### 2023 BKX-NIS ABSTRACTS

#### BIO1

## HOW WATER QUALITY IMPACTS ECOSYSTEM HEALTH IN THE ELIZABETH RIVER

Toniah Harrison and Micheala Lindo. Norfolk State University, Norfolk, VA

BIO<sub>2</sub>

### **OBESITY REDUCTION TO PREVENT DIABETES**

Nairobi Huff. Fisk University, Nashville, TN

BIO<sub>3</sub>

# ASSESSING THE PRESENCE OF MICROPLASTICS IN THE ELIZABETH RIVER USING EASTERN OYSTERS (CRASSOSTREA VIRGINICA) AS BIOINDICATORS

Jensyn Carr, Marcus Walker and Ashley Haines. Norfolk State University, Norfolk, VA.

**BIO4** 

# THE RELATIONSHIP BETWEEN LEARNING PREFERENCES, PRESENTATION STYLES, HIGH-IMPACT INSTRUCTIONAL STRATEGIES, MOTIVATION, AND EMOTIONAL INTELLIGENCE ON BROADENING STEM PARTICIPATION

**Ellis Jackson**, Scott Wicker and Tierra Freeman-Taylor. Kentucky State University, Frankfort, KY

**BIO5** 

# DRESS SYNDROME AND SJS/TEN: DIFFERENCES AND SIMILARITIES IN CUTANEOUS ADVERSE DRUG REACTIONS

Michael McLeod. Kentucky State University, Frankfort, KY

CH1

# CONDUCTIVITY ANALYSIS OF POLY (ETHYLENE OXIDE) CONTAINING BORON CROSS-LINK ELECTROLYTES FOR LITHIUM-AIR BATTERIES

Kymani Williams and Emily Emilien. Fort Valley State University, Fort Valley, GA

CH2

# ANTI-APOPTOTIC PROTEINS BCLXL AND MCL-1 PROMOTE APOPTOTIC RESISTANCE IN GLIOBLASTOMA

**Shango Rich**<sup>1</sup>, Elizabeth Fernandez<sup>2</sup>, David Nathanson<sup>2</sup>. <sup>1</sup>Department of Biology, Norfolk State University, Norfolk VA; <sup>2</sup>Departments of Medical and Pharmacology, University of California, Los Angeles, CA

### CMPE1

### UTILIZING MATHEMATICAL MODELING TO APPROXIMATE TUMOR GROWTH

Micha'l McAlpine. Fort Valley State University, Fort Valley, GA.

### CMPE2

# PREVALENCE OF DEPRESSION AMONG PEOPLE OF DIFFERENT SOCIOECONOMIC AND RACIAL/ETHNIC GROUPS

Ebunoluwa Adebesin. Huston-Tillotson University, Austin, TX.

#### CMPE3

#### LIBRARY MANAGEMENT SYSTEM DATABASE

Zainab Khan, Huston-Tillotson University, Austin, TX.

### ES<sub>1</sub>

# COMMUNICATING POLYFLUOROALKYL SUBSTANCES (PFAS) INFORMATION TO THE PUBLIC: STRATEGIES, CHALLENGES, AND BEST PRACTICES

Jensine Crowder and Scott Wicker. Kentucky State University, Frankfort, KY

#### GSO<sub>1</sub>

# USING IRIDIUM OXIDE-COATED NEURAL PROBES TO UNDERSTAND SPACE RADIATION EFFECTS ON THE CNS

**Shelita Renee Augustus**<sup>1</sup>, Kazon Harrigan<sup>2</sup>, Thong Chi Le<sup>2</sup>, Hargsoon Yoon<sup>1,2</sup>. <sup>1</sup>Center for Materials Research; <sup>2</sup>Department of Engineering

Norfolk State University, 700 Park Avenue, Norfolk, VA.

