects of Foster Care: Measuring Hope and Academic Success

Sheila McGirt (Graduate)
Dr. Shinaz Jindani (Savannah State University)

It is not unusual for some teenagers to experience frequent movement from foster homes to foster homes. The goal of this research was to test the effectiveness of the intervention for 17 year old participant who was pregnant with her first child. The participant was provided with services such as permanent housing, school uniforms and after school program. It was hypothesized that these services together will create a stable environment that would raise the Hope and Academic Success of the participant which may unfold into a sense of motherhood. A 7 item instrument was administered during the counseling sessions and 12 data points were gathered. The data was tested for autocorrelation (baseline p=0.01, intervention p=0.08). Using moving average, baseline data was transformed (p=0.8). Proportion frequency noted no change between the phases. D index showed increase by 6% in desired direction. Even though the participant did find a permanent living situation with her aunt due to the court intervention, Hope and Success did not show significant improvement from the phase I to phase II. Given the short duration of the study, no changes were detected. Had the studied continued it is very likely that the client may be motivated to identify unproductive behavior and make most of the permanent housing situation and get ready to deliver the baby.

G103
Abstinence Is The ONLY Way...Or Is It???

Celina McMillian (Graduate)
Dr. Shinaz G. Jindani (Savannah State University)

Like so many other states, the state of Georgia imposes Abstinence Only Sex Education for our teenagers, even though there are over 152,000 sexually active teenagers in Georgia. Georgia’s teen pregnancy (young women ages 15-19) rate is 95 pregnancies per 1000 young women, higher than the national rate of 84 pregnancies per 1000. This research project studies the effects of this policy on our teenager’s quality of sexual health. The study uses sample of convenience and gathers data from former teen mothers or those teens that are currently pregnant. The questionnaire explores their views about how this policy influenced their decision to become sexually active and become mothers. Further, this questionnaire uses 11 statements and measures their views on a 5 point Likert scale, where 1 was strongly agree and 5 was strongly disagree. Preliminary findings suggest, for the majority, this policy did not prevent them from becoming sexually active. Socio-cultural factors are discussed in the context of this policy and the recommendations are made. IRB: 13-2-270

G104
The Children Are Our Future

Celina McMillian (Graduate)
Evelyn Dennard (Savannah State University)

3.6 million cases of child abuse are reported every year in the U.S. and the number of children involved in these reports is 6 million. Like many other states, Georgia enforces mandatory reporting laws for child abuse and neglect laws from certain professions like physicians, nurses, medical interns, dentists, teachers, school staff, counselors, psychiatrists, social workers, daycare workers, child-welfare workers, law enforcement officers and photo booth workers. This research project studies the effects of this policy on our prevention and reduction of child abuse cases overall. The study uses sample of convenience and gathers data from peer reviewed journals and child abuse websites. Preliminary findings suggest, for the majority, this policy does not reduce or prevent child abuse occurrences and in some cases caused them to reoccur. Socio-cultural factors are discussed in the context of this policy and the recommendations are made.

G105
Child Abuse and Protection Act

Anne-Marie Mendez (Graduate)
Evelyn Dennard (Savannah State University)

Helen Keller once said, “Although the world is full of suffering, it is full also of overcoming it” (Quotations about Justice, 2014). Children are one of the most resilient creatures out there. No matter their circumstance “they cling to the hope that growing up will bring escape and freedom” (Quotations about Justice, 2014) but if there is no one ever sticking up for their rights and for their conditions to change, they will end up growing up bitter and forever a prisoner to their childhood trauma. This paper seeks to examine the 1974 Child Abuse and Protection Act and how it has made an impact thus far in the lives of many children. It is true that the world has not completely rid itself of this cruel
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and unusual punishment, but at least society has stepped towards not only identifying maltreatment but also reporting it.

G106
Communitarian Sentiment of Isolated Underclass
Anne-Marie Mendez (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Some groups of people are not integrated well into the American Main Stream simply due to their race, gender or socio economic status. These groups are identified as “Isolated Underclass”. They are denied the access and resources that an average American Citizens are privileged to. This does not limit the group; “Isolated Underclass” to formulate its own support system and help its members with issues of daily living. Using Strength Perspective, this research gathered data from 50 Latino Hispanic citizens residing in Liberty County, measuring Communitarian Sentiment. Items such as, “We recognize that it is hard to grieve for a death of a loved one, who may have lived and died in other country than USA” were included. Preliminary findings suggest that even though these groups are identified as “Isolated Underclass”, they still display Communitarian Sentiment and provide support to their members. In fact they have their own support system that acts in the larger context of not being integrated into American Main Stream.

G107
Childhood Obesity in the United States
Kenneth Mermelstein (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Childhood obesity is a concern in the United States primarily because there has been a threefold increase in the rate of obesity among children between the ages of 2 and 19 during the last 40 years (CDC). In 2010 the Federal government allocated 1 billion dollars towards health and wellness, of which 373 million dollars going towards obesity and tobacco prevention (Presidential Report on Obesity, 2010). Even with the large sums of money being funneled into the system to address the problem, the question remains that obesity among children is still on the rise. This poster will examine the history and some of the causes of obesity in the United States, and propose ways in which obesity might truly be combated. Keywords: Childhood obesity, Obesity epidemic United States.

G108
Pulling Together: Aging, Social Support and Independence
Kenneth Mermelstein (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The older population (65+) numbered 41.4 million in 2011, an increase of 6.3 million or 18% since 2000. The number of Americans aged 45-64 – who will reach 65 over the next two decades – increased by 33% during this period. Almost half of older women (46%) age 75+ live alone. Therefore it is important to measure what living alone means and the role of social support. This study hypothesized that the person over the age of 55 who have social support are more likely to live independently as compared with those who may not have social support. Using a sample of convenience, a 30 item questionnaire was administered at the Savannah Entrepreneurial Center; over the period of 4 weeks, who had lined up to seek free help to file tax returns. Preliminary finding suggests that older persons who can navigate their social support and resources are more likely to live independently.

G109
Using Rational Emotive Behavior Therapy to Build Trust with Others
Brian Anthony Mitchell (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Psychodynamic perspective (Freud, 1900) helps us understand our behavior and feelings are rooted in our childhood experiences and therefore impact our adult relationships. Erik Erikson (1959) explains how we learn to trust in our childhood impacts trust in our adult relationships. In this single subject research design the participant was a 19 years old male with trust issues between him and his girlfriend. Using Rational Emotive Behavior Therapy (REBT, 1962), one-o-one counseling sessions were offered with a focus on stress reduction and skills that will help him build trustful relationships. In order to track the impact of the intervention, a 21 item questionnaire was designed measuring anxiety and partner satisfaction that used 4 point Likert Scale. The data was tested for autocorrelation. No trend was found. The findings were inconclusive as Partner Satisfaction moved in desired direction and Anxiety moved in undesired direction. As the data was too small to reach any conclusion, readers are cautioned about the findings. However had the intervention remained active, it was very likely that some change in desired direction would occur as REBT helps restructure negative thought patterns and result in positive thinking.
G110
Cognitive Behavior Therapy Used to Treat a College Student Experiencing Depression, Social Anxiety and Academic Distress
La’Keisha K. Mitchell (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research was to determine if cognitive behavior therapy could successfully assist in decreasing symptoms of social anxiety, depression and academic distress in a college student. The goal was to use cognitive behavior techniques like thought challenging, self-monitoring, journaling and home work assignments to decrease the clients presenting problems. The client attended individual counseling sessions once a week for a total of 7 weeks. Each week before sessions the client was given a Counseling Center Assessment of Psychological Symptoms (CCAPS) questionnaire to complete. A CCAPS-34 is a 34-item assessment instrument with eight distinct subscales (depression, generalized anxiety, social anxiety, academic distress, eating concerns, hostility, alcohol use, and overall distress) related to psychological symptoms and distress in college students. I used the results from the clients CCAPS to assess the client, the lower the clients scores the better. Results concluded a decrease in depression, social anxiety and academic distress. All results showed decrease in the desired direction. The data was tested for autocorrelation, no trend was found. The hypothesis that cognitive behavior therapy would assist in decreasing social anxiety and depression was supported by the statistical analysis. It is presumed that academic distress elevated during the final two weeks of counseling due to final exams. It is worth reflecting over the practice methods that brought about resolution of the clients problems. IRB number 13-3-357

G111
My Professional Growth as a Social Worker
La’Keisha K. Mitchell (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

The agency I am placed at to complete my field practicum is SCAD Counseling and Student Support Services, this office offers counseling services to students attending Savannah College of Art and Design. SCAD Counseling and Student Support Services assist students with short-term individual, disability and substance abuse counseling, crisis intervention, organized therapeutic support groups, makes community referrals, plan educational workshops and provide self-help resources. Time management, stress management, study skills, and creativity counseling are also available. While interning at this agency I have performed psychosocial and disability assessments as well as therapy for students suffering from a range of different physical and mental disabilities, stress, anxiety, phase of life stressors, trauma, self-esteem issues and crises. I along with my field instructor identified practice behaviors as well as theories such as the empowerment theory, solution focused therapy, cognitive behavior theory and strengths perspective that I used to operationalize the ten competencies that are mandated by CSWE. In this process, I have gained confidence as a professional social worker and I am now able to integrate theory and practice when working with clients. This experience has helped me develop self-efficacy and formed my identity as a professional social worker. I am grateful for the hands on experience.

G112
Breaking the Cycle and Becoming a New Me: A Single Subject Research Design
Teer Mitchell (Graduate)  
Dr. Shinaz Jindani (Savannah State University)

Can the use of Cognitive Behavioral Therapy (CBT) reduce emotional distress and problematic behaviors in school age children? The goal of this study was to use Socratic dialogue via anger management counseling, self-relaxation training and journaling to help one subject learn how to process and express her anger in a positive manner. The subject was a 14 year old female. In order to track the impact of interventions, a survey was created to capture the frequency of anger outburst and her response to the event. The survey consisted of ten items (compiled from a pool of twenty rotating statements) with a Likert scale ranging from Strongly Agree, Agree, Disagree and Strongly Disagree. The survey was administered two times a week for four weeks. Using SINGWIN the data was tested for autocorrelation and the d-index indicated that the subject’s anger had increased instead of decreasing with the interventions. CBT did not bring desired results as it was only discovered during the intervention that the client was diagnosed with Borderline Intellectual Functioning. As CBT demands reasoning and the ability to link thought to the behavior, the intervention did not bring about desired results. In order to understand practice effectiveness the social worker has to be able to integrate theoretical evidence, practical evidence and statistical evidence and optimize results of intervention.

G113
Navigating the Challenges of Providing Social Work
Teer Mitchell (Graduate)  
Tara Tolbert (Savannah Chatham County Public School System)

As charter schools gain popularity with the intent of providing students in the public school system with a comparable education to those students in private school, the School Social Worker (SSW) is often faced with many ethical dilemmas. The SSW Intern at Savannah Classical Academy practice behaviors were guided by the NASW’s code of ethics when completing bio-psychosocial assessments and providing crisis intervention & prevention services. The SSW Intern primarily used an ecological & strengths perspective and systems theory when
engaging students and their guardians. The utilization of the ecological perspective afforded the SSW Intern the opportunity to gain valuable insight on the student’s family dynamics, peer relationships and support systems. The systems theory approach provided the SSW Intern with valuable information on how the student’s resources impacted their family life and daily routine. While the strengths perspective focused on improving the student’s self-esteem which helped improve their attitude, academic performance and adherence to school policies. Self-reflection provided the SSW Intern with a realization that while assisting Savannah Classical Academy’s students adjust to their new charter school’s policies and procedures, that she was also helping them shape their moral development through modeling. SSW Intern felt confident with her practice behaviors as her internship progressed to provide counseling, case management, truancy deterrence, crisis intervention and educational support.

G114
Stress, Anxiety, and Burden of Elderly Caregiving
Juan C. Moore (Graduate)
Dr. Shinaz Jindani (Savannah State University)

This research project explores the level of caregiving burden experienced by the caregivers. In most cases caregivers are the relatives and are biologically related to the receiver; therefore caregiving burden is rarely recognized as this is culturally established role of how children must care for their parents. Since there is no recognition of such burden there is no discussion about the support services for the caregivers. A 14 items questionnaire was designed to assess the caregiving burden. It asked the participants to list the services they provided to the receiver, such as helping with defecation, administering medication, fiduciary services etc. It also asked the participant to rate their stress level in each of these categories from 1-5, where 5 represented extreme level of stress. Using the sample of convenience the questionnaire was administered at three elderly residential facilities. Fifty completed data sets were obtained. All 14 tasks were ranked. Tasks such as helping with defecation, bathing and dressing were stress laden. Preliminary findings suggest that it is worth discussing caregiving burden and it is time that we provide social support to our caregivers.

G115
Finding Life Contentment While Grieving
Ali B. North (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research was to study the effectiveness of individual and group therapy as an intervention on a grief management of one client who had lost her son due to suicide. In addition to losing her eldest son, the client suffered from circumstantial depression. The overall goal of the intervention was to increase client’s life contentment as client would manage grief and depressive symptoms. A 12 item inventory was designed to measure the client’s depression, grief and life contentment using Likert Scale; Strongly Agree, Agree, Disagree, and Strongly Disagree. In all 9 data points were gathered. Using SINGWIN the data was tested for autocorrelation. There was no statistical significance, indicating no change between pre and post phases of the treatment. However, celeration graph noted movement of the data in the desired direction. This implies that if the intervention continues the client is likely to benefit and regulate depressive symptoms and manage grief that will result in increased life contentment.

G116
Organizational Context That Shapes Practice
Ali B. North (Graduate)
Dr. Shinaz Jindani (Savannah State University)

During my experience as a counselor at a local psychiatrist’s office, I have found myself engaged in client well-being and looking at each situation using a multidimensional social work approach. Using supervision with a trained psychiatrist allows me to see the client through a larger lens that helps guide my practice behaviors. I remain professional and set boundaries during the initial assessment. My practice is to make the client feel comfortable by building rapport and conveying the message of teamwork. By establishing collaboration, I am empowering clients to feel confident so that they can face difficult situations once their goals have been accomplished in therapy. I communicate and provide tools that are specific for a particular client. Having seen a diverse group of people with an array of situations has brought forth growth and as I continue to learn and grow from each experience I encourage my clients to do the same. I understand and abide by all competencies set forth by CSWE, but during this field experience I must identify with being a professional social worker who conducts herself accordingly and understanding my client’s behavior and their social environment.

G117
Self-Esteem in (Combat) PTSD Client
Margarita Olivarez-Beraud (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The goal of this project was to evaluate the effectiveness of intervention; group and individual therapy with one client, who was 31 year old, Caucasian Male with diagnosis of PTSD, as he was previously deployed to Afghanistan. Using Cognitive Behavior Therapy, the client participated in group therapy continuously for 6 weeks daily, where he had opportunity to process and benefit from Psych-Education. In order to track changes due to intervention, a 20 item instrument was designed measuring on a 4 point Likert Scale, where 1 was strongly agree and 4 was strongly disagree. This instrument tracked changes in self-esteem,
as this was to indicate how the client was managing symptoms of PTSD. In all 12 data sets were gathered within 6 weeks. Using SINGWIN the data was tested for autocorrelation. Statistically there was no significant improvement in outcome variable. The impact of the interventions could not be fully assessed due to the interaction effect of event. The client frequently was faced with medical review board as he was considering discharge from the army. However the rate of change in the desired direction. The client did state that he felt he had gained new skills that helped him regulate his emotions and manage PTSD symptoms.

G118
Aging Out Of Foster Care
Heather A. Osborne (Graduate)
Evelyn Denard (Savannah State University)

When a child “ages out” in foster care, what awaits them? Are there laws that mandate for appropriate aftercare affording them a firm footing in the adult world? Are these mandates sufficient for the child weaning off of the foster care system? What are the statistics regarding the “aged out” foster care child? Pertinent statistics that has impacted this issue consists of The Foster Care Independence Act of 1999--- The Chafee Act, which is reviewed. Some issues arise as to the implementation of the legislation based on flexible funding procedures afforded to the different states and due to the capricious nature of that implementation. In particular, Georgia’s execution of the legislation and supports for the “aged out” foster children are discussed. As part of a pinpoint focus, the city of Savannah’s solutions are researched. Suggestions for additional remedies are stated.

