

PRESENTATION SCHEDULES

MONDAY, APRIL 6, 2026

COLLEGE OF AGRICULTURE

GRADUATE SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

9:00 AM	AGR-035	TEACHERS' PERCEPTIONS OF USING VIRTUAL REALITY TO ENHANCE AGRICULTURAL EDUCATION Brian Kibirige*. Agribusiness and Education, College of Agriculture. Advisor(s): John Ricketts
9:15 AM	AGR-018	IDENTIFICATION AND MANAGEMENT OF CANKER DISEASES CAUSED BY BOTRYOSPHERA DOTHIDEA AND DIAPORTHE ERES IN FLOWERING DOGWOOD (CORNUS FLORIDA) Pratima Subedi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Dr. Christina Jennings, Dr. Cansu Oksel, Terri Simmons
9:30 AM	AGR-016	FEEDING THE SOIL TO FEED THE CROP: APPLICATION OF COVER CROPS IN ORGANIC VEGETABLE PRODUCTION SYSTEMS Sai Prakash Naroju*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Dilip Nandwani
9:45 AM	AGR-017	GENOMIC INSIGHTS INTO PLANT GROWTH PROMOTION AND BIOCONTROL OF THE ENDOPHYTIