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Georgia Southern University Research Symposium

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# Research Symposium Program [2016]

Georgia Southern University

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# RESEARCH<sup>2016</sup> SYMPOSIUM

GEORGIA SOUTHERN UNIVERSITY

SATURDAY, APRIL 16, 2016  
NESSMITH-LANE CONFERENCE CENTER



10% Recycled Paper

# SCHEDULE OF EVENTS

## 8:00 - 8:45 AM REGISTRATION, POSTER SETUP & CONTINENTAL BREAKFAST

Nessmith-Lane Atrium & Ballroom

## 9:00 - 9:30 AM OPENING REMARKS

Nessmith-Lane Ballroom

## 9:30 - 10:30 AM SESSION 1

Molecular Biology Initiative (MBI) (Closed Session)	1909
Natural & Physical Sciences	2903
Natural & Physical Sciences	2904 B
Qualitative Research	2905 A
Education & Learning	2908
Exercise Science & Human Performance	2904 A
Exercise Science & Human Performance	2905 B
Humanities & Social Sciences	2901
Engineering & Material Sciences	2911

## 10:30 - 10:45 AM BREAK

## 10:45 AM - NOON MORNING POSTER PRESENTATION

Natural & Physical Sciences  
Molecular Biology Initiative (MBI)  
Public Health & Wellness  
Exercise Science & Human Performance

## NOON - 1:30 PM LUNCH, KEYNOTE SPEAKER & PRESENTATION OF AVERITT AWARDS

Nessmith-Lane Ballroom

## 1:30 - 2:30 PM SESSION 2

Molecular Biology Initiative (MBI) (Closed Session)	1909
Natural & Physical Sciences	2903
Natural & Physical Sciences	2905 A
Humanities & Social Sciences	2901
Public Health & Wellness	2908
Engineering & Material Sciences	2911
Computer Science & Information Technology	2904 A
Education & Learning	2904 B
Business & Logistics	2905 B

## 2:30 - 2:45 PM BREAK

## 2:45 - 4:00 PM AFTERNOON POSTER PRESENTATION

Engineering & Material Sciences  
Computer Science & Information Technology  
Business & Logistics  
Humanities & Social Sciences  
Education & Learning  
Qualitative Research


## 4:00 - 5:00 PM SESSION 3


Molecular Biology Initiative (MBI) (Closed Session)	1909
Natural & Physical Sciences	2903
Natural & Physical Sciences	2905 A
Engineering & Material Sciences	2905 B
Engineering & Material Sciences	2911
Education & Learning	2904 B
Humanities & Social Sciences	2901
Public Health & Wellness	2908
Computer Science & Information Technology	2904 A

## 5:00 - 5:30 PM RECEPTION & SYMPOSIUM AWARDS

Nessmith-Lane Ballroom

### RESEARCH TOPICS

 Computer Science & Info Technology

 Business & Logistics


 Exercise Science & Human Performance

 Engineering & Material Sciences

 Education & Learning

 Qualitative Research

 Natural & Physical Sciences

 Molecular Biology Initiative

 Humanities & Social Sciences

 Public Health & Wellness

# KEYNOTE SPEAKER



## Mark Lytle

*Vice Chancellor for Economic Development  
Board of Regents University System of Georgia*

In his current role Mr. Lytle is responsible for identifying and enhancing access to the research and economic development assets of all the institutions of the University System of Georgia. He is also responsible for utilizing those assets to create an ecosystem of innovation, discovery and entrepreneurship with the mission to create new businesses and support Georgia's early stage companies, existing industries, communities, researchers, students and faculty.

Mr. Lytle is also the USG representative to Governor Deal's High Demand Careers Initiative, wherein validated industry workforce needs are identified.

Mark then establishes the industry relationships and creates collaborations with industry groups and companies to align existing or create new academic programs to meet the requirements.

Prior to joining the University System of Georgia in April 2013, he was the Division Director for the Georgia Centers of Innovation, a division of the Georgia Department of Economic Development. In that role he had overall managerial responsibilities for Georgia's Six Centers of Innovation, connecting Georgia businesses with university researchers, essential contacts and matching grants to help companies compete and grow.

# THE AVERITT AWARD



The Averitt Award is the highest honor bestowed upon graduate students within the Jack N. Averitt College of Graduate Studies. Through nominations from each department's graduate program faculty, two semi-finalists are chosen by the Graduate Program's Director/Coordinator, one student from each category: Excellence in Research and Excellence in Instruction. Of these semi-finalists, two students are chosen and each are bestowed a \$1,000 cash prize and a Crystal Eagle trophy. The 2015 Averitt Award Winners will be announced during the Research Symposium Luncheon at 12:00 - 1:30 PM in the Nessmith-Lane Ballroom.

## Previous Winners

2015	Zachary Dietrich	PhD Psychology	Excellence in Research
2015	Joshua Holloway	MA Mathematics	Excellence in Instruction
2014	Cameron Cato	MSAE - Mech. Engineering	Excellence in Research
2014	Aaron Roberts	MA English	Excellence in Instruction
2013	Lauren Deaner	MS Biology	Excellence in Research
2013	Amit Arora	PhD Logistics	Excellence in Instruction
2012	Carl Nicholas "Nick" Keiser	MS Biology	Excellence in Research
2012	Johnathan Craig Martin	PsyD Psychology	Excellence in Instruction

# RESEARCH SYMPOSIUM MOBILE APP



The Research Symposium is now available via mobile app. The mobile app will act as a virtual program. You can search for a specific speaker or research topic, as well as, read abstracts about the presentations. The mobile app features the schedule, session types, floor plans, speakers abstracts, etc. Please follow the directions below to download the EventXD mobile app.

1. Download the “EventsXD” app from the app store.
2. Create a Username and Password using your Georgia Southern Email (*password must 7 letters long and contain a capital letter, numerical character, and a special character*)
3. Click on the magnifying glass in the top right corner and search “Georgia Southern University Research Symposium”.
4. Once you click on the Research Symposium you will have access to all of information necessary for the conference, below are descriptions of each icon.