G119
Senior Day Recreation Centers
Heather A. Osborne (Graduate)
Dr. Shinaz G. Jindani (Savannah State University)

With the life expectancy of 78.64 (2011) years, the need for Senior Day Recreation Centers cannot be questioned as it offers a safe place for the elderly, but also provides for the family member who has a primary responsibility as a caregiver. These centers provide a much-needed respite for the caregiver, affording a break from the physical demands and stress of providing round-the-clock care. This research explores the opinion of the caregivers, who may or may not be willing to give donation, which in turn can provide additional services at these centers. Using a sample of convenience, the data was gathered from 62 respondents via Survey Monkey. Besides demographics, 10 statements were used to gather their opinions about their willingness to donate. Three factors were represented by the study: Willingness to Donate, Affiliation with Potential Participant, and Awareness. Findings suggest that Willingness to Donate (Cronbach’s α=.951), Affiliation with Potential Participants (Cronbach’s α=.656, and Awareness (Cronbach’s α=.676) demonstrate interrelated consistency regarding the individual factors and overall have a relatively high interrelated consistency (Cronbach’s α=.845).

G120
Applying Practice and Theory at the Mandated Field
Maria Ramos (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Community Based Mental Health Hospital provided me with a context in which to implement practice behaviors that utilized 10 competencies mandated by The Council on Social Work Education (CSWE). This project describes these practice behaviors that were informed by a reflective process and theoretical base such that it maximized client outcomes. The entire internship process was invigorating and helped me develop a professional identity, as The Master of Social Work curricula provided an extensive and an interchangeable approach between classroom theories and the field practicum. This process facilitated theory integration with a conscious choice of practice technologies. Theories such as Cognitive Behavior, Ecological Perspective, Maslow’s Needs of Hierarchy and Stage Theory were frequently employed in the delivery of services. Practice methods such as Cognitive Behavior Therapy, Strengths Perspective, Family Support and Crisis Intervention were widely used. In the final summation, this process helped me develop a sense of self-efficacy and formed my identity as a professional social worker. Key words: cswe, competency based outcomes, social work identity, self-efficacy.

G121
Evaluating the Effectiveness of Cognitive-Behavior
Maria Ramos (Graduate)
Dr. Shinaz Jindani (Savannah State University)

It is universally agreed that the grief brings about deep emotional pain, yet the experience is not universal, as each person experiences pain in unique ways. This single subject research participant was a court mandated 30 year old male from the local Community Mental Hospital who wanted to learn new coping mechanisms that would help him regulate his triggers that were anchored in grief. Using the combination of Cognitive Behavioral Therapy and Psycho-Education, the researcher conducted 10 counseling sessions with the client and gathered 20 data points. To track changes, a 25-item instrument was designed with 7-point Likert Scale that measured the levels of Self-esteem, Hope, Grief, Anxiety and Guilt. The data was tested for autocorrelation and no trend was found. Proportion frequencies captured significant changes between phases in desired directions for areas including Self-Esteem (23%...
increase), Grief (30% decrease), Anxiety (48% increase) and Guilt Management (23% increase). The change in the Hope metric was not statistically significant, as the participant was court mandated without anticipated date of discharge. Given the findings, Cognitive Behavior Theory that informed Cognitive Behavior Therapy and Psycho-Education enabled the client to gain coping skills. Key words: grief, cognitive behavioral theory, cognitive behavior therapy, psycho-education.

G122 At Risk Youth and The Role of Career Aspiration

Thena Reeves (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Many factors can influence at risk youths to drop out of school, become truant, involve in gangs and with criminal justice system. There is some evidence that youths who develop career aspirations are less likely to get involved with above mentioned factors. It is therefore important to compare youths who have career aspirations versus the youth who do not. Using the sample of convenience this research gathered data from the youth who were in juvenile facility who were involved with illegal activities and also gathered data from the youth who live in our communities and attend public school system with no record of any involvement with illegal activities. Besides demographics 27 items questionnaire inquired about their career aspirations. Chi-square did not attain any significance. However the youth who live in the communities demonstrated higher levels of career aspirations than those who were in juvenile facility. Recommendations are made to develop the program that fosters critical thinking of our youth and enable them to develop career aspiration.

G123 Georgia Stand Your Ground Study

Rita D. Reid (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Policy does not stand in isolation, it is perceived in the cultural context of the community. There is much discussion about Stand Your Ground Law across America, due to the recent verdict given to Mr. George Zimmerman who shot and killed Mr. Trayvon Martin. Due to the outcome of this case, factors of discrimination due to racism have provoked hot debate. In general, it is believed that Whites are significantly more successful claiming self-defense when their attacker is Black rather than Blacks when fighting back an attacker (Jonsson, 2013). The purpose of this research was to gather the views of Savannah State University Students about the Georgia’s Stand Your Ground Law. This study explored variables such as race, education and demographics and how it influences the perception of the law in a given cultural context. A ten item questionnaire gathered views using a four point Likert scale from Strongly Agree to Strongly Disagree. Items such as “The Trayvon Martin and George Zimmerman case is an example of blatant racism” were included. Findings suggest that cultural and historical factors influence perceptions of the policy. Social Work implications and recommendations are discussed.

G124 The Indian Child Welfare Act

Rita D. Reid (Graduate)
Evelyn Denard (Savannah State University)

This paper explores The Indian Child Welfare Act (ICWA) that was in enacted in 1978. The ICWA is a federal law that was enacted because of the high rate of Indian children removed from their traditional homes and from their native Indian culture. According to, Louis La Rose of the Winnebago Tribe of Nebraska, “I think the cruelest trick that the white man has ever done to Indian children is to take them into adoption court, erase all of their records and send them off to some nebulous family ... residing in a white community and he goes back to the reservation and he has absolutely no idea who his relatives are, and they effectively make him a non-person and I think ... they destroy him.” This paper reviews literature on the policy and discusses the positive results of the ICWA and the gaps in the policy. Social workers are needed to assess its strengths and limitations of the policy. Recommendations are suggested to improve the outcomes for Native children and families.

G125 Codependency in Adult Relationships

Marcie Renfroe (Graduate)
Dr. Shinaz Jindani (Savannah State University)

This single subject research project studied the impact of individual counseling and journaling on codependency. The single subject was a middle age Caucasian woman who had difficulties in personal relationships and was codependent on her live in boyfriend. The intervention goal was to enable the client to gain emotional independence. Rational Emotive Therapy (RET) under the Cognitive Behavior Theory was used. Six individual sessions were conducted. RET addresses unhealthy emotions and maladaptive behaviors that are adverse to achieving goals, in this case independence. To track changes due to RET, an instrument was designed with 11 items measured on a 4 point Likert Scale where 1 was strongly disagree and 4 was agree. The data was tested for autocorrelation. Proportion Frequency noted significant changes between phases (p=0.00). Delta noted effect size of 47% in the desired direction. Rational Emotive Therapy did show results and should be continued as it provided growth to the client’s emotional independence.
G126
Empathetic Listening, Compassionate Engagement: Growing into a Social work Professional

Marcie Renfroe (Graduate)
Dr. Shinaz Jindani (Savannah State University)

H.U.G.S is one of the few organizations that don’t require insurance to get treatment; it is very affordable. They provide services such as counseling, group therapy, addiction services and vocational training. I was able to gain comprehensive experience as it provided me with a context to grow as a social work professional. Even though I have chosen Clinical Practice, I cannot ignore the impact of social policy on the client population. Clinical interventions cannot stand alone. In order to maximize client outcome, services have to be comprehensive and directed to the client’s needs. Policies impact clinical interventions and thus can enhance or negate its impact. On a recent note, I got the opportunity at H.U.G.S. to participate in a discussion on legalization of marijuana in Colorado and the effect it may have on clinical addiction interventions. Further, I am a proponent of the strengths perspective, as it is a constructive approach that builds upon client’s strengths and resilience. It does consider the client’s presenting problems along with the client’s positive qualities that can anchor behavior changes catalyzed by clinical intervention. In this sense, I was able to practice behavior such as empathetic listening, compassionate engagement and client driven problem solving approaches. Within the ethical framework I evolved into a professional social worker and gained a sense of self-efficacy that will help me practice independently.

G127
Applying Theory and Practice in the Field Practicum Setting

Heather Rudolph (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The hospital setting provided me with the opportunity to incorporate practice behaviors delineated by The Council on Social Work Education (CSWE) under each of the 10 competencies. This project outlines some of the practice behaviors utilized to ensure best possible outcomes for clients. I was able to inform my practice through evidence based research. Theories like systems theory, ecological perspective, strengths perspective, and others were used to provide services to clients. Practice methods include crisis intervention and brief counseling. Through my field practicum I was able to bring classroom theories into practice. My field practicum allowed me to gain a greater understanding of human behavior and helped to develop my self-efficacy as a social worker.

G128
Caregiver Well-Being

Heather Rudolph (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research was to assess three areas that can have a negative impact on a caregiver’s well-being: caregiver stress, caregiver isolation, and caregiver burn-out. The goal of this project was to work with a single subject caregiver of a pediatric oncology patient who has experienced these negative symptoms and introduce interventions that may help mitigate these symptoms due to an extended caregiving role. In order to track the impact of the intervention, the “Caregiver Well-Being Survey” was created to measure the stress, isolation, and burn-out associated with her caregiving role. The survey consisted of fourteen items with a Likert scale of Strongly Agree, Agree, Disagree, and Strongly Disagree. The survey was administered once a week, for five weeks. Using SINGWIN, the data was tested for autocorrelation. Statistically there was no significant improvement in systems. The impact of the intervention could not be assessed as there were only five data sets. However, the celebration graph does note the movement of the data in the desired direction. The client did state that her coping had become easier after the introduction of the intervention.

G129
College Readiness for All Research

Tadisha Sams-Young (Graduate)
Dr. Shinaz Jindani (Savannah State University)

During the beginning of the 19th century, education was a privilege of those who were in a certain social class. These particular individuals were citizens who possessed the means to afford tuition for their schooling. Due to the high cost associated with attending college, this still holds true even today. The last two years of high school are many students’ last opportunity to receive a free education and preparedness before becoming a working adult. Does this preparedness include college readiness? This research explores the view of high school and college students, who are 18 years and older in Chatham County. It is hypothesized that students who are first generation students attending college are less prepared than those who had their parents seek college education. Using a 30 item questionnaire, this research also explores views on intent and action for college readiness. Using sample of convenience, 50 data sets are gathered and analyzed. Preliminary findings suggest all students irrespective to their parental background must receive help for college readiness.


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**G130**  
**Title XXI & Georgia Peach Care Program**  
**Tadisha Sams-Young (Graduate)**  
**Evelyn Denard (Savannah State University)**  

Dating back to many years ago, policy implementation helped to change and shape the world as we know it. Each president of the United States provided unique and valuable concepts that are very beneficial to all that we do. In 1965, President Lyndon B. Johnson led our country and helped pave the way for Medicaid. This service helped many families living in poverty with assistance in health care. Before 1997, there were no direct medical insurances provided for those individuals who had modest incomes but income was not low enough to receive Medicaid for their children. These individuals either went without medical insurance, or were forced to deal with the burden of paying for health care out of pocket. During the Administration of President Bill Clinton, Title XXI of the Social Security Act was passed and paved the way for Georgia’s Peach Care for Kids. Since 1999, children of parents whose income was too much for Medicaid, and maybe not enough to afford health insurance were able to benefit from PeachCare for Kids. Georgia PeachCare is administered through the Children’s Health Insurance Program (CHIP), which provides matching funding to the individual states for health insurance to families and children. Throughout the policy review, you will receive background information, current practice, and ways of education and advocacy on in regards to policy implementation of PeachCare for Kids through the State of Georgia.

**G131**  
**Gaining Self-Efficacy through Integrating Theories**  
**Earnestine Shields (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**  

The Department of the Army along with its Department of Social Work Service (SWS) recognizes the importance of families in retention and unit readiness. The Family Advocacy Program (FAP) was created under SWS with the sole mission of preventing family violence with a comprehensive and effective program, dedicated to providing support services to ensure readiness of soldiers and their families through the promotion of self-reliance, resiliency, and stability. The key element of FAP is prevention through education and to reduce short and long term negative effects on the families. The goal of SWS is to provide soldiers and family members involved in family violence with; early referral services to reduce risks, establish safety limits, provide treatment for victims, and support to units and individuals. I was able to join Clinical Social Workers, Licensed Marriage and Family Therapist and was able to directly interact with the clients. I was able to participate in individual counseling sessions, marriage therapy sessions and group therapy sessions and was able to witness the client outcomes first hand. More frequently than not I used Cognitive Behavior Theory along with Interpersonal Therapy that helped me help the client focus on “here and now” of interpersonal behaviors instead of problems. This reinforced positive interactions in the client’s lives and brought about meaningful relationships. Witnessing theories in action resulting in the client’s benefit help me gain a sense of self-efficacy. Now I am independent practitioner and use theory along with reflective practice to strengthen my competencies as a professional social worker.

**G132**  
**The Effectiveness of Interpersonal Therapy on Managing Anger**  
**Earnestine Shields (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**  

The purpose of this research was to identify evidence-based practices that can be used by Military Family Advocacy Programs to provide soldiers and their families’ services and promote self-reliance, resiliency, and stability. These programs are dedicated to spouse and child abuse prevention, education, prompt reporting, investigation, and intervention and treatment. The goal of this project was to work with a single-subject participant who was a soldier enrolled in the FAP - Domestic Violence Program who wanted to regulate his anger and stress that would in turn enhance his relationships and quality of life. To track changes a 10 item instrument was designed to measured anger and stress levels using 5 point Likert scale. The client was offered one-o-one counseling, group therapy and marriage therapy. During the 9 sessions of counseling 9 data points were gathered and analyzed through SINGWIN. The data was tested for autocorrelation. Proportion frequency noted significant changes between phases (p=0.000980). The D-index noted the effect size of 50% decrease in anger. The use of Cognitive Behavior Theory along with Interpersonal Therapy yielded positive results, as it helped client focus on his behavior to formulate meaningful relationship.

**G133**  
**Assertive Community Treatment and Schizophrenia**  
**Priscilla Small (Graduate)**  
**Dr. Shinaz Jindani (Savannah State University)**  

This single subject research project was undertaken to study the effect of an intervention while working with a Homeless Schizophrenic client who was learning how to cope with various situations. The intervention involved him in the Assertive Community Treatment (ACT Team) so that he can regulate his anger and anxiety and function independently on his own while living in the community. To track the effectiveness of the intervention the client was administered an 18 item questionnaire measured on Likert Scale of Strongly Agree, Agree, Disagree, Strongly Disagree, for nine weeks. This tool included nine items form Zung Self Rating Anxiety Scale and nine items from Snell Clinical Anger Scale. The data was tested for
autocorrelation. The findings were conflicting. While the anxiety decreased by 10% anger increased by 22%. Assertive Community Treatment has benefited many clients. It has helped many client’s function independently. For this client, the results were not positive. It is very likely that the nine weeks was a short period within which a client could not show the progress. The tool may not be appropriate to the client’s background, along with complex problems of being homeless and being Schizophrenic.

G134 Practice Behavior in an Acute Behavioral Hospital
Priscilla Small (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Memorial Health University Medical Center’s behavioral medicine floor is an acute mental health treatment facility for who individuals who suffer from mental illnesses and substance abuse. The clients who come to this agency typically stay for about 3-7 days depending on the severity of their needs. My field instructor and I have developed two practice behaviors under each of the ten competencies identified by the Council of Social Work Education. In order to provide services that the clients can benefit from I used a number of therapies such as the Ecological perspective, cognitive behavior therapy, group therapy, individual therapy, the strengths perspective and systems theory depending on the client’s needs. This assignment has benefited me in a number of ways, especially by giving me the opportunity to be able to use the practice behaviors I feel that are very important in my professional career and the ones that will benefit the clients the best. This self-reflection has shown me how I have grown into a more mature and confident professional social worker.

