

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - MONDAY, MARCH 27, 2023

#### FACULTY ORAL PRESENTATIONS - RSP 163

*Presentations may be available from 9:00 AM - 12:00 PM*

9:00 AM	FO-01	<b>CLIMATE LEADERSHIP ACADEMY (CLA): A WELL-DESIGNED PLATFORM FOR ENGAGING MINORITY COMMUNITY MEMBERS IN CLIMATE CHANGE RESEARCH, SCIENCE EDUCATION, AND</b> Jianwei Li, Yujuan Chen, Thomas Byl, Reginald Archer, Aditya Khanal, Emmanuel Omondi, Fulya Baysal-Gurel, De'Etra Young, Chandra Reddy <i>Department of Agriculture and Environmental Sciences</i> , College of Agriculture, Tennessee State University
9:20 AM	FO-02	<b>EVALUATION OF BIOLOGICAL CONTROL AGENTS AND CHEMICAL TREATMENTS FOR CONTROL OF BACTERIAL CROWN GALL ON ROSE</b> Dr. Cansu Oksel, <i>Otis L. Floyd Research Center</i> , Tennessee State University, Dr. Prabha Liyanapathiranage, <i>Otis L. Floyd Research Center</i> , Dr. Farhat Avin, <i>Otis L. Floyd Research Center</i> , Dr. Fulya Baysal-Gurel, <i>Otis L. Floyd Research Center</i>
9:40 AM	FO-03	<b>THE SHAPE OF SPACELIFE, ASSUME A SPHERICAL COW</b> Dr. Geoffrey Burks, <i>Physics</i> , Tennessee State University
10:00 AM	FO-04	<b>MICROMECHANICS METHOD FOR BRIDGING BETWEEN DISCRETE AND CONTINUUM: THEORY AND APPLICATIONS</b> Dr. Ranganathan Parthasarathy, <i>Civil and Architectural Engineering</i> , Tennessee State University, Dr. Anil Misra, <i>University of Kansas</i>
10:20 AM	FO-05	<b>ENHANCING GROWTH, DEVELOPMENT AND LIGNOCELLULOSIC BIOMASS TRAITS IN SORGHUM USING BACTERIAL ENDOPHYTES FOR SUSTAINABLE BIOENERGY SYSTEMS</b> Dr. Christine Ondzighi Assoume, <i>Agricultural Environmental and Sciences</i> , Tennessee State University, Mr. Adam Traore, Tennessee State University, Dr. Ahmad Aziz, <i>Agricultural Environmental and Sciences</i> , Dr. Margaret Mmbaga, <i>Agricultural Environmental and Sciences</i>
10:40 AM	FO-07	<b>IDENTIFICATION AND MANAGEMENT OF PSEUDOMONAS SYRINGAE PV. SYRINGAE, THE CAUSAL AGENT OF PSEUDOMONAS LEAF SPOT ON RED MAPLE</b> Dr. Prabha Liyanapathiranage, <i>Otis L. Floyd Research Center</i> , Tennessee State University, Dr. Cansu Oksel, <i>Otis L. Floyd Research Center</i> , Dr. Farhat Avin, <i>Otis L. Floyd Research Center</i> , Mr. Madhav Parajuli, <i>Otis L. Floyd Research Center</i> , Dr. Fulya Baysal-Gurel, <i>Otis L. Floyd Research Center</i>
11:00 AM	FO-06	<b>AN EXAMINATION OF FARMLAND TENURE, PLANNING AND SUCCESSION CHALLENGES FACING TENNESSEE FARMERS: PRELIMINARY RESULTS FROM A STATEWIDE SURVEY</b> Ms. Mary Mafuyai, <i>Agricultural Environmental and Sciences</i> , Tennessee State University, Dr. Kofi Britwum, <i>Agricultural and Environmental Sciences</i> , Tennessee State University

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - TUESDAY, MARCH 28, 2023

#### GRADUATE ORAL - ENGINEERING - SESSION 1 - RSP 009

*Presentations may be available from 9:00 AM - 12:00 PM*

9:00 AM	GO-ENGR-01	<b>MICROMECHANICS BASED HOMOGENIZATION OF TRUSS LATTICES WITH EXPERIMENTAL VALIDATION</b> Kehinde Omotayo*, Samal Aminashairi. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Ranganathan Parthasarathy, Anil Misra
9:20 AM	GO-ENGR-02	<b>TRAFFIC OPERATIONAL SIMULATION OF RAILROAD HIGHWAY CROSSING</b> Irene Akyoo*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
9:40 AM	GO-ENGR-03	<b>EVALUATING INCIDENT DURATION WITH RESPECT TO INCIDENT TYPES IN TENNESSEE</b> Bryson Mgani*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
10:00 AM	GO-ENGR-04	<b>AI/ML BASED TRAIN ARRIVALS AND DELAYS PREDICTION AT RAILWAY-HIGHWAY GRADE CROSSINGS</b> Emmanuel Samson*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
10:20 AM	GO-ENGR-05	<b>AN AUTOMATIC HIGHWAY ROAD SIGNAL DETECTION BY USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING METHOD</b> Al Amin*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba, Kamrul Hasan

#### GRADUATE ORAL- AGRICULTURAL SCIENCES - SESSION 1 - RSP 163

*Presentations may be available from 9:00 AM - 12:00 PM*

9:00 AM	GO-AGNS-01	<b>DEVELOPING GENE EDITING SYSTEM FOR TOMATOES TO GENERATE STRESS TOLERANT LINES</b> Jun Guo*, Dybia Jain, Kajol Pradhan*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou, Sonali Roy
9:20 AM	GO-AGNS-02	<b>EVALUATION OF BROCCOLI VARIETIES FOR WINTER PRODUCTION IN NON-HEATED GREENHOUSE IN MIDDLE TENNESSEE.</b> Kajol Pradhan*, Priya Thapa, Dibya Thapa Magar, Jun Guo. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou
9:40 AM	GO-AGNS-03	<b>ANTIFUNGAL EFFECTS OF VOC'S PRODUCED BY BACILLUS SPECIES AGAINST OOMYCETE PATHOGEN PHYTOPHTHORA CAPSICI</b> Jamille Robinson*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou, Ouyang Lizhi, John Ricketts
10:00 AM	GO-AGNS-04	<b>COLLECTION OF GERMINATING TOMATO POLLEN USING LASER CAPTURE MICRODISSECTION FOR IDENTIFICATION OF HEAT-INDUCED PROTEOMES</b> Dibya Thapa Magar*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou

*\*Denotes Presenters*

---

## ORAL PRESENTATION - TUESDAY, MARCH 28, 2023 *(Continued)*

---

### GRADUATE ORAL- AGRICULTURAL SCIENCES - SESSION 1 - RSP 163

---

*Presentations may be available from 9:00 AM - 12:00 PM*

10:20 AM	GO-AGNS-05	<b>EVALUATION OF BACTERIAL ENDOPHYTES FOR CONTROLLING SOUTHERN BLIGHT IN HEMP PRODUCTION</b> Mustapha Olawuni*. <i>Agricultural and Environmental Science</i> , College of Agriculture. Advisor(s): Margaret Mmbaga
11:00 AM	GO-AGNS-06	<b>PLANT COVER AND WINTER MORTALITY OF WINTER CANOLA (BRASSICA NAPUS L.) IN TENNESSEE</b> Sudip Bishwokarma*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Jason de Koff, Firuz Yuldashev
11:20 AM	GO-AGNS-07	<b>EVALUATION OF DIFFERENT GROWTH MEDIA AND FORMULATION METHODS FOR ECONOMIC PRODUCTION OF BIOLOGICAL CONTROL AGENTS FOR TOMATO PRODUCTION</b> Peter Eyegheleme*. <i>Agricultural and Environmental Science</i> , College of Agriculture. Advisor(s): Margaret Mmbaga
11:40 AM	GO-AGNS-08	<b>ANTIBIOTIC RESISTANCE IN BACTERIA ISOLATED FROM GOAT MEAT IN NASHVILLE, TENNESSEE</b> Moses Owusu*. <i>Family and Consumer Sciences</i> , College of Agriculture. Advisor(s): Agnes Kilonzo-Nthenge

---

---

### GRADUATE ORAL - LIFE AND PHYSICAL SCIENCES - SESSION 1 - RSP 209

---

*Presentations may be available from 9:00 AM - 12:00 PM*

9:00 AM	GO-LPS-01	<b>RAPID DETECTION OF PATHOGENIC E. COLI BASED ON CRISPR TECHNOLOGY</b> Pallavi Rathore*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ali Taheri, Agnes Kilonzo-Nthenge, Korsi Dumenyo, Zeinab Yadegari
9:40 AM	GO-LPS-04	<b>ANALYSIS OF KEY FACTORS INVOLVED IN DEVELOPMENTAL ARREST IN WINDOWED EGGS FOR GENOME EDITING AND TRANSGENESIS STUDIES</b> Rhia Nelson*, Nevein Soliman, Jailyn Jamison, Sammatha Stiff. <i>Biological Sciences</i> , College of Life Sciences. Advisor(s): Xiaofei Wang, Ann Bohannon-Stewart
10:00 AM	GO-LPS-05	<b>MOLECULAR DIVERSITY AND FUNCTIONAL IMPLICATION OF AMPHIBIAN INTERFERON COMPLEX: REMARKING IMMUNE ADAPTATION IN VERTEBRATE EVOLUTION</b> Oluwaseun Adeyemi*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Sang Yongming
10:20 AM	GO-LPS-06	<b>RESISTANCE PROFILE OF PATHOGENIC BACTERIA IN GOAT AND SHEEP FECAL SAMPLES FROM TENNESSEE AND GEORGIA</b> Basnet Ashesh*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Basnet Ashesh, Agnes Kilonzo-Nthenge
11:00 AM	GO-LPS-07	<b>ANTIBIOTIC USE PRACTICES AND ANTIMICROBIAL RESISTANCE IN SMALL-SCALE GOAT AND SHEEP FARMING</b> Tobenna Aniume*. <i>Family and Consumer Sciences</i> , College of Agriculture. Advisor(s): Agnes Kilonzo-Nthenge

---

*\*Denotes Presenters*

---

## ORAL PRESENTATION - TUESDAY, MARCH 28, 2023 (Continued)

---

### GRADUATE ORAL - LIFE AND PHYSICAL SCIENCES - SESSION 1 - RSP 209

---

*Presentations may be available from 9:00 AM - 12:00 PM*

11:20 AM	GO-LPS-08	<b>INACTIVATION OF FOODBORNE PATHOGENS ON SURFACES BY ULTRAVIOLET LIGHT EMITTING DIODE SYSTEMS</b> Aakash Sharma*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ankit Patras, Housyn Mahmoud
----------	-----------	---

---

---

### GRADUATE ORAL - ENGINEERING - SESSION 2 - RSP 009

---

*Presentations may be available from 9:00 AM - 12:00 PM*

1:00 PM	GO-ENGR-07	<b>DESIGN OF A SOLAR POWER AND WIRELESS POWER TRANSMISSION SYSTEM FOR DYNAMIC ELECTRIC VEHICLE CHARGING WITH AI BASED LOAD FORECASTING.</b> Richard Wiencek*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Sagnika Ghosh
1:20 PM	GO-ENGR-08	<b>OPTIMAL FREQUENCY FOR OPTIMAL PERFORMANCE AND EFFICIENCY OF A SINGLE-PHASE WIRELESS POWER TRANSMISSION SYSTEM</b> Richard Wiencek*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Sagnika Ghosh
1:40 PM	GO-ENGR-09	<b>PHYSICS BASED DATA PREPROCESSING TO INCREASE THE ACCURACY OF DEEP LEARNING BASED TRAFFIC STATE ESTIMATION</b> Daryl Mupupuni*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Liang Hong, Kamrul Hasan, Leehyun Keel
2:00 PM	GO-ENGR-10	<b>A DECISION-BASED ENSEMBLE FRAMEWORK FOR INTRUSION DETECTION IN THE INTERNET OF VEHICLES</b> Varshini Guduru*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Kamrul Hasan, Saleh Zein-Sabatto, Deo Chimba
2:20 PM	GO-ENGR-11	<b>DEEP LEARNING-BASED APPROACH FOR DEVICE AUTHENTICATION USING RF FINGERPRINTING: IDENTIFYING MALICIOUS TRANSMITTER</b> Ekramul Haque*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Kamrul Hasan
3:00 PM	GO-ENGR-12	<b>PRECISELY IDENTIFIED FAULTY PRODUCTS IN MANUFACTURING INDUSTRIES THROUGH LIMITED DATA BY USING MACHINE LEARNING TECHNIQUES</b> Al Amin*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Kamrul Hasan
3:20 PM	GO-ENGR-13	<b>PHYSICS REGULATED DEEP LEARNING FOR TRAFFIC DENSITY ESTIMATION WITH SMALL NOISY DATA</b> Anupama Guntu*. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Liang Hong, Kamrul Hasan, Leehyun Keel