**SCHEDULE** - Breaks down each session, listing the time, title of the presentation, room number of the session, and the presenters names.

**SPEAKERS** - Each speaker is listed alphabetically by first and last name.

**TIME SLOTS** - A condensed schedule of all of the presentation times.

**SESSION TYPES** - The three different types of sessions.

**AUDIENCES** - The research topics.

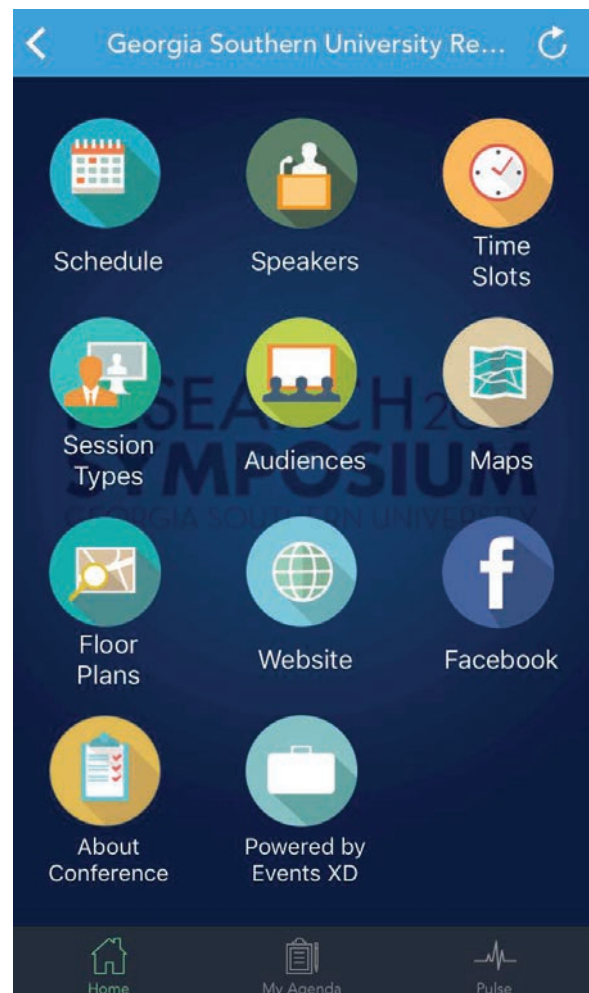
**MAPS** - A GPS location of Nessmith-Lane Conference Center.

**FLOOR PLANS** - PDF of the room locations of Nessmith-Lane Conference Center.

**WEBSITE** - Link to the Research Symposium website.

**FACEBOOK** - Link to the College of Graduate Studies Facebook page.


**ABOUT CONFERENCE** - Description about the Research Symposium.




# SESSION 1


## CONCURRENT SESSIONS 9:30 -10:30 AM


<b>ROOM 1909</b> 	<b>MOLECULAR BIOLOGY INITIATIVE (MBI) (CLOSED SESSION)</b>	
	<i>Students:</i> Sarah Duong, Georgia Southern University James Alfieri, Georgia Southern University Matthew Tipton, Georgia Southern University	<i>High School Teachers:</i> Cynthia Dean, South Effingham High School Yvonne Arnsdorff, Effingham County High School Laura Ike, Effingham County High School Jessica Bragdon, Southeast Bulloch High School


<b>ROOM 2903</b> 	<b>NATURAL &amp; PHYSICAL SCIENCES</b> <i>(Chaired by)</i>	
	Investigating a Link a Between Type-1 Diabetes and Environmental Factors	Christopher Mays Georgia Southern University
	Discovery of Novel Quinolone Derived Compounds as Psychotherapeutic Agents	Ashley Williams Georgia Southern University
	The Effects of Thermal Opportunity and Habitat on Thermoregulatory Effectiveness	Lauren Neel Georgia Southern University


<b>ROOM 2904 B</b> 	<b>NATURAL &amp; PHYSICAL SCIENCES</b>	
	Streamlining the Johnson-Neyman Technique for Two-Way Interactions	Dr. Steve Carden Georgia Southern University
	Comparing k Population Means with No Assumption about the Equality of the Population Variances	Dr. Charles W. Champ Georgia Southern University


<b>ROOM 2905 A</b> 	<b>QUALITATIVE RESEARCH</b>	
	<i>Round Table:</i> Using a Phenomenological Approach in Research with Non-students and Other Underrepresented Populations	Dr. Jennifer Zorotovich Georgia Southern University

<b>ROOM 2908</b> 	<b>EDUCATION &amp; LEARNING</b>	
	<i>Round Table:</i> Using Participation in Georgia Southern University's QEP as a Springboard for the Scholarship of Teaching and Learning Projects <i>(Assisted by Ashley Walker, Melanie Stone, Lainie Wilson and Raymona Lawrence)</i>	Dr. Terri Flateby Georgia Southern University

<b>ROOM 2904 A</b> 	<b>EXERCISE SCIENCE &amp; HUMAN PERFORMANCE</b>	
	Athlete and Non-Athlete Quiet Stance Postural Performance	Megan Mormile Georgia Southern University
	The Relationship Between Position, Impact Magnitude and Cumulative Impact Burden in NCAA Division I Football Players	Katelyn Grimes Georgia Southern University
	Assessment of Anti-Saccades Within 24 to 48 Hours Post-Concussion	Nathan D'Amico Georgia Southern University

<b>ROOM 2905 B</b> 	<b>EXERCISE SCIENCE &amp; HUMAN PERFORMANCE</b>	
	<i>Round Table:</i> Socioeconomic Status in Research and Education <i>(Assisted by Dr. Christina Gipson and Dr. Jody Langdon)</i>	Dr. Tamerah Hunt Georgia Southern University


