

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - MONDAY, MARCH 28, 2022

#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 1 (G-AGSCI-1)

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

9:00 AM     A102    **A PRELIMINARY BREED EVALUATION OF SAVANNA-SIRED DOE PERFORMANCE COMPARED WITH KIKO-SIRED AND SPANISH-SIRED DOES IN A MEAT GOAT HERD.**

Megan Goolsby\*. *Institute for Agricultural Research (IAgR)*, College of Agriculture.

Advisor(s): Richard Browning, Emily Hayes

9:20 AM     A062    **SURVIVAL AND MOVEMENT PATTERNS OF REINTRODUCED ZOO-RAISED EASTERN HELLBENDERS**

Marley Machara\*. *Agricultural and Environmental Sciences*, College of Agriculture.

Advisor(s): William Sutton

9:40 AM     A093    **THE EFFECT OF EARLY FEEDING OF COPROCOCCUS EUTACTUS ON GROWTH PERFORMANCE OF GUINEA FOWL**

Morgan Roberts\*. *Agricultural and Environmental Sciences*, College of Agriculture.

Advisor(s): Samuel Nahashon, Thyneice Taylor

10:00 AM    A100    **INACTIVATION OF WATER BORNE PLANT PATHOGEN PHYTOPYTHIUM VEXANS USING UV-C LED IRRADIATION**

Bhawana Ghimire\*. *Otis L. Floyd Research Center*, College of Agriculture. Advisor(s): Fulya

Baysal-Gurel, Ankit Patras, Brahmaiah Pendyala

10:20 AM    A056    **BIOCHEMICAL ANALYSIS OF BACILLUS THURINGIENSIS ISOLATE IMC 8 IN PLANT DISEASE PROTECTION AND GROWTH PROMOTION IN TOMATO.**

Jamille Robinson\*. *Agricultural and Environmental Sciences*, College of Agriculture.

Advisor(s): Margaret Mmbaga, R. Ravi

**10:40 AM     BREAK**

11:00 AM    A020    **PHOTOSYNTHETIC RESPONSES OF SWITCHGRASS TO CO<sub>2</sub> CONCENTRATION AND LIGHT**

Christina Kieffer\*, FNU Navneet, Joshua Borlay. *Biological Sciences*, College of Life and Physical Sciences. Advisor(s): Dafeng Hui

11:20 AM    A044    **SINGLE CELL PROTEOMICS ANALYSIS OF TOMATO POLLEN MICROSPORE UNDER HEAT STRESS.**

Pyria Thapa\*. *Agricultural and Environmental Sciences*, College of Agriculture.

Advisor(s): Suping Zhou, Hui Li

11:40 AM    A051    **GENETIC SEGREGATION DETECTED THROUGH SINGLE NUCLEOTIDE POLYMORPHISMS OF SWEET SORGHUM MICROSPORES**

Dilovan Yahya\*, Aron Felts. *Agricultural and Environmental Sciences*, College of Agriculture. Advisor(s): Ahmad Aziz

---

## GRADUATE ENGINEERING and COMPUTER SCIENCE - SESSION 1 (G-ENGR)

---

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

9:00 AM     A001    **MACHINE LEARNING AND STATISTICAL EVALUATION OF HAZMAT RELATED CRASHES IN TENNESSEE**

Grace Mbiaji\*, Ethiopine Choping\*. *Civil and Architectural Engineering* , College of Engineering. Advisor(s): Deo Chimba

---

9:20 AM     A003    **TRAVEL TIME IMPACTS FROM CONVERTING HOV TO HOT LANES IN NASHVILLE METROPOLITAN AREA DURING MORNING RUSH HOURS**

Hellen Shita\*. *Civil and Architectural Engineering* , College of Engineering. Advisor(s): Deo Chimba

---

9:40 AM     A041    **STRATEGIC HARDWARE TROJAN TESTING WITH HIERARCHICAL TROJAN TYPES**

Satyaki Nan\*. *Computer Science* , College of Engineering. Advisor(s): Swastik Brahma

---

10:00 AM    A054    **EFFECT OF WIND INTENSITY, FORWARD SPEED, MINIMUM PRESSURE, AND TRACK CHANGE ON HURRICANE HARVEY STORM SURGE HINDCAST**