G135 Does Lack of Government Knowledge and Women
Alicia Stephenson (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Does Lack of Political and Government Knowledge Correlate to a Higher Rate of Promiscuity in Females Abstract This purpose of this study is to see if there is a correlation between females who indulge in sexually promiscuous behavior are less likely to keep up with current issues about what is happening with our Government and in their community. There is a lot of information about ways to prevent women from contracting STDs and from getting pregnant. But young women are still reluctant to educate themselves on preventative behaviors and techniques. Young women seem to be more self-involved therefore, they fail to see the connection between their sexual aggressive attitudes and behavior and the current issues with STD rates and teenage pregnancies in their own community. Background research will focus on rates of STD’s in females, mothers in their late teens, sexually aggressive females, and females engaging in risky behavior. A survey method is used to determine the significance of the correlation. There are 25 I statements and 10 short answer questions. The survey was scored on a 5 point scale ranging from strongly agree to strongly disagree with neutral in the middle. The survey was conducted to see if females knew about some local and states wide government issues, and also had common STD knowledge. The study was conducted on 3 local colleges in the Savannah area, and it focused on females in their early 20s. The I statements and questions stated information about their local government, state government, and STDs. The research should conclude that females who can agree to know more about what is going on in their government and are involved in their communities are not as sexually aggressive and are more likely to be involved in their environment by watching the local news and volunteering in their local community. This study can promote the need and necessity of mentors in young female’s lives to prevent them from getting involved in sexually promiscuous behavior or have children at a young age which can cause them to end up at social services needing help and resources to care for their child.

G136 Juvenile Code Title 15 Chapter 11 Updated
Alicia Stephenson (Graduate)
Evelyn Denard (Savannah State University)

There has been an update to the Juvenile Code of Georgia Annotated that went into effect in January of 2014. The Code will affect public safety and court room laws as it pertains to the youth. The purpose of the revision is to create a more organized structure for the Juvenile Codes, incorporate the best practices collected from other states, and to maximize state and funding reimbursement. The revisions made to Title 15 are based on research and best practices of the system from across the 50 states and the result are intended for the children and their communities. The revision of Title 15 Chapter 11 of the Official Code of Georgia Annotated starts with a new organizational structure; separates the provisions applicable to different types of cases into different articles. The majority of the social science articles were collected and used to cultivate the pros, cons, and criticisms about the effectiveness of the code. Children under 18 who have behavioral issues; runaways or unruly are now considered to be “children in need of services” instead of being detained for these minor offences. Children who need to be detained may receive alternatives to detention whenever possible, for those who will benefit from more focused treatment. Also mediation and community-based programs will stand as alternatives to detention. Another important improvement will allow Time frames for key court hearings in CPS cases are to occur sooner will ensure that all the player remain focused on the best interest of the child. Guidelines to determine if these children will receive an alternative action are vague and can lead to gaps in what type of child will be considered for substitution to incarceration. The intended results of this code reduce the percentage of children who go on to
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commit more crime after being released from the Department of Juvenile Justice and to reduce the amount of federal dollars spent on juvenile justice.

G137
Arriving At Personal Practice Philosophy
Dwayne Taylor (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this project is to summarize the field practicum learning experiences, and the use of theories that helped me reflect and prepare as a social work professional. Considering the framework for 10 competencies mandated by The Council on Social Work Education, I was able to demonstrate practice behaviors that were informed by various theories and practice methods. Theories such as Empowerment, Systems Theory and Strength Perspective proved to be an asset while serving the clients who were primarily older adults, and had limited access to resources. Using the National Association of Social Work Code of Ethics along with rich classroom experience helped me form a personal philosophy and contribute to the profession of social work. Through this process I have gained insight and have become independent thinker.

G138
Depression Due to Vision Loss
Dwayne Taylor (Graduate)
Dr. Shinaz Jindani (Savannah State University)

There is some evidence that the individuals who acquire disability during their life time may suffer from depression, as they try to regain their independence. The purpose of this single subject research study was to test the effect of one-on-one counseling on enabling the participant to regulate depression due to newly acquired vision loss. The participant was a 21 year old male who had suffered brain trauma. An instrument with 10 items measuring depression was designed using a 5 point Likert Scale. In all, 18 data sets were gathered and analyzed through SINGWIN. The data was tested for autocorrelation. The D-Index noted a 50% decrease in Depression Scores. Helping the participant to seek social support, seek resources and build coping skills resulted in regaining of independence, and a decrease in depression.

G139
Organizational Context: Serving Military Families
Lisa Tellier (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The New Parent Support Program (NPSP) helps military families learn and cope with stress, isolation, post-deployment reunions, and the everyday demands of parenthood. This program is a key secondary prevention program designed to ameliorate domestic violence and or child abuse and neglect with in military families. Using such theories as Social Learning, Ecological, Prevention Science and Early development theories this intern was able to operationalize practice behaviors in this agency using 10 competencies mandated by the Council of Social Work Education. Working with military families I was able to develop culturally responsive therapeutic relationships and apply best practices and evidence-based interventions. Through this process with the help of my Field Instructor, I gained confidence as a professional social worker. I am able to integrate theory and practice to impact client outcomes, which becomes learning material for me to reflect on and use it to produce higher levels of self-efficacy.

G140
The Effectiveness of New Parent Support for Military Spouses
Lisa Tellier (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this single subject research was to evaluate the effectiveness of support and education to help cope with stress, isolation, post-deployment reunion, and the everyday demands of parenthood. A specialized assessment tool used by the military agency namely; “Family Needs Screener” identified high stress in areas of relationship realignment and child discipline matters. The participant was a military spouse who was a 21 year old, Native American Female. Using Home Visitation as method of intervention, various issues were addressed such as relationship discord, child discipline, and stress triggers. To track changes in client’s coping levels, an instrument was designed using an 8 item questionnaire which measured levels of stress. This instrument used 5 Point Likert Scale. Within 10 visitations, 7 data points were gathered. Prevention Science and Social learning theories provided overarching framework for this intervention process. The data was tested for autocorrelation. No trend was found. Proportion Frequency noted no changes between phases. Delta noted 18% increase in undesired direction. Due to the small sample size, and short duration of treatment, the data did not attain statistical significance.

G141
Social Work Theories, Practice & Self-Efficacy
Shariske Thomas (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Army Community Services facilitates the commanders’ ability to provide comprehensive services that support the readiness of soldiers, civilian employees and their families. New Parent Support Program (NPSP) provides intense home visit mentoring, educational and support services, prenatal to three years of age
Supporting New Parents Using Behavior Theories

Shariske Thomas (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Army Community Services (ACS) facilitates the commanders’ ability to provide comprehensive services that support the readiness of soldiers, civilian employees and their families. The New Parent Support Program (NPSP), a division of the Family Advocacy Program, provides intense home visit mentoring, educational and support services to families with children prenatal to three years of age as a means of preventing family violence and enhancing parenting skills and family cohesiveness. Ecological and social learning theories, research, and practical experience have demonstrated that families play a crucial role in a child’s development; parents are the most important teachers. The current research was undertaken to examine the effectiveness of NPSP services from a new parent’s point-of-view. A single subject design was used, the client presented with depression, marital dissatisfaction, and lack of parenting skills. The client completed two surveys containing 10 items for 10 weeks, one survey measured depression and the other measured satisfaction of services provided through home visits, classes, and interactive play. The hypothesis state the client will exhibit a decrease in depression, become more confident and knowledgeable as a parent, and will improve his interpersonal relationships. The statistical data revealed a d-index increase of 49.3% in reported satisfaction of services provided. The d-index for depression was a 39.4% increase, a decrease in depression. Theoretical and practical significance was found, and the client reported practice effectiveness.

“Arizona SB 1070 Impact on Immigrant Children”

Tie’rra Thompson (Graduate)
Evelyn Denard (Savannah State University)

This research examines Arizona’s Senate Bill 1070 that was mandated in 2010, and addresses some of the legal, economic, and social challenges that have resulted due to its execution. The issue of immigration is an ongoing debate that has created a fringe in public rhetoric. According to Brianna Lee (2013), those who oppose illegal immigration contest that undocumented immigrants are an economic drain; others claim that they are an economic boon (Lee, 2013, para.3). Recent research has revealed that approximately 5.5 million children, 80% of whom are U.S. citizens, currently live in mixed-legal status families with at least one undocumented parent (Cervantes, 2012, para.8). With the enactment of Senate Bill 1070, many families are being torn apart, which is resulting in an abounding number of children living in fear of losing a parent or sibling at any moment and it is putting children at risk of unnecessarily entering the child welfare system (Cervantes, 2012).

“To What Extent Does A Person’s Level of Ethnic Identity Impact Their Level of Xenophobia?”

Tie’rra Thompson (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Throughout history Americans have adopted both negative and positive perspectives regarding the issue of immigration. This in part is due to the idea that some individuals view newcomers or immigrants as competitors for jobs and public services (Xenophobia, 2001). According to the Merriam-Webster dictionary, Xenophobia is “the fear and hatred of strangers or foreigners” (Merriam-Webster’s online dictionary, n.d.) which impacts how we Americans view immigration policies. Many individuals believe that the influx of immigrants has created an increase in the rates of crime and social disorder. However, there is evidence that the vast majority of immigrants are law-abiding and as a group are more often victims of personal crimes than natives (Perkins, 2009, p. 2). William Arrocha argues in his research that through the characterization of immigrants as aliens or as criminals it has resulted in immigrants lives appearing as less valuable than those of the dominant culture (Arrocha, 2011). Furthermore, research has shown “that severe economic inequalities and the marginalization of persons from access to basic economic and social conditions give rise to tensions and manifestations of racism and xenophobia” (Xenophobia, 2001, para.1). This research examined the relationship between ethnic identity and individual’s level of xenophobia. This was measured by 15 item instrument which included items such as “Do you believe that the immigration in this country is out of control.” Using the sample of convenience, this survey was distributed to Savannah State’s students (n=25) and individuals at Forsyth Park.
n=25), yielding a total of 50 respondents. Preliminary findings suggest that the lower levels of education are related with higher levels of Xenophobia, irrespective of ethnic background.

G145 Impact of Moral Reconation Therapy On Quality of Life of a Drug Abusing Client

Ruthie Ward (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Moral Reconation Therapy (MRT) is a cognitive behavioral counseling program that combines education, individual and group counseling, and structured exercises designed to enhance moral development in treatment-resistant clients. As long as clients’ judgments about right and wrong are created from low levels of moral reasoning, counseling them, training them in job skills, and even punishing them will have little permanent impact on their behavior. This intervention model confronts clients with the consequences of their behavior and the effect that it has had on their community, family, and friends. In working with The Resiliency Institute and County Drug Court, one particular client was identified who needed intense MRT. The purpose of this research was to examine the client’s participation in MRT and its relationship to his/her quality of life and its corollary effect in the drug court program. Generalized Contentment Scale was used as a measure that will indicate the progress due to MRT. The scale is used by clinicians and researchers in repeated administrations with the same client so that therapists can monitor and evaluate the effect of treatment over time in single-subject research designs. With a total of ten data points collected, there was no significant change on Generalized Contentment Scale from phase I to phase II. The validity of the research was considerably low as the client’s qualitative feedback during the group sessions was contrary to the higher scores on Generalized Contentment Scale. However MRT did show some impact as the client demonstrated more awareness of his/her deep seated issues and was in the process of resolving it. It did not reach the stage of reconciliation during the short time of therapy and hence there was no change in the client’s scores. Given more time, the client is very likely to show the progress.

G146 Treatment Facility Intern Experience

Ruthie Ward (Graduate)
Dr. Shinaz Jindani (Savannah State University)

St. Simons By the Sea is a treatment facility for adults and children with addiction problems and/or psychiatric issues. This field placement provided me with parameters to demonstrate practice behaviors that operationalized ten competencies mandated by the Council on Social Work Education. Demonstrations of these behaviors were informed by Empowerment Model of Change along with Cognitive Behavioral Therapy. In addition, the Strengths Perspective and Crisis Intervention were widely used. While under a medically supervised detoxification (if needed), clients experienced individual counseling along with group work to support overall effectiveness. The intern experience was exciting and beneficial helping me develop a professional identity. The Savannah State University Masters of Social Work curriculum provided an extensive foundation between the field practicum and classroom theories.

G147 An Assimilation of Social Work Competencies

Leslie E. Weir (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this research is to outline the assimilation of professional social work competencies from learned standards to active practice based on field practicum placements at the Economic Opportunity Authority and Chatham County Juvenile Mental Health Court. Over the course of two years, the researcher has gone from being a mere student that was nervous about interacting with clients and managing staff to a leader that is confident but ready to gain practice knowledge as a professional social worker. The current research illustrates various real-life situations from the researcher that subsequently tell a story about her development into an effective practitioner. This research also serves to demonstrate that the Master of Social Work program at Savannah State University utilizes a curriculum that is effective in producing skilled, knowledgeable and proficient professional Social Workers.

G148 Cognitive Behavioral Therapy in Reducing Impulsive Behavior of Attention-Deficit/ Hyperactivity Disorder

Leslie E. Weir (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The purpose of this single subject research was to measure the effectiveness of an intervention; impulse control and skill building, for an ADHD child that demonstrated impulsivity. The researcher used Cognitive Behavior Therapy to design the intervention. The researcher met with the client once a week for 30-45 minutes for a total of 9 sessions. During the sessions, the researcher reviewed with the client what was discussed in the previous session. Then read materials to the client related to impulse control and facilitated a discussion about impulse control related to the reading, lastly conducted a play activity and worksheet related to the material discussed with the client. At the end of each session, the client was presented a 10 item 5 point Likert scale questionnaire with smiley faces that matched the scale: Always, Most times, Sometimes, Hardly Ever and Never. Using SINGWIN, the data was tested for autocorrelation. No
trend was found. The proportion frequency noted no significant change between the baseline and intervention phases. However, the D-Index Effect Size noted an increase by 29% in the desired direction. The most important limitation noted was a late discovery by the researcher of an anger management problem the participant had. This research confirmed that cognitive behavioral therapy can be effective when treating the impulsive symptoms of ADHD if it is combined with age appropriate anger management technique training. IRB APPROVAL #: 13-2-344

G149
Race to the Top Education Policy
Rachel West (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Race to the Top is part of the federal government’s American Recovery and Reinvestment Act Program (2009) that encourages our K-12 education system to innovate and reform especially low performing schools. This research focuses on how “Race to the Top” has influenced parental engagement at local level. Using a sample of convenience, teachers and principals were administered a 10 item survey using that measured how they conceptualize the role of the parents in implementing “Race to the Top” policy. This tool used 4 point Likert Scale where 1 was Strongly Disagree and 4 was Strongly Agree. Preliminary findings suggests that the most teachers and principals do support parental engagement but it lacks concrete conceptualization of the specific roles parents can play in this policy implementation.

G150
Truancy
Rachel West (Graduate)
Evelyn Denard (Savannah State University)

A truant student is a child between five and sixteen who during the school calendar year has more than five unexcused absences. School boards are required to adopt polices for truancy to make sure that every child will be successful in their education. It is important to hold parents and children accountable so they understand how missing school impacts their future. The truancy law in Georgia helps define what truancy is, what is considered an excused absent, and what are unexcused absents. Georgia law states that school boards must enforce all truancy laws and policies. The community plays a large role in helping prevent students from skipping school. This research will examine the Georgia truancy law and it’s effectiveness and how the community and schools work together to eliminate truancy in Georgia schools.