<b>ROOM 2901</b> 	<b>HUMANITIES &amp; SOCIAL SCIENCES</b>	
	Psychological Inflexibility and Prejudiced Reactions When Exposed to Violent ISIS Propaganda	Arthur T. Hatton Georgia Southern University
	U.S. Drug Prohibition and Institutional Stability in South America	Mariana Saenz Georgia Southern University
	Sanctified: A Thematic Analysis of Reasons for Perceived Holiness/Transcendence	Lotte Pummerer Georgia Southern University

<b>ROOM 2911</b> 	<b>ENGINEERING &amp; MATERIAL SCIENCES</b>	
	Color Removal from Pulp Mill Effluent Using Immobilized Coal Fly Ash	Jason McLean Georgia Southern University
	Three-Dimensional Finite Element Analyses for Buried Concrete Pipes in the Imperfect Trench Installations	Jun Suk Kang Georgia Southern University
	Influence of Injection Strategy on the Combustion and Emissions Characteristics of Carinata Biodiesel and n-Butanol	Martin Muinos Georgia Southern University

<b>10:30 - 10:45 AM</b>	<b>BREAK</b>
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## MORNING POSTER PRESENTATION

### NESSMITH-LANE ATRIUM 10:45 AM - NOON

	<b>NATURAL &amp; PHYSICAL SCIENCES</b>		
	1	Efficient Synthesis of Novel Triazole Chemosensors Using Click-chemistry	Richard Govan Georgia Southern University
	2	Intramolecular Cross-linking of Beta Subunits and PEGylation of Bovine Stroma Free Hemoglobin For Use as a Hemoglobin Based Oxygen Carrier	Gil Salazar Georgia Southern University
	3	Asymmetric Membranes Containing Micron-Size Silicon as Anode Material for High Capacity Lithium-Ion Batteries	Ian Byrd Georgia Southern University
	4	Relationship Between LiDAR-derived Canopy Structure Metrics and Precipitation Redistribution in Forests Varies with Scale	Daniel Cirincione Georgia Southern University
	5	Microwave-assisted Free Radical Polymerization of Tung oil-based Resins	Souleymane H. Seye Georgia Southern University
	6	Functionalizing of Well-defined Poly-acrylates with TEMPO and PEG moieties for the Modification of Hemoglobin-Based Oxygen Carriers for the Treatment of Traumatic Brain Injuries	Omniya Alomainy Georgia Southern University
	7	Effects of Rapid pH and Salinity Change on the Physiology of a Local Estuarine Fish Species, <i>Fundulus heteroclitus</i>	Shauna Tietze Georgia Southern University



8	$\alpha$ -Eleostearic Acid Extraction by Saponification of Tung Oil and Its Subsequent Polymerization	Amanda Murawski Georgia Southern University
9	Antibiotic and Nutrient Mixtures Influence Phytoplankton Abundance and Community Composition in Flowing Waters	Jason Duff Georgia Southern University
10	Gas Phase Formation of Noble Gas Molecules	Jerry Filipek II Georgia Southern University
11	Inhibitory Effects of Vinegar and Plant Essential Oils Against Airborne Molds Collected Near a Dairy Farm	Nosa Lloyd Georgia Southern University
12	Immune Activation Influences the Trade-off Between Thermoregulation and Shelter Use	George Todd Georgia Southern University
13	Investigating the Role of ITGA6 in Tumor Development	Shauntell Luke Georgia Southern University
14	Biochemical and Genetic Consequences of Sleep Deprivation in Zebrafish ( <i>Danio rerio</i> )	Jade Boykin Georgia Southern University
15	Georgia Coastal Plain Rivers: Leaf Litter Processing and Macroinvertebrate Assemblages	Byron Collins Georgia Southern University
16	Bacteriophage as an Alternative Indicator for Microbiological Pollution at Marine Beaches	Dr. Asli Aslan Georgia Southern University
17	Micro-Horizontal Axis Wind Turbine (MHAWT) Design for Nano-Grids	Mehedi Hasan Georgia Southern University
18	Synthesis of Gold Nanorods Using C12EDMAB as a Less Toxic, Alternative Growth-Directing Agent	Winston Xu Georgia Southern University
19	Effects of Ions on Peptide Structure and Function	Aimee Renee Georgia Southern University
20	Effects of Nutritionally Charged Biochar on Vegetable Crop Growth, Health and Yield	Elizabeth Baker Georgia Southern University
21	Using CRISPR Based Genome Editing to Create an Autistic Zebrafish Model	Paul Lascuna Georgia Southern University
22	Contrast Medium-Induced Apoptosis And Autophagy In Kidney Proximal Tubular Cells	Jasmine Fuller Augusta University
23	Sodium Indicator in Embryonic Systems	Brittany Smith Georgia Southern University
24	In Search for the Computational Logic of the Brain	Grace Fox Augusta University
25	Detection of Wolbachia in Human Lice	Matthew Anderson Georgia Southern University
26	Forelimb Function During Bipedal Locomotion in Lizards	Chase Kinsey Georgia Southern University
27	The Behavioral Study of Autism in Zebrafish	Danielle Lott Georgia Southern University
28	Detection of <i>Acinetobacter baumannii</i> in Human Lice	Shamta Warang Georgia Southern University
29	Developing Molecular Tools for Diagnosis of Human Ehrlichiosis	Megan Mears Georgia Southern University
30	Microwave Assisted Synthesis of Tri-substituted Pyridazine Exploration	Austin Wright Georgia Southern University
31	Up-Conversion Emissions of Er <sup>3+</sup> Doped Gd <sub>2</sub> (WO <sub>4</sub> ) <sub>3</sub> Phosphors	Grayson Wiggins Georgia Southern University



