

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - MONDAY, MARCH 22, 2021

#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 1

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

- 9:00 AM A101 **EVALUATION, IDENTIFICATION, AND CHARACTERIZATION OF NOVEL GROWTH-PROMOTING BACTERIAL ENDOPHYTES AS ECO-FRIENDLY PRODUCTS TO ENHANCE SORGHUM GROWTH AND BIOMASS TRAITS**  
Adam Traore\*. *Agricultural and Environmental Sciences*, College of Agriculture Advisor(s): Christine Ondzighi-Assoume, Margaret Mmbaga
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- 9:20 AM A106 **ON UNDERSTANDING THE ADSORPTION MECHANISMS OF SELECTED MICRONUTRIENTS ON TENNESSEE SOIL: A MACROSCOPIC AND IN SITU ATTENUATED TOTAL REFLECTANCE FOURIER TRANSFORM INFRARED SPECTROSCOPIC STUDY**  
Avedananda Ray\*. *Agricultural and Environmental Sciences*, College of Agriculture Advisors(s): Sudipta Rakshit, Bharat Pokharel
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- 9:40 AM A107 **INCREASING SEED PRODUCTION AND SUSTAINABLE VEGETABLE OIL YIELDS THROUGH CELL CULTURE SYSTEMS AND CRISPR-CAS9 GENOME-EDITING TECHNOLOGY IN SOYBEAN**  
Gabriel Carrasquillo\*. *Agricultural and Environmental Sciences*, College of Agriculture Advisors(s): Christine Ondzighi-Assoume
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- 10:00 AM A20 **COVER CROP USAGE FOR THE SUSTAINABLE MANAGEMENT OF SOILBORNE DISEASES IN WOODY ORNAMENTAL NURSERY PRODUCTION SYSTEM**  
Madhav Parajuli\*, Milan Panth. *Otis L. Floyd Research Center*, College of Agriculture Advisor(s): Fulya Baysal-Gurel
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- 10:20 AM A22 **POSTHARVEST DISEASE CAUSED BY FUSARIUM COMMUNE: A NEW THREAT TO ZINNIA CUT FLOWER PRODUCTION**  
Ravi Bika\*, Farhat Avin. *Otis L. Floyd Research Center*, College of Agriculture Advisor(s): Fulya Baysal-Gurel
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- 10:40 AM A23 **MANAGEMENT OF PHYTOPHTHORA ROOT ROT OF BOXWOOD USING FUNGICIDES, BIOFUNGICIDES, FERTILIZERS AND HOST PLANT DEFENSE INDUCERS IN FIELD CONDITIONS**  
Sandhya Neupane\*, Terri Simmons. *Otis L. Floyd Research Center*, College of Agriculture Advisor(s): Fulya Baysal-Gurel

#### GRADUATE ENGINEERING and COMPUTER SCIENCE - SESSION 1

*Presentations from 9:00 AM - 10:40 AM*

- 9:00 AM A102 **TESTING A SYSTEM TO STUDY THE ELECTROCHEMICAL AND STRUCTURAL PROPERTIES OF IONIC LIQUIDS**  
Jonathan Reynolds\*. *Office of the Dean of Engineering*, College of Engineering Advisor(s): Samuek K Hargrove, Jerzy Chlistunoff, Tommy Rockward, Lizhi Ouyang, Landon Onyebueke
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- 9:20 AM A109 **HOMOGENIZATION-BASED OPTIMIZATION OF LATTICE STRUCTURES USING GRANULAR MICROMECHANICS APPROACH**  
Yahaira Corona\*. *Civil and Architectural Engineering*, College of Engineering Advisor(s): Ranganathan Parthasarathy

9:40 AM	A110	<b>TWINNING-LIKE BEHAVIOR IN TENSEGRITY STRUCTURES</b> Kehinde Omotayo*, Armin Motadel. <i>Civil and Architectural Engineering</i> , College of Engineering Advisor(s): Ranganathan Parthasarathy, Srinivasan Sivakumar
10:00 AM	A16	<b>EFFECTS OF LASER POWDER BED FUSION (LBPF) PROCESS PARAMETERS ON ADDITIVE MANUFACTURED PARTS</b> Anne Munyasia*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Abiodun Fasoro, Lee-Hyun Keel
10:20 AM	A17	<b>IN-SITU ADDITIVE MANUFACTURING MONITORING USING COMPLEMENTARY METAL OXIDE SEMICONDUCTOR (CMOS) TECHNOLOGY</b> Ayodeji Fawole*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Abiodun Fasoro, Lee-Hyun Keel

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*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - MONDAY, MARCH 22, 2021