Madinah Shamsu\*. *Mechanical and Manufacturing Engineering* , College of Engineering. Advisor(s): Muhammad Akbar

---

10:20 AM    A071    **STRUCTURAL PHASE TRANSITION IN A SIMPLEX TENSEGRITY**

Armin Motadel\*, Kehinde Omotayo\*. *Civil and Architectural Engineering* , College of Engineering. Advisor(s): Ranganathan Parthasarathy

---

**10:40 AM                BREAK**

---

11:00 AM    A082    **A COMPARISON OF COMSOL AND PYTHON MODELS FOR PVDF BASED SURFACE ACOUSTIC WAVE (SAW) SENSORS WITH SIMULATED RESULTS**

Omari Paul\*, Akinwunmi Joaquim, Michael Ibezim, Dewayne Johnson, April Falconer. *Center of Excellence: Information Systems and Engineering Management* , Research and Sponsored Programs. Advisor(s): Richard Mu, Richard Mu, Frances Williams, Arend M. van der Zande

---

11:20 AM    A083    **ELECTROSPRAY DEPOSITION OF POLYVINYLIDENE FLUORIDE (PVDF) MICROPARTICLES: IMPACT OF SOLVENTS AND FLOW RATE**

Akinwunmi Joaquim\*, Omari Paul, Dewayne Johnson, Michael Ibezim, April falconer. *Center of Excellence: Information Systems and Engineering Management* , Research and Sponsored Programs. Advisor(s): Richard Mu, Richard Mu, Frances Williams, Nadya Mason

---

11:40 AM    A070    **HOMOGENIZATION-BASED OPTIMIZATION OF LATTICE STRUCTURE USING GRANULAR MICROMECHANICS APPROACH**

Kehinde Omotayo\*, Samal Aminashairi\*. *Civil and Architectural Engineering* , College of Engineering. Advisor(s): Ranganathan Parthasarathy

---

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - MONDAY, MARCH 28, 2022

#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 2 (G-AGSCI-2)

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

1:00 PM	A024	<b>SMALL SIGNALING PEPTIDES MEDIATE NODULATION AND NITROGEN ACQUISITION</b> Divya Jain*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Sonali Roy, Suping Zhou, Ali Taheri, Lena Maria Muller, Xiaofei Wang
1:20 PM	A026	<b>EFFECTS OF COOL SEASON COVER CROP ROOTS ON GERMINATION AND GROWTH OF TEST SPECIES ANNUAL RYEGRASS AND LETTUCE</b> Grayson DeLay*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Anthony Witcher
1:40 PM	A027	<b>EARLY SEASON MONITORING OF DROUGHT INDUCED PHYSIOLOGICAL CHANGES OF FLOWERING DOGWOODS IN CONTAINER PRODUCTION SYSTEM</b> Krishna Neupane*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Anthony Witcher
2:00 PM	A028	<b>EVALUATION OF FUNGICIDES AND BIOFUNGICIDES TO CONTROL PHYTOPHTHORA ROOT ROT AND RHIZOCTONIA ROOT ROT ON RED MAPLE</b> Madhav Parajuli*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
<b>2:20 PM</b>	<b>BREAK</b>	
2:40 PM	A030	<b>MANAGEMENT OF PHYTOPHTHORA ROOT ROT OF BOXWOOD USING BIOFUMIGANTS IN FIELD PRODUCTION</b> Sandhya Neupane*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
3:00 PM	A033	<b>IDENTIFICATION OF PROTEOMICS CHANGES ASSOCIATED WITH EPIGENETICS FOR ALUMINUM STRESS IN TOMATO</b> Candice Haymon-Gresham*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Suping Zhou
3:20 PM	A045	<b>PROTEOMICS ANALYSIS OF STRAWBERRY FRUITS EXPOSED TO ESSENTIAL OILS</b> Kajol Pradhan*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Suping Zhou
3:40 PM	A042	<b>EFFECT OF UV-C IRRADIATION ON SELECTED POLYPHENOLS AND VITAMINS IN A HIGHLY TURBID APPLE JUICE</b> Anita Scales*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ankit Patras, Fur-chi Chen