## MOLECULAR BIOLOGY INITIATIVE (MBI)

32	Caught in the Act: Immersion of Hands-on Molecular Biology Applications in High School Forensic Science Course	Sarah Duong Georgia Southern University
33	Molecular Detection for Zoonotic Cacteria from Ticks (Acari: Ixodidae) in Georgia, USA	Sarah Duong Georgia Southern University
34	Inquiry Based Learning Using Instagram: Understanding Biotic and Abiotic Factors in a Pond Ecosystem	Jamie Alfieri Georgia Southern University
35	Parasite Life-History Determines the Relationship Between Anthropogenic Change and Parasite Community Structure	Jamie Alfieri Georgia Southern University
36	A Three Act Module for Teaching Genetic Techniques to High School Students	Matthew Tipton Georgia Southern University
37	Characterization of Selenate Reducing Bacteria	Matthew Tipton Georgia Southern University



## PUBLIC HEALTH & WELLNESS

38	Exploring Risk and Protective Factors for Alcohol and Tobacco Use Among Youth: An Innovative Approach	Dr. Moya Alfonso Georgia Southern University
39	Models of Eating Disorders: Associations with Self-Esteem, Schemas, and Ethnicity	Rebecca A. Conrad Georgia Southern University
40	Predictors of Having HPV Vaccination Among Young Adults: A Brfss 2014 Study	Deborah Kanda Georgia Southern University
41	Ebola and Social Media	Kathryn C. Finch Georgia Southern University
42	The Impact of a Nutrition Education Intervention on Self-Reported Feelings of Food Insecurity	Caitlin Koch Georgia Southern University
43	Effect of Air Flow Rates in Versatrap Slit Impactor Cassettes on the Collection of Atmospheric Mold Spores in a Rural Community	Bushra Shah Georgia Southern University
44	Association Between Fruit and Vegetable Consumption and Sleep Quantity in Pregnant Women	Kassandra Snook Georgia Southern University
45	A Systematic Review of Sex-Based Differences in Diarrheal Disease and Helminthic Infections	Varadan Sevilimedu Georgia Southern University
46	Effect of Natural Products Against Growth of Three Allergenic and Toxigenic Molds	Brittany Loadholt Georgia Southern University
47	Effect of Natural Products on Overall Microbial Activity in Household Items	Teyajiah Givens Georgia Southern University
48	Airborne Bacterial Exposure at Workers Breathing Height in an Organic Farm of Rural Georgia	Tedd Gandy Georgia Southern University
49	Microbial Activity and Airborne Culturable Microbial Concentrations in South Georgia Homes	Alli McInerney Georgia Southern University
50	Analysis of Relapse in Leukemia Patients With Missing Data Using an Extension of the EM Algorithm	Braydon Schaible Georgia Southern University
51	A Non Parametric Procedure for Change Point Detection in Linear Regression	Jing Sun Augusta University
52	Inhalable Exposure Levels of Airborne Mold spores in Rural Georgia Homes	Jacquelyn Lewis Georgia Southern University
53	Effects of Serum Levels of Vitamin A and Precursors on Colorectal Cancer Mortality	Chimunya Okoli Georgia Southern University
54	Secondary Data Analysis based on Children Health Survey: On Factors Associated to Overall Dental Health of Children in USA	Kavita Gohil Georgia Southern University

55	On Obesity of Children and Adolescents in USA in Relation to other Health and Environmental Conditions	Hani Samawi Georgia Southern University
56	Zika Virus-related Photo Sharing on Pinterest and Instagram	Liz Blankenship Georgia Southern University
57	Using the Theory of Reasoned Action to Examine the Knowledge, Attitudes, and Beliefs Among Georgia Physicians Towards the Therapeutic Use of Medical Cannabis	Shannon Antoine-Hardy Georgia Southern University



### EXERCISE SCIENCE & HUMAN PERFORMANCE


58	3D Printing of Wrist Cock-Up Splint Using Two Commercially Available Printers	Amanda Behr Augusta University
59	Situational Influences on Experiences of Long Trail Hikers: An Application of Means-End Theory	Justin Yun Georgia Southern University
60	The Effectiveness of Teaching Life Skills through Sport-Based Interventions for At-Risk Youth	Mindy Scott Georgia Southern University


<b>NOON - 1:30 PM</b>	<b>LUNCH, KEYNOTE SPEAKER &amp; PRESENTATION OF AVERITT AWARDS</b>	<b>NESSMITH-LANE BALLROOM</b>
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## SESSION 2


### CONCURRENT SESSIONS 1:30 - 2:30 PM


#### MOLECULAR BIOLOGY INITIATIVE (MBI) - ROOM 1909 (CLOSED SESSION)


<b>ROOM 2903</b>	<b>NATURAL &amp; PHYSICAL SCIENCES</b>	
	Regulating Sodium Ion Concentrations: Investigation of a Class of Potential Peptide Therapeutics	Dr. Amanda Stewart Georgia Southern University
	Acute Toxicity Study of Titanium Dioxide Nano Fibers In The Lung of Sprague Dawley Rats	Daniel Hunter Georgia Southern University
	Quantum Chemical Rovibronic Data for c-C <sub>3</sub> H with Application to the Interstellar Medium	Matthew Bassett Georgia Southern University


<b>ROOM 2905 A</b>	<b>NATURAL &amp; PHYSICAL SCIENCES</b>	
	Greedy Trees and Degree Sequences	Rachel Bass Georgia Southern University
	Assessing Sustainability Knowledge and Behaviors of Students, Faculty, and Staff at Georgia Southern University	Scott Blair Georgia Southern University
	Using the Fossil Record of Horned Dinosaurs to Test Hypotheses of Environmental and Ecological Associations in an Extinct Lineage	Rich Bykowski Georgia Southern University


<b>ROOM 2901</b> 	<b>HUMANITIES &amp; SOCIAL SCIENCES</b>	
	The Transformative Linguistic Politics of Mountain Language	Matthew Wentz Georgia Southern University
	Dances with Superwolves? Love, Nietzsche, and Jack London as the Darwinian Romantic	Esther Stuart Georgia Southern University
	McCarthy's Modern Monster: Confronting Changing Culture in Child of God	Mandy Ford Georgia Southern University