#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 2

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

1:00 PM	A24	<b>EFFICACY OF FUNGICIDES AND BIOFUNGICIDES TO MANAGE PHYTOPHTHORA CINNAMOMI UNDER DROUGHT CONDITION</b> Krishna Neupane*. <i>Otis L. Floyd Research Center</i> , College of Agriculture Advisor(s): Fulya Baysal-Gurel
1:20 PM	A33	<b>DEVELOPMENT OF A COVER CROP SYSTEM FOR MANAGEMENT OF FLATHEADED BORERS IN RED MAPLE PRODUCTION</b> Axel Gonzalez*. <i>Otis L. Floyd Research Center</i> , College of Agriculture Advisor(s): Karla Adesso, Jason Oliver
1:40 PM	A34	<b>IDENTIFICATION OF MELON GENOTYPES FOR BREEDING FOR RESISTANCE AGAINST BACTERIA WILT DISEASE</b> Bimala Acharya*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Korsi Dumenyo, Ali Taheri
2:00 PM	A38	<b>SWEET SORGHUM MICROSPORES' ISOLATION AND WHOLE GENOME AMPLIFICATIONS FOR MOLECULAR MARKERS' SEGREGATION</b> Dilovan Yahya*, Aaron Felts. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Ahmad Aziz
2:20 PM	A40	<b>KINETICS CHARACTERIZATION OF SPECIFIC MONOCLONAL ANTIBODIES TARGETING CAMPYLOBACTER FLAGELLIN PROTEIN USING SURFACE PLASMON RESONANCE</b> Shreya Hamal*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Fur-Chi Chen
2:40 PM	A41	<b>EFFECT OF TEMPERATURE ON GERMINATION RATE IN WINTER CANOLA</b> Taqdeer Gill*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Jason deKoff

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

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

1:00 PM	A49	<b>PREDICTING THE THERMODYNAMIC STABILITY OF PEROVSKITE STRUCTURE THROUGH MACHINE LEARNING</b> Moyinoluwa Eniola*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Sitalar Aryal, Lizhi Ouyang
1:20 PM	A54	<b>AB INITIO SIMULATION OF THE ELECTRONIC STRUCTURE PROPERTIES OF 1-BUTYL-3METHYLIMIDAZOLIUM HEXAFLUOROPHOSPHATE (BMIM PF6) IONIC LIQUID</b> Oluwatosin Fagbuyi*, Olurotimi Joaquim. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Lizhi Ouyang, Sitalar Aryal
1:40 PM	A55	<b>MODELING/ SIMULATION OF FLUID DYNAMICS OF MICROFLUIDS OF DIFFERENT VISCOSITIES IN MICROCHANNELS</b> William Montgomery*. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Lizhi Ouyang, Sitalar Aryal

2:00 PM	A56	<b>AN AB-INITIO STUDY OF SOLID SOLUTIONS CREATED BY COMBINING LEAD-FREE AB03 TYPE PIEZOELECTRIC MATERIALS USING VIENNA AB-INITIO SIMULATION PACKAGE (VASP)</b> Olurotimi Joaquim*, Oluwatosin Fagbuyi. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Lizhi Ouyang, Sitaral Aryal
2:20 PM	A67	<b>OPEN INTELLIGENT UAV PLATFORM</b> Yves Siakam*, Emmanuel Safari. <i>Electrical and Computer Engineering</i> , College of Engineering Advisor(s): Yi Chung Chen

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*\*Denotes Presenters*

## PRESENTATION SCHEDULES

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### ORAL PRESENTATION - TUESDAY, MARCH 23, 2021

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#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 3

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

9:00 AM	A43	<b>ASSESSING THE EFFECT OF WINTER CANOLA VARIETIES ON WINTER CANOPY COVER AND WINTER MORTALITY</b> Manasarobar Bhattarai*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Jason de Koff
9:20 AM	A46	<b>CARBON NANO-DOTS AS A NOVEL TOOL FOR DELIVERY OF FOREIGN DNA AND MICROBIAL TRANSFORMATION</b> Anju Pandey*, Asmita Devkota. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Ali Taheri, Korsi Dumenyo
9:40 AM	A53	<b>GENOME EDITING TO IMPROVE TOMATO (SOLANUM LYCOPERSICUM) TOLERANCE TO ALUMINUM TOXICITY</b> Jesse Potts*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Suping Zhou, Hui Li, Sonali Roy
10:00 AM	A57	<b>MASS ISOLATION AND CRYOPRESERVATION OF SWEET SORGHUM MICROSPORES FOR CELL CULTURING</b> Aron Felts*, Dilovan Yahya. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Ahmad Aziz
10:20 AM	A61	<b>SOYBEAN ROOT HAIRS DEVELOPMENT</b> Asmita Devkota*, Anju Pandey. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Ali Taheri, Korsi Dumenyo
10:40 AM	A63	<b>WEED CONTROL IN CUTTING PROPAGATION USING HERBICIDES AND</b> Isha Poudel*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Anthony Witcher

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#### GRADUATE - INTERDISCIPLINARY STUDIES

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

9:00 AM	A29	<b>AN EXPLORATORY STUDY ON THE PERSPECTIVES OF HIGHER EDUCATION FACULTY REGARDING EFFECTIVE LEADERSHIP STYLES DURING A TIME OF CRISIS</b> Sandra Bogard*. <i>Education Leadership</i> , College of Education Advisor(s): Terrance McNeil
9:20 AM	A39	<b>SURVIVING IN THE FITNESS INDUSTRY DURING THE COVID-19: THE APPLICATION OF SPORT ENTREPRENEURSHIP</b> Michael Black*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences Advisor(s): Mamo Yoseph
9:40 AM	A68	<b>EMPLOYMENT MISCLASSIFICATION: VARIATIONS IN POLICY AND THE DIFFUSION OF PENALTY LAWS ACROSS U.S. STATES</b> Robert Marioni*. <i>Public Administration</i> , College of Public Service Advisor(s): Meg Streams

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10:00 AM A81 **ASSESSING MOTIVATION, PERCEIVED SURVIVAL RISK, AND ENTREPRENEURSHIP KNOWLEDGE: A CASE FROM SMALL AGRICULTURAL ENTREPRENEURS IN TENNESSEE**  
Michael Crawford\*, Reginald Holland. *Agricultural and Environmental Sciences*, College of Agriculture Advisor(s): Aditya Khanal

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10:20 AM A82 **EXAMINING THE ADOPTION OF AGRITOURISM AS ALTERNATIVE FARM ENTERPRISE IN TENNESSEE: WHO ARE THE ADOPTERS?**  
Reginald Holland\*, Renu Ojha. *Agricultural and Environmental Sciences*, College of Agriculture Advisor(s): Aditya Khanal

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**10:40 AM BREAK**

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11:00 AM A83 **EXAMINING THE ADOPTION OF BEST MANAGEMENT PRACTICES BY AGRITOURISM OPERATIONS IN TENNESSEE: WHAT, WHO, AND WHERE?**  
Renu Ojha\*, Michael Crawford, Sudip Adhikari. *Agricultural and Environmental Sciences*, College of Agriculture Advisor(s): Aditya Khanal

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11:20 AM A87 **PERCEIVED BUSINESS RISK AND SAVING BEHAVIOR OF SMALL FARM BUSINESS HOUSEHOLDS: AN EMPIRICAL ANALYSIS FROM TENNESSEE**  
Sudip Adhikari\*, Renu Ojha. *Agricultural and Environmental Sciences*, College of Agriculture Advisor(s): Aditya Khanal

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11:40 AM A93 **FACTORS LIMITING THE MARKETING OF LOCAL FOOD IN TENNESSEE**  
Blessing Ajumobi\*. *Agricultural and Environmental Sciences*, College of Agriculture Advisor(s): Enefiok Ekanem, Mary Mafuyai

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*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### ORAL PRESENTATION - TUESDAY, MARCH 23, 2021

#### GRADUATE - AGRICULTURAL SCIENCES - SESSION 4

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

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| 1:00 PM | A69 | <b>DEVELOPMENT AND CHARACTERIZATION OF ELECTROSPRAY STARCH / YELLOW MUSTARD MUCILAGE COATINGS FOR THE PRESERVATION OF STRAWBERRIES</b><br>Anto Pradeep Raja Charles*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture<br>Advisor(s): Ying Wu, Richard Mu, Fur - Chi Chen, Agnes Kilonzo-Nthenge                     |
| 1:20 PM | A71 | <b>EFFECT OF THE NOVEL POLYSACCHARIDE ON THE MICROENCAPSULATION OF ESSENTIAL OIL AND POLYPHENOLS USING A SPRAY-DRYING METHOD</b><br>Haona Bao*, Anto Pradeep Raja Charles. <i>Agricultural and Environmental Sciences</i> , College of Agriculture<br>Advisor(s): Ying Wu, Agnes Kilonzo-Nthenge, Fur-Chi Chen, Samule Nahashon, Dafeng Hui |
| 1:40 PM | A75 | <b>PREVALENCE AND SPATIAL VARIATION OF ANTIMICROBIAL-RESISTANT COMMENSAL BACTERIA IN POULTRY AND CATTLE FARMS</b><br>Maureen Nzomo*. <i>Family and Consumer Sciences</i> , College of Agriculture Advisor(s): Agnes Kilonzo-Nthenge   |
| 2:00 PM | A91 | <b>ECONOMIC POTENTIAL FOR BIOMASS SORGHUM AS A BIOENERGY FEEDSTOCK IN SOUTHERN REGION</b><br>Kabirat Nasiru*, Steven Kennedy. <i>Agricultural and Environmental Sciences</i> , College of Agriculture<br>Advisor(s): Prabodh Illukpitiya  |
| 2:20 PM | A98 | <b>THERMAL ASSISTED HIGH-PRESSURE PROCESSING OF THREE MICROBIAL SPORES IN PRESENCE OF NISIN, LYSOZYME, LACTIC ACID, AND CITRIC ACID IN DEIONIZED WATER AND A FOOD VEHICLE</b><br>Sadiye Aras*. <i>Cooperative Extension</i> , College of Agriculture Advisor(s): Aliyar Fouladkhah  |
| 2:40 PM | A99 | <b>BIOFILM FORMATION OF WILD-TYPE AND RIFAMPICIN-RESISTANT O157 AND NON-O157 SHIGA TOXIN-PRODUCING ESCHERICHIA COLI AND THEIR INACTIVATION BY BACTERICIDAL COMPOUNDS</b><br>Sabrina Wadood*. <i>Cooperative Extension</i> , College of Agriculture Advisor(s): Aliyar Fouladkhah  |