#### GRADUATE - LIFE AND PHYSICAL SCIENCES (G-LPSCI)

*Presentations from 1:00 PM - 3:40 PM*

1:20 PM	A058	<b>COLLECTION AND CONVERSION OF FOOD WASTE FOR VALUE-ADDED BIOPRODUCTS</b> Phyllicia Hemphill*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Joshua OHair, Xiaofei Wang
---------	------	---

1:40 PM	A025	<b>HIGH PRESSURE PASTEURIZATION OF STAPHYLOCOCCUS AUREUS AUGMENTED WITH MILD HEAT AND NISIN NISIN</b> Jyothi George*. <i>Cooperative Extension</i> , College of Agriculture. Advisor(s): Aliyar Fouladkhah
2:00 PM	A035	<b>A NOVEL PROCESS OF Pd-CATALYZED CROSS-COUPLING OF ACYL HALIDES AND ARYLTRIFLUOROBORATES</b> Mohammad Alsafwani*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Mohammad Al-masum
<b>2:20 PM</b>	<b>BREAK</b>	
2:40 PM	A036	<b>PALLADIUM-CATALYZED UNPRECEDENTED CROSS-COUPLING OF PHENOLS AND HALIDES FOR THE SYNTHESIS OF AROMATIC ETHERS</b> Reem Albeshy*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Mohammad Al-masum
3:00 PM	A037	<b>PD-CATALYZED CROSS COUPLING OF PHTHALIC ANHYDRIDE AND ORGANOTRIFLUOROBORATES FOR THE DIRECT AROYLATION REACTIONS</b> Grady Clopton*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s):
3:20 PM	A101	<b>EVALUATION AND DATA ANALYSIS OF SOL-GEL METHOD WITH ACIDS TO DETERMINE MOST EFFECTIVE SOL-GEL METHOD</b> Aniska Ramsay*. <i>Chemistry</i> , College of Life and Physical Sciences. Advisor(s): Joshua Moore

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - TUESDAY, MARCH 29, 2022

#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 3 (G-AGSCI-3)

*Presentations from 9:00 AM - 11:40 AM*

9:00 AM	A055	<b>EFFECT OF FOUR BACTERIAL ENDOPHYTES ON TOMATO BIOMASS PRODUCTION.</b> Peter Eyegheleme*, Jamille Robinson. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Margaret Mmbaga, Daniel Demissie
9:20 AM	A063	<b>IMPACT OF BOKASHI, PURPLE NON-SULFUR BACTERIA, AND COMPOST ON CLONALLY PROPAGATED CANNABIS SATIVA</b> Nicholas Davies*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Emmanuel Omondi, Matthew Blair, Bharat Pokharel, Mitchell Richmond
9:40 AM	A064	<b>POLLINATORS AND MONITORING OPTIONS FOR WINTER CANOLA (BRASSICA NAPUS L) IN TENNESSEE</b> Manasarobar Bhattarai*, Taqdeer Gill. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Jason de Koff, Firuz Yuldashev
10:00 AM	A066	<b>SWEET SORGHUM BIOFUEL TRAITS: THE JOURNEY FROM SEED TO MICROSPORE</b> Aron Felts*, Dilovan Yahya. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ahmad Aziz
<b>10:20 AM</b>	<b>BREAK</b>	

10:40 AM	A069	<b>DO DAY-NEUTRAL STRAWBERRY PLANTS RESPOND DIFFERENTLY TO NITRATE (NO<sub>3</sub>) VERSUS AMMONIUM (NH<sub>4</sub>) FORMS OF NITROGEN?</b> Sunil Gurung*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Dharma Pitchay
11:00 AM	A096	<b>USING CELL CULTURE SYSTEMS AND CRISPR-Cas9 GENOME-EDITING TECHNOLOGY TO INCREASE SEED PRODUCTION AND SUSTAINABLE VEGETABLE OIL YIELDS IN SOYBEAN</b> Gabriel Carrasquillo Roque*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Christine Ondzighi-Assoume, Matthew W. Blair
11:20 AM	A095	<b>UNRAVELING GENETIC AND BIOCHEMICAL MECHANISMS-INDUCED GROWTH-PROMOTING ENDOPHYTES INVOLVED IN CELL WALLS SYNTHESIS TO IMPROVE SORGHUM FOR SUSTAINABLE BIOENERGY SYSTEMS IN TENNESSEE</b> Adam Traore*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Christine Ondzighi-Assoume, Margaret Mmbaga