---

*\*Denotes Presenters*

## GRADUATE ORAL- AGRICULTURAL SCIENCES - SESSION 2 RSP 163

*Presentations may be available from 1:00 PM - 4:00 PM*

1:00 PM	GO-AGNS-09	<b>AN INVESTIGATION ON NURSERY GROWERS' PERCEPTION OF BOXWOOD BLIGHT DISEASE AND ASSESSMENT OF EFFICACY OF ITS MANAGEMENT</b> Bhawana Ghimire* . <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Ankit Patras, Brahmaiah Pendyala
1:20 PM	GO-AGNS-10	<b>EFFECT OF PLANT DEFENSE ELICITOR IN PREVENTING AMBROSIA BEETLE ATTACKS IN FLOWERING DOGWOODS EXPOSED TO SIMULATED FLOOD</b> Madhav Parajuli* . <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Jason B. Oliver, Karla Addesso
1:40 PM	GO-AGNS-11	<b>EVALUATION OF FUNGICIDES AND APPLICATION INTERVALS FOR THE</b> Christina Jennings* . <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
2:00 PM	GO-AGNS-12	<b>IDENTIFICATION OF FUNGAL SPECIES CAUSING CANKER DISEASE ON REDBUD (Cercis sp.) AND DEVELOPMENT OF AN EFFECTIVE DETECTION TOOL</b> Pratima Subedi* . <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
2:20 PM	GO-AGNS-13	<b>EFFECTIVENESS OF FLOWERING PLANTS IN ATTRACTING ARTHROPOD NATURAL ENEMIES IN VEGETABLE PRODUCTION</b> Yuna Gaire* . <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Kaushalya Amarasekare, Firuz Yuldashev, Sarah Kilcoyne
3:00 PM	GO-AGNS-14	<b>ASSESSMENT OF THE EFFECTIVENESS OF LOW-COST ETHANOL DETECTORS IN DETERMINING FLOOD STRESS IN DOGWOOD (Cornus florida L.) TO FACILITATE ON-SITE DETECTION OF TREES VULNERABLE TO AMBROSIA</b> Anju Poudel* . <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Karla Addesso, Jason Oliver, Paul O'Neal
3:20 PM	GO-AGNS-15	<b>HERBICIDE STRESS AND FLATHEADED BORER ATTACKS IN RED MAPLE CULTIVARS</b> Asmita Gautam* . <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Karla Addesso, Jason Oliver, Anthony Witcher, Cindy Perkovich
3:40 PM	GO-AGNS-16	<b>STANDARDIZING CURRENT RESEARCH PROTOCOLS TOWARDS GENETIC MODIFICATION FOR ANDROGENIC RESPONSIVE MICROSPORES OF RECALCITRANT SORGHUM BICOLOR</b> Aron Felts* . <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ahmad Aziz, C. Ondzighi-Assoume, Dilovan Yahya

## GRADUATE ORAL - LIFE AND PHYSICAL SCIENCES - SESSION 2 - RSP 209

*Presentations may be available from 1:00 PM - 4:00 PM*

1:00 PM	GO-LPS-09	<b>ASSOCIATION BETWEEN HEALTHCARE PROVIDERS' WORKLOAD ON PATIENT OUTCOMES: A SYSTEMATIC REVIEW</b> Bennett Crane*, Cal Gamache*, Ben Nguyen*, Brandon Trent* . <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Deborah Edmondson
---------	-----------	---

*\*Denotes Presenters*

---

## ORAL PRESENTATION - TUESDAY, MARCH 28, 2023 *(Continued)*

---

### GRADUATE ORAL - LIFE AND PHYSICAL SCIENCES - SESSION 2 - RSP 209

---

*Presentations may be available from 1:00 PM - 4:00 PM*

1:20 PM	GO-LPS-10	<b>FABRICATION OF ACTIVE FOOD PACKAGING MATERIALS FROM NATURAL POLYMERS VIA ELECTROSPINNING</b> Wenjun Zhu*, Karla Robles. <i>TIGER Institute</i> , College of Engineering. Advisor(s): Richard Mu, Ying Wu, Akira Ueda, Virginia Lorenz
1:40 PM	GO-LPS-11	<b>ELECTROHYDRODYNAMIC FABRICATION OF CORE-SHELL MICROPARTICLES FOR CONTROLLED-RELEASE IMMUNOTHERAPY OF OVARIAN CANCER</b> Karla Robles*. <i>TIGER Institute</i> , College of Engineering. Advisor(s): Richard Mu, Todd Giorgio, Ying Wu, Nadya Mason, Akira Ueda
2:00 PM	GO-LPS-12	<b>EFFECTS OF WARMING ON SWITCHGRASS PHOTOSYNTHESIS AND LEAF CHLOROPHYLL CONTENT</b> Christina Kieffer*, Navneet Kaur. <i>Biological Sciences</i> , College of Life Sciences. Advisor(s): Dafeng Hui, Jianwei Li
2:20 PM	GO-LPS-13	<b>IMPACTS OF NITROGEN FERTILIZER, GREENHOUSE, AND CROP SPECIES ON</b> Avedananda Ray*. <i>Biological Sciences</i> , College of Life Sciences. Advisor(s): Dafeng Hui