<b>ROOM 2908</b> 	<b>PUBLIC HEALTH &amp; WELLNESS</b>	
	Public Health Implications of Social Media Use During Natural Disasters, Environmental Disasters, and Other Environmental Concerns	Carmen Duke Georgia Southern University
	The Implications of Shared Sanitation Facilities on the Transmission of Diarrheal Pathogens Transmitted Via Environmental and Person-To-Person Routes: A Modeling Study	Matthew Just Georgia Southern University
	Treatment Allocation Methods Using Ordered Statistics	Esong Huang Georgia Southern University

<b>ROOM 2911</b> 	<b>ENGINEERING &amp; MATERIAL SCIENCES</b>	
	H.265 Video Traffic Prediction Using Neural Networks	Collin Daly Georgia Southern University
	Novel Combustion and Emission Characteristics of Controlled Injection Atomization Using Jet-A, Carinata Bio-diesel, and Ultra Low Sulfur Diesel in an Indirect Injection Compression Ignition Engine	Tyler Naes Georgia Southern University
	A Multiuser EEG Based Imaginary Motion Classification Using Neural Networks	Sylvia Bhattacharya Georgia Southern University

<b>ROOM 2904 A</b> 	<b>COMPUTER SCIENCE &amp; INFORMATION TECHNOLOGY</b>	
	Detection of Location Falsification Attacks in GPS Driven Cloud-assisted Cognitive Radio Networks	Swetha Reddy Georgia Southern University
	A PTAS for the Multiple Parallel Identical Multi-stage Flow-shops to Minimize the Makespan	Dr. Weitian Tong Georgia Southern University
	Real-time Adaptive Cyber-Security for Smart Energy Grid Systems	Dr. Danda Rawat Georgia Southern University

<b>ROOM 2904 B</b> 	<b>EDUCATION &amp; LEARNING</b>	
	QEP Process Writing Survey: Results and Implications (Assisted by Julie Odom-Dixon)	Dr. Xiaomei Song Georgia Southern University
	Principals Perceptions of Differentiated Instruction and Leadership Practices for Successful Implementation in Elementary School Settings	Allison Van Tone-Foles Georgia Southern University
	Piloting Co-Teaching for Undergrads: Collaboration Between a Pre-service Special Education Teacher and In-service Middle Grades Teachers	Tianna Quiller Georgia Southern University

<b>ROOM 2905 B</b> 	<b>BUSINESS &amp; LOGISTICS</b>	
	Role Of Communication and Collaboration in the Relationship Between Integration and Logistics and Firm Performance	Nihar Kumthekar Georgia Southern University
	Supplier and Customer Collaboration and Their Relationship with Process Integration, Firm Performance and Logistics Performance	Mohammed Anas Irfan Georgia Southern University

<b>2:30 - 2:45 PM</b>	<b>BREAK</b>
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# AFTERNOON POSTER PRESENTATION

## NESSMITH-LANE ATRIUM 2:45 - 4:00 PM

ENGINEERING & MATERIAL SCIENCES		
1	Developing an Emergency Communications Framework Using Unmanned Arial Vehicles	Sterling Holcomb Georgia Southern University
2	Smart Library	Deon Lucien Valdosta State University
3	Application of Web Published Virtual Instruments in Delivering Engineering Instructions and Performing Experimental Research	Shahnam Navaee Georgia Southern University
4	Dual-band, Electrically Small, Parasitic Array Antenna for Wireless Communication Systems	Yen Le Georgia Southern University
5	Multi-Level Cascaded Inverter (MLCI) Design, Simulation and Implementation with Solar Photovoltaic System Modeling	Adam Carver Georgia Southern University
6	Autonomous Methods in the Application of Simple Swarm Capabilities	Joseph Watt III Georgia Southern University
7	Implementation of an Electronic Fuel Injection System for Advanced Combustion to Achieve Reduced Diesel Emissions	Remi Gaubert Georgia Southern University
8	Design of Dual Band, High Gain, Close Spaced Frequency Tunable Antenna	Jinxi Chen Georgia Southern University
9	Circularly Polarized Electrically Small Cross Dipole Antenna Using Inductively Coupled Feed	Joshua Haney Georgia Southern University
10	Characterization of UHMWPE Nanocomposite Fibers Reinforced with PVP-coated SWCNTs	Stephanie Hulsey Georgia Southern University
11	Assessment of Electrode Surface Area in Electrical Impedance Myography Study Using Finite Element Method.	Somen Baidya Georgia Southern University
12	Warning Systems Evaluation for Overhead Clearance Detection	Clayton Rogers Georgia Southern University
13	Design and Development of an Electric Drive-By-Wire Vehicle: The Flagship for the Intelligent Vehicle Laboratory	Zach Coles Georgia Southern University
14	Measuring Frequency Availability for Cognitive Radio Networks by Means of Adaptive Threshold	Isaac Cushman Georgia Southern University
15	Robotic Wire Arc Additive Manufacturing	Alex Purdy Georgia Southern University
16	Mechanical Design and Optimization of a Seven Function Animatronic System	Eric Burns Georgia Southern University
17	Modeling & Simulation of Energy Storage for DC NANO- GRID	Shantu Ghose Georgia Southern University