---

## GRADUATE - INTERDISCIPLINARY STUDIES (G-IDSTU)

---

*Presentations from 9:00 AM - 10:20 AM*

9:00 AM	A039	<b>ASSEMENT OF ECONOMIC IMPACT OF COVID-19 ON AGRICULTURE AND FOOD SYSTEM IN TENNESSEE</b> Kabirat Nasiru*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Prabodh Illukpitiya
9:20 AM	A060	<b>DOES TRAINING SOURCE AFFECT THE ADOPTION OF BEST MANAGEMENT PRACTICES OF INTEGRATED PEST MANAGEMENT IN SPECIALTY CROPS? FINDINGS FROM TENNESSEE.</b> Purushottam Dhungana*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Aditya Khanal, Kaushalya G. Amarasekare
9:40 AM	A081	<b>AGRITOURISM FOR SMALL FARMS: ASSESSING DEMAND AND SEASONALITY OF THE AGRITOURISM ATTRACTIONS ADOPTED BY FARM OPERATIONS IN TENNESSEE.</b> Michael Crawford*, Purushottam Dhungana. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Aditya Khanal
10:00 AM	A006	<b>THE COMBINATION OF ISCHEMIC COMPRESSION AND EXERCISE FOR IMPROVING PAIN PRESSURE THRESHOLD, PAIN INTENSITY, AND FUNCTIONAL RANGE OF MOTION IN ACTIVE AND LATENT TRIGGER POINTS OF THE LOWER EXTREMITY</b> Clarke Hyde*, Aya Melhem*, Sarah Lotshaw*, Joshua Wolfe*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Deborah Edmondson

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - TUESDAY, MARCH 29, 2022

#### UNDERGRADUATE - ENGINEERING AND COMPUTER SCIENCE - SESSION 1

##### (U-ENGR-1)

*Presentations from 1:00 PM - 2:40 PM*

1:00 PM	A067	<b>DESIGN OF A DUCTLESS HVAC SYSTEM WITH ERV FOR A RESIDENTIAL BUILDING IN ATLANTA, GEORGIA</b> Kamal Kamel*, Sherif Kamel*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Muhammad Akbar
1:20 PM	A002	<b>ANALYZING HAZMAT INCIDENTS IN TENNESSEE AND US</b> Anna Morrison*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
1:40 PM	A004	<b>EVACUATION OF CAMPUS LIKE POPULATION DURING EMERGENCY</b> Ethiopine Choping*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba, Grace Mbiaji
2:00 PM	A038	<b>EVALUATION OF OPERATIONAL DEFICIENCIES OF SIGNALIZED INTERSECTIONS AROUND TSU CAMPUS FOR EMERGENCE EVACUATION</b> Diana Cortez*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
2:20 PM	A059	<b>DESIGN OF PASSIVE FLOW SPLITTING MODULE FOR MICROFLUIDICS</b> Tesfaye Segni*, Amyra Black, Amari Meddling. <i>Mechanical and Manufacturing Engineering</i> ,

#### UNDERGRADUATE - INTERDISCIPLINARY STUDIES (U-IDSTU)

*Presentations from 1:00 PM - 2:40 PM*

1:00 PM	A061	<b>DH PROJECT: WHITE SUPREMACY: THE REOCCURRING PATTERN OF RACISM, SOCIAL INEQUALITY, AND INJUSTICE IN AMERICA</b> Terez Hill*. <i>Sociology</i> , College of Liberal Arts. Advisor(s): Edward Sanford
1:20 PM	A068	<b>PERCEIVED IMPACT OF STRESSORS ON BLACK ADOLESCENT FEMALE STUDENTS IN CENTRAL ALABAMA DURING THE ONSET OF COVID-19</b> Brittany Wiggins*. <i>Sociology</i> , College of Liberal Arts. Advisor(s): Roger Klomegah
2:20 PM	A009	<b>STUDY OF THE REACTION CONDITIONS AFFECTING THE PHYSIC-CHEMICAL PROPERTIES OF MELANINS.</b> Venise Govan*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Koen Vercruysse