---

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - WEDNESDAY, MARCH 29, 2023

#### GRADUATE ORAL - ENGINEERING - SESSION 3 - RSP 009

*Presentations may be available from 9:00 AM - 12:00 PM*

9:00 AM	GO-ENGR-14	<b>DESIGN AND SIMULATION OF OPTIMAL MICROFLUIDIC DESIGN FOR EFFECTIVE FLUID MIXING</b> Christopher Buford*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Landon Onyebueke, Lizhi Ouyang, Richard Mu, Sabrina Torres
9:20 AM	GO-ENGR-15	<b>THE GROWTH OF GALLIUM OXIDE NANOWIRES</b> Geordan Dorsey*, Antonio Moore. <i>TIGER Institute</i> , College of Engineering. Advisor(s): Richard Mu, Akira Ueda, Eugene Collins
9:40 AM	GO-ENGR-16	<b>DEVELOPING NEW POLLEN GRAIN COUNT METHOD USING MACHINE LEARNING TO EVALUATE HEAT TOLERANCE OF TOMATOES</b> Priya Thapa*, Shourav Bin Rabbani, Kajol Pradhan, Jun Guo, Dibya Thapa Magar. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou, Manar D. Samad, Hui Li, Sonali Roy
10:00 AM	GO-ENGR-17	<b>DEVELOPMENT OF A COMPUTATIONAL MODEL FOR ACCELERATED AGING AND MATERIAL DEGRADATION IN VARYING TEMPERATURE AND</b> Grady Clopton*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Mohammad Habibi
11:00 AM	GO-ENGR-19	<b>COMPARATIVE ANALYSIS OF THE MECHANICAL PROPERTIES OF 3-D PRINTED SPECIMENS</b> Ifeanyi Okoye*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Landon Onyebueke, Richard Mu
11:20 AM	GO-ENGR-20	<b>FABRICATION OF MULTIFERROIC POLYMERIC FIBERS – A PLATFORM FOR SENSORY APPLICATION</b> Simbarashe Kanjanda*. <i>TIGER Institute</i> , College of Engineering. Advisor(s): Richard Mu, Akira Ueda

#### GRADUATE ORAL- AGRICULTURAL SCIENCES - SESSION 3

*Presentations may be available from 9:00 AM - 12:00 PM*

9:00 AM	GO-AGNS-17	<b>MUNG BEAN VARIETY INTRODUCTIONS TO TENNESSEE</b> Joshua Relyea*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Matthew Blair
9:20 AM	GO-AGNS-18	<b>MUNG BEAN AS AN ALTERNATE CROP FOR SMALL AND MID-SIZED FARMERS. A COMPARATIVE ECONOMIC ANALYSIS</b> Satya Tiwari*, Fisseha Tegegne, Dafeng Hui. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Prabodh Illukpitiya
9:40 AM	GO-AGNS-19	<b>SCREENING AND GENE EXPRESSION ANALYSIS OF COWPEAS AND BLACK-EYED PEAS FOR ALUMINUM TOLERANCE.</b> Max Miller*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Matthew Blair, Dr. Hui Li

*\*Denotes Presenters*



---

## ORAL PRESENTATION - WEDNESDAY, MARCH 29, 2023 *(Continued)*

---

### GRADUATE ORAL- AGRICULTURAL SCIENCES - SESSION 3

---

*Presentations may be available from 9:00 AM - 12:00 PM*

10:00 AM	GO-AGNS-20	<b>YIELD CHARACTERIZATION AND GEOSMIN QUANTIFICATION OF GRAIN</b> Lahari Nekkalapudi*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Matthew Blair, Dr. Hui Li
10:20 AM	GO-AGNS-21	<b>USING BIOTECHNOLOGY TO INCREASE SEED PRODUCTION AND SUSTAINABLE VEGETABLE OIL YIELDS IN SOYBEAN</b> Gabriel Carrasquillo*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Christine Ondzighi Assoume, Matthew Blair
11:00 AM	GO-AGNS-22	<b>PROMOTING SMART CONTRACTS FOR SPECIALTY CROPS: EXAMINING FOOD BUYERS' WILLINGNESS TO PARTICIPATE IN BLOCKCHAIN SYSTEM</b> Devashish Bhandari*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Prabodh Illukpitiya
11:20 AM	GO-AGNS-23	<b>COFFEE CHAFF AS AN ALTERNATIVE SUBSTRATE COMPONENT FOR CONTAINER-GROWN WOODY ORNAMENTALS</b> Jacob Rawls*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Anthony Witcher
11:40 AM	GO-AGNS-24	<b>ESTABLISHMENT OF SELECTED COOL SEASON COVER CROPS FOR MIDDLE TENNESSEE NURSERIES</b> Grayson DeLay*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Anthony Witcher

---

---

## UNDERGRADUATE - ORAL PRESENTATION (INTERDISCIPLINARY)

---

*Presentations may be available from 1:00 PM - 4:00 PM*

1:00 PM	UGO-01	<b>HARVESTING SOLAR ENERGY USING PEROVSKITE PHOTOVOLTAIC CELLS FOR IMPROVED APPLICATIONS IN PORTABLE DEVICES</b> Elijah Rachell*, Alexis Bell*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Mohammad Habibi
1:20 PM	UGO-02	<b>COMPUTATION OF PER ATOM STRAIN IN CLASSICAL MOLECULAR DYNAMICS SIMULATIONS</b> Andrew Mikhaeil*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Ranganathan Parthasarathy
1:40 PM	UGO-03	<b>REVERSING THE ENTREPRENEURIAL CURSE: ASSESSING ISSUES FACED AS A SELF-EMPLOYED BUSINESS OWNER</b> Anarra Williams*. <i>Family and Consumer Sciences</i> , College of Agriculture. Advisor(s): LaPorchia Davis
2:00 PM	UGO-04	<b>SWEET SORGHUM YIELDS PER HARVESTS IN TENNESSEE SUMMER AND FALL OF 2022</b> Paris Johnson*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ahmad Aziz, Dilovan Yahya, Aron Felts
2:20 PM	UGO-05	<b>THE EFFECT OF CYSTEINE ON THE SYNTHESIS OF MELANINS</b> Jaila Winford*. <i>Chemistry</i> , College of Life Sciences. Advisor(s): Koen Vercruysse