G151
Death Penalty and Minors: Crossroads of Conservatism and Liberalism
Whitney M. Whittington (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Life in prison and death penalty for adults has not reduced the crime rate in our communities, yet there are proponents of death penalty for the youth who are younger than 18 years. More often than not, it is assumed that the death penalty will prevent youth from committing homicide. We as society fail to use holistic perspective and consider all the factors that lead a youth to a brink of committing such crimes. If we did consider holistic perspective, it will not be difficulty for us to find sustainable solutions and provide services to these youth to become productive and fulfilled citizens in our communities. Using the sample of convenience this research explores the individual’s view about the death penalty for minors. It is hypothesized that the political affiliation, social economic status and gender will influence their views. In all 75 completed data sets were collected. Preliminary findings suggests that the political affiliation predicts the views of the respondents, who are not open to considering the holistic factors.

G152
The Multiethnic Placement Act: An Overview
Whitney M. Whittington (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Multiethnic Placement Act has been amended several times in an effort to ensure that the best interests of every child who is a part of the foster care system are being met. In order to know the importance of this act, it is critical to know the standard practice before it. The author will discuss the standard practices as well as the law before this act was implemented. The author will be addressing the purposes of the Multiethnic Placement Act (MEPA), focusing on the importance of preventing discrimination on the grounds of race, color, or national origin (RCNO). The statistical break down of race in the foster care system will be addressed and why it is not only relevant, but a crucial part of MEPA. The purposes and goals will account for the majority of this paper, but the author has made a point to also include the implications of this act for social workers and how to best apply it in practice.

G153
Training Parent as an Antecedent To Bullying Prevention
Rachael Williams (Graduate)
Dr. Shinaz Jindani (Savannah State University)

We cannot ignore the problem of Bullying in our schools as its
relationships with other variables have become more prominent. According to the studies by Yale University (2013), bully victims are 2 to 9 times more likely to consider suicide than non-victims. According to statistics reported by ABC News (2010), nearly 30 percent of students are either bullies or victims of bullying, and 160,000 kids stay home from school every day because of fear of bullying. Nature versus Nurture theory states that the environment equally plays role in the upbringing of a child. This environment includes; parents, family, school, communities and much more. This exploratory research focuses on the views of the parents about their role in enabling their child not is a bully or a victim and about their views on their child’s school environment as it prevents bullying and establishes emotionally safe learning environment. The 16 item questionnaire used 4 point Likert Scale and gathered the views of the parents. Fifty completed questionnaires were obtained and analyzed using IBM Statistics (SPSS). Preliminary findings suggests that the training parents on regular basis enables the healthy learning environment at school, rather than train parents after an incident has occurred.

G154
Evolving as a Social Work Professional
Tonya Wright (Graduate)
Dr. Shinaz Jindani (Savannah State University)

This agency is a residential facility for homeless individuals and families that provide temporary shelters and transitional housing along with a host of other services such as mental health counseling, prevention education and employment guidance. I was particularly in-charge of Transitional Housing where clients receive several services such as managing bills, budgeting monthly expenses, complete high school education, remain medically complaint, seek mental health and substance abuse support services and have a normal life. The idea is to enable them to have consistency and stability in their life that will enhance their personal goals and ensure quality of life. Clients are engaged via home visits followed by an office visit where they receive counseling according to their case plan. The clients attend Monthly Tenants Meetings (MTM) where they receive educational information. I used Psycho Education and Social Skills training during MTM. Topics such as “Obama Care Training” and “Banking and Generating Sustainable Funds” were included. Psycho Education facilitated discussions on active listening, regulating affect, restructuring thought patterns and reality testing. Using Strength Perspective and Empowerment Theories I was positively able to influence client’s lives. Frequent use of theories contributed to the reflective thought that helped me consciously choose intervention and individualized the client. This process helped me gain self-confidence as a social work professional and contributed to my identity, that I believe is constantly evolving. This evolving process has helped me commit to the profession of social work indefinitely.

G155
The Effective of Cognitive Behavior Therapy on Reg
Tonya Wright (Graduate)
Dr. Shinaz Jindani (Savannah State University)

This single subject research participant was an African American female client who was diagnosed with Axis I Depression and Anxiety along with obesity, high blood pressure, diabetes and with foot and eye complications. Using Cognitive Behavior Theory (CBT), the intervention used talk therapy and focused on “Problem Solving” v/s “Problem Talking”. CBT helps restructure thoughts and its connection with the behavior and Talk Therapy helps client ventilate and also helps client formulate small plans for change that are behavior oriented, timely and specific to the effect. In order to measure the effectiveness of the intervention, a 25 items instrument was designed that measured stress, using 7 point Likert Scale, where I was Strongly Disagree and 7 was Strongly Agree. Findings suggest that there was 47% increase in her stress levels as she was about to quit the program due to organizational constraints.

G156
Military Child Initiative
Christian Young (Graduate)
Dr. Shinaz Jindani (Savannah State University)

The Military Child Initiative is a program that will assist public schools to improve the quality of education for highly mobile and vulnerable young people with a special focus on military children and their families by providing national, state and local education agencies, as well as schools, parents and health, child welfare, juvenile justice and educational professionals with information, tools and services that enhance school success. The program uses a variation of programs, models and frameworks that have been empirically researched and used in the past to address issues such as resilience and social-emotional learning, school and family community partnerships, deployment, and military life, amongst other topics. Currently, researchers are undertaking a qualitative needs assessment with military students, military parents, school personnel and installation personnel.

G157
The Army’s Policy on Tattoos and the Effect on Soldier’s Morale
Christian Young (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Morale is associated with positive self-esteem, determination and confidence. A group’s morale is more than that; it also contributes to the group cohesion. This is all the more important for our US Army, as the morale determines the combat readiness. Army’s recent implementation of a stricter policy
Abstracts

Abstracts on tattoos may not have impacted the moral, but surely has increased dissatisfaction and disagreement among soldiers. This research explores how the new policy imposes on soldier’s morale. It is hypothesized that the new policy has no benefits for the well-being of the Army and instead it can be detrimental to soldier’s morale. Using a sample of convenience, a 21 items instrument was administered to 50 soldiers. Preliminary findings suggest that soldiers do find the restriction on tattoos detrimental to their morale, as it impacts who can and cannot join Army, who will get discharged based on Tattoos policy and rearrangement of priorities within the Army. Demoralization of a soldier may ripple into other areas of that soldier’s life, such as the soldier’s family life. Thus the negative impact of the policy is far reaching. Implications for Social Work Intervention are discussed.

G158
Engaging Colleges/Universities to Promote Non-Traditional Students College Success

Tanisha M. Zeigler (Graduate)
Dr. Shinaz Jindani (Savannah State University)

Since 1980s, it is almost a norm for non-traditional students to enter college and complete their higher education. Most of these students attend on part time basis and work on full time basis and may have family responsibilities such as taking care of their children and/or taking care of their aging parents. The question still remains, despite some gains with this student population, what are the adjustment issues. What enabling context does colleges and universities provide to contribute to their academic success? To address these questions, an instrument was designed measuring college adjustment, social life and resources for academic success. It compares traditional students and non-traditional students. The data was collected at a four year college using the sample of convenience. In all 100 completed questionnaires was obtained. Initial findings suggest that the colleges do provide resources for students in general however specialized resources for non-traditional students are almost non-existent. IRB Number: 13-2-282
Morehouse School of Medicine Master of Public Health Program provides unique opportunities for students to engage in community-based participatory research, student-directed learning and problem-solving and to develop skills and competencies essential to the practice of public health.

Stephanie Miles-Richardson, DVM, PhD
Associate Professor, Department of Community Health and Preventive Medicine
Assistant Dean for Graduate Education in Public Health
Director, Master of Public Health Program

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Congratulations
Savannah State University Symposium Participants!
We wish you greatness and excellence as you continue in your research endeavors!
U159
Investigating a Role of Estrogen & How it Impacts on Obesity

Akosua Amponsah (Senior)
Dr. Johnny Johnson (Savannah State University)

Like other hormones estrogen works as a chemical messenger in the body. It is critical for normal development of the female reproductive organs, including the ovaries, and uterus. Estrogen also helps regulate a woman's menstrual cycles and is necessary for normal breast development. Recent studies have suggested that adult weight gain, especially just before and after menopause, increases breast cancer risk (Macciò 2010). After menopause a woman's ovaries stop producing estrogen and the primary source for estrogen is a woman's body fat (Macciò 2010). Therefore, a woman with a higher level of body fat during the post-menopausal years would be expected to have a higher level of body estrogen than a comparatively lean woman. The relationship between obesity and estrogen has been studied extensively in the past, but previous reports in African American women have not been conducted under carefully controlled dietary conditions of weight maintenance and physical exercise using measures of estrogen. The aim of the present study was to examine the effects of different concentrations of estrogen and their effect on pre-adipocytes in vitro.

U160
Beneficial Effect of Terminalia pallida Fruit Extract on Adipogenesis

Kristopher Ballou (Senior), RaJeanna Jarrett (Junior), Rueben Israel-McBee, Katlyn Ferguson
Dr. Chellu S. Chetty and Kameswara Rao Badri (Savannah State University)

The epidemic of obesity has an enormous effect on mankind affecting all ages, throughout the world. The excessive amount of body fat developed and accumulated by humans in obesity will leads to multiple metabolic diseases that complicate our everyday life. Obesity associated health problems include type-II diabetes, dyslipidemia, hypertension, coronary heart disease and cancers. Unfortunately, the countless number of treatments developed to counter such problems has proven to no avail. This includes costly over the counter as well as prescription drugs with numerous side effects. As a result there has been an ongoing search for more natural, less costly, and more effective remedies with minimal/no side-effects to be made available to those suffering from obesity. The plant Terminalia Pallida (TP) has shown anti-hyperglycemic and anti-atherogenic activity. Therefore, the current study was taken up to investigate the mechanisms of anti-adipogenic activity of TP. Mouse embryonic fibroblasts, 3T3-L1 cells, was used for these studies. 3T3-L1 cells were treated with adipogenic cocktail (1 μM of dexamethasone, 10 μg/mL of insulin and 0.5mM of 3-isobutyl 1-methylxanthine) to differentiate them into adipocytes. Simultaneously, 3T3-L1 cells were treated with ethanolic extract of TP or lipid lowering drug, Simvastatin. After ten days of treatment, pre-adipocytes differentiating into adipocytes. However, it was noted that the group treated with the TP extract had a stronger anti-adipogenic effect on fat cells than that of the simvastatin treated group. From our studies it is very clear that TP fruit extract is a potential drug for the treatment of obesity and dyslipidemia.

U161
Drug Repurposing

Shanice Caldwell (Senior)
James McCusker (Rensselaer Polytechnic Institute)

The purpose of this research is to find new effective treatments for disease using existing drugs. Our approach is to gather and integrate existing data using semantic technologies to help discover promising drug repurposing. Many diseases are based on genetic or epigenetic changes that can be targeted indirectly via upstream regulatory pathways. Targets need to have a high likelihood of affecting all possible changes, and so need to have upstream interactions that cover multiple genotypes/epigenotypes that might drive the same phenotype. This interaction information is available from a number of sources, many of which are already available as linked data. The genes and proteins in these pathways also represented in linked data. By using existing published data from resources such as ArrayExpress and the Gene Expression Omnibus, we can potentially aggregate information that represents transcription, epigenetic, and genetic state in many different diseases using a common means of expression: the probability that a fact is true. These facts and probabilities can be used to determine if, for instance, a drug target is likely to affect a particular phenotype. We can essentially simulate reactions of already-approved drugs by finding out what downstream effects they may have on disease. The simulation is enabled by background semantic models of effects and pathways.
Abstracts

U162
Investigating the Role of Pipk1γ in Regulating KCNQ5 Protein Levels

Racheal Daniels (Senior)
Dr. Anastassios Tzigouniz (University of Connecticut)

It is known that the membrane phospholipid, PIP₂, is necessary for the function of KCNQ channels. In the brain PIP₂ is primarily synthesized by the enzyme Pipkig (PIP5K). By using conventional whole cell patch clamp we found that when KCNQ5 is expressed along with PIP5K there is significant up regulation of KCNQ5 channel activity. This data raised the possibility that KCNQ5 levels might also depend on Pipk1γ. Hence, we examined whether the membrane and cytosolic fractions of KCNQ5 channels depend on the levels of PIP5K, by using wild-type and Pipkig heterozygous (+/-) mice. Previous work has shown that Pipkig+/- mice have lower PIP₂ levels. To probe KCNQ5 protein levels in cortical tissue we used western blotting. We found that KCNQ5 protein levels did not change in mice deficient in Pipkig Additionally, we report that the majority of Pipkig is cytosolic and Pipkig+/- mice seem to have lower Pipkig in the membrane fraction.

U163
P311 Mediates Epithelia to Mesenchymal Transition

RaJeanna Jerrett (Junior) and Kristopher Ballou (Senior)
Sree Latha Aramgam (University of Chicago) and Kameswara Rao Badri (Savannah State University)

Idiopathic Pulmonary Fibrosis is a devastating progressive lung disease which affects the parenchyma in the lungs through excessive deposition of extracellular matrix, collagen. P311 is a novel 8kDa intracellular protein that is highly abundant in the brain, smooth muscle, skeletal muscle and, wound proto-myofibroblast and myofibroblast. In addition, P311 is also revealed in various stages of developing embryonic lungs and lung resection. Our recent studies show that the P311 knockout mice are protected from bleomycin induced lung fibrosis. Compared to wild type mice lungs, KO mice have significantly reduced number of myofibroblast along with decreased levels of collagen and TGF-β expression as indicated by real-time PCR, western blots, and immunohistology. Further, we studied the involvement of P311 in epithelial transformation to see whether this vital mechanism demands P311. Through RT2 profiler PCR Arrays studies, we identified differences in epithelial to mesenchymal transition markers with the over-expression of P311. Taken together, our results indicate that 22 genes showed > 1.5 fold change, 10 genes showed > 1.75 fold change and 5 genes showed > 2 fold change in P311 over expressed group. These genes are significant in understanding the mechanisms that link P311 to not only pulmonary fibrosis but also devastating lung cancers in correspondence to epithelial transition which undoubtedly may lead to the identification of innovative pathways in diagnosis and treatment. Meanwhile, pulmonary transplantation remains the only treatment for patients suffering from this chronic illness.

U164
Exploring the Role of Catecholamines in Ultrasonic Vocalization Production in Parkinsonian rats

Kiara Miller (Senior)
Dr. Cynthia Kelm-Neslson and Dr. Michelle Ciucci (University of Wisconsin-Madison)

Parkinson disease (PD) is a progressive neurodegenerative condition. Traditional clinical signs in patients with PD include bradykinesia, muscle rigidity, and tremor. However, voice deficits are also common and include a vocal tremor, as well as reductions in loudness and pitch variability. Dopamine (DA) replacement therapies, such as levodopa, are effective at treating deficits in the extremities, but provide little to no benefit for cranial sensorimotor deficits such as vocal dysfunction. In addition to the loss of DA neurons, noradrenergic neurons are also depleted in PD; however, the role of norepinephrine (NE) in vocalizations is unknown. Ultrasonic vocalizations (USV) from rats with either a DA only or DA + NE lesion were examined in the present study. Additionally, immunohistochemistry was used to analyze brain tissue. We hypothesized that motor and vocal deficits as well as the loss of DA in the striatum would be more severe in animals with dual lesions compared to a DA lesion. The goal of this research project was to evaluate the central role of NE and its relation to vocalization deficits in a dual lesion paradigm.