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - WEDNESDAY, MARCH 30, 2022

#### UNDERGRADUATE - ENGINEERING AND COMPUTER SCIENCE - SESSION 2

(U-ENGR-2)

9:00 AM	A084	<b>FABRICATION OF SOLID AND CORE-SHELL PVDF MICROPARTICLES VIA ELECTROSPRAY</b> Dewayne Johnson*, Akinwunmi Joaquim, Omari Paul, Michael Ibezim, April Falconer. <i>Center of Excellence: Information Systems and Engineering Management</i> , Research and Sponsored Programs. Advisor(s): Richard Mu, Frances Williams, Nadya Mason
9:20 AM	A085	<b>POLYVINYLIDENE FLUORIDE (PVDF) MICROFIBERS SYNTHESIZED USING THE HIGH VOLTAGE ELECTROSPINNING TECHNIQUE</b> Michael Ibezim*, Omari Paul, Akinwunmi Joaquim, Dewayne Johnson, April Falconer. <i>Center of Excellence: Information Systems and Engineering Management</i> , Research and Sponsored Programs. Advisor(s): Richard Mu, Frances Williams, Nadya Mason
9:40 AM	A086	<b>ALIGNED NANOFIBERS OF PVDF AND THEIR APPLICATIONS</b> Antonio Moore*, Chibuikem Iheagwaram. <i>Center of Excellence: Information Systems and Engineering Management</i> , Research and Sponsored Programs. Advisor(s): Richard Mu, Virginia Lorenz, Eugene Collins, Akira Uedal
10:00 AM	A090	<b>DESIGN OF A COAXIAL 3D PRINTING NOZZLE FOR DIRECT WRITE EPOXY RESINS</b> Amairanny Espinosa*, Morgan Quates. Mechanical and Manufacturing Engineering, College of Engineering. Advisor(s): Landon Onyebueke, Lizhi Ouyang, Sitaram Aryal, Anne Munyasia
10:20 AM	A097	<b>OPTIMIZATION OF MICROCHANNEL GEOMETRY FOR SYNTHESIS OF POLYSTYRENE IN A MICROREACTOR USING COMSOL</b> Christopher Buford*, Alexis Bell. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Landon Onyebueke, Lizhi Ouyang, Grady Clopton, Junqin Hou
10:40 AM		<b>BREAK</b>
11:00 AM	A103	<b>DESIGN OF REGENERATIVE BRAKING CONTROL AND OPTIMIZING BATTERY RECHARGING IN ELECTRIC VEHICLES</b> Zhuri Winfree-Givens*, Maged Souryal*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering. Advisor(s): Mohammad Habibi

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### POSTER PRESENTATION - WEDNESDAY, MARCH 30, 2022

#### UNDERGRADUATE - ENGINEERING AND COMPUTER SCIENCE

*Presentations from 1:00 PM -2:00 PM*

1:00 PM	A007	<b>ANALYSIS OF FACTORS AFFECTING PEDESTRIAN AND BICYCLE CRASH FREQUENCY</b> Jose Portillo*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
---------	------	--



1:15 PM	A008	<b>USER EQUILIBRIUM ASSIGNMENT FOR FREIGHT TRUCK INTERMODAL CONNECTORS</b> Jeannine Mbabazi*. <i>Civil and Architectural Engineering</i> , College of Engineering. Advisor(s): Deo Chimba
1:30 PM	A104	<b>DYNAMIC VEHICLE CHARGING</b> Christian Robertson*, Joshua Campbell, Branden Currie. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Sagnika Ghosh
1:45 PM	A105	<b>DESIGN OF A SOLAR ENERGY SYSTEM WITH SMART CONTROLLER CAPABLE OF WEATHER PREDICTION AND ACTING AS A VIRTUAL POWER PLANT (VPP).</b> Richard Wiencek*, Cameron Fagan. <i>Electrical and Computer Engineering</i> , College of Engineering. Advisor(s): Sagnika Ghosh