#### **GSO2- Virtual**

# AN EVALUATION OF ADDITIVE MANUFACTURING (AM)/3D PRINTING EDUCATION IN ENGINEERING USING CONSTRUCTIVISM LEARNING THEORY AND THE TPACK FRAMEWORK

**Ogbonna Ofor**, Francesca Mellieon-Williams, Luria YoungFareed Dawan and Albertha Lawson. Southern University and A&M College Baton Rouge, LA.

### GSO<sub>3</sub>

# INVESTIGATING THE IMPACT OF IMMERSIVE TECHNOLOGY ON COMPUTATIONAL THINKING DEVELOPMENT IN ENGINEERING TRAINING

**Opeyemi Ojajuni**, Yasser Ismail, Francesca Mellieon-Williams and Albertha Lawson. Southern University and A&M College, Baton Rouge, LA

### **GSO4- Virtual**

# ROLE OF LIPID RAFTS IN REGULATING CANNABINOID RECEPTOR MEDIATED SIGNALING

R. Begum, S. Thota, N. Bidarimath, and S. Batra

Laboratory of Pulmonary Immuno-toxicology, Department of Environmental Toxicology, Southern University and A&M College, Baton Rouge, LA

#### GSO<sub>5</sub>

# MELATONIN RESCUES CIGARETTE SMOKE EXTRACT-INDUCED INFLAMMATION AND AUTOPHAGY IN LUNG EPITHELIAL CELLS

**S. Thota<sup>1</sup>**, R. Begum<sup>1</sup>, D. Muthyala<sup>1</sup>, N. Bidarimath<sup>1</sup>, J. Obuya<sup>2</sup>, S. Batra<sup>1</sup>. <sup>1</sup>Laboratory of Pulmonary Immunotoxicology, Department of Environmental Toxicology, <sup>2</sup>Southern University agriculture and extension center, Southern University and A&M College, Baton Rouge, LA

#### **GSO6**

# RNA EXPRESSION OF PSEUDOMONAS AERUGINOSA STRAIN PA14 UNDER TRADITIONAL ANTIMICROBIAL SUSCEPTIBILITY TESTING AND PHYSIOLOGICALLY RELEVANT CONDITIONS

**Amber Grace<sup>1</sup>**, Rajnish Sahu<sup>1</sup>, Donald R. Owen<sup>2</sup>, and Vida A. Dennis<sup>1</sup>. <sup>1</sup>Alabama State University, Montgomery, Alabama, USA. <sup>2</sup>Therapeutic Peptides Inc., Baton Rouge, Louisiana, USA.

### **GSO7- Virtual**

# UNDERSTANDING SCIENCE TEACHERS CULTURALLY RELEVANT TEACHING PRACTICES

Rochelle Darville and Nastassia Jones. Southern University A&M College, Baton Rouge, LA.

### **GSO8-NC**

# AN ANALYSIS OF VIRTUAL REALITY USAGE AMONG STUDENTS IN STEM FIELDS (AGRICULTURAL SCIENCES AND ENGINEERING)

**Davender Rapolu** Department of Computer Science, Southern University and A&M College, Baton Rouge, LA..

### GSP1

#### BREAST CANCER: RAISE AWARENESS AND LOWER RISK

Elizabeth Daniels. Fisk University, Nashville, TN

#### GSP2

# THE IMPACT OF COMPUTER BASED TECHNOLOGIES ON BUSINESS COMMUNICATIONS

**Akinsanmi Olumide.** Department of Computer Science, Southern University and A&M College, Baton Rouge, LA.

#### GSP3

### ROLE OF CARBON NANOTUBES IN DPE-INDUCED INFLAMMATION

**M. Thakur**, A. Abdulkadir, and S. Batra, Laboratory of Pulmonary Immunotoxicology, Department of Environmental Toxicology, Southern University and A&M College, Baton Rouge, LA

### GSP4

# UBC4/5-MEDIATE E6AP-DEPENDENT DEGRADATION OF DAMAGED PROTEINS IN E-CIGS VAPOR CONDENSATE-CHALLENGED LUNG EPITHELIAL CELLS

**Mutyala**, R. Begum, S. Thota, N. Bidarimath, and S. Batra. Laboratory of Pulmonary Immunotoxicology, Department of Environmental Toxicology & Southern University and A&M College, Baton Rouge, LA.