U165
Evaluation of Functional Antibodies Specific to Bordetella Pertussis Antigens

Po’Teea Morris-Hunter (Senior)
Dr. Sandra Steiner and Dr. Han Li (Morehouse College and Centers for Disease Control and Prevention)

Pertussis it remains a poorly controlled vaccine preventable disease worldwide causing 260,000 deaths yearly and 40,000 cases in the United States in 2012. We investigated the capacity of sera from pertussis acellular vaccinees (Emory Donor Services, n=18) to opsonize (osonophagocytosis assay - OPA) pertussis (Tohama I) and to neutralize the pertussis toxin (PT) in a toxin neutralization assay (pTNA). A fluorescent (FAM-SE), whole cell OPA using HL-60 cells phagocytes and rabbit complement was conducted in triplicate in the serum panel and immunoglobulin (Talecris). Duplicate pTNAs were conducted with active PT and CHO cells. We measured the serum’s PT neutralizing capacity and effective doses (ED50) were reported. Functional antibodies were compared to Luminex immunoglobulin G (IgG) antibody concentrations.
(IU/ml) for 5 antigens [Adenylate Cyclase (ACT), PT, Pertactin (PRN), Filamentous Hemagglutinin (FHA), and Fimbrial antigens (Fim2/3)] and the level of correlation was determined. We hypothesized that OPA and pTNA functional antibodies from pertussis vaccinees would correlate with antibodies to pertussis antigens. All 18 vaccinees had functional antibodies by OPA (titers > 2048) and by pTNA (ED50 range = 11.5 to 498.5). One serum had low anti-PT IgG and pTNA function. Anti-PT antibodies were significantly correlated with pTNA function ($r = 0.915, P < 0.001$). However, specific antibodies were not correlated with OPA (trends found for anti-PRN and anti-FHA antibodies). This research will contribute towards the development of pertussis correlates of protection and the evaluation of the immune status of populations at risk.

**U166**

**Obesity: GLP-1’s Adipogenic Effects**

Asia Stinson (Senior)
Dr. Johnny Johnson (Savannah State University)

Obesity is an increasing epidemic across the world, primarily in the minority population here in the U.S. Obesity is directly related to adipogenesis which is key to energy homeostasis. Adipogenesis is a cellular differentiation process that causes preadipocytes to differentiate into adipocytes. GLP-1, a hormone that regulates postprandial insulin secretion, is a major promoter of adipogenesis and cell differentiation. Therefore, obesity plays a direct role in the levels of GLP-1. GLP-1 at low levels were found in obese subjects. This therefore leads to the belief that GLP-1 levels affect hyperplasia and hypertrophy. At high levels of GLP-1 there is an increase in hyperplasia. While low levels give lead to an increase in hypertrophy. As aforementioned, GLP-1 causes growth within a cell. This growth is via pathways such as PKA (protein kinase pathways, and Notch (very conservative signaling pathway that controls cell fate). If the pathways that lead to cell hypertrophy can be stopped and the pathways that lead to hyperplasia can be enhanced it could potentially cause a reduction in obese individuals and result in a decrease in societal obesity all together. Using varying concentrations of GLP-1, we have elucidated a role for the Notch pathway.

**U167**

**Obesity Disparity in Low-Income Savannah Communities**

Eric D. Williams (Senior)
Dr. Deden Rukmana (Savannah State University)

The purpose of this study is to identify the relationship between exercise habits, eating habits, and yearly income which has subsequent effects on obesity in the Savannah communities. The goal is to understand how these three characteristics influence the rate of obesity among low-income families. This study uses surveys which ask the participants about their eating habits, exercise patterns, and other influential lifestyle patterns such as daily hobbies, work schedules, and the communities impact on a healthy lifestyle. Other methods by which the data is collected is by obtaining the survey participants’ weight and waist. Expected results of this study would be that many of the participants that live in these low-income communities either are obese or have the potential to become obese in the near future. The findings may be helpful in providing suggestions for a healthier lifestyle.

**Chemistry**

**Undergraduate Abstracts**

**U168**

**Synthesis of Benzofuran-2-carboxylic acid derivatives**

Shakema Bowman (Sophomore)
Dr. Karla-Sue Marriott (Savannah State University)

3-Halocoumarins are readily converted into benzofuran-2-carboxylic acids via a Perkin (coumarin-benzofuran ring contraction) rearrangement reaction. Benzofuran-2-carboxylic acid derivatives are known for exhibiting pharmacological activity. Derivatives of benzofuran-2-carboxylic acid possess anti-inflammatory properties, and act as anaesthetics. Benzofuran-2-carboxylic acid derivatives have shown selective cytotoxicity against human cancer cells; human lymphoma cells U937, lymphoblastoid cells TK6, leukemia cells THP1, and adenocarcinoma cells H441. Additionally, benzofuran-2-carboxylic acids bearing (chloromethyl) indoline or benzoyl nitrogen mustard as DNA-binding group are structural subunits of synthetic analogues of some natural antitumor agents such as CC-1065, duocarmycin, dystamycin, and netropsin. Syntheses of benzofuran-2-carboxylic acid derivatives are also important to the development of novel solutions to immune system and radiation risks that have plagued the National Aeronautics and Space Administration agency and its astronauts. We hypothesized that Benzofuran-2-carboxylic acid derivatives will obviate the immune dysfunction which occurs as a result of exposure to deep-space radiation, microgravity, and infectious agents from other crew members during long-term space flights. We have successfully synthesized novel benzofuran-2-carboxylic acid and its derivatives in good yield.
Abstracts

U169  
Role of Catalase in the Oxidative Defense System Measured in Aquatic Life

Brittany Bush (Junior)  
Dr. Cecil Jones (Savannah State University)

Fish and humans as vertebrates are similar in terms of biochemical pathways. These pathways may be exploited to enhance or improve the effectiveness of therapeutic regimens against various diseases. Catalase (CAT) is an enzyme component of our oxidative defense system that converts the harmful reactive oxygen species, hydrogen peroxide to water by the reaction shown below.

\[
2\text{H}_2\text{O}_2 \xrightarrow{\text{catalase}} 2\text{H}_2\text{O} + \text{O}_2
\]

We have two objectives for monitoring the activity of CAT in aquatic life: (1) measuring the activity of CAT may serve as an early warning for site contamination in recreational and commercial fishing areas; (2) measurements may be extrapolated and compared to CAT activities observed in human cells to understand the critical role this enzyme plays in oxidative damage associated with various diseases. This work describes a method for monitoring the antioxidant activity of the cytoprotective enzyme CAT in selected fish organs. Total protein determination was measured by the Bradford method. The method employs the dye, coomassie blue which appears to bind with lysine and arginine groups of the protein. The activity of CAT was measured by its inhibition of H2O2 in the presence of a yellow-complex forming titanium sulfate, TiOSO4.

U170  
Antioxidant Activity of Cytoprotective Enzymes with Photosensitized Reactive Oxygen Species

Racheal Daniels (Senior)  
Dr. Cecil Jones (Savannah State University)

The primary problem with treating cancerous tissue with photodynamic therapy (PDT) is the lack of long-term control of tissue destruction. The long term efficacy of PDT appears to be diminished, to some extent, by the response of our oxidative defense system that creates a resistance to the effects of reactive oxygen species (ROS) generated by PDT. This work describes a method for monitoring the antioxidant activity of the cytoprotective enzyme, superoxide dismutase (SOD) in...
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selected fish organs. Fish and humans, as vertebrates, share common biochemical pathways. Certain species of aquatic life were used as animal models for assessing the effects of PDT on mitochondria in an effort to characterize the nature of oxidative stress-induced biochemical changes that promote cell survival. In addition, the activity of SOD may serve as an early warning system for site contamination in recreational and commercial fishing areas. Human serum albumin was used as a standard for generating a calibration curve for a total protein determination by the Bradford method. The activity of SOD was measured by its inhibition of autooxidation of epinephrine. There are three types of SODs, namely Cu-SOD, Zn-SOD, and Mn-SOD. Adding KCN to the assay mixtures to inhibit Cu and Zn-SOD, allowed one to measure the activity of Mn-SOD as it remains unaffected (Fridovich, I. (1974) Adv. Eznymol., 41, 35).

U171
Microwave Assisted, Boric Acid Catalyzed Direct Amidation of Carboxylic Acid

Marion Johnson (Senior)
Dr. Olarongbe Olubajo (Savannah State University)

Amides are important intermediates in the synthesis of valuable chemicals, including pharmaceuticals and agrochemicals. The conventional methods of synthesis of amides are the reaction of amines and the derivatives of carboxylic acid, such as acid halides, anhydrides, ester and/or the use of activating agents such as N,N'-dicyclohexylcarbodiimide (DCC). There are many disadvantages in using these methods; one of which is the hazardous reagents, such as thionyl chloride, oxalyl, phosgene used in preparing the acid halides. These reagents are corrosive and the byproducts released are also corrosive. Recently, catalytic amount of boric acid was used in the synthesis of several amides. All of thereported synthesis required 15 hours or more of refluxing. We are reporting the use of microwave to reduce the reaction time to 15 minutes or less and comparable yield with conventional refluxing. The products are identified using IR, 1H and 13C NMR.

U172
Synthesis and Characterization of Cationic Porphyrin: A Potential Candidate for Photodynamic Therapy of Tumor

Marion Johnson (Senior)
Dr. Adegoye Adeyemo (Savannah State University)

Novel meso-substituted cationic porphyrin has been synthesized, purified, isolated and characterized by UV-Vis, and NMR spectroscopic techniques. This new porphyrin, mesotetakis (2,3,5,6-tetrafluoro-4-trimethylaminophenyl)porphyrin tetraiodide, is a potential agent for photodynamic therapy of tumor (PDT). Meso-tetra (2,3,4,5,6-pentafluorophenyl) porphyrin I was synthesized by reacting 2,3,4,5,6-pentafluorobenzaldehyde with pyrrole in (1:1) molar ratio in refluxing propionic acid, using a modification of the Alder-Longo procedure. The 4-dimethylaminophenyl derivative 2 was prepared by refluxing compound 1 in dimethylformamide (DMF) overnight. The third and final compound 3 was synthesized by reacting compound 2 with excess methyl iodide in refluxing chloroform overnight. We now present the UV-Vis, proton and carbon-13 NMR spectral data of compounds 1-3.

U173
The Synthesis of Sigma Receptor Ligands

Gabrielle Powell (Senior)
Dr. Karla-Sue Marriott (Savannah State University)

There are two different sigma receptors in the body, sigma-1 and sigma-2. Sigma-1 has received the most scientific attention to date. Previous research of sigma-1 receptors showed that various drugs act as ligands and bind to the sigma-1 receptor. These drugs are antipsychotics, neuroleptics, and neuroactive steroids. Sigma-1 receptors are located in various areas of the human body both centrally and peripherally. Sigma-1 receptors function as a modulator for dopamine, acetylcholine, NMDA, and opioid receptors. Sigma-1 receptors have potential application in the treatment of addiction as well as other neurological disorders such as Alzheimer's and Parkinson's. A common feature of sigma-1 ligands is an amine moiety, such as an N-alkyl, N, N-dialkyl, or N-arylalkyl. We are currently engaged in the synthesis of amide derivatives of benzofuran carboxylic acids via a DCC/DMAP condensation reaction in an effort to produce ligands that are selective for the sigma-1 receptor.

Computers Science

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U174
Developing a Prototype to Enhance Privacy/Security of Android Camera-Enabled Applications

Jarvis Brewer (Senior) and Qatrunnada Ismail
Dr. Apu Kapadia (Indiana University)

As technology continuously emerges so do the staggering issues revolving around security. Our research focuses on enhancing privacy of cellular devices that operates on the Android operating system. Android being an open source platform, it easily increases the applications that these devices have to offer,
however it also increases the risk that an app may attempt to access personal and private information through the act of “virtual theft”. This particular type of crime involves malicious applications being installed on the device, which then can gain access and control the mobile phones’ multiple sensors, also known as “sensory malware”. Current Android devices put the burden on users to install apps that will not steal visual information nor share photos that are damaging. Our goal focuses on exploring systems that can lessen the risk of camera-enabled applications and reduce the burden on the user. By incorporating THE location services (GPS, network, Wi-Fi) already installed on these devices, we are designing a conceptual system, which will then allow the user to control when their photos are taken and how they are shared based on the location of the device. This system allows users the option to set certain regions on a map interface that when entered into by the device sets the camera into different modes to lower the possibility of information being captured and shared without the user’s permission. The concepts outlined in this project could then be integrated into current and future Android devices to reinforce their security.

U175
Utilizing Dijkstra’s Algorithm to Determine the Shortest Route to Savannah State University (SSU)

Jasmine Butler (Senior)
Dr. Alfredo Villanueva (Savannah State University)

Savannah State University (SSU) students and employees utilize various routes to get to a location on campus. It is important to travel on or off campus as with any location in a feasible, safe, and timely manner. When using Google Maps, it only gives the street way to get to a destination. The principal objective of this research is to find the shortest path between several buildings on campus using Dijkstra’s Algorithm. Dijkstra’s Algorithm is a scientific graph search algorithm that solves the single-source shortest path problem for a graph with non-negative edge paths. In order to determine the shortest path, I used a programming language that allows for the destination of the distances to be calculated. The programming language I used to demonstrate the shortest path was C++ and it found the distances between the buildings shown and the overall shortest path. The final product of this project is the actual map and C++ coding which declares how the shortest distance is determined/calculated.

U177
Fetching Objects with Robots

Patrick Dean, Jr. (Sophomore)
Dr. Asad Yousuf (Savannah State University)

Robotics technology is used in all sectors of engineering and other areas such as manufacturing. With Robot we can achieve precision and control remote through hardware and software interfacing. The purpose of this project is to learn the design and implementation of major components of Robotic System using Hardware and Software interfacing concepts. Intent of this project involves: 1) Learn the of major components of Robotics Systems, 2) Learn fundamental concepts of Robotics Navigation and transportation of objects, 3) Learn how to use PBASIC for modeling basic building blocks of Robotics system, and 4) Learn microcontroller technology and impact of using microcontrollers in robotics system design. The design will be carried out using the Parallax Integrated Development Environment. The project will be implemented in the following three stages: Analysis and Design, Design Implementation, and Testing and verification. The combination of software and hardware design makes this platform an excellent choice for summer undergraduate student project in both design and research aspects. Understanding the basics of PBASIC programming language and the hardware associated with the Robotic system was a requirement of this project. In the end, the goal of the research was to program the
robot to maneuver towards an object, pick the object up, pivot 180 degrees and return to its starting position.

**U178**

**Strength of Metals**

**Trent Demeritte, Jr. (Senior)**  
**Bryan Knackiewicz (Savannah State University)**

The MTS Servo hydraulic Wedge machine may be used to test the compression and tensile strength of any particular metal in a round bar shape according to the requirements stated in ASTM A370 - 12a Standard Test Methods and Definitions for Mechanical Testing of Steel Products. Experimental laboratory testing of one of these strength properties, compression strength, has been performed upon five different .5 inch diameter metals bars: stainless steel, copper alloy, aluminum, carbon steel, and brass using the MTS Servo hydraulic Wedge machine. Test data for each sample was produced by TestWorks® 4, the software used in conjunction with an MTS frame system (MTS Systems Corporation, 2011, p. 17). The data has been analyzed and compared to the strength properties determined from previous academic research. These comparisons will validate the strength properties produced by the MTS Servo hydraulic Wedge machine. In addition, the MTS Servo hydraulic Wedge housed by Savannah State University has yet to be operated upon and the manufacturer has not provided a detailed operation manual. Therefore, an operation manual that describe the step-by-step procedures of operating the machine and analyzing the data using TestWorks® 4 has been constructed.

**U179**

**Smart Road Sign**

**Fredrick Fluker (Junior)**  
**Dr. Mohammad A. Mustafa (Savannah State University)**

The objective of this research is to design a system that would communicate with the road maintenance department to alert them of the need for maintenance on a particular road sign. To achieve this goal we will develop a prototype system that communicates with the maintenance department through a message system to display that “maintenance needed immediately” when the view of the sign is in violation of the code requirements and the sign is a critical sign such as school zone signs, and stop signs. ArcGIS 10.0 was used to map the traffic analysis in the Savannah area. This was very important from an economic standpoint, being that implementing the technology on every street sign would be very costly. This mapping technology allowed us to only focus on areas of high traffic volume which would be more vulnerable to accidents. The use of this map will allow maintenance departments the ability to focus this technology in not only the critical signs in the area, but the signs in high traffic volumes in those areas.