---

*\*Denotes Presenters*



---

## UNDERGRADUATE - ORAL PRESENTATION (INTERDISCIPLINARY)

---

*Presentations may be available from 1:00 PM - 4:00 PM*

3:00 PM	UGO-06	<b>PAR-4 AND ITS EFFECTS ON CARDIOVASCULAR DISEASE</b> Sabrina Noel*, Ann Ebhouu, Ifezie Tooohukwu, Alfred Gbomina. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Carla Gardner-Jones, Evanageline Motley, Larry Alexander
3:20 PM	UGO-07	<b>WNT SIGNALING MODULATION IN CHRONIC WOUNDS</b> Sandra Noel*, Delany Bradford, Hannah Barge. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Sarika Saraswati
3:40 PM	UGO-08	<b>THE REDUCTION OF NITROUS OXIDE EMISSIONS WITH BIOCHAR APPLICATIONS USING SWITHGRASS</b> Sarena Noel*, Christina Kieffer, Avendananda Ray, Navneet Kaur. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Dafeng Hui

---

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

---

### POSTER PRESENTATION - THURSDAY, MARCH 30, 2023

---

#### FACULTY POSTER PRESENTATIONS - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

- |       |   |
|-------|---|
| FP-01 | <b>USE OF FLOWERING PLANTS FOR PEST MANAGEMENT IN VEGETABLE PRODUCTION</b><br>Dr. Kaushalya Amarasekare, <i>Agricultural Environmental and Sciences</i> , Tennessee State University,<br>Dr. Firuz Yuldashev, <i>Agricultural Environmental and Sciences</i> , Tennessee State University, Ms.<br>Yuna Gaire, <i>Agricultural Environmental and Sciences</i> , Tennessee State University   |
| <hr/> |   |
| FP-03 | <b>ECONOMIC IMPACT AND MANAGEMENT OF BOXWOOD BLIGHT DISEASE IN THE U.S. NURSERY INDUSTRY</b><br>Dr. Kumuditha Hikkaduwa Epa Liyanage, <i>Otis L. Floyd Research Center</i> , Tennessee State University, Bhawana Ghimire, <i>Otis L. Floyd Research Center</i> , Tennessee State University, Dr. Fulya Baysal-Gurel, <i>Otis L. Floyd Research Center</i> , Dr. Charlie Hall, <i>Department of Horticultural Sciences</i> , Texas A&M University, College Station, TX 77843 |
| <hr/> |   |
| FP-04 | <b>AN ANALYSIS OF SOCIOECONOMIC DIFFERENCES IN FARMLAND OWNERSHIP AND SUCCESSION IN TENNESSEE</b><br>Mrs. Mary Mafuyai, <i>Agricultural and Environmental Sciences</i> , Tennessee State University, and Dr. Kofi Britwum, <i>Agricultural and Environmental Sciences</i> , Tennessee State University  |
| <hr/> |   |
| FP-06 | <b>ELUCIDATING THE ROLE OF SFRP2 IN MODULATING ORGAN FIBROSIS</b><br>Dr. Sarika Saraswati* <i>Biological Sciences</i> , Tennessee State University, Ms. Delany Bradford, <i>Biological Sciences</i> , Ms. Meiling Melzer, Vanderbilt University Medical Center, Nashville, TN   |
- 

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### POSTER PRESENTATION - THURSDAY, MARCH 30, 2023

#### GRADUATE SCIENCES - AGRICULTURAL - ELLIOTT HALL AUDITORIUM

*Presentations may be available from 9:00 AM - 12:00 PM*

- |           |  |
|-----------|--|
| GP-GSA-01 | <b>IDENTIFICATION OF PROTEINS AND BIOLOGICAL PROCESSES AFFECTED BY USE OF ESSENTIAL OIL ON FRESH STRAWBERRIES</b><br>Kajol Pradhan*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou  |
| GP-GSA-02 | <b>GENOME-WIDE ASSOCIATION STUDY FOR ROOT SYSTEM ARCHITECTURE TRAITS IN FIELD SOYBEAN [GLYCINE MAX (L.) MERR.]</b><br>Pallavi Rathore*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ali Taheri, Korsi Dumenyo   |
| GP-GSA-03 | <b>COMPARATIVE TRANSCRIPTOMICS REVEALS SMALL RNA COMPOSITION AND DIFFERENTIAL MICRORNA RESPONSES UNDERLYING INTERFERON-MEDIATED ANTIVIRAL REGULATION IN PORCINE ALVEOLAR MACROPHAGES</b><br>Jiuyi Li*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Yongming Sang, Laura C. Miller |
| GP-GSA-04 | <b>JOHNSON GRASS AND PIGWEED ECOTYPES IN TENNESSEE COUNTIES FOR DNA PROFILING</b><br>Rafeq Jambi*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ahmad Aziz, Dilovan Yahya  |
| GP-GSA-05 | <b>SCREENING AND RESPONSE OF COMMERCIAL COWPEA [<i>Vigna unguiculata</i> (L.) Walp.] CULTIVARS TO LOW pH AND ALUMINUM TOXIC CONDITIONS.</b><br>Max Miller*. <i>Agricultural Sciences and Environmental</i> , College of Agriculture. Advisor(s): Matthew Blair, Hui Li   |
| GP-GSA-06 | <b>CONVENTIONAL MUNG BEAN PRODUCTION IN WEST TENNESSEE (SHELBY COUNTY)</b><br>Joshua Relyea*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Matthew Blair, Bruce Kirksey  |
| GP-GSA-07 | <b>UNDERSTANDING ABIOTIC SURFACE INTERACTION MECHANISMS OF NUCLEOTIDES ON SOIL MINERALS</b><br>Diptesh Banerjee*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Sudipta Rakshit, Ali Taheri   |
| GP-GSA-08 | <b>FABRICATION OF ANTIMICROBIAL PACKAGING MATERIALS USING NATURAL POLYMERS BY COAXIAL-ELECTROSPRAY</b><br>Zicheng Yi*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Zicheng Yi, Richard Mu, Ying Wu  |
| GP-GSA-09 | <b>'USER-INSPIRED' UV-C TECHNOLOGIES TO CONTROL MICROORGANISMS AT CHILLING STATIONS IN DEVELOPING COUNTRIES</b><br>Amritpal Singh*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ankit Patras, Brahmaiah Pendyala  |
| GP-GSA-10 | <b>PROJECT ACTIVITIES TO HELP LOCAL NURSERY AND GARDEN CENTERS TO MINIMIZE THE IMPACTS FROM THE COVID-19 PANDEMIC</b><br>Jun Guo*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou, Ouyang Lizhi, John Ricketts   |