#### GRADUATE - LIFE SCIENCES

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

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| 1:00 PM | A25 | <b>INHIBITION OF THE SPECTRAPLAKIN PROTEIN MICROTUBULE ACTIN CROSSLINKING FACTOR 1 SENSITIZES GLIOBLASTOMAS TO RADIATION</b><br>Kala Bonner*. <i>Biological Sciences</i> , College of Life Sciences Advisor(s): Quincy Quick               |
| 1:20 PM | A42 | <b>COMBINED CURCUMIN AND LUTEOLIN SYNERGISTICALLY SUPPRESSES GROWTH OF COLON CANCER CELLS</b><br>Rukayat Aromokeye*. <i>Family and Consumer Sciences</i> , College of Agriculture Advisor(s): Hongwei Si                                   |
| 1:40 PM | A58 | <b>GROWTH EFFECTS OF TUMORIGENIC CELLS EXPOSED TO CONCENTRATIONS OF EXTRACTS OF THE PLANT FRANKINCENSE</b><br>Sarah Saleh*, Imani Jordan, Kierstan Tate. <i>Biological Sciences</i> , College of Life Sciences<br>Advisor(s): Elbert Myles |

2:00 PM    A59    **THE CYTOTOXIC ACTIVITY OF THYMUS VULGARIS EXTRACT ON CANCER CELL LINES, AND ANTIMICROBIAL ACTIVITY STRAINS OF PATHOGENIC**  
Ashwaq Albeladi\*, Alanis Onwu. *Biological Sciences*, College of Life Sciences Advisor(s):  
Elbert Myles

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2:20 PM    A8    **TOLL-LIKE RECEPTOR 4 IS REQUIRED FOR TRIBUTYL TIN-INDUCED INCREASES IN PRODUCTION OF INTERLEUKIN 1 BETA AND INTERLEUKIN 6 BY HUMAN IMMUNE CELLS**  
Aliyah Alcalá\*. *Chemistry*, College of Life Sciences Advisor(s): Margaret Whalen

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*\*Denotes Presenters*



## PRESENTATION SCHEDULES

### ORAL PRESENTATION - WEDNESDAY, MARCH 24, 2021

#### UNDERGRADUATE - AGRICULTURAL SCIENCES - SESSION 1

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

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| 9:00 AM  | A104 | <b>WINTER HAIR SHEDDING LEVEL AFFECTS COW-CALF PERFORMANCE IN DEXTER COWS</b><br>Kaylee Hurt*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Richard Browning   |
| 9:20 AM  | A44  | <b>PREVALENCE OF ENTEROBACTERIACEAE ON FACULTY AND STUDENTS' COMPUTER KEYBOARDS</b><br>Jordyn White*, Maureen Nzomo, Winne Mukuna. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Agnes Kilonzo-Nthenge                              |
| 9:40 AM  | A60  | <b>CYTOTOXIC ACTIVITY OF CHRYSANTHEMUM EXTRACTS ON PROSTATE, LUNG, AND BREAST CANCER CELLS</b><br>Krysten Perkins*. <i>Biological Sciences</i> , College of Life Sciences Advisor(s): Elbert Myles  |
| 10:00 AM | A66  | <b>HOW MUCH DO TENNESSEE FARMERS KNOW ABOUT INTEGRATED PEST MANAGEMENT (IPM) AND BIOLOGICAL CONTROL? FINDINGS FROM A</b><br>Christian Smith*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Aditya Khanal, Kaushalya G. Amarasekare |
| 10:20 AM | A72  | <b>EFFECT OF DIETARY LYSINE ON PERFORMANCE OF BROILER CHICKENS</b><br>Jacob Rawls*, Collins Khwatenge. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Samuel Nahashon, Thyneice Taylor   |
| 10:40 AM | A74  | <b>THE PREVALENCE OF ANTIBIOTIC-RESISTANT BACTERIA ON CELL PHONES</b><br>Jourdon Huntley*, Maureen Nzomo, Winne Mukuna. <i>Family and Consumer Sciences</i> , College of Agriculture Advisor(s): Agnes Kilonzo-Nthenge  |