#### GSP5

# POSSIBLE ROLE OF RPS6 IN REGULATING SUMO-DEPENDENT INTRINSIC APOPTOTIC PATHWAY IN DPE-CHALLENGED LUNG EPITHELIAL CELLS

**N. Bidarimath**, S. Thota ,R. Begum, D. Mutyala, and S. Batra. Laboratory of Pulmonary Immunotoxicology, Department of Environmental Toxicology, Southern University and A&M College, Baton Rouge, LA.

#### GSP5

# POSSIBLE ROLE OF RPS6 IN REGULATING SUMO-DEPENDENT INTRINSIC APOPTOTIC PATHWAY IN DPE-CHALLENGED LUNG EPITHELIAL CELLS

**N. Bidarimath**, S. Thota ,R. Begum, D. Mutyala, and S. Batra. Laboratory of Pulmonary Immunotoxicology, Department of Environmental Toxicology, Southern University and A&M College, Baton Rouge, Louisiana-70813, USA.

#### GSP7

# PCP AND TCHQ DIFFERENTIALLY REGULATE CELL DEATH/SURVIVAL PATHWAYS

**R.Kondati**<sup>1</sup>, S. Thota1, R. Begum<sup>1</sup>, N. Bidarimath<sup>1</sup>, D. Muthyala<sup>1</sup>, W.C. Dorsey<sup>2</sup>, and S. Batra<sup>1</sup>. Laboratory of Pulmonary Immuno-toxicology, Department of Environmental

Toxicology, Southern University and A&M College, Baton Rouge, LA. <sup>2</sup>Molecular Toxicology Research Laboratory, Grambling State University Grambling, LA.

#### PSUG1

# BIOCOMPATIBLE POLYGLYCIDOL-BASED HYDROGELS FOR LOAD-BEARING TISSUE ENGINEERING

**Sania Colbert**<sup>1</sup>, Eva Harth<sup>2</sup> and Dain B. Beezer\*<sup>1</sup>. <sup>1</sup>Fisk University, Nashville, TN; <sup>2</sup>University of Houston, Houston, TX.

### PSUG2

# INVESTIGATION OF A PHOTOVOLTAIC CELL BASED ON NON-UNIFORM ILLUMINATION

Jordan Graham. Norfolk State University, Norfolk, Virginia

#### PSUG3

### POST-POLYMERIZATION MODIFICATION OF BRANCHED POLYGLYCIDOL

**Joshua Amosu**<sup>1</sup>, Eva Harth<sup>2</sup> and Dain B. Beezer\*<sup>1</sup>. <sup>1</sup>Fisk University, Nashville TN; <sup>2</sup>University of Houston, Houston, TX

### PSUG4

# INHIBITION OF ACETYL-COA CARBOXYLASE 1 SUPPRESSES CHOLANGIOCARCINOMA TUMORIGENESIS

**Azaria Jack**<sup>1</sup> and Yunfeg Zhao<sup>2</sup>. <sup>1</sup>Dillard University, New Orleans, LA; <sup>2</sup>LSUHS Shreveport, Shreveport, LA.

#### PSUG5

# AN ANALYSIS OF CANNABINOIDS AND AMMONIUM NITRATE AQUATIC POLLUTION ON THE MORPHOLOGICAL DEVELOPMENT ON PREMETAMORPHIC TADPOLES

Aariana Tucker. Norfolk State University, Norfolk, Virginia

#### PSUG6

### STUDIES ON FOLLICULOGENESIS IN THE DOMESTIC CAT

**Jada Wilson**, Jocellyn Banks, Rajeev Chandra. Department of Biology, Norfolk State University, Norfolk, VA

#### PSUG7

### **EPISTASIS OF CYTOCHROME P450 ENZYMES 2C9 AND 2C19**

**Ajeya Dixon<sup>1</sup>** and Gabriel Boyle<sup>2</sup>. <sup>1</sup>Norfolk State University, <sup>2</sup>University of Washington

### PSUG8

### DUF2419 AND THE DYNAMIC QUEUOSINE (Q) CHANGES OF TRNA IN VIVO

**Chanel Staton**<sup>1</sup>, Jeremy Henderson<sup>2</sup>, Juan Alfonzo<sup>2</sup>. <sup>1</sup>Norfolk State University at Norfolk, VA; 20hio State University at Columbus, OH.