**U220**

**Cosmological Mass Bounds in an Antientropic Big Crunch with Local Forward Arrows of Time**

**La'Shant'e Grant (Senior) and D'Monique Green**  
**James A. Broberg (Savannah State University)**

We set two minimum mass bounds for the intergalactic medium of the observable universe under a possible end-of-universe scenario in which the universe undergoes antientropic collapse into a Big Crunch while individual galaxies preserve local arrows of time by maintaining individual entropic evolution. The homogenous large-scale structure of the collapsing universe was modeled as our current ΛCDM universe under time reversal, employing non-modified Newtonian dynamics and 2011 WMAP values for the cosmological equation of state. First, we calculated the minimum mass required for the IGM to evolve antientropically at a rate needed to absorb the entropic gain of each galaxy while the universe as a whole loses entropy at a rate equal and opposite to its rate today. Second, we calculated the minimum IGM mass required for the work performed on the IGM by the galaxies to be a thermodynamically reversible process, in order to allow our universe to appear as a mirror image of today’s universe. The minimum IGM mass required for the universe to evolve antientropically was found to be $3.6 \times 10^{11}$ kg, and the minimum IGM mass required for a reversible process was found to be $1.3 \times 10^{67}$ kg. Both values are over ten orders of magnitude higher than the accepted actual IGM mass for today’s universe, $1.1 \times 10^{53}$ kg, indicating the unviability of a Big Crunch scenario in which local arrows of time are preserved under antientropic collapse.

**U180**

**Electric Circuit Analysis in MATLAB and Simulink**

**Nathaniel Hardy, III (Senior)**  
**Dr. Asad Yousuf (Savannah State University)**

Computer Simulation of Electrical Circuit is a trend in both academics and practice of Electrical Engineering. Simulation software packages such as MULTSIM and PSPICE provide the simulation of an Electrical Circuits to verify the design. However, the predesigned software packages are not helpful in understanding the calculation and analysis of electrical circuit components. The name MATLAB stands for MATrix LABoratory. MATLAB was written originally to provide easy access to matrix software developed by the LINPACK (linear system package) and EISPACK (Eigen system package) projects. MATLAB is computational software which provides conceptual approach for designing and solving problems in Electrical Circuits. MATLAB has embedded software called SIMULINK which provides an essential way to model, simulate and analyze Electrical Systems which are characterized by some inputs and outputs.
Abstracts

U181
Design and Stress Analysis of a Load-Carrying Hanger Using SolidWorks Simulation
Maleek D. Montgomery (Sophomore)
Dr. Mir Hayder (Savannah State University)

In this study, the static analysis of a load-carrying hanger was performed using SolidWorks Simulation software. The study was carried out in two stages. In the first stage, a suitable 3D model of a load-carrying hanger was developed, and in the next step, stress analysis was conducted keeping one side of the hanger fixed to a wall. The main focus was to understand where the maximum stress is developed when the load is applied from the top of the hanger. In addition, to the stress data, displacement and strain data was analyzed to develop a better understanding. Results show that for all loads applied to the hanger, the maximum stress was developed on the upper horizontal part where it is attached to the wall. None of the three parts failed/yielded due to loads tested in the study.

U182
VHDL Models Implemented in FPGA Hardware
Timothy Wright (Senior)
Dr. Asad Yousuf (Savannah State University)

Traditional digital design components are being replaced by FPGA (Field Programmable Grid Array). FPGA’s are the most popular and becoming the mainstay of many re-programmable applications. FPGAs’ re-programmability feature makes it more attractive since it can be completely changed by electrical process. As the technology scaling of chips continues then more and more logic will be available on the chip and will provide a great platform for FPGA systems.

Environmental Science

Undergraduate Abstracts

U183
The Effects of Storm Surge on Savannah State University Buildings
Johnny Black (Junior)
Dr. Tara Cox (Savannah State University)

The purpose of this project is to display the effects on buildings of storm surge due to a hurricane that could occur in Savannah, Georgia and greatly impact the campus of Savannah State University. Savannah, Georgia is long overdue for a hurricane. The campus of Savannah State University is located near Thunderbolt, which is surrounded by several bodies of water. Storms are divided into categories: Categories 1 through 5 with category 1 being the weakest and category 5 being the strongest, with wind speeds of up 155+mph. Inundation maps from Savannah Area GIS will be overlaid on maps of Savannah State University in ArcGIS to determine the relative impact of categories 1 through 5. Results will include the different percentages of the buildings on SSU that will be affected due to storm surge of a hurricane. Also, I expect my research will help students of Savannah State University find better shelter when an event like this does occur.

U184
Biodiesel Preparation from Microalgae
Jennifer Colley (Junior)
Dr. Hua Zhao (Savannah State University)

Petroleum-based fuels are facing challenges of depleting supplies and environmental pollutions. To achieve environmental and economic stability world-wide, it is essential for fuel to be renewable and capable of atmospheric CO2 sequestration. Microalgae utilize photosynthesis to convert carbon dioxide to potential biofuels, foods, feeds and high-value bioactive compounds. Microalgae are renewable sources for several different types of biofuels, one of which is biodiesel. Algal oil can be converted into biodiesel through a process called transesterification, in which an alcohol reacts with the triglycerides in the oil to produce biodiesel and glycerol. The purpose of this research is to determine if microalgae are a viable, economic source of renewable feedstock for biodiesel preparation. In this research the green algae Chlorella vulgaris was freeze-dried and extracted using chloroform/methanol (2/1) under microwave irradiation. The resulting algal oil was converted to biodiesel via a CaO-catalyzed transesterification in glyme as co-solvent. The reaction was periodically monitored by the analysis of High Pressure Liquid Chromatography (HPLC) which showed a high triglyceride conversion. In conclusion, our preliminary results have shown microalgae could be a viable source of renewable feedstock for biodiesel production. This project was supported by NIH NIBIB and RISE projects.

U185
Savannah State’s Soil Diversity
Demery Craig (Senior)
Dr. Tara Cox (Savannah State University)

The content of soil determines erosion, fertility, and limit the pollution in groundwater. Soil is the upper layer of earth where plants grow, usually consisting of organic remains, clay and rock particles. Some forming factors of soil profiles are the parent material, the climate, vegetation and weathering. The differences
between mature soil and immature soil are that mature soil is well developed and normally has a soil profile with clearly defined horizons; immature soils lack these properties. The purpose of this study was to determine how soil properties vary across the SSU campus and the coastal plains. This was done by sampling and testing these sites for the pH balance, organic content, dry weight, and water holding capacity. The sites that were used for sampling were mapped using ARCGIS 10.0. Through ARCGIS mapping and sampling of different sites, this research highlights the biodiversity of Savannah State University Campus and the surrounding coastal plains.

U186
Chatham County’s Mitigation: Which is More Effective: Manmade or Natural?

Marcus Johnson (Senior)
Dr. Tara Cox (Savannah State University)

Chatham County, Georgia has avoided hurricanes and the resulting storm surge damage recently. However, Chatham County has one of the largest projected storm surge areas in the United States and once the water comes, where will it go? Does Savannah have an effective drainage system? Our means for protections, canals, levees, marshlands, dunes, and armored shores are not battle tested. I used Geographic Information Systems to determine where armored shorelines are and what form of mitigation is used in that area. I then overlaid storm surge inundation maps shape files to see how high the water is projected to be in the geographical areas of interest. Also, hydrology and elevation is incorporated to give one a true perception of how the water will move.

U187
Food Desert Among Low-Income Areas in Savannah, GA

Renee Smith (Senior)
Dr. Tara Cox (Savannah State University)

As population increases in urban and suburban regions, the accessibility of vital businesses is essential to sustaining communities. Suburbanization has led to the migration out of the crowded inner cities to more spacious land to build homes, schools, and to establish oneself outside of the hectic, congested city environment. Businesses such as chain grocery stores, convenient stores, and other primary establishments have followed the same trend because of availability of unused land as opposed to brownfield (industrially used land), modern infrastructures, and a location that offers a more open atmosphere pleasing to consumers. As a result this has lead to a drastic change in the dynamic of urban areas. Poverty has increased due to lack of employment; independently owned businesses have increased prices as availability of products may be limited; and fast food restaurants are more prevalent leading to an increase in obesity and life-style diseases, as well a significant lack of healthy living options. The term “food desert” describes the inaccessibility to fresh, healthy, and affordable foods to a location. These circumstances lead to questions of environmental justice and equality of all social classes. There are 16 public housing complexes in Savannah that provide housing for low-income families. In Savannah there are five popular health food stores that sell organic food and products. The location of health food stores in relation to public low-income housing in Savannah, Georgia will be mapped in ArcGIS10.0 and analyzed to identify if there is an environmental inequality present and in what ways it can be eradicated.

U188
Prevalence and Distribution of Health Hazardous Waterborne Microbial Contents in Water Samples Collected from Savannah Water bodies

Travis Young (Senior)
Dr. Sivapatham Paramasivam and Dr. Sri Ranjini Arumugam (Savannah State University)

Waterborne bacteria such as Escherichia coli (coli forms) and Enterococci can be responsible digestive system illness if they get into biological systems. Humans can be exposed to these types of bacterial strains through consumption of food, various water and or bathing at common place like beach, swimming pool, etc. This study was initiated from the 4th week of June 2013 to enumerate the prevalence and distribution of Escherichia coli and Enterococci periodically (weekly basis) from selected six sampling locations namely Fort Pulaski (Savannah River), Polk Street Site 1 & Site 2 (place of Savannah River interaction with Beach – River-end), and Tybee Beach (2nd Street, 8th Street, and 11th Street) within Savannah region till the end of July 2013. E. coli was monitored through EPA Method 1603 (Membrane Filtration and Incubation technique) and Enterococci was monitored through EPA Method 1601 (Membrane Filtration and incubation technique). Monitoring of other water quality parameters (such as pH, salinity, alkalinity, hardness, dissolved organic carbon, dissolved nitrogen, elemental composition through ICP-OES and ionic composition through ion chromatograph) and documenting weather conditions during sampling time will be used relate with the distribution of these waterborne microbes and reported at the end of 5-week study. This study is expected to be extended for additional 10 – 12 months (till summer 2014) to monitor the seasonal trend of distribution of E. coli and Enterococci on bi-weekly basis.
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**Marine Science**

**Undergraduate Abstracts**

**U190**

**Litter Left Behind by Visitors Before and After Weekends on Tybee Beach**

Kelsey R. Cramer (Junior)
Dr. Mary Carla Curran (Savannah State University)

People often leave litter behind on beaches, and the shores of Tybee Island, GA are no exception. Approximately 899,000 trips are made by visitors to Tybee Island beach annually. The purpose of this study was to determine the influence of weekend visitors and improper waste disposal on the amount of litter on the beach. Sampling was conducted on Fridays and the following Mondays during May-October 2013. Transect lines measuring 80 m in length were placed perpendicular to the water. A 0.25 m² quadrat was placed every 10 m along each transect and the litter inside the quadrat was counted and separated into categories based on its composition. There was no significant difference (p = 0.8475) in the amount of litter collected before the weekend (3.0 ± 1.16 pieces/m²) versus after the weekend (3.1 ± 1.14 pieces/m²). The most common type of litter was cigarette butts, with 1.4 ± 0.53 pieces/m². Other common categories of litter were plastic (0.7 ± 0.30 pieces/m²) and paper (0.6 ± 0.33 pieces/m²). While we did not find a difference in the amount of litter collected, we only sampled the beach for 8 weekends. Other researchers have reported a direct relationship between the number of visitors and litter density. Additional sampling and estimates of beach visitor densities are necessary to determine whether the amount of litter on Tybee Island is influenced by the number of visitors to the beach.

**U191**

**Sediment Properties Along the Georgia Coast (South Atlantic Bight)**

Kamilya Daniels (Senior)
Dr. Carol Pride (Savannah State University)

The purpose of this project was to determine if there are compositional changes in the sediments along a southward transect off the Georgia coast. The grain size distribution of sediments at these sites are being determined for future comparison with beach and estuarine deposits to determine their suitability as source sites for beach renourishment and as dredge spoil disposal sites. The samples were collected via grab sample aboard the R/V Savannah on December 9 - 12, 2013. Organic content will be estimated by loss-on-ignition analysis. Sedimentary components will be identified microscopically and grain size analysis by sieving. The hypothesis is that sediments 5nm offshore can be used for beach renourishment events, but that the sites would not be suitable for disposal of dredged sediments from the estuaries.

**U192**

**Fusobacterium: A Major Component of the Common Bottlenose Dolphin Tursiops Truncatus Microbiome**

Kristopher M. Drummond (Junior), Kevin A. McKenzie (Graduate)
Marc E. Frischer (Skidaway Institute of Oceanography) and Dr. Tara M. Cox (Savannah State University)

Previous studies had identified bacteria belonging to the Family Cetobacterium as a dominant component of the microbiome from stranded common bottlenose dolphins (Tursiops truncatus) in the South Atlantic Bight region (Edwards MS thesis 2012). Cetobacterium, has previously been identified in association with whales and dolphins. However, in the Edwards study the bacteria could not be identified more specifically because the identification was based on a single strain. New PCR primers specific for Cetobacterium were designed that would amplify a larger (~1400 bp) fragment of the 16S rRNA gene providing a means to identify dolphin Cetobacterium to a higher taxonomic resolution. Cetobacterium-specific PCR primers were used to amplify spleen genomic DNA extracts from common bottlenose dolphins known to be dominated by Cetobacterium. Initial trials were unsuccessful but eventually a primer pair was identified that amplified the expected sized amplicon allowing it to be cloned and sequenced. The resulting sequence identified the SAB Cetobacterium as a Fusobacterium; it was unique from Cetobacterium strains initially identified as being associated with marine mammals. Further studies can look to see if Fusobacterium is prevalent in other dolphins and other marine life in the South Atlantic Bight region. More research is warranted to see the role of Fusobacterium in the microbiomes of common bottlenose dolphin.

**U193**

**Comparative Measurements of Effective EPS Extractions with Ion Chromatography & Spectrophotometry**

Robert Dumas, II (Senior)
Dr. Dionne Hoskins (Savannah State University)

Samples of Extracellular Polymeric Secretions (EPS) were taken from marine sediments in southeast Georgia and analyzed using an Ion Chromatograph (IC). The collection of the samples was taken during the low-tide moments of the day when the sediment would be most accessible. The samples were prepared in advance of testing for a thorough cleanliness. The IC was an older instrument; therefore the accuracy and precision of the results are compared with readings from a newer model of a spectrophotometer. Using two different methods of testing, gave exponentially different results. The samples were compared to standards of Beta-Glucose at varying concentrations of ppm to ppt. The mobile phase for the IC was kept at a standard concentration.
concentration using set conditions of preparation. The eluding was comprised of sodium hydroxide, acetone, and deionized water. The product had to then be degassed and stored in amber bottles. The process had to complete on average every two to three days for the results to be untainted.

**U194**
**Distribution Of Invasive Lionfish in Grays Reef National Marine Sanctuary**

**Elijah J. Ferguson (Junior)**
**Dr. Tara Cox (Savannah State University)**

This project will focus on the distribution of the invasive species lionfish (Pterois volitans) in the Grey's Reef National Marine Sanctuary, to determine their distribution and possible increase of population, between the years of 2002-2013. Data were obtained from Gray's Reef National Marine Sanctuary (S. Fangman, unpub. Data). Data were plotted in ArcGIS 10.0 to investigate distribution of sightings. These data were then compared among years. I expect to find similar trends of lionfish sightings near ledge like habitats within Gray's Reef National Marine Sanctuary; these will most likely be habitats which most resemble the lionfish's natural habitat. Understanding the distribution of lionfish will give researchers a better idea of what type of habitat will be affected by this invasive species and will allow them to take certain precautions to prevent further invasions.