*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 31, 2022

#### GRADUATE - AGRICULTURAL SCIENCE (G-AGSCI)

*Presentations from 9:00 AM – 12:15 PM*

9:00 AM	A049	<b>INFLUENCE OF SOIL AND FOLIAR APPLICATION OF FULVIC ACID ON YIELD PARAMETERS OF ORGANICALLY GROWN BELL PEPPERS (CAPSICUM ANNUUM L.) UNDER OPEN-FIELD CONDITIONS IN TENNESSEE</b> Pinky Kanabar*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Dilip Nandwani
9:15 AM	A053	<b>ENCAPSULATION OF CBD OIL USING NATURAL POLYMERS BY FREEZE DRYING TO MODULATE GUT MICROBIOTA AND ENHANCE GUT HEALTH</b> Jerel Crew*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ying Wu
9:30 AM	A089	<b>SURFACE COMPLEXATION MECHANISM OF LACCASE ON HEMATITE: AN IN-SITU ATR-FTIR STUDY</b> Avedananda Ray*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Sudipta Rakshit
9:45 AM	A091	<b>EFFECTS OF MYCORRHIZAL NETWORK ON OVERSTORY TREE GROWTH IN SOUTHEASTERN FORESTS</b> Rebekah Long*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Bharat Pokharel
10:00 AM	A029	<b>EFFECT OF SOLITARY AND COMBINED USE OF COVER CROPS ON SOILBORNE DISEASE SUPPRESSIVENESS IN WOODY ORNAMENTAL NURSERY PRODUCTION SYSTEMS</b> Madhav Parajuli*, Milan Panth. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
10:15 AM	A092	<b>PHENOLOGY OF FLATHEADED BORER DEVELOPMENTAL STAGES IN RED MAPLE NURSERY CROPS</b> Aubree Morrison*. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Jason Oliver, Karla Adesso, Anthony Witcher, Cindy Perkovich, William Klingeman



10:30 AM	A013	<b>ANTIMICROBIAL TRICLOSAN (TCS) INCREASES PRODUCTION OF INTERLEUKIN 1 BETA (IL-1<math>\beta</math>) IN HUMAN IMMUNE CELLS</b> Wendy Wilburn*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
<b>10:45 AM</b>	<b>BREAK</b>	
11:00 AM	A014	<b>EFFECTS OF DIBUTYLTIN EXPOSURES ON TRANSLATION REGULATORY FACTOR eIF4B IN HUMAN IMMUNE CELLS</b> Amanda Ruff*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
11:15 AM	A019	<b>HOW MUCH IS SOIL NITROUS OXIDE EMISSION REDUCED WITH BIOCHAR APPLICATION? AN EVALUATION OF META-ANALYSES</b> FNU Navneet*, Christina Kieffer. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Dafeng Hui
11:30 AM	A040	<b>QUERCETIN ENHANCES THE ACTIVITY OF CYTOCHROME P450 3A4 (CYP3A4) IN POOLED HUMAN LIVER MICROSOMES (HLMs)</b> Iman McCrary*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): William Boadi
11:45 AM	A048	<b>EFFECTS OF DENSITY, VARIETY, AND THEIR INTERACTION ON MUNGBEAN ECOPHYSIOLOGY AND YIELD</b> Jaekedah Christian*, Soroush Moghaddam, Aisha Touray, FNU Navneet, Christina Kieffer. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Dafeng Hui, Prabodh Illukpitiya
12:00 PM	A050	<b>THE OXYGEN LEVEL IN CHICK EMBRYO DURING EARLY DEVELOPMENT</b> Roud Alamri*, Terrill Wakefield, Erin Clark. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Xiaofei Wang

\* Denotes Presenter

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 31, 2022

#### GRADUATE - HEALTH SCIENCE -SESSION 1 (G-HSCI-1)

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

9:00 AM	A034	<b>COMPARING THE ACCURACY OF THREE DIFFERENT TRACK APP IN COLLEGE STUDENT ATHLETE</b> Cortlin Scales*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences. Advisor(s): Yoseph Mamo
9:15 AM	A099	<b>THE EFFECT OF COMMUNITY-LEVEL POVERTY ON RATES OF TEENAGE PREGNANCY</b> Nikayla Cobb*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences. Advisor(s): Poliala Dickson, Dr. James Heimdal
10:00 AM	A073	<b>EFFECTIVENESS OF AQUATIC THERAPY ON IMPROVING QUALITY OF LIFE FOR GERIATRIC INDIVIDUALS POST-STROKE</b> LaDonna Caston*, Elley Allison, Christopher Beard, Elijah Jenkins, Julie Knapp. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter

10:30 AM	A075	<b>CLINICIANS' PERCEPTIONS OF TREATMENT FOR SCHIZOPHRENIA: SENSORY-BASED THERAPY OR MEDICATION</b> Sydney Hill*, Alexa Almond, Kelsie Moosmann, Sara Boggs. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter
11:00 AM	A076	<b>EFFECTS OF CLASS-WIDE SENSORY-BASED INTERVENTION ON PEER ACCEPTANCE OF STUDENTS RECEIVING SUPPORT SERVICES</b> Kelly Givens*, Amber Oliveri, Sarah Singleton. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter
11:15 AM	A077	<b>COMPARING POSITIVE REINFORCEMENT AND SENSORY BASED APPROACH: PRODUCING POSITIVE CLASSROOM BEHAVIORS FOR CHILDREN WITH</b> Jamia Pennington*, Sandra Dicks, Kayla Pendleton. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Lisa Porter

\* Denotes Presenter

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 31, 2022

#### GRADUATE - HEALTH SCIENCE - SESSION 2 (G-HSCI-2)

*Presentations from 1:00 PM – 3:45 PM*

1:00 PM	A098	<b>A POLICY BRIEF ON THE CIVIL RIGHTS ACT OF 1964 IN THE PUBH 5110 CLASS</b> Kendra Yokley*. <i>Public Health, Healthcare Administration and Health Sciences</i> , College of Health Sciences. Advisor(s): Elizabeth Brown
1:15 PM	A005	<b>IS THE USE OF ORAL CONTRACEPTIVE BENEFICIAL TO FEMALE ATHLETES IN THE PREVENTION OF ANTERIOR CRUCIATE LIGAMENT INJURY?</b> Mia Faragalli*, Kara Taylor, Abi Welch, Edilberto Raynes. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Edilberto Raynes
1:30 PM	A018	<b>A SYSTEMATIC REVIEW ON THE EFFECTS OF MAXIMALLY CUSHIONED RUNNING SHOES AND GROUND REACTION FORCES</b> Katlyn Council*, Dillon Douglass, Seth McGinnis, lukus wallace. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Derek Charles
1:45 PM	A031	<b>ARE NEW GRADUATE PHYSICAL THERAPISTS PREPARED TO TREAT PELVIC DYSFUNCTION?</b> LeiLani Lee*, Dillon Douglas, Thomas Richard. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Marsha Bowman
2:00 PM	A032	<b>COMPARING THE EFFECT OF BLOOD FLOW RESTRICTION TRAINING IN PEOPLE UNDER THE AGE OF 40 VERSUS OVER THE AGE OF 40 AND IN MALES VERSUS FEMALES.</b> Scott Reaves*, Cathleen Kirkland, Patrick Oravetz, Richard Thomas. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark
2:15 PM	A046	<b>A SYSTEMATIC REVIEW OF LITERATURE: THE REPORTED EFFICACY OF AVAILABLE TREATMENT INTERVENTIONS FOR PEDIATRIC DAYTIME URINARY INCONTINENCE - WITH A FOCUS ON GIGGLE INCONTINENCE</b> Stephanie Deines*, Jordon Greer, Ann Hajec, Sean Harper, Taylor Tolleson. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Marsha Bowman