#### UNDERGRADUATE - ENGINEERING AND COMPUTER SCIENCE

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

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| 9:00 AM  | A108 | <b>VIBRATION STRAIN AS A KINEMATIC MEASURE OF THERMAL EFFECTS AND STRUCTURAL HETEROGENEITY IN ATOMISTIC MODELS</b><br>Alydia Young*. <i>Civil and Architectural Engineering</i> , College of Engineering Advisor(s): Ranganathan Parthasarathy  |
| 9:20 AM  | A47  | <b>COMPARATIVE ANALYSIS OF THE STRENGTH PROPERTIES OF SPECIMENS PRINTED FROM THREE DIFFERENT TYPES OF 3-D PRINTERS</b><br>Madinah Shamsu*, Tesfaye Segni. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Lizhi Ouyang, Oluwatosin Fagbuyi, Olurotimi Joaquim          |
| 9:40 AM  | A48  | <b>ANALYSIS OF THE PHYSICAL PROPERTIES OF 3-D PRINTED OBJECTS IN ADDITIVE MANUFACTURING BASED ON PERCENTAGE INFILL DENSITY</b><br>Micaiah Mayfield*, Paul Johnson. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Lizhi Ouyang, Oluwatosin Fagbuyi, Olurotimi Joaquim |
| 10:00 AM | A65  | <b>MECHANICAL TESTING OF SHORT GLASS FIBERS</b><br>Tesfaye Segni*, Derrell Cook. <i>Mechanical and Manufacturing Engineering</i> , College of Engineering Advisor(s): Landon Onyebueke, Lizhi Ouyang, Oluwatosin Fagbuyi, Sitaral Aryal   |

## ORAL PRESENTATION - WEDNESDAY, MARCH 24, 2021

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### UNDERGRADUATE - AGRICULTURAL SCIENCES - SESSION 2

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

1:00 PM	A76	<b>PREVALENCE OF ENTEROBACTERIACEAE ON FACULTY AND STUDENTS' COMPUTER KEYBOARDS</b> Jordyn White*, Maureen Nzomo, Winnie Mukuna. <i>Family and Consumer Sciences</i> , College of Agriculture Advisor(s): Agnes Kilonzo-Nthenge
1:20 PM	A79	<b>GROWTH PERFORMANCE OF BROILER CHICKENS FED DIETS CONTAINING THE PROBIOTIC ESCHERICHIA COLI STRAIN NISSLE 1917</b> Carla Larriue*, Angela Settles. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Samuel Nahashon, Thyneice Taylor
1:40 PM	A80	<b>EFFECT OF THE PROBIOTIC ESCHERICHIA COLI STRAIN NISSLE ON GROWTH PERFORMANCE OF BROILER CHICKENS</b> Jada Black*, Angela Settles. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Samuel Nahashon, Thyneice Taylor
2:00 PM	A89	<b>EVALUATING THE EFFECTS OF E. COLI STRAIN NISSLE 1917 ON BODY WEIGHT GAIN IN BROILER CHICKENS</b> Carla Larriue*, Angela Settles. <i>Agricultural and Environmental Sciences</i> , College of Agriculture Advisor(s): Samuel Nahashon, Thyneice Taylor
2:20 PM	A95	<b>BIOFILM FORMATION OF PATHOGENETIC NONTYPHOIDAL SALMONELLA ENTERICA SEROVARS AND NON-PATHOGENIC SALMONELLA LT2 AND THEIR SENSITIVITY TO SODIUM HYPOCHLORITE AND QUATERNARY AMMONIUM COMPOUNDS</b> Simen Asefaw*, Sadiye Aras. <i>Cooperative Extension</i> , College of Agriculture Advisor(s): Aliyar Fouladkhah