#### PSUG9

# THE EFFECTS OF COAL TAR CREOSOTE ON THE EARLY DEVELOPMENTAL STAGES OF LOCAL GERMINATING PLANT LIFE

DonnaMarie Miller. Norfolk State University, Norfolk, Virginia.

#### PSUG10

### QUALITY CARE ASSESSMENT FOR SICKLE CELL PATIENTS

**Myles Perry**<sup>1</sup>, Mahlete Yared<sup>2</sup> and Chris Fungwe<sup>2</sup>. <sup>1</sup>Norfolk State University, Norfolk, VA; <sup>2</sup>Eastern Virginia Medical School, Norfolk, VA.

#### PSUG11

# PRODUCTION OF HYDROGEN PEROXIDE IN C. ELEGANS FROM PFOS EXPOSURE

**Faith Smith**, Joshua Smith, Marie Delcy and Celia Dodd. Department of Biology, The Fort Valley State University, Fort Valley, GA.

#### PSUG12

# REPRESSION OF RPS15 LEADS TO DIVERSE TRANSCRIPTIONAL RESPONSES IN SACCHAROMYCES CEREVISIAE

**Raphyel Rosby**<sup>1</sup>, Bryan T. Rogers<sup>1</sup>, Kieu Tran<sup>2</sup>, Maheshia Dassanayake<sup>2</sup>, Dan Burke<sup>3</sup>, Derek Walker<sup>4</sup>. <sup>1</sup>Southern University and A&M College, Baton Rouge, LA, <sup>2</sup>Louisiana State University, Baton Rouge, LA, <sup>3</sup>North Carolina State University, Raleigh, NC, <sup>4</sup>University of Michigan, Ann Arbor, MI.

### PSUG13

# SELENIUM APPEARS TO DRIVE AMENSALISM AMONG BACTERIODES IN HUMAN GUT MICROBIOME

Jaden Hines, Jalen Hurt and Emmanuel D. Williams, Livingstone College, Salisbury, NC

### PSUG14

### FUNGAL PLANT PATHOGEN DETECTION USING UV REFLECTIVE POWDER

**Curvieon Ezell<sup>1</sup>** and Paul Severns<sup>2</sup>. <sup>1</sup>Fort Valley State University; Fort Valley, GA; <sup>2</sup>University of Georgia Plant Pathology Dept.; Athens, GA.

#### PSUG15

# A STUDY OF THE SUSCEPTIBILITY OF THE REPRODUCTION AND MORPHOLOGY OF DANIO RERIO TO AMMONIUM NITRATE TOXICITY

**Dejanah Lorthe**. Norfolk State University, VA

### PSUG16

## COMPUTATIONAL ANALYSIS OF UDP-GLYCOSYLTRANSFERASE VARIATION ACROSS STRAINS OF CAENORHABDITIS ELEGANS

**Aleya Johnson**<sup>3,4</sup>, Ari Levin<sup>3</sup>, Kyra Chism<sup>2,3</sup>, Rockford Watkins<sup>1,4</sup>, Maci Benveniste<sup>2,3</sup>, Niyelle Tucker<sup>3</sup>, Bailey Nicolas<sup>3</sup>, Rahil Taujale<sup>1,3</sup>, Muhammad Zaka Asif<sup>1,3</sup>, Arthur S. Edison<sup>1,2,3</sup>.