2:30 PM	A057	<b>BEST PRACTICES OF EMERGING INTERVENTIONS USED TO IMPROVE WALKING ABILITY IN ADULT ACUTE/SUBACUTE STROKE: A SYSTEMATIC</b> Matthew Black*, Casey Kennedy, Carlo Quintanilla, Andrew Sanderson, Derek Smith. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Karen Smith
<b>2:45 PM</b>	<b>BREAK</b>	
3:00 PM	A078	<b>USING EMOTIONAL INTELLIGENCE ASSESSMENT IN THE DOCTOR OF PHYSICAL THERAPY (DPT) ADMISSIONS PROCESS</b> Christine Khalil*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): David Lehman
3:15 PM	A088	<b>PHYSICAL THERAPY AND TRANSGENDER HEALTH</b> Beshoy Ibrahim*, Jessica Carlson, Greice de Sa, Nick Lauren, Ana Villalva. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): David Lehman
3:30 PM	A011	<b>THE ROLE OF TLR4 IN PENTACHLOROPHENOL STIMULATION OF IL-1<math>\beta</math> PRODUCTION IN HUMAN IMMUNE CELLS</b> Aleshia Seaton-Terry*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen

\* Denotes Presenter

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 31, 2022

#### UNDERGRADUATE - LIFE AND PHYSICAL SCIENCES

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

1:00 PM	A094	<b>IMPLEMENTING A TOBACCO USE PREVENTION MEDIA LITERACY PROGRAM: LESSONS LEARNED</b> Neriah Alexander*. <i>Center for Prevention Research (CPR)</i> , Research and Sponsored Programs. Advisor(s): Rebecca Selove
1:15 PM	A022	<b>REGIONAL ROSTROCAUDAL COMPARISON OF CALBINDIN AND CALRETININ IN THE AUDITORY CORTEX</b> Rodney McCracken*. <i>Psychology</i> , College of Education. Advisor(s): Lisa de la Mothe
1:30 PM	A010	<b>STUDY OF THE REACTION CONDITIONS AFFECTING THE PHYSIC-CHEMICAL PROPERTIES OF MELANINS.</b> Jaila Winford*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Koen Vercruysse
1:45 PM	A012	<b>EFFECTS OF HEXABROMOCYCLODODECANE (HBCD) EXPOSURES ON INTERLEUKIN 6 (IL-6) PRODUCTION IN HUMAN MONOCYTE-DEPLETED PERIPHERAL BLOOD MONONUCLEAR CELLS (MD-PBMCs)</b> Kameron Brooks*, April Falconer-Turner. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
2:00 PM	A015	<b>LIPID PEROXIDES (LPs) AND GLUTATHIONE (GSH) IN POOLED LIVER MICROSOMES (HLMs) FOLLOWING EXPOSURE TO FLAVONOIDS</b> Mohamed Mohamed*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): William Boadi

2:15 PM	A016	<b>LIPID PEROXIDES AND GLUTATHIONE LEVELS IN POOLED HUMAN LIVER MICROSOMES (HLMs) FOLLOWING EXPOSURE TO QUERCETIN.</b> Walter Cannon*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): William Boadi
2:30 PM	A017	<b>PARTICIPATION OF TOLL-LIKE RECEPTORS IN TRIBUTYLtin-INDUCED INCREASES IN INTERLEUKIN 6 PRODUCTION BY HUMAN IMMUNE CELLS.</b> Toran Kirkland*, Aliyah Alcala. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
<b>2:45 PM</b>		<b>BREAK</b>
3:00 PM	A021	<b>TOLL-LIKE RECEPTOR ACTIVATION IN TRIBUTYLtin-INDUCED INCREASES IN INTERLEUKIN 1B PRODUCTION BY HUMAN IMMUNE CELLS</b> Brooke Osborne*, Aliyah Alcala. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
3:15 PM	A023	<b>EFFECTS OF DIBUTYLtin EXPOSURES ON TRANSLATION REGULATORY FACTOR S6 IN HUMAN IMMUNE CELLS</b> Meaghan Lewis*, Amanda Ruff. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen
3:30 PM	A087	<b>WNT SIGNAL MODULATION IN CHRONIC WOUNDS</b> Ashanti Mitchell*, Karrington Powell. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Sarika Saraswati
3:45 PM	A043	<b>THE SGLT2 INHIBITOR CANAGLIFLOZIN REDUCES ANDROGEN RECEPTOR EXPRESSION AND NUCLEAR LOCALIZATION OF BETA-CATENIN IN HUMAN PROSTATE CANCER CELLS</b> Kalkidan Bekele*. <i>Biological Sciences</i> , College of Life and Physical Sciences. Advisor(s): Margaret Whalen, LaMonica Stewart, Ph.D.

*\* Denotes Presenter*