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*\*Denotes Presenters*

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 25, 2021

Presentations from 9:00 AM – 12:00 PM

#### GRADUATE - POSTER SESSION 1

9:00 AM	A100	<b>INACTIVATION OF L. MONOCYTOGENES BY UTILIZATION OF NISIN AND ELEVATED HYDROSTATIC PRESSURE</b> Sabrina Wadood*. <i>Cooperative Extension</i> , College of Agriculture. Advisor(s): Aliyar Fouladkhah
9:15 AM	A103	<b>LOCAL FOOD SYSTEM CONTRIBUTIONS TO ECONOMIC DEVELOPMENT</b> Oluwatooni Ajayi*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Enefiok Ekanem, Mary Mafuyai
9:30 AM	A105	<b>INFLUENCE OF VETERINARY ANTIBIOTICS ON THE RETENTION/ RELEASE MECHANISMS OF BORON ON THE CLAY AND OXIDE MINERAL/ WATER INTERFACE</b> Rose Mumbi*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Sudipta Rakshit, Ankit Patras
9:45 AM	A21	<b>EFFICACY OF FUNGICIDES AND BIOFUNGICIDES IN CONTROLLING ROOT AND CROWN ROT DISEASE OF WOODY ORNAMENTAL PLANTS CAUSED BY PHYTOPYTHIUM VEXANS</b> Madhav Parajuli*, Milan Panth. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
10:00 AM	A26	<b>DEVELOPMENT OF LOOP-MEDIATED ISOTHERMAL AMPLIFICATION METHOD FOR DETECTION OF PHYTOPYTHIUM VEXANS IN DIFFERENT SOURCES</b> Bhawana Ghimire*, Farhat Avin. <i>Otis L. Floyd Research Center</i> , College of Agriculture. Advisor(s): Fulya Baysal-Gurel
10:15 AM	A45	<b>MANIPULATION OF MULTIPLE GENES IN GLYCEOLLIN SYNTHESIS PATHWAY IN SOYBEAN USING CRISPR/CAS9</b> Anju Pandey*, Asmita Devkota. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ali Taheri, Korsi Dumenyo
10:30 AM	A62	<b>DEVELOPMENT AND CHARACTERIZATION OF SOYBEAN LINES WITH REDUCED RAFFINOSE SUGARS</b> Asmita Devkota*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Ali Taheri, Korsi Dumenyo
<b>10:45 AM</b>		<b>BREAK</b>
11:00 AM	A96	<b>SENSITIVITY OF STAPHYLOCOCCUS AUREUS TO MILD ELEVATED HYDROSTATIC PRESSURE AND NISIN IN HEPES BUFFER</b> Jyothi George*. <i>Cooperative Extension</i> , College of Agriculture. Advisor(s): Aliyar Fouladkhah
11:15 AM	A97	<b>AUGMENTING THE EFFICACY OF PRESSURE-BASED PASTEURIZATION OF ESCHERICHIA COLI O157:H7 USING THYMOL AND MILD HEAT IN MEAT HOMOGENATE</b> Sadiye Aras*. <i>Cooperative Extension</i> , College of Agriculture. Advisor(s): Aliyar Fouladkhah, Shahid Chowdhury
11:30 AM	A31	<b>CYBER DECEPTION: A GAME AND PROSPECT THEORETIC APPROACH</b> Satyaki Nan*. <i>Computer Science</i> , College of Engineering. Advisor(s): Swastik Brahma
11:45 AM	A32	<b>REDUNDANCY-BASED MITIGATION OF JAMMING ATTACKS</b> Satyaki Nan*. <i>Computer Science</i> , College of Engineering. Advisor(s): Swastik Brahma

\* Denotes Presenter

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 25, 2021

Presentations from 9:00 AM – 12:00 PM

#### GRADUATE - POSTER SESSION 2

9:00 AM	A10	<b>THE EFFECTIVENESS OF MUSIC THERAPY COMBINED WITH MINDFULNESS MEDITATION TO ALLEVIATE SYMPTOMS OF CLINICAL DEPRESSION IN ADULTS</b> Elli Hoffman*, Elizabeth Foshee*, Jake Roberson*, Allison LaJeune*, Cara Mitchell*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Larry Snyder
9:15 AM	A11	<b>THE IMPACT OF AQUATIC THERAPY ON FUNCTIONAL MOBILITY AND ACTIVITIES OF DAILY LIVING FOR INDIVIDUALS OVER 50 WHO ARE DIAGNOSED WITH PARKINSON'S DISEASE</b> Patti Jordan*, Hannah Grant*, Katelyn Atkinson*, Morgan Booth*, Trent Burch*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Larry Snyder
9:30 AM	A12	<b>THE EFFICACY OF VIDEO MODELING ON IMPROVING SOCIAL INTERACTION SKILLS FOR CHILDREN WITH AUTISM, A SYSTEMATIC REVIEW</b> Tracy Stowers*, Rachael Pomerantz*, Lena Roll*, Katie Underwood*, Eden Ellis*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Larry Snyder
9:45 AM	A13	<b>THE IMPACT OF SOCIAL PARTICIPATION ON QUALITY OF LIFE IN ADULTS WITH CEREBRAL PALSY</b> Ali Grace Davis*, Leslie Giles*, Kiersten Lewis*, Garret Ortiz*, Shaudre'e Fuller*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Larry Snyder
10:00 AM	A14	<b>A COMPARISON ON THE EFFICACY OF CONSTRAINT INDUCED MOVEMENT THERAPY VERSUS MIRROR THERAPY FOR ADULTS WHO HAVE HAD A STROKE</b> Savannah Crabtree*, Emily Pack*, Rene Roush*, Kayla Starnes*, Darrian Harlang*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Larry Snyder
10:15 AM	A15	<b>A COMPARISON OF THE OUTCOMES OF PATIENTS FOLLOWING AN ANTERIOR CRUCIATE LIGAMENT SURGICAL INTERVENTION REGARDING THE UTILIZATION OF WEIGHT-BEARING VERSUS BODY WEIGHT SUPPORTED PROTOCOLS: A SYSTEMATIC REVIEW</b> Cody Sheeks*, Hannah Arduino, Caden Crosby, Jeannine McGuire, Kevin Minavi. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark
10:30 AM	A18	<b>THE EFFICACY OF OCCUPATIONAL THERAPY ON INDIVIDUALS RECENTLY SUFFERING A TRAMATIC BRAIN INJURY RELATIVE TO SOCIAL PARTICIPATION AND QUALITY OF LIFE</b> India Lamboy*, Grant Bernard*, Ashanti Wade*, Alexandria Woods*, Anthony Joshua*. <i>Occupational Therapy</i> , College of Health Sciences. Advisor(s): Larry Snyder
<b>10:45 AM</b>		<b>BREAK</b>
11:00 AM	A19	<b>THE EFFICACY OF ONLINE LEARNING FOR GRADUATE-LEVEL LABORATORY SCIENCE COURSES</b> Izabelle Peters*, Monica Cathey, Donald Gavin, Kyle St. Hilaire. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark, Derek Charles
11:15 AM	A2	<b>ROLE OF PHYSICAL THERAPY IN REDUCING LENGTH OF STAY AND OCCURRENCE OF POST INTENSIVE CARE SYNDROME AMONG COVID 19 PATIENTS ADMITTED TO THE INTENSIVE CARE UNIT</b> Stacey Affeldt*, Phillip Alcorn*, Travis Duke*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Edilberto Raynes