18	Single-Input Multi-Outputs (SIMO) DC-DC Converter for Nano-Grids	Ormond Castle Georgia Southern University
19	Charging EV using PV Panel with DC-DC Converter	Adam Johnston Georgia Southern University
20	Smart Vehicular Networks for Reducing Road Accidents and Traffic Congestion	Macy Beasley Georgia Southern University
21	Frequency Tunable Antennas for Smart Grid Communications	Brycent Chatfield Georgia Southern University
22	Research in Robotic Palletizing	Sarah Black Georgia Southern University
23	Rapid Sonochemical Synthesis and Performance Analysis of Nano-scaled Metal Organic Framework (MOF) Particles for Nitrogen and Carbon Dioxide Adsorption	Wahiduz Zaman Georgia Southern University
24	Thermal Management of Electronic Devices Using Biologically-Inspired Flow Networks	Chris Morris Georgia Southern University
25	High Impact Resistance Fibers from Poly-Dicyclopentadiene	Dhruv Barvaliya Georgia Southern University
26	Corona Treated Hybrid Nanocomposite Textile Fiber	Quazi Nahida Georgia Southern University
27	Accelerated Insulation Recycling System (AIRS)	Debalina Ghosh Georgia Southern University
28	Effects of the Oxidation/Reduction Potential on Sediment Ammonia Release in Surface Waters	Edward Waters Georgia Southern University
29	Evaluation of Resistance to Rutting and Moisture damage on High RAP content Asphalt Concretes using Hamburg Wheel Tracking device	Sungun Kim Georgia Southern University
30	A Micro-Hydro Power Generator Electrical System Design and Implementation	Zack Floyd Georgia Southern University
31	Multi-Inputs Multi-Outputs Universal Converter for Smart Home Applications	Kyle Radford Georgia Southern University
32	Emotion Recognition using Fuzzy Clustering Analysis	Tejal Udhan Georgia Southern University
33	Scalable-Video-Based Dynamic Bandwidth Allocation Algorithms for EPONs	David Moore Georgia Southern University
34	Energy Efficient EPONs	Robert Bowyer Georgia Southern University
35	Mobile Crowd-Based Outsourcing for Intelligent Traffic Navigation	David Ames Georgia Southern University
36	The Abatement of Noise in Aircraft Gas Turbine for Increased Passenger Comfort	Aliyah Knowles Georgia Southern University
37	Combustion, Noise, and Vibrations of a Bio-fueled IDI Engine	Jose Moncada Georgia Southern University
38	Fuzzy Logic and Speech Recognition Applications on Autonomous Vehicles	Earl Smith Georgia Southern University
39	Real-Time Solar Energy Monitoring for Renewable Energy Applications	Nicole Guajardo Georgia Southern University
40	An Alternative Experimental Method to Measure the Thermal Conductivity of Nanofluids	Zach Wilkes Georgia Southern University
41	Particle Boards Created from Modified Lignin	Robbie Kazen Georgia Southern University
42	Distinctness of EEG Based Brain Signal Readings and their Potential for Biometric Systems	Kaushik Bhimraj Georgia Southern University



## COMPUTER SCIENCE & INFORMATION TECHNOLOGY

43	Artificial Neural Networks in Classifying Hand Gestures through Electromyography	Kyle Leep Georgia Southern University
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## BUSINESS & LOGISTICS

44	Achieving Economic Growth and Sustainability Through Agri-Business Development	Morgan Jefferson Georgia Southern University
45	Comparing Differences and Similarities in the European Banking System, using the French, German, Italian, Spanish and English Banking System	Sarah Gleissle Georgia Southern University



## HUMANITIES & SOCIAL SCIENCES

46	Designing for Desire: An Exploration of Feminine Identity	Jessica Raymond Georgia Southern University
47	Repetition and Formatting in Medication Instructions	Jessica Le Georgia Southern University
48	Influence of Game Stimuli on Participant Snacking	Emily Welsh Georgia Southern University
49	Psychopathy, Empathy, and Prosocial Helping: Can You Increase Altruistic Helping For Individuals High In Psychopathy?	Courtney Beussink Augusta University
50	Racial Influences on the Perception of Police	Sam Omelian Augusta University
51	Levels of Resilience and Life Satisfaction in Those with a History of Child Sexual Abuse	Kim Iannacone Georgia Southern University
52	Dissociative Identity Disorder: Practice-Informed Research For Counselors-In-Training	Josh Littleton Augusta University



## EDUCATION & LEARNING

53	Being Critical: (In)Equity in Education for Students with Disabilities	Ellen Hotchkiss Georgia Southern University
54	Nontraditional Student Veterans: Support Services in Higher Education	Tamela Evans Georgia Southern University
55	An Exploration of the Impostor Phenomenon and its Impact on Black Women Administrators in Higher Education in the South	Marian Muldrow Georgia Southern University
56	21st Century Reasoning Modalities In Interdisciplinary STEM Education	Bryon Gallant Georgia Southern University
57	The Testing Effect Varies with Spaced Versus Massed Learning of Skeletal Muscle Information	Jose Perez Georgia Southern University
58	The Development of an OpenXC Research Environment for Designing and Customizing Vehicle-Centric Applications	Dr. Shonda Bernadin Florida State University
59	A Three-Act Module for Teaching Genetic Techniques to High School Students	Matthew Tipton Georgia Southern University
60	Time Travel: Scientists and Their Contributions towards the Discovery of Atoms and Atomic Properties	Austin Wright Georgia Southern University
61	Learning Through Service: Assessing the Effectiveness of the FMAD Stitch Shop	Rachel Eike Georgia Southern University
62	Police Academy Recruits Academic Performance Predicted by Initial Education Obtainment Level	Don Doutt Valdosta State University

**QUALITATIVE RESEARCH**

63	The Influence of Group Development on Stress Appraisal and Coping Responses of Expedition Trip Leaders	Julie Swantek Georgia Southern University
64	Understanding and Promoting Breastfeeding among African American Women in the Rural South	Jessica L. Stewart Augusta University
65	Factors Affecting Substance Abuse and Treatment in Ghana: A Social-Ecological Perspective Using Photovoice	Ahmed Kabore Georgia Southern University

**SESSION 3****CONCURRENT SESSIONS  
4:00 - 5:00 PM****MOLECULAR BIOLOGY INITIATIVE (MBI) - ROOM 1909 (CLOSED SESSION)****ROOM 2903****NATURAL & PHYSICAL SCIENCES**

