

Joint Annual Research Symposium 2019

(JARS 2019)

Friday, March 22, 2019
Auditorium and Ballroom, Tompkins Hall



Agenda

Friday – March 22, 2019

7:30 a.m. – 8:00 a.m.	JARS Registration Check-in.....	Auditorium, Tompkins Hall
	Sigma Xi table setup.....	Dr. Maria Calhoun President, Sigma Xi
8:00 a.m. – 8:30 p.m.	Opening Ceremony.....	Auditorium, Tompkins Hall
	Welcome.....	Dr. Fan Wu Interim Director Tuskegee University Office of Undergraduate Research
	Opening Remarks.....	Dr. Shaik Jeelani Vice President for Research Dean of Graduate School

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8:30 a.m. – 9:30 a.m. Invited Talk.....Auditorium, Tompkins Hall
Social and Behavioral Research with African American Women Living with HIV: Ethical Considerations and Lessons Learned

Dr. Faith E. Fletcher
Assistant Professor
Department of Health Behavior
University of Alabama at Birmingham

9:30 a.m. – 9:40 a.m. JARS Judges Orientation.....Meeting Room B, Tompkins Hall
Dr. Melissa Reeves
Department of Chemistry
Tuskegee University

9:45 a.m. – 10:45 a.m. Grad. Oral Presentation Session 1.....Auditorium, Tompkins Hall
Session Chair: Dr. Jay Bhuyan

- 📄 **Assessing Social Justice in Alabama Using Geographic Information Systems**
Nicole Nunoo, Agricultural and Resource Economics.
- 📄 **The Comparative Analysis of Lactobacilli and Bifidobacterial and The Assessment of Their Anti-Inflammatory Abilities**
Que'nyah Randolph, Animal Science.
- 📄 **Intrusion Detection by using Genetic Algorithm**
Sk Naimul Haque, Information System and Security Management.
- 📄 **The Effect of Zinc Titanate Nanoparticles on The Nano-Mechanical, Tribological, and Thermal Behavior of Polyetherimide**
Mohamed Elafandi, Materials Science.

9:45 a.m. – 11:45 a.m. Undergraduate Poster Session.....Ballroom, Tompkins Hall

10:45 a.m. – 11:00 a.m. Coffee Break..... Ballroom, Tompkins Hall

11:00 a.m. – 12:00 p.m. Grad. Oral Presentation Session 2.....Auditorium, Tompkins Hall
Session Chair: Dr. Yasmeen Rawajfih

- 📄 **Seed Micronutrient Content (Iron and Zinc) and Cooking Time for Selected Dry Bean Cultivars**
Papias Binagwa, Integrative Biosciences (IBS).

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📄 The Impact of Race and Region on the Incidence of Heir Property in Alabama.

Dalal Alkordi, Integrative Public Policy and Development Program.

📄 The Relationship Between the Church, Land Ownership and Heir Property for The African American Community in Macon County, Alabama

Kara Woods, Integrative Public Policy and Development Program.

12:00 p.m. – 1:30 p.m. Lunch (On Your Own)

1:30 p.m. – 2:45 p.m. Concurrent U.G. Oral Presentation Session 3...Auditorium, Tompkins Hall

Session Chair: Dr. Jay Bhuyan

📄 Evaluating the Microbiome of the Nasal Cavity of Cattle with Bovine Respiratory Disease Complex (BRDC)

April Johnson, Animal Science.

📄 How Phytase Can Reduce the Amount of Money and Phosphorus Traveling Downstream from Poultry Farms

Kaci Merriwether-Hawkins, Animal Science.

📄 Intrathymic Transplantation of Healthy Nurse Cells Reduces Mortality and Morbidity in Lupus Prone Mice

Linque Martin, Animal Science.

📄 Autochthonous Flora and the Development of AOM-induced Colon Cancer

Jaylon Vaughn, Animal Science.

1:30 p.m. – 2:45 p.m. Concurrent U.G. Oral Presentation Session 4..... Meeting Room A

Tompkins Hall

Session Chair: Dr. Honghe Wang

📄 Funeral Home Record Book Data: A Valuable Research and Service-Learning Tool

Caylen Goldsberry, Animal Science.