**U195**
**Changes in Yearly Spatial Use of the Common Bottlenose Dolphin, Tursiops Truncatus, in the Coastal Waterways of Savannah, GA**

**Kalub D. Holt (Junior) and Robin M. Perrtree**
**Dr. Tara M. Cox (Savannah State University)**

The common bottlenose dolphin, Tursiops truncatus, occupies coastal environments along the western Atlantic and has a complex stock structure. Understanding temporal and spatial distribution of the animals is critical to better defining stock structure. The purpose of this study was to track changes in spatial use by individual common bottlenose dolphins from 2009 to 2013 in the coastal waterways of Savannah, GA. Boat-based surveys and photo identification were used to identify individual dolphins. Individuals were selected for this study if they were identified on 12 or more days and observed in three or more separate years. Sixty-nine bottlenose dolphins were sighted 12 or more times; a subset of those were selected for this study (N = 19). Nineteen dolphins were seen on an average of 23.8 sightings (Range: 14- 28) and 19.3 days (Range: 14- 26). There was little annual variation in the spatial range on a yearly basis by the animals. Two individuals examined to date did show some change in spatial use patterns: they were found in a small portion of the study area in 2009 and 2010 versus being found throughout the study area in 2011 and 2012. The preliminary results of this study indicate there is little annual variation in spatial use by most individuals within the study area.

**U196**
**OB/GYN Availability to the Public Of Chatham County**

**Quortnee Jones (Junior)**
**Dr. Tara Cox (Savannah State University)**

The objective of this project is to determine if there is a shortage of available Obstetricians/Gynecologists in Savannah, GA to assists women who are capable of bearing children based upon their age. Data on locations of OB/GYN practices were geocoded in ArcGIS10.0 and overlaid with 2010 Census data on populations of women within child bearing age. My hypothesis is that Chatham County will have less than the average ratio of 2.62 available OB/GYNs per 10,000 women within the county, and the distribution of OB/GYNs will not match the distribution of the population of women most in need of their services. Studies have shown that Chatham County barely reaches the average ratio of available OB/GYN's per 10,000 women healthy of child-bearing age.

**U197**
**Comparing the Annual Regression of Sea Ice in the Artic**

**Shaneese C. Mackey (Junior)**
**Dr. Tara Cox (Savannah State University)**

Approximately 7% of the earth’s surface is covered by sea ice. The ice that forms around the poles reflects the sun rays and reduces the amount of heat and radiation on earth. A decrease in sea ice could be caused by an increase in CO2 in the atmosphere and temperature. The purpose of this project was to identify the trends of the forming sea ice in the Artic every ten years from 1978 to 2012. Data from the National Snow and Ice Data Center were mapped in ArcGIS 10.1 and analyzed for temporal trends in spatial extent.

**U198**
**Analysis of Sea Turtle Humeri for Trace Element Composition**

**Eric Parks (Senior)**
**Dr. Selena Heppell and Matthew Ramirez (Oregon State University)**

The Atlantic Ocean is home to five of the seven species of sea turtles that exists in the world, with these turtles being the Kemps Ridley, Loggerhead, leatherback, hawksbill, and Olive Ridley. Analysis normally performed to increase knowledge of these creatures are stable isotopes, lipids, and heavy metals present in the blood and tissue of the sea turtle; with trace
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element analysis gaining appreciation as an efficient tool (Ramos and Gonzalez-Solis, 2012; Burton, 2007). Trace element analyses are now being conducted to better understand trophic interactions, migratory patterns, or growth patterns of sea turtles. (Szep et al., 2009; Sakai et al., 2000). The purpose of this project was to investigate the use of laser ablation-inductively coupled plasma mass spectrometry in characterizing the trace element composition of sea turtle humerus bones. The composition of 21 elements were compared among 12 loggerhead sea turtle humerus bones by ablating transects perpendicular to annular growth elements. Transects were made in duplicate for each bone to capture within bone variation in elemental composition. The first trial of testing has revealed that Li, Be, B, Mg, V, Cr, Mn, Fe, Cu, Zn, Se, Rb, Sr, Cd, Sn, Ba, and Pb could all be detected, although some in small concentrations, in the humerus bone of the sea turtles tested. More research is being conducted to narrow down the concentration of each element and to determine if a trend can be detected between different growth years on the humerus.

U199
Bottlenose Dolphin (Tursiops truncatus) Strandings

Bruce Patterson (Sophomore)
Dr. Tara Cox (Savannah State University)

The most common marine mammal that strands in Georgia is the common bottlenose dolphin (Tursiops truncatus). This project will show the spatial relationships among dolphin strandings from coastal South Carolina, Georgia, and Florida. My goal is to identify what states had the highest number of bottlenose dolphin strandings and identify the two main causes for strandings in each state. I will be taking data from The National Marine Fisheries Service on strandings along the Southeast U.S. coast. These data were provided by the NMFS Marine Mammal Health and Strandings program; and will be mapped in ARCGIS 10.

U200
Distribution of Strandings of Bottlenose Dolphins (Tursiops Truncates) Along the Georgia, Florida, and South Carolina Coasts

Precious Scott-Edmonds (Junior)
Dr. Tara Cox (Savannah State University)

Bottlenose dolphins (Tursiops truncatus) can be found worldwide in temperate and tropical waters. Strandings occur year around and may involve one or multiple dolphins. There is no one known cause of stranding but causes may include but are not limited to, health complications, such as disease; environmental factors such as pollution or starvation; or various forms of human interaction such as ships and vessels. This project will help shed light on the distribution of dolphin strandings by analyzing spatial trends in male and female stranding cases from 2010-2014. Data collected by the NOAA Marine Mammal Health and Stranding Response Program will be mapped in ArcGIS 10.0. Distribution of strandings of male and female bottlenose dolphins will be compared spatially and temporally. By isolating months and specific hotspots that strandings occur more frequently, response teams may better prepare and maybe even be able to prevent dolphin mortalities due to strandings.

U201
Spring-Neap variation in Egg-Length Correlations and Embryonic Development for the Daggerblade Grass Shrimp Palaemonetes Pugio

Renee’ Smith (Senior)
Dr. Sue Ebanks (Savannah State University)

The daggerblade grass shrimp Palaemonetes pugio is found throughout the Atlantic and Gulf coasts. It serves as a vital food source for many invertebrate and fish species that have significant economic importance to fisheries and marine life. In this study, we sought to determine possible relationships between weight (g) and clutch size, length (mm) and clutch size, and developmental stage of P. pugio over the monthly tidal (spring-neap) cycle in Country Club Creek (Wassaw Sound Estuary, GA, USA). A developmental stage scoring was derived, grouping the 11 published embryonic development stages into 6 stages from fertilized egg (group 1) to post-nauplius with visible eye condensation (group 6). Thirty shrimp were collected by dip net at low tide during two spring and two neap tides from May 31 to October 2013. Based on data collected, a correlation between length or weight and the number of eggs was determined. By using the regression percentage (R2 value) and regression equation, we were able to determine a mathematical (quantitative) method for predicting egg count in grass shrimp for use in future toxicological studies.
and surrounding coastal waters. We predict the production of this diatom will increase in time due to the various changes in the environment. The relative abundance of 
Pseudo-nitzschia exceeded to about 12% when the salinity ranged from 45 to 60 and water temperature ranged from 15 to 30 degrees Celsius. During the fall (2009-2010) is when Pseudo-nitzschia was found to be the most abundant in the tidal creek. Data from other Georgia estuaries and shelf waters are being compared to determine the relative abundance of Pseudo-nitzschia in relation to salinity, water temperature, and turbidity.

G203
Speckled Sea Trout Distribution in the Savannah River Estuary

Paul Arkwright, III (Graduate)
Dr. Tara Cox (Savannah State University)

The speckled sea trout Cynoscion nebulosus is an important food fish and game fish in the estuaries of the southeastern USA. It is well known that speckled sea trout are the cornerstone of multi-million dollar commercial and recreational fisheries in Georgia, but little attention has been paid to their importance or value to local artisanal and subsistence fisheries. The purpose of this study was to analyze artisanal fishery catch data in search of spatial and temporal trends in speckled sea trout distribution in the Savannah River Estuary, Georgia. A secondary objective was to estimate the total catch value. Sea trout catch data from 2005 was acquired from a local fisherman. The catch data included: date of sampling, number of individuals captured, catch weight (kg), depth of sampling (m), and general area of sampling. Nine sites were chosen for this study because of their location on, or proximity to, the Savannah River. Fish catch data were graphically represented using ArcGIS and monetary values were calculated using Microsoft Excel. A total of 1548 individual fish, weighing 1055 kg and having a street value of $6963 were collected. Temporally and spatially, speckled sea trout were unevenly distributed throughout the Savannah River. Two clear patterns were observed. Speckled sea trout were caught upriver and in deep water during the cold months, but were caught in shallow waters, near the mouth of the river, in warm months. Similar behaviors were observed in previous studies of speckled sea trout ecology on the East and Gulf Coasts.

G204
Latitudinal Variations of Diatom Communities of the Georgia Inner Shelf (December 2013)

Ashton Arnold (Graduate)
Dr. Carol Pride (Savannah State University)

Diatoms are important primary producers within marine environments. A prior study suggested lower diatom diversity in the Savannah River than estuaries farther south. The present study analyzed the diatom communities at four stations along the Georgia inner shelf to determine if the same trend occurs offshore. The stations were 5 nautical miles off the Savannah River, Ossabaw Sound, St. Catherine’s Sound, and the Altamaha River. Water samples were collected aboard the R/V Savannah on December 9, 2013. In the laboratory diatoms were identified to the genus level at 40X magnification. Relative abundances and standing stocks of the genera were then calculated and mapped in ArcGIS 10.0. The mean standing stock for the four stations was 5547.02 ± 1436.40 cells per liter. The most abundant genus off of the Savannah River, Ossabaw Sound, and St. Catherine’s Sound was Skeletonema. However, the southernmost site off the Altamaha River had two similarly abundant genera: Conscinodiscus and Rhizosolenia. The Shannon-Weiner Indices range from 1.47 off the Savannah River to 2.20 off the Altamaha River, supporting the previously observed trend of greater diversity at the southernmost sites.

G205
Tidal and Diel Movement Patterns of the Atlantic Stingray Dasyatis Sabina Along a Stream-Order Gradient

Cameron Brinton (Graduate)
Mary Carla Curran (Savannah State University) and Charles F. Cotton (Florida State University Coastal and Marine Lab)

Stingray behavior can be affected by external cues in the environment such as tide. Stream geomorphology may further influence how stingrays respond to stimuli. The purpose of this study was to determine how tidal stage and diel period affected the movement patterns of the Atlantic Stingray Dasyatis sabina in tidal creeks along a stream-order gradient. Twenty-two stingrays were tagged internally with VEMCO coded-acoustic transmitters and were tracked in Romerly Marsh and Country Club creeks near Savannah, GA. Creeks were classified using the Horton concept of stream orders, which assigns unbranched streams to the first order. In Romerly Marsh Creek, 57.2% of upstream movement and 62.3% of downstream movement occurred at night, but stingray movements were evenly distributed throughout the diel cycle in Country Club Creek. Stingray movements were not clearly correlated with tidal stage in Romerly Marsh Creek. In Country Club Creek, stingray movements were oriented with tidal currents; the majority of downstream movements occurred at the beginning of the ebb tide (39.2%) and the majority of upstream movements occurred...
Abstracts

at the end of the flood tide (31.7%). Tidal stage and diel period did not consistently influence stingray behavior in Romery Marsh Creek (4th-5th order streams) and Country Club Creek (1st-4th order streams); thus, stingrays may be altering their behavior based on additional environmental factors such as creek geomorphology.

G206
Understanding the Perceived Communication Structure of Coastal Resource Management in Small Island Developing States (SIDS) of the Eastern Caribbean Region; Case Study: St. Vincent and the Grenadines

Sanya S. Compton (Graduate)
Dionne Hoskins (Savannah State University)

Small Islands Developing States (SIDS) are low-lying coastal countries that are structurally vulnerable and prone to productivity and development issues. Ninety percent of SIDS are located in the tropics and depend heavily on their coastal resources. The Caribbean islands make up 40% of the SIDS and many islands share common features and resources (tourism, agriculture, fisheries, coral reefs). The current approaches being used need to be re-defined and specific skills in the areas of facilitation and communication need to be developed. St. Vincent and the Grenadines (SVG) is chain of 32 islands located in the Eastern Caribbean, extending southward of the windward island archipelago. Like many other SIDS, SVG depends heavily on its marine and coastal resources to sustain its economy. Because of the similarities to other islands and relatively unique governance structure St. Vincent and the Grenadines was chosen as the representative case study. The purpose of this research was to test the hypothesis that different perceptions about 6 coastal resource management issues exist among 5 stakeholders groups. The objectives were to assess the perceived communication structure regarding coastal resource management among the islands of Saint Vincent and the Grenadines, and to determine if communication barriers exist among stakeholders. Forty local stakeholders were interviewed using a Q-sort methodology. Each stakeholder was required to give their perception on 69 statements, which were focused on the communication of resource management issues. Results from the Principal Component Analysis (PCA) suggest that six factors explain 52.5% of the variability in perception among all stakeholders.

G207
Seasonal Fish Family Abundance at Cockspur Island and Tybee Island

Jennifer A. Gut (Graduate)
Dr. Tara Cox and Dr. Mary Carla Curran (Savannah State University)

Studying the seasonal use of estuaries and surf zones by fishes is important for determining the influence of anthropogenic impacts, such as climate change, on fish movement and necessary for the management of commercially and recreationally important species. The purpose of this study was to characterize the fish assemblages of both estuarine and coastal sites during all seasons. Fish were collected by seine net during ebb tide and spring tide from March 2013 to February 2014 at 2 sites on Cockspur Island and 4 sites on Tybee Island and were identified to the family taxonomic level. Individuals from the family Sciaenidae were present year-round at both sites on Cockspur Island and 3 sites on Tybee Island, with the highest peak during the spring season at both islands (45.2% and 52.8% of the total catch, respectively). At the most estuarine site, the families Mugilidae, Fundulidae, and Engraulidae were also present throughout the entire sampling period. Carangids were collected from spring to fall at Tybee Island, with a peak in summer representing 92.4% of the total catch. Some families were only present during one season, such as Elopidae, which were found during summer; and Ariidae, which were collected in the fall. Overall, this work supports the findings of previous studies in which individuals from the families Sciaenidae, Mugilidae, Fundulidae, and Engraulidae are year-round estuarine residents compared to other transient families, which are only present within the area at a certain period of time.

G208
Assessing the Landings of Food Shrimp as Reported by Shrimpers Trawling along the Georgia Coast between 1989 and 2013

Keya Jackson (Graduate)
Dr. Dionne Hoskins (Savannah State University)

For a fishery to be economically viable, sufficient quantities of fish must be landed over the course of the season to meet market demand. However, in Georgia, the shrimp fishery has been threatened by reduced fishing effort, increased fuel costs, disease, and competition with cheap imported shrimp. The objective of this study was to investigate spatial and temporal trends in shrimp landings along the Georgia coast from 1989-2013. Shrimping areas on the coast of Georgia that will be investigated include the Savannah River, Wassaw Sound, Ossabaw Sound, Catherine's Sound, Sapelo Sound, Doboy Sound, Altamaha Sound, Simons Sound, St. Andrews Sound, and St. Marys Sound. Shrimp landings reported by Georgia fishermen between the years of 1989 and 2013 will be obtained from the Georgia Department of Natural Resources (GADNR), plotted in ArcGIS 10.0, and compared by year and shrimping location. The trends identified in this study may be used to predict future patterns in shrimp landings along the Georgia coast. This study will also promote the use of data collected by shrimpers to assist scientific research requiring landings data.
G209
Coastal Georgia Wetlands Analysis (1980s & 2006)

Chelsea Parrish (Graduate)
Dr. Tara Cox (Savannah State University) and Sonny Emmert (Georgia Department Of Natural Resources)

Wetlands consist of areas that are either filled or saturated with water at some point during a year; they are considered an important link between land and water. Because wetlands consist primarily of hydric soil, unique vegetation specific to this type of soil—aquatic plants—is found in wetlands. Wetlands are classified into five distinct systems: marine, estuarine, riverine, lacustrine, and palustrine. The National Wetlands Inventory Program (NWI) of the U.S. Fish and Wildlife Service (FWS) originally inventoried Georgia and its coastline in the late 1970s and again in the late 1980s. Since then development activity and natural geophysical processes have taken place. In 2006, wetland inventories from 6 ocean counties in Georgia were updated and mapped. These coastal wetlands account for approximately 3,159 square miles (5.5 percent) of the State of Georgia. In total, 804,227 wetlands exist in coastal Georgia. Up to 97 percent of Georgia wetlands are important for nutrient assimilation. Data from the late 1980s will be compared to data collected in 2006 in ArcGIS 10.0 to determine the loss, gain, and/or change of the Savannah River subwatershed (HUC 12). In addition, wetland function per acre in this watershed will be calculated from the 2006 data. This research will provide valuable information within the watershed regarding the overall role of wetland functions as well as the change that has occurred between the 1980s and 2006.