11:30 AM A28 **APPLICABILITY OF PHYSICAL THERAPY IN THE INPATIENT TREATMENT SETTING FOR PERSONS WITH CHRONIC PAIN AND OPIOID USE DISORDER: A SYSTEMATIC**  
Andrew Martin\*, Peter Jombo\*, Ryan Edwards\*. *Physical Therapy*, College of Health Sciences.  
Advisor(s): Karen Smith

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11:45 AM A30 **AN EDUCATIONAL MODEL OF THE FEMALE ATHLETE TRIAD FOR STUDENTS AND PRACTICING PHYSICAL THERAPISTS: A PERSPECTIVE STUDY**  
Brittin Boyer\*, Madicyn Hinton\*, Jenna Mcpherson\*. *Physical Therapy*, College of Health Sciences.

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*\* Denotes Presenter*

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 25, 2021

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

#### GRADUATE - POSTER SESSION 3

1:00 PM	A35	<b>QUANTIFYING VARIABLES THAT INFLUENCE PATIENT COMPLIANCE IN PERFORMANCE OF HOME PROGRAMS OF PHYSICAL THERAPY PATIENTS</b> Dillon Douglas*, Andrew Sanderson*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark
1:15 PM	A36	<b>THE INFLUENCE OF BLACK WOMEN'S HAIR ON EXERCISE PARTICIPATION</b> Janae Swift*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Richard Clark
1:30 PM	A5	<b>WOULD INTEGRATING MOTIVATIONAL INTERVIEWING INTO PHYSICAL THERAPY IMPROVE PATIENT OUTCOMES?</b> Shannon Stewart*, Benjamin Miles*, Zarrawan Haji*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Deborah Edmondson
1:45 PM	A52	<b>INCREASING THE DIVERSITY OF ADMISSIONS COMMITTEES TO IMPROVE FUTURE DOCTOR OF PHYSICAL THERAPY (DPT) STUDENT REPRESENTATION</b> Thomas Richard*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): David Lehman
2:00 PM	A64	<b>COMPARING THE EFFICACY OF HIPPO THERAPY AND HALLIWICK AQUATIC THERAPY ON SITTING POSTURAL CONTROL IN CHILDREN AGES 3-12 WITH CEREBRAL PALSY: SYSTEMATIC REVIEW</b> Audrey Brown*, Katie Palm*, Katie Shoup*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Karen Smith
2:15 PM	A85	<b>THE EFFECT OF POST ACTIVATION POTENTIATION IN SHOT PUT THROW</b> Alexis Gant*. <i>Human Performance and Sport Sciences</i> , College of Health Sciences. Advisor(s): Yoseph Mamo, Vanessa Moreno, Poliala Dickson
2:30 PM	A88	<b>THE RELATIONSHIP BETWEEN STRESS FRACTURES AND POST-MENOPAUSAL RUNNERS</b> Cory Barboza*, Julie Carter*, Mitchell Johnson*, Avery Zabka*. <i>Physical Therapy</i> , College of Health Sciences. Advisor(s): Derek Charles
<b>2:45 PM</b>		<b>BREAK</b>
3:00 PM	A90	<b>IMPROVING COMMUNITY ADVISORY BOARD EFFECTIVENESS</b> Tinuoye Felicia Oluwatoyin*. <i>Office of the Dean of Liberal Arts</i> , College of Liberal Arts. Advisor(s): Oscar Miller
3:15 PM	A6	<b>EFFECTS OF TRIBUTYL TIN EXPOSURES ON TRANSLATION REGULATORY FACTORS EIF4E, EIF4B, AND S6 IN HUMAN LYMPHOCYTES</b> Amanda Ruff*. <i>Chemistry</i> , College of Life Sciences. Advisor(s): Margaret Whalen
3:30 PM	A7	<b>ANTIMICROBIAL TRICLOSAN (TCS) INCREASES PRODUCTION OF INTERLEUKIN 6 (IL-6) IN HUMAN IMMUNE CELLS</b> Wendy Wilburn*. <i>Chemistry</i> , College of Life Sciences. Advisor(s): Margaret Whalen
3:45 PM	A111	<b>PHOSPHORYLATION OF STAT3 BY THE HUMAN SEROTONIN 2C RECEPTOR</b> Chase Richard*, Musarrat Maisha, Marybeth Curtis, Letimicia Fears, Zeljka Lanaghan. <i>Biological Sciences</i> , Life & Physical Sciences. Advisor(s): Michael Ivy, Hugh Fentress