📄 Effects of Curcumin and Quinoline Based Drugs against Toxoplasma Gondii

Aarin Huffman, Biology.

📄 Comparison of Methods to Recover Silver from Silver Waste

Jade Stanley, Chemistry.

📄 Linear Dynamical Systems

Tyner LaKyah, Computer Science and Mathematics.

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1:45 p.m. – 3:45 p.m. Graduate Poster Session..... Ballroom, Tompkins Hall

2:30 p.m. – 3:00 p.m. Coffee Break..... Ballroom, Tompkins Hall

3:00 p.m. – 4:15 p.m. U.G. Oral Presentation Session 5.....Auditorium, Tompkins Hall

Session Chair: Dr. Yasmeen Rawajfih

📄 Nanoindentation and Nanoscratch Investigations on Carboxylic Functionalized Multi-Walled Carbon Nanotubes Epon 862 Composites

DeJohn Louder, Mechanical Engineering.

📄 Mechanical Property Mapping of Polyetherimide Nanocomposites by Nanoindentation

Isaiah Wilson, Mechanical Engineering.

📄 The Disproportional Infant Mortality Rate of Women in America

Nadirah Reynolds, Psychology.

📄 The effect of stress and biofeedback training on multitasking performance

Princess Haile, Psychology.

4:15 p.m. – 4:30 p.m. Closing Remarks.....Dr. Sheena Harris

Interim Director

Tuskegee University Presidency Student Engagement Initiatives

List of Poster Sessions Participants:

9:45 a.m. – 11:45 a.m. Undergraduate Poster Session.....Ballroom, Tompkins Hall

- U1) The effects of DiNP on The Early Embryotic Development of Mice**
Jaylen Parks, Animal Science.
- U2) Determination of Coccidia Infective Oocysts Dosages to Induce a Mild to Moderate Growth Depression in Broilers**
Naomi Waldon, Animal Science.
- U3) Not Crazy: An Explanation of Kaolin Geophagia in the Macon County, Alabama**
Sydney Sims, Animal Science.
- U4) Investigation of T-Regulatory Cell Population in The Thymus of NZBWF1 Generation Lupus Prone Mice after Intra-Thymic TNC Transplants**
Brianna Brown, Animal Science.
- U5) TRIM29 Expression in Microsatellite Stable Colorectal Cancer**
Micah Grey, Biology
- U6) Lack of Maternity Care Contributes to Infant Morbidity and Mortality in Rural America**
Kayla Baker, Biology.
- U7) Screening of Genistein, Hydroxyquinoline, 8-Hydroxyquinoline, and Their Combinations Against Toxoplasma Gondii**
Carlyn Logwood, Biology.
- U8) Characterization of Bacteriophage Lysin PlyKp17 Against Multi-Drug Resistant Klebsiella Pneumoniae**
Kennedy Harris, Biology.
- U9) FARSB Knockdown in Urothelial Carcinoma**
Alexis Johnson, Biology.
- U10) Evaluation of 8-Hydroxyquinoline and 8-Hydroxyquinoline-5-sulfonic Acid Against Toxoplasma Gondii Growth**
Jeffrey Bryant, Biology
- U11) Toxoplasmosis Activity**
Joy Massey, Chemical Engineering.
- U12) The Use of Aloe Vera Leaves for The Synthesis of Silver Nanoparticles**
Nathalie Momplaisir, Chemistry.
- U13) Formulation of an Aloe Vera Gel-Based Skin Care Product Using All Natural Ingredients**
Marissa Jones, Chemistry.