G210
Determining the Effect of Season on the Distribution of the Atlantic Stingray Dasyatis sabina in Two Creek Systems in Savannah, Georgia Using Acoustic Telemetry

Sarah Ramsden (Graduate)
Dr. Mary Carla Curran (Savannah State University)

Samples of Extracellular Polymeric Secretions (EPS) were taken from marine sediments in southeast Georgia and analyzed using an Ion Chromatograph (IC). The collection of the samples was taken during the low-tide moments of the day when the sediment would be most accessible. The samples were prepared in advance of testing for a thorough cleanliness. The IC was an older instrument; therefore the accuracy and precision of the results are compared with readings from a newer model of a spectrophotometer. Using two different methods of testing, gave exponentially different results. The samples were compared to standards of Beta-Glucose at varying concentrations of ppm to ppt. The mobile phase for the IC was kept at a standard concentration using set conditions of preparation. The eluding product had to then be degassed and stored in amber bottles. The process had to complete on average every two to three days for the results to be untainted.

G211
The Tidal Effect on the Carbonate Chemistry of the Wilmington River

Mike Scaboo (Graduate)
Dr. Chris Hintz (Savannah State University)

The salt marsh estuaries of the southeastern coast transfer dissolved inorganic carbon (DIC) to the coastal ocean. The Wilmington River connects the Savannah River estuary to Wassaw Sound southeast of Savannah, Georgia, U.S.A. and is bordered by areas of moderate population and large expanses of salt marsh. The purpose of this study was to determine the carbonate chemistry of the Wilmington River before the Savannah River is deepened. Water samples were collected 1 m below the surface and 1 m above the benthos. DIC and pH were determined by a total carbon analyzer and spectrophotometry, respectively. The alkalinity and pCO2 were calculated. A spatial interpolation (spline with barriers) of the difference between the river and ocean signature was performed with ArcGIS. DIC ranged from 1349-1986 µmol kg⁻¹. Supersaturated pCO2 varied from 878-1835 µatm. The resulting river pH was 7.37-7.74. The highest pCO2 (1835 µatm) was during low tide, which was expected. This study provides a baseline reference before the expected Savannah Harbor deepening that will change the carbonate chemistry of the Wilmington River and potentially alter the carbon export in the future.

G212
Extraction of Microbial Extracellular Polymeric Substance (EPS) using the Ethanol Precipitation Method

Crystal Smith (Graduate) and Loughlin Onyeokoro
Dr. Dionne Hoskins (NOAA Fisheries)

Epipelagic diatoms and cyanobacteria secrete extracellular polymeric secretions (EPS) into the substrate and improve habitat quality by providing nutrients in dissolved, colloidal, and aggregate forms. The consumption of colloidal and particulate EPS by commercially-important invertebrates and vertebrates connect microbially-produced carbohydrates to the bioenergetics of infaunal and epifaunal sediment communities. The purpose of this study was to quantify the extraction efficiency of extracellular polymeric secretions using the ethanol precipitation method and also to test the accuracy of the phenol-sulfuric acid assay for quantifying EPS. Samples were collected from Country Club Creek, GA June 2012 and June 2013. EPS were extracted from the sediment using ethanol precipitation, clean via dialysis and quantified using a spectrophotometer. There was a 63% loss of EPS after extraction. Scientists may be greatly underestimating the amount of EPS available to infaunal and epifaunal sediment communities.
G213
Short-term Effects of the BP Oil Spill on Brown Pelicans (Pelecanus occidentalis)
Coral Thompson (Graduate)
Dr. Tara Cox (Savannah State University)

The Deepwater Horizon or BP oil spill occurred on 20 April 2010 and led to over 180 million gallons of oil leaking into the Gulf of Mexico. The wellhead was capped on 15 July 2010, and the cleanup of the oil spill began. Many marine animals were affected by the oil spill including a variety of marine birds. The brown pelican Pelecanus occidentalis is known to use barrier islands found along the Gulf of Mexico for reproduction and Gulf of Mexico waters for foraging. The purpose of this study was to examine the effects of the oil spill on the brown pelican by mapping the locations of dead and live birds affected during the months before the wellhead was capped. Data provided by the U.S. Fish and Wildlife were mapped in ArcGIS 10.0 to determine the temporal and spatial distribution and extent of effects on brown pelicans. The month with the highest number of brown pelicans reported was June 2010 (n=138), followed by July 2010 (n=88), and the least were found in May 2010 (n=78). In May the locations were all concentrated near Louisiana and Mississippi. In June several birds were reported in Florida, east of the oil spill. In July pelicans were found in Texas, west of the oil spill. This type of analysis can aid in predicting how widespread the impacts of an oil spill can become for marine organisms.

G214
Estimation of Site Fidelity for Common Bottlenose Dolphins Tursiops Truncatus in the Savannah River Estuary using the Robust Design
Jessica J. Thompson (Graduate)
Dr. Tara M. Cox (Savannah State University) and Michael J. Conroy (University of Georgia)

Estimating abundance for common bottlenose dolphins Tursiops truncatus in an estuarine ecosystem has unique challenges. Estuarine populations mix, and dolphins range from their core habitat, thus rendering traditional closed population models invalid. The Robust Design incorporates multiple short sampling periods in which closed population models are applied within the context of longer-term periods over which the population is assumed open. The fusion of the closed and open population models relaxes the assumptions of the closed model and necessitates estimation of temporary emigration and heterogeneity of capture which is used to estimate abundance. We designed a study for the Savannah River estuary between the Savannah River and Ossabaw Sound to estimate fidelity using statistically robust design. The design estimates fidelity by using photo-identification, modeling using a robust mark-recapture design, and estimating temporary emigration through maximum likelihood multistate modeling. Within the survey area there is spatial delineation between dolphins that used the northern and southern habitat according to sighting data that were collected before 2012. Temporary emigration between the northern and southern regions of the study area will be determined using data collected in 5 primary sampling periods from 2013-2014. The probability of moving between two states, temporary emigration, and fidelity will be calculated using MARK. The probability of moving between two states and temporary emigration will be needed for the estimate of heterogeneity of recapture accounted for by robust models using closed-period recapture. Our results will aid in the tracking of population response to disease, environmental changes, and anthropogenic factors.

G215
Evaluation of Biological and Physical Parameters of Natural and Restored Oyster Reefs in Georgia
Tiffany Ward (Graduate)
Dr. Matthew Ogburn and Dr. Dionne Hoskins (Savannah State University)

Long-term monitoring of small scale restoration projects is lacking much documentation and standardized methods. Little is known about how these functions can be developed using different restoration methods in the construction of restored reefs. The purpose of this study was to test quick and inexpensive methods for monitoring physical and biological parameters of natural and restored oyster reefs over a long period of time. Quadrat and transect data was collected at 19 sites of which 12 were restored oyster reefs. Data was collected for 3 consecutive years during the summer and fall seasons. Density was measured in .25 m² quadrats across the upper and lower sections of the reef along with rugosity and height. Sites were divided into 3 transects perpendicular to the shoreline extending from the marsh edge to the water line at low tide. Transects were assessed in 1 m intervals while elevation, rugosity, and height were measured, and percent cover or live oysters, shell, sediment, barnacles, and Spartina alterniflora were estimated. The effect of percent cover of live oysters on rugosity was assessed for natural and each type of restored site and 36.92% of the increase in rugosity can be attributed to the percent cover or live oysters at natural sites (p <0.0001). Mean density was compared between sites for each year by section for both natural and restored reefs. Over time it is expected that these restored reefs shall start to look like the natural reefs and the chosen methods or measurement provide good visual progress.
Mathematics

Undergraduate Abstracts

U216
Historical Trends and Prediction in Savannah’s Temperature

Blessing Enya (Sophomore)
Dr. Hyounkyun Oh (Savannah State University)

Climate change has been a serious issue which is world widely affecting people and the environment over decades. NOAA’s National Climate Data Center also indicates that temperature rose throughout most of the United States at an average rate of 0.11ºF per decade and the warmth record was built in the most recent 10-year period. On the other hand, based on the NOAA’s data some South and Southeast areas of the U.S, including state of Georgia, still experienced a very slight temperature change over the past century. Present study aims firstly to build a mathematical modeling of temperature changes at Savannah, Georgia. Based on the data of the past 60-year monthly mean highest and lowest temperature then are investigated. Using the Fourier Approximation, this non-linear discrete approximation is converted to a continuous function so that we predict the future change of temperature at Savannah area. Resultant information may be applied to develop more accurate predictive system by combining other climate control system.

U217
Digital Elevation Model and Energy Expenditure

Vanda Johnson (Junior)
Dr. Hyounkyun Oh (Clemson University)

A.E Minetti states in an article that when the slope of the route is about fifteen degrees, the energy required to gain a certain altitude is minimized. Despite this theory, it’s almost impossible to find the optimal trail up a mountain with the lowest energy expenditure due to various factors: infinitely many starting points, selective directions, individually unique metabolic systems, etc. Nevertheless, we are still interested in finding the best trail up a given mountain. This research explores two major building blocks: development of digital elevation model (DEM) for Stone Mountain in Georgia, and examination of energy expenditure along the existing/newly created trails. The DEM from a topographical map, which provides the surface information of a given mountain, is achieved through the 3D numerical interpolation method with the help of the intuitive estimation of boundary points from a simple topographical map from a park brochure. The evaluation of existing and new park trails from fixed points to the summit of the produced 3D mountain is also achieved through the formula for biomechanical energy expenditure of the human body. Furthermore, we examine Minetti’s theory and compare the results of each park trail by observing the graphs of the trail slant. The resultant data shows that the existing trail is well developed reflecting the Minetti’s theory and newly developed trail is also well adopted. This work contributes and extends to the various research fields, including creation of 3D visualized map, virtual analysis of mountain surfaces, evaluation of existing trails, and their applications.

U218
Two-Tone Coloring of Graph Products

Ashley Morris (Senior)
Dr. Jim Brown (Clemson University)

A variation of graph coloring known as a t-tone k-coloring assigns a list of t colors each vertex of a graph from the set \( \{1, \ldots, k\} \) where any two vertices distance d apart share fewer than d colors in common. The minimum integer k such that a graph G has a t-tone k-coloring is known as the t-tone chromatic number. We study the 2-tone chromatic number of three different graph products. In particular, given graphs G and H, we found the 2-tone chromatic number for the direct product \( G \times H \), the Cartesian product \( G \Box H \), and the strong product \( G \ast H \).

U219
Underwater Communication Using Sinusoidal Waves

William Snyper (Junior)
Dr. George Tessema (Savannah State University)

The ocean has been a mystery to humans for so many centuries; due to the technological advancement of the twenty first century we are able to discover new things about it. Though we can explore it, we are faced with many problems such as establishing an effective way to communicate underwater. Communication is the biggest concern of any operation which could be the determining factor of success or failure. The purpose of this research is to study an existing underwater diver communication system and identify its strengths and weakness. The system we intend to study utilizes sound wave as a means of communication. There have been numerous device created for this purpose such as the Neptune Space. Our goal is to find a permanent solution to eliminate its weakness. If we can study the collected data on the device we hope that it may help us develop a method that would provide an effective and efficient way of establishing a communication channel for divers that meets our desire sound quality and range.
### Judging Rubric for Poster Presentation of Research

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<tr>
<td><strong>Poster Effectiveness</strong></td>
<td>Content is very well organized and demonstrates an excellent experimental design.</td>
<td>Content is well organized, and has satisfactory experimental design.</td>
<td>Content is adequately organized, but an adequate experimental design is not demonstrated.</td>
<td>Content is poorly organized and there is no evidence of experimental design.</td>
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<td><strong>Level of Scholarship and Impact</strong></td>
<td>Project demonstrates a very high level of scholarship, with proper citations available.</td>
<td>Project demonstrates a high level of scholarship, with many citations available.</td>
<td>Poster demonstrates an adequate level of scholarship, with some citations available.</td>
<td>Poster demonstrates a poor level of scholarship, with no citations available.</td>
<td>Poster lacks any impression of being scholarly.</td>
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<tr>
<td><strong>Visual Aesthetic</strong></td>
<td>Poster is very attractive, neat, colorful, and hured the audience to read the contents.</td>
<td>Poster is attractive, well-organized, but lacked the allurement to the reader.</td>
<td>Poster is adequate in the material presented, but is weak in organization and neatness.</td>
<td>Poster is poorly presented, but does contain related topics to the theme.</td>
<td>Poster is poorly presented, and does not relate to the topics of the scholarship.</td>
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<tr>
<td><strong>Grammar</strong></td>
<td>There are no grammatical/mechanical mistakes on the poster.</td>
<td>There are 1-2 grammatical/mechanical mistakes on the poster.</td>
<td>There are 3-4 grammatical/mechanical mistakes on the poster.</td>
<td>There are 5-6 grammatical/mechanical mistakes on the poster.</td>
<td>There are more than 7 grammatical/mechanical mistakes on the poster.</td>
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### Judging Rubric for Presenter

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<td><strong>Knowledge of Project</strong></td>
<td>Answers difficult questions clearly and succinctly.</td>
<td>Answers most questions.</td>
<td>Has some difficulty answering challenging questions.</td>
<td>Has difficulty answering questions.</td>
<td>Does not understand the questions asked.</td>
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<tr>
<td><strong>Logical Presentation</strong></td>
<td>Presentation is consistently clear and logical. Comfortably uses visual aid (poster) to enhance presentation.</td>
<td>Presentation is clear for the most part, but not consistently. Comfortably uses visual aid (poster) to enhance presentation.</td>
<td>Presentation is generally unclear and inconsistent. Uses some visual aids (poster) to enhance presentation.</td>
<td>Presentation is unclear and illogical. Does not use visual aid (poster) to enhance poster presentation effectively.</td>
<td>Presentation is very confusing. Does not use the visual aid (poster) to enhance presentation effectively.</td>
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<td><strong>Background Information</strong></td>
<td>Demonstrates a very strong knowledge of the research project and project background.</td>
<td>Demonstrates a good knowledge of the research project and project background.</td>
<td>Demonstrates some knowledge of the research project and project background.</td>
<td>Demonstrates poor knowledge of the research project.</td>
<td>Does not demonstrate any knowledge of the research project.</td>
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<td><strong>Presence</strong></td>
<td>Speaks clearly, naturally and with enthusiasm; makes eye contact.</td>
<td>Speaks clearly, naturally, makes eye contact.</td>
<td>Reads from poster or script some of the time.</td>
<td>Reads from poster or script most of the time.</td>
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Name of Judge: ____________________________ Final Score: ____________________________

Select judging area

- [ ] Biology
- [ ] Engineering
- [ ] Marine Science
- [ ] Social & Behavioral Science
- [ ] Chemistry
- [ ] Environmental Science
- [ ] Mathematics
- [ ] Social Work
- [ ] Management and Marketing
- [ ] Political Science & Public Affairs

Feedback for presenter (anonymous):

______________________________

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4th Annual Research Conference and RIMI Symposium Committee

would like to thank everyone who contributed to the success of our conference.

Special thanks to...

Coca-Cola (Savannah)

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SSU Alumni Affairs
SSU Department of Marketing & Communications
SSU Division of University Advancement
SSU IT Department
SSU Physical Plant
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