*\* Denotes Presenter*

## PRESENTATION SCHEDULES

### POSTER PRESENTATIONS - THURSDAY, MARCH 25, 2021

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

#### UNDERGRADUATE - POSTER SESSION

1:00 PM	A92	<b>ECONOMIC FEASIBILITY OF DEVELOPING MUNG BEAN (VIGNA RADIATA) AS AN ALTERNATIVE CROP FOR SMALL AND MEDIUM SIZED FARMERS</b> Daiva Wilson*. <i>Agricultural and Environmental Sciences</i> , College of Agriculture. Advisor(s): Prabodh Illukpitiya, Fisseha Tegegne
1:15 PM	A112	<b>PHOSPHORYLATION OF STAT3 BY SEROTONIN VIA THE HUMAN 5-HT2C</b> Larry McNary*, Mary Curtis, Musarrat Maisha, Letimica Fears, Bipradas Roy. <i>Biological Sciences</i> , Life and Physical Sciences. Advisor(s): Hugh Fentress, Michael Ivy
1:30 PM	A3	<b>ACTIVATION OF TRANSLATION REGULATORY FACTOR EIF4B IN PERIPHERAL BLOOD MONONUCLEAR CELLS BY TRIBUTYL TIN</b> Blake Allen*, Amanda Ruff. <i>Chemistry</i> , College of Life Sciences. Advisor(s): Margaret Whalen
1:45 PM	A4	<b>THE EFFECT OF HEXABROMOCYCLODODECANE ON THE PRODUCTION OF INTERLEUKIN-6 BY HUMAN IMMUNE CELLS</b> JaQuel Maise*, April Falconer. <i>Chemistry</i> , College of Life Sciences. Advisor(s): Margaret Whalen
2:00 PM	A77	<b>RESPONSES OF SWITCHGRASS LEAF PHOTOSYNTHESIS TO CO<sub>2</sub> CONCENTRATION AND LIGHT UNDER DIFFERENT PRECIPITATION TREATMENTS</b> Amanee Harris*, Joshua Borlay, Imani Lane, Christina Kieffer. <i>Biological Sciences</i> , College of Life Sciences. Advisor(s): Dafeng Hui
2:15 PM	A78	<b>EFFECTS OF NITROGEN FERTILIZATION ON SOIL GREENHOUSE GASES EMISSIONS</b> Elijah Poston*, Imani Lane, Joshua Borlay, Christina Kieffer. <i>Biological Sciences</i> , College of Life Sciences. Advisor(s): Dafeng Hui
2:30 PM	A86	<b>SEASONAL CHANGES OF LEAF PHYSIOLOGY AND RESPONSES TO LIGHT AND CO<sub>2</sub> OF MUNG BEAN PLANTS</b> Jaekedah Christian*, David Hickkok. <i>Biological Sciences</i> , College of Life Sciences. Advisor(s): Dafeng Hui, Mathew Blair, Fisseha Tenegne, Prabodh Illukpitiya
2:45 PM	A9	<b>TRICLOSAN INCREASES PRODUCTION OF THE PRO-INFLAMMATORY CYTOKINE INTERLEUKIN-1B IN HUMAN IMMUNE CELLS: THE ROLE OF ERK1/2 PATHWAY</b> Sahra Gabure*, Wendy Wilburn. <i>Chemistry</i> , College of Life Sciences. Advisor(s): Margaret Whalen

*\* Denotes Presenter*