Gorenstein Projective (Pre)Covers	Michael J. Fox Georgia Southern University
Simulations and Analysis of ADRC/Controlled Lorenz System	Zachary Espe Georgia Southern University
Partitions Connected with the Number 8	Nicolas Allen Smoot Georgia Southern University


**ROOM 2905 A****NATURAL & PHYSICAL SCIENCES**


Development of PEG and TEMPO Functionalised ROMP Monomers for Advances in the Treatment of Traumatic Brain Injuries	Caleb Bohannon Georgia Southern University
Controlled Accentuation of Reactive Oxygen Species in Cancer Cell Models by Redox-Active Molecular Probes	Rebecca McCall Georgia Southern University
Properties of Cyclic Compositions	Moriah Gibson Georgia Southern University

**ROOM 2905 B****ENGINEERING & MATERIAL SCIENCES**


An Autonomous Unmanned Aerial Vehicle Emergency Response Communication System	Robin Grodi Georgia Southern University
A Game Theoretic Analysis of the Security of Secondary Users in the Presence of Active Attackers in a Cognitive Radio Network	Tanjil Amin Georgia Southern University
Structural And Thermal Expansion Analysis Of Multiple Piston And Connecting Rod Assemblies	Dr. Mosfequr Rahman Georgia Southern University




<b>ROOM 2911</b> 	<b>ENGINEERING &amp; MATERIAL SCIENCES</b>	
	Telemetry Based Location Sensor Fusion and Error Correction in Intelligent Vehicles	Tom Beyerl Georgia Southern University
	Use of Small Arrays of Single Beam Laser Rangefinders for Intelligent Vehicle Obstacle Detection and Point Cloud Development	Bernard Ibru Georgia Southern University
	Performance Analysis of Physical Layer Security in Massive MIMO System with QoS Requirements	Kishan Neupane Georgia Southern University

<b>ROOM 2904 B</b> 	<b>EDUCATION &amp; LEARNING</b>	
	Bahamian Elementary School Principals and Teachers Perceptions of Inclusive Education	Tracy Colebrooke Georgia Southern University
	Teaching as an International TA: The Psychically Intense Play between the Self and the Other	Yiming Jin Georgia Southern University

<b>ROOM 2901</b> 	<b>HUMANITIES &amp; SOCIAL SCIENCES</b>	
	Savannah Irish Neighborhoods in 1860	Sarah Ryniker Georgia Southern University
	Visual Data in Glazing	Courtney Ryan Georgia Southern University
	Peaceful Intermission	Anna Currence Georgia Southern University

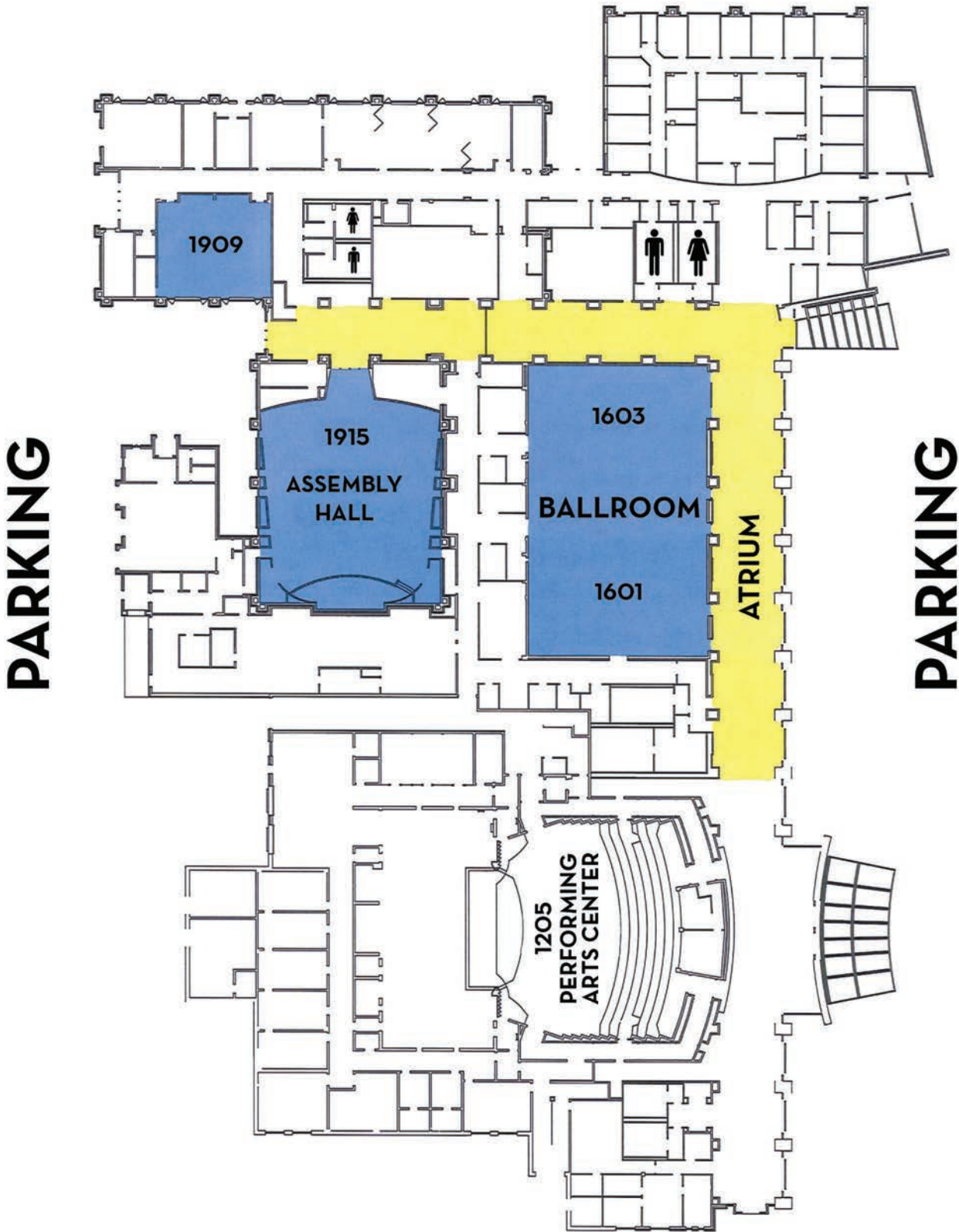
<b>ROOM 2908</b> 	<b>PUBLIC HEALTH &amp; WELLNESS</b>	
	A Mixed Methods Assessment of the Implementation of Electronic Health Records in Local Health Departments	Karmen S. Williams Georgia Southern University
	The Effects of Government Regulation on Providing Healthcare at United States Hospitals Between 1997 and 2010	David Schott Georgia Southern University
	Continuum of a Declining Trend in Correct Self-Perception of Body Weight Among American Adults	Amber Morgan Georgia Southern University

<b>ROOM 2904 A</b> 	<b>COMPUTER SCIENCE &amp; INFORMATION TECHNOLOGY</b>	
	Voter Sentiment Analysis Based on Tweet History	Chris Bergin Georgia Southern University
	Building Ultra-Secure Private Cloud to Promote Collaborative Research in Security, Privacy, and Digital Forensics <i>(Assisted by Isaac Cushman)</i>	Dr. Lei Chen Georgia Southern University
	Standardized Abstract Network Diagramming Symbols - Notation and Uses	Vladan Jovanovic Georgia Southern University

<b>5:00 - 5:30 PM</b>	<b>RECEPTION &amp; SYMPOSIUM AWARDS</b>	<b>NESSMITH-LANE BALLROOM</b>
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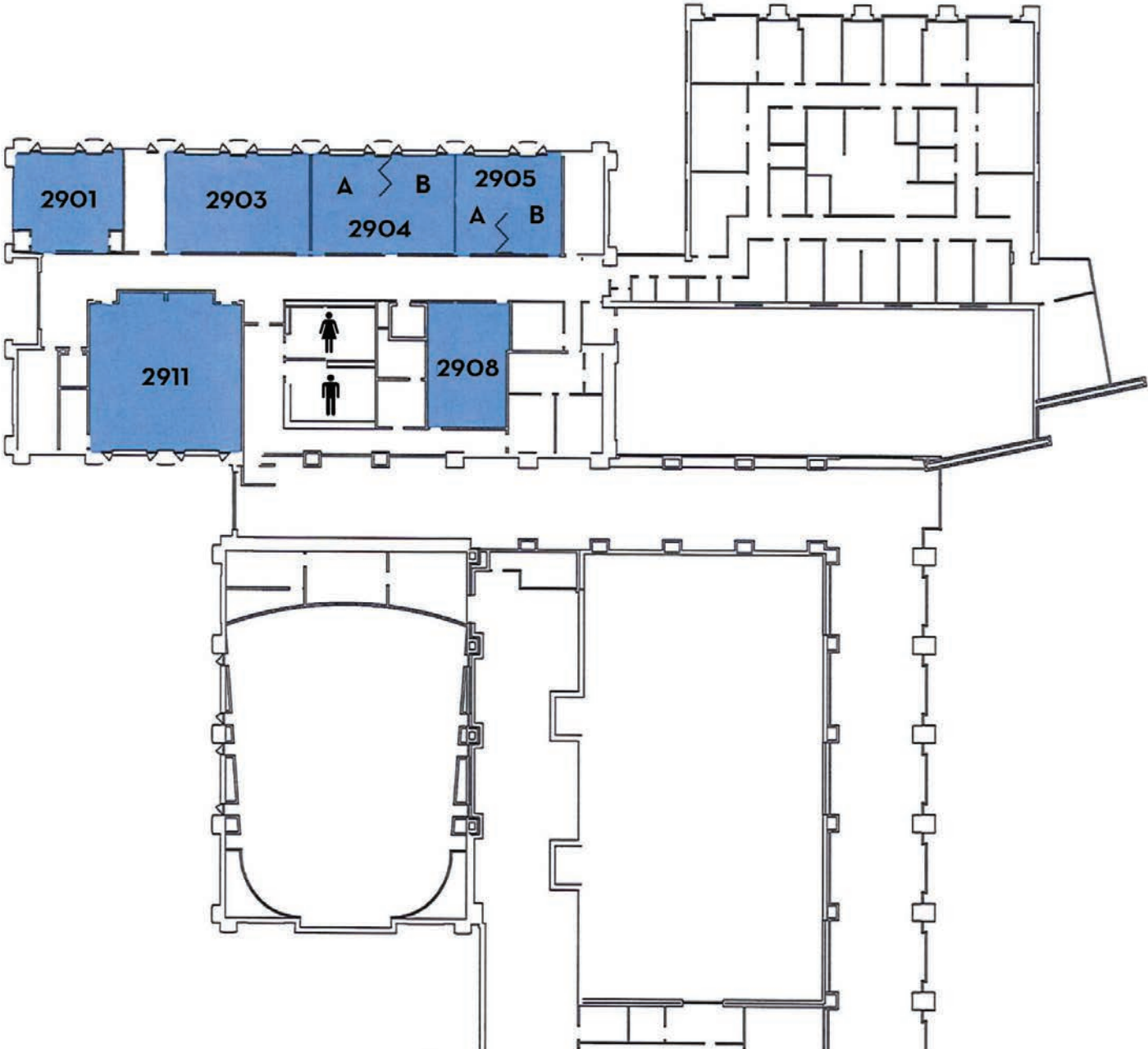
# NESSMITH-LANE CONFERENCE CENTER

## FIRST FLOOR



# NESSMITH-LANE CONFERENCE CENTER

## SECOND FLOOR







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