*\*Denotes Presenters*

---

## POSTER PRESENTATION - THURSDAY, MARCH 30, 2023 *(Continued)*

---

### GRADUATE ENGINEERING - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

- |           |   |
|-----------|---|
| GP-GSE-01 | <b>DEVELOPMENT OF RECHARGEABLE CEMENT CONCRETE-BASED BATTERIES USING IRON AND NICKEL AS ANODE AND CATHODE MATERIALS</b><br>Mercy Sammy*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Lin Li, Shihui Liu                                    |
| GP-GSE-02 | <b>INVESTIGATION OF PHOTODEGRADATION OF IMIDACLOPRID AND THIAMETHOXAM IN AQUEOUS ENVIRONMENT UNDER UVA, UVB AND SUNLIGHT EXPOSURE</b><br>Sylvia Kirwa*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Lin Li, Roger Painter, Andrea Gardiner |
| GP-GSE-03 | <b>PRELIMINARY STUDY OF ENERGY STORAGE OF CONCRETE BATTERY BASED ON IRON ANODE-ZINC CATHODE DORCAS MACHIMU, SHIHUI LIU, LIN LI</b><br>Dorcas Machimu*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Shihui Liu, Lin Li                      |
- 

---

### GRADUATE SCIENCE - HEALTH SCIENCES - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

- |           |  |
|-----------|--|
| GP-GSH-01 | <b>A SYSTEMATIC REVIEW OF SCHOOL COUNSELOR CONTENT IN ACA</b><br>Pamela Pugh*, Pranathi Shankar*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha                         |
| GP-GSH-02 | <b>WHY GIVE BIRTH? AN EXPLORATORY STUDY OF THE DEVELOPMENT OF FEAR IN CHILDBIRTH</b><br>Imani Rivers*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha                    |
| GP-GSH-03 | <b>ASSESSING DIVISION I STUDENT-ATHLETE CAREER SELF-EFFICACY AS THEY PREPARE TO ENTER THE WORKFORCE</b><br>Korab Idrizi*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha |
| GP-GSH-04 | <b>AN EXPLORATION OF IMPOSTER SYNDROME AND ITS PSYCHOLOGICAL EFFECTS ON BLACK WOMEN IN COLLEGE</b><br>Kayla Womack*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha      |
| GP-GSH-05 | <b>MULTIRACIAL IDENTITY AND SELF-DISCLOSURE</b><br>Kiana McClintick*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha   |
| GP-GSH-06 | <b>SHIFTING THE NARRATIVE: FROM SURVIVING TO THRIVING</b><br>Reniece Martin*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha   |
| GP-GSH-07 | <b>INCLUSIVE CLASSROOMS AND PEER PERCEPTION OF STUDENTS WITH DISABILITIES</b><br>Jordyn Rosenblum*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha                       |
- 

*\*Denotes Presenters*

---

## POSTER PRESENTATION - THURSDAY, MARCH 30, 2023 *(Continued)*

---

### GRADUATE SCIENCE - HEALTH SCIENCES - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

- |           |  |
|-----------|--|
| GP-GSH-08 | <b>EXPLORING AFRICAN AMERICANS STUDENTS' PERCEIVED THERAPEUTIC OUTCOMES BASED ON THE RACE AND GENDER OF THEIR THERAPIST(S)</b><br>Rhea Harrison*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha   |
| GP-GSH-09 | <b>FAMILY FACTORS AND STRESS MANAGEMENT: HOW DOES FAMILY FACTORS AFFECT CHINESE INTERNATIONAL STUDENTS IN THE U.S NAVIGATING STRESS IN COLLEGE?</b><br>Fanchen Gao*. <i>Psychology</i> , College of Education. Advisor(s): Lauren Rocha  |
| GP-GSH-10 | <b>THE IMPACT OF WOMEN IN SPORT</b><br>Maya Howard*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences. Advisor(s): Jason Smith, Poliala Dickson, Robbie Cochrum, James Heimdal, Tim Jones  |
| GP-GSH-11 | <b>THE NEED FOR SPORT PSYCHOLOGY PROGRAMS AT THE COLLEGIATE LEVEL</b><br>Julia Koogler*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences. Advisor(s): Poliala Dickson, Jason Smith, Robbie Cochrum, James Heimdal, Tim Jones                            |
| GP-GSH-12 | <b>COACHING MINORS AT HBCUS</b><br>Bryce Daniet*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences. Advisor(s): Jason Smith  |
| GP-GSH-13 | <b>THE IMPACT OF ADULT PLAY ON QUALITY OF LIFE</b><br>Morgan Jackson*, Kaela Kreis*, De'Shaundra Larry*, Valeri Balistreri*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter   |
| GP-GSH-14 | <b>THE IMPORTANCE OF OCCUPATIONAL THERAPY IN CAREGIVERS' OCCUPATIONAL BALANCE AND GRIEF PROCESSING IN END-OF-LIFE CARE</b><br>Chardea Harrison*, Emily Bailor*, Jusin Brown*, Keyuna Bufford*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter |
| GP-GSH-15 | <b>IMPACTS ON MENTAL HEALTH FOR A TYPICAL ADULT WITH A SIBLING WITH A DISABILITY</b><br>Nardeen Abskharaun*, Jennifer Bumpous*, Chloe Hixson*, Briera Miles*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter                                  |
| GP-GSH-16 | <b>SUBSTANCE-USE ADDICTION: LINKS WITH SENSORY PREFERENCES AND INDIVIDUALS' AWARENESS OF THEIR SENSORY PATTERNS</b><br>Karina Speth*, Jennifer Sulcer*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter  |
| GP-GSH-17 | <b>PREFERRED TEACHING METHODS OF STUDENTS IN A MASTER OF OCCUPATIONAL THERAPY PROGRAM</b><br>Katie Bass*, Lauren Meyers*, Abby McCarthy*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter  |
| GP-GSH-18 | <b>EMERGING PRACTICE OT IN SPORTS</b><br>Erica Batchelor*, Lauryn Caruthers*, D'Arrikyia Fields*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter  |
| GP-GSH-19 | <b>IDENTIFYING A NEED FOR COPING SKILLS CLASSES IN COLLEGES TO IMPROVE QUALITY OF LIFE OUTCOMES</b><br>Brooke Bailey*, Monique Willoughby*. <i>Occupational Therapy</i> Occupational Therapy, College of Health Sciences. Advisor(s): Lisa Porter                                |