<sup>1</sup>Institute of Bioinformatics; <sup>2</sup>Department of Genetics; <sup>3</sup>Complex Carbohydrate Research Center –University of Georgia, Athens, GA; <sup>4</sup>Fort Valley State University

#### PSUG17

# THE COMPUTATIONAL STUDY OF PHENOTHIAZINE ANTIPSYCHOTICS AS POTENTIAL ANTI-TUMOR DRUGS

**Areona Little<sup>1</sup>**, Tiffani Holmes<sup>1</sup> and Kaneatra Simmons<sup>2</sup>. <sup>1</sup>Department of Chemistry, Fort Valley State University, Fort Valley, GA 31030. <sup>2</sup>Department of Biology, Fort Valley State University, Fort Valley, GA

#### PSUG18

### REDUCING THE RISK OF SIDS IN NASHVILLE, TENNESSEE

Jordan Smith. Fisk University, Nashville, TN

### PSUG19

# DOMESTIC VIOLENCE AND MENTAL HEALTH AMONG YOUNG AFRICAN AMERICANS

**Alecsis Taylor**. Fisk University, Nashville, TN.

### PSUG20

# BREAST CANCER AWARENESS & COVID-19 AMONG AFRICAN AMERICAN WOMEN

**Trinity Upshaw.** Fisk University, Nashville, TN

### PSUG21

# COVID-19 AND ITS EFFECTS ON MENTAL HEALTH: ADHD IN AFRICAN AMERICAN COLLEGE STUDENTS

Mauryce Thomas, II. Fisk University, Nashville, TN

#### PSUG22

# DIABETES AWARENESS: DECREASE AND LOWER THE RISK OF THE FRESHMAN FIFTEEN

Rhyan Hewlin, Fisk University, Nashville, TN

#### PSUG23

### WHY DO AFRICAN-AMERICANS HAVE THE MOST STROKES?

Allyson Merriweather. Fisk University, Nashville, TN

### PSUG24

#### MATERNAL AND INFANT MORTALITY IN AFRICAN AMERICAN WOMEN

Vichelle Johnson. Fisk University, Nashville, TN

#### PSUG25

#### HYPERTENSION AND STROKE AWARENESS AMONGST AFRICAN AMERICANS

Imani Douglas. Fisk University, Nashville, TN

### PSUG26

### ALUMINUM-ION BATTERY: A CASE STUDY OF IONIC LIQUID ELECTROLYTES

**Maya Smith**<sup>1</sup>, Mieko Smith<sup>1</sup>, Yiwen Wang<sup>2</sup>, Zhen Wei<sup>3</sup>, Ruigang Wang<sup>3</sup>. <sup>1</sup>Fort Valley State University, Fort Valley, GA; <sup>2</sup>Northridge High School, Tuscaloosa, AL; <sup>3</sup>The University of Alabama, Tuscaloosa, AL.

#### PSUG27

# UNDERSTANDING THE RESPONSE AND LIMITS OF THE EXTREMOTOLERANT FUNGUS, KNUFIA PETRICOLA, TO DESICCATION STRESS

**John Josiah Olalekan**<sup>1</sup>, Grace Hamilton<sup>2</sup> and Amy Gladfelter<sup>2</sup>. <sup>1</sup>Department of Natural Science and Mathematics, Johnson C. Smith University, Charlotte, NC, USA; <sup>2</sup>Department of Biology, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

#### (NC) **PSUG-28**

ENGINEERING E. COLI FOR PROFUSION OF DRUG-LIKE MOLECULES.

**Destiny Marcus**. Livingstone College

#### **PSUG-29**

EXAMING THE EFFECT OF REDLINING ON PRE-TERM BIRTS IN MECKLENBURG COUNTY, CHARLOTTE, NC USING ARCGIS STORYMAPS.

**Shay Bell**. *John C. Smith University* 

## PSUG-30

THE SYNTHETIC INVESTIGATION OF SILICA MODIFIED POLYMERS.

**Dajaneen Alejandro-Ortiz**. Livingstone College

## PSUG-31

COMPARING METHODS OF MANUFACTURING PEROVSKITE SOLAR CELLS.

Madalynn Payne. Livingstone College