- U14) Constructing a Three Component Mannich Reaction Using a Silver Tetranitrile Complex**
Quentoria Walton, Chemistry.
- U15) Racial Disparities and Triple Negative Breast Cancer Survivors with in the African American Woman: The comparison of Biological, Obesity, SocioEconomic Determinants**
Kiara Hooks, Health Science.
- U16) Interfacial Properties of Cnts-Added Carbon Fiber Epoxy Composites Through Nanoindentation Technique**
Alexander Anderson, Mechanical Engineering.
- U17) Cellulose Bead Synthesis and Nutrient Release**
Johnathan Mitchell, Mechanical Engineering.
- U18) Investigation of Thermal Stability of Cellulose Beads**
James Davis, Mechanical Engineering.
- U19) A Molecular Dynamics Simulation Study on Varying Degree of Functionalization and Its Effects on pullout simulation of Amine Functionalized Carbon Nanotube and Epon polymer**
DeJohn Louder, Mechanical Engineering.
- U20) Flexure and Thermo-mechanical properties**
Elgin Woodside, Mechanical Engineering.
- U21) The Impact of thermocycling on the Mechanical Properties and Fracture Mechanics of Carbon Fiber Reinforced Polymer Composites**
Queondra Hendrix, Mechanical Engineering.
- U22) Black Maternal Mortality**
Clara Lang, Psychology.
- U23) Education Intervention for Scleroderma Diagnosis**
Kristin Williams, Psychology.
- U24) Access to Employer Provided Health Insurance in Low Income Communities**
Jasmine Mabry, Psychology.
- U25) Influenza and Pneumonia**
Darin Fitz, Sociology.
- U26) The Prevalence of Mental Illness in the Prison Population**
Deborah Price, Sociology.

1:45 p.m. – 3:45 p.m. Graduate Poster Session.....Ballroom, Tompkins Hall

- G1) Growth Period of Different Browse Species Suitable for Grazing Small Ruminants**
Bidur Paneru, Animal Science.

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- G2) Chromatin Modelling Enzyme CARM1 is A Potential Target in Treating Bladder Cancer**
Christopher Andrews, Biology.
- G3) Novel role for transcriptional regulator Kaiso in HIV-1infection**
Zainab Alwan, Biology
- G4) Efficacy of Receptor Tyrosine Kinase Inhibitors in Novel In-Vitro Model for Metastatic Castration Resistant Prostate Cancer**
Raven Williams, Biology.
- G5) Disparities in Cervical Cancer Treatment Options Among African American Women in Alabama**
Isra Elhussin, Chemistry.
- G6) Micro-Textured Hydrogel for Electronic and Energy Applications**
Osaiyekemwen Omoregie, Electrical Engineering.
- G7) Identification of distinct Gene expression profiles in African and Caucasian American men with prostate cancer.**
Joakin Mori, IBS.
- G8) IoT implementation Raspberry PI**
Fatimah Almaghrabi, Information System and Security Management.
- G9) Investigation of Mechanical and Nanomechanical Properties of Carbon Fiber Composites Reinforced with Aligned Carbon Nanotubes**
Oluwaseyi Shofolawe-Bakare, Material Science and Engineering.
- G10) Characterization of Low Temperature Plasma Treated Biobased Silica/Carbon Hybrid Nanoparticles**
Zaheeruddin Mohammed, Material Science and Engineering.
- G11) Investigation on the Compressive Properties of Carbon/Glass/Epoxy Composites Reinforced with Graphene Nanoplatelets/Montmorillonite Nanoclay**
Mohammad Al Ahsan, Material Science and Engineering.
- G12) Comparative Study on Flexural Properties of Nanoclay and Graphene Nanoplatelet Added Carbon Fiber Reinforced Polymer Composites**
Sarower Tareq, Material Science and Engineering.
- G13) Synthesis of Polyvinyl Alcohol and CaCO₃ from Eggshells for Nanocomposites via Ultrasonication**
Aiesha Ethridge, Material Science and Engineering.
- G14) Modulating Effects of Intrathymic TNC Transplants on Cardiovascular Remodeling in Systemic Lupus Erythematosus-Induced Hypertension**
Terrance Platt, Vascular Biology.
- G15) Bioactive Tissue Engineering Scaffolds Derived from Egg and Sea Shell Waste**
Vincent Hembrick-Holloman, Material Science and Engineering.



JARS 2019 Organizing Committee:

Dr. Deloris Alexander
Dr. Jay Bhuyan
Dr. Maria Calhoun
Dr. Sheena Harris
Dr. Yasmeen Rawajfih
Dr. Melissa Reeves
Dr. Olga Bolden-Tiller
Dr. Honghe Wang
Dr. Richard Whittington
Dr. Fan Wu