*\*Denotes Presenters*

---

## POSTER PRESENTATION - THURSDAY, MARCH 30, 2023 (Continued)

---

### GRADUATE SCIENCE - HEALTH SCIENCES - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

GP-GSH-20	<b>EXPLORING THE RELATIONSHIP BETWEEN MENTAL HEALTH EDUCATION AND CAREGIVER SELF-EFFICACY</b> Miciah Caruthers*, Madelaine Touzeau*, Arden Butler*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter
GP-GSH-21	<b>THE EFFECT OF AMPUTATION ON BODY IMAGE AND QUALITY OF LIFE</b> Ella Cannon*, Emma McClellan*, Kelsey Seitz*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter
GP-GSH-22	<b>A COMPARATIVE REVIEW OF THE EFFECTS OF CORTICOSTEROID INJECTIONS AND RESISTANCE EXERCISE ON WOMAC SCORES OF PATIENTS WITH KNEE OSTEOARTHRITIS</b> Mina Isaac*, Leilani Lee*, Dalin Parker*, Rebecca Pettross*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Ronald Barredo
GP-GSH-23	<b>SCREENING FOR PELVIC FLOOR MUSCLE DYSFUNCTION WITH A PRIMARY COMPLAINT OF LOW BACK PAIN IN OUTPATIENT PHYSICAL THERAPY SETTINGS</b> Rebecca Villpiano*, Emily Enoch*, Sarah Parsons*, Ashlyn Morrison*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Derek Charles
GP-GSH-24	<b>RETURN TO SPORTS ACL REHABILITATION IN MEN VS WOMEN: WHAT WORKS AND WHAT DOESN'T? A SYSTEMATIC REVIEW</b> Megan Tidwell*, Miranda Harmon*, Zack Hillis*, Maxwell Maloney*, James Young*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark
GP-GSH-25	<b>A SYSTEMATIC REVIEW: THE EFFECTS OF PREOPERATIVE PELVIC FLOOR MUSCLE TRAINING ON URINARY INCONTINENCE AFTER PROSTATECTOMY</b> Michael LaRue*, Peter Geroulis, Bryce Reed*, Ben Rosplock*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Marsha Bowman
GP-GSH-26	<b>SENSORY FEEDBACK EFFECTS ON LOWER EXTREMITY PHANTOM LIMB PAIN WITH MYOELECTRIC PROSTHESES: A SYSTEMATIC REVIEW</b> Caroline Edmonson*, Ryan Gant*, Andrew Merritt*, Caleb Wharton*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Karen Smith
GP-GSH-27	<b>ARE NEW GRADUATE PHYSICAL THERAPISTS PREPARED TO MANAGE PELVIC DYSFUNCTION?</b> Leilani Lee*, Thomas Richard*, Dillon Douglas. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Marsha Bowman
GP-GSH-28	<b>PAIN ATTITUDES AND BELIEFS OF DOCTORATE OF PHYSICAL THERAPY STUDENTS</b> Maxwell Ashcroft*, Zachary Richard*, Benjamin Sisco*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): David Lehman
GP-GSH-29	<b>OUTCOMES TO SPINAL FUSION AND ARTIFICIAL DISC REPLACEMENT SURGERIES IN THE CERVICAL SPINE: A SYSTEMATIC REVIEW</b> Ben Alden*, Megan Hoover*, Abby Howard*, Wyatt Walton*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Patricia King

*\*Denotes Presenters*

---

## POSTER PRESENTATION - THURSDAY, MARCH 30, 2023 (Continued)

---

### GRADUATE SCIENCE - HEALTH SCIENCES - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

- |           |  |
|-----------|--|
| GP-GSH-30 | <b>THE EXTENT TO WHICH THE RIGOR OF UNDERGRADUATE PREREQUISITE COURSES IS AN INDICATOR OF FIRST-YEAR SUCCESS IN A DOCTOR OF PHYSICAL THERAPY PROGRAM</b><br><br>Ulani Robinson*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark                                 |
| GP-GSH-31 | <b>3RD YEAR TENNESSEE STATE UNIVERSITY PHYSICAL THERAPY STUDENTS' PERCEPTIONS ON PIVOTING TO A HYBRID LEARNING ENVIRONMENT DURING THE COVID-19 PANDEMIC</b><br><br>Roy Etta*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Derek Charles                                    |
| GP-GSH-32 | <b>ARE PELVIC HEALTH PHYSICAL THERAPISTS READY FOR THE "OPTIMIZING POSTPARTUM OUTCOMES ACT OF 2022" (H.R. 8181)?</b><br><br>Kariya Jennings*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Marsha Bowman  |
| GP-GSH-33 | <b>EXPLORING CAB MEMBERS' PERCEIVED ROLES, NEEDS, AND SKILLS TO PROMOTE CANCER HEALTH EQUITY</b><br><br>J'la Jenkins*, Philip Morris. <i>Center for Prevention Research (CPR)</i> , Research and Sponsored Programs. Advisor(s): Rebecca Selove, Jennifer Erves, Leah Alexander, Karen Winkfield |
- 

---

### GRADUATE SCIENCE - LIFE SCIENCES - ELLIOTT HALL AUDITORIUM

---

*Presentations from 9:00 AM - 12:00 PM*

- |           |   |
|-----------|---|
| GP-GSL-01 | <b>WNT SIGNALING MODULATION IN CHRONIC WOUNDS</b><br><br>Hannah Barge*, Sandra Noel. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Sarika Saraswati   |
| GP-GSL-02 | <b>RESPONSE PATTERNS OF SIMULATED CORN YIELD AND SOIL NITROUS OXIDE EMISSION TO PRECIPITATION CHANGE</b><br><br>Navneet Kaur*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Dafeng Hui   |
| GP-GSL-03 | <b>DIBUTYLTIN STIMULATION OF TUMOR NECROSIS FACTOR A IN HUMAN IMMUNE CELLS: ROLE OF TOLL-LIKE RECEPTOR 4.</b><br><br>Latoya Daniel*, Aleshia Seaton-Terry. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen  |
| GP-GSL-04 | <b>HEXABROMOCYCLODODECANE (HBCD) INCREASES PRO-INFLAMMATORY CYTOKINES INTERLEUKIN 1 BETA (IL-1B) AND INTERLEUKIN 6 (IL-6) IN HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS</b><br><br>April Falconer-Turner*, Kameron Brooks, Eseoghene Ogaga. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen |
- 

*\*Denotes Presenters*



---

## POSTER PRESENTATION - THURSDAY, MARCH 30, 2023 *(Continued)*

---

### GRADUATE SCIENCE - LIFE SCIENCES - ELLIOTT HALL AUDITORIUM

---

*Presentations may be available from 9:00 AM - 12:00 PM*

GP-GSL-05 **ANTIBACTERIAL AGENT, TRICLOSAN (TCS), ALTERS THE PRODUCTION OF PRO-INFLAMMATORY CYTOKINE INTERLEUKIN 1 BETA FROM HUMAN IMMUNE CELLS: THE ROLE OF MITOGEN-ACTIVATED PROTEIN KINASES**  
Wendy Wilburn\*. *Chemistry*, College of Life and Physical Sciences. Advisor(s): Margaret Whalen

---

GP-GSL-06 **COMPARISON OF TLR4 AND TLR1/2 IN PENTACHLOROPHENOL INDUCED STIMULATION OF IL-1B IN HUMAN IMMUNE CELLS**  
Aleshia Seaton-Terry\*. *Chemistry*, College of Life and Physical Sciences. Advisor(s): Margaret Whalen

---

---

### UNDERGRADUATE POSTER - INTERDISCIPLINARY

---

*Presentations from 1:00 PM - 4:00 PM*

UP-01 **INDIVIDUAL MICROSPORE ISOLATION FROM SWEET SORGHUM CULTIVARS TOWARDS GENETIC ANALYSIS**  
Blake Wright\*. *Agricultural and Environmental Sciences*, College of Agriculture. Advisor(s): Ahmad Aziz, Dilovan Yahya

---

UP-02 **THE BENEFITS OF URBAN FORESTS IN TENNESSEE**  
Aria McElroy\*. *Agricultural and Environmental Sciences*, College of Agriculture. Advisor(s): Yajuan Chen

---

UP-03 **IMPACT OF COVID-19 IN AGRI-FOOD SYSTEM AND ITS ENVIRONMENTAL EFFECTS**  
Kerrington Howard\*. *Agricultural and Environmental Sciences*, College of Agriculture. Advisor(s): Prabodh Illukpitiya

---

UP-04 **K-12 SCHOOL STAKEHOLDERS' PHENOMENOLOGICAL EXPERIENCES WITH TRAUMA-INFORMED TRAINING**  
Kirsten Dillard\*. *Psychology*, College of Education. Advisor(s): Lauren Rocha, Yn'kioko Tillery

---

UP-05 **DESCRIPTIVE STATISTICS OF THE IMPACT OF CABLE RAILS SYSTEMS**  
Aaron Lamson\*. *Civil and Architectural Engineering*, College of Engineering. Advisor(s): Deo Chimba

---

UP-06 **THE ROLE OF P38 MAP-KINASES IN HBCD-INDUCED INCREASES IN IL-6 PRODUCTION IN HUMAN IMMUNE CELLS**  
Eseoghene Ogaga\*, April Falconer-Turner. *Chemistry*, College of Life and Physical Sciences. Advisor(s): Margaret Whalen

---

UP-07 **THE ROLE OF p44/42 MAP KINASE IN HEXABROMOCYCLODODECANE (HBCD)-INDUCED PRODUCTION OF INTERLEUKIN 6 (IL-6) IN HUMAN PERIPHERAL BLOOD MONONUCLEAR CELLS (PBMCs)**  
Kameron Brooks\*, April Falconer-Turner. *Chemistry*, College of Life and Physical Sciences. Advisor(s): Margaret Whalen

---

*\*Denotes Presenters*

---

**POSTER PRESENTATION - THURSDAY, MARCH 30, 2023** *(Continued)*


---

**UNDERGRADUATE POSTER - INTERDISCIPLINARY**


---

*Presentations may be available from 9:00 AM - 12:00 PM*

UP-08	<b>THE ROLE OF TLR4 IN PENTACHLOROPHENOL-INDUCED STIMULATION OF INTERLEUKIN 6 PRODUCTION BY HUMAN IMMUNE CELLS</b> Zinia Hunter*, Aleshia Seaton-Terry. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
UP-09	<b>TRIBUTYLTIN-INDUCED PRODUCTION OF TUMOR NECROSIS FACTOR A IN HUMAN IMMUNE CELLS INVOLVES TOLL-LIKE RECEPTOR 1/2</b> Sophia Fisher*, Meaghan Lewis. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
UP-10	<b>TOLL-LIKE RECEPTOR 4 CONTRIBUTES TO TRIBUTYLTIN STIMULATION OF</b> Meaghan Lewis*. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Margaret
UP-11	<b>ANALYZING ESTROGEN RECEPTOR RESPONSE TO BREASTS CANCER CELLS AT STIFFNESS RELATIVE TO THE BONE MARROW</b> Jada Lott*. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen, Julie Rhoades-Sterling
UP-12	<b>MPEMBA EFFECT ON NONAQUEOUS LIQUID: A STUDY OF NON-EQUILIBRIUM FACILITATED FREEZING RATE ENHANCEMENT</b> Alexander San-Marina*. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Tasneem Siddiquee

---

*\*Denotes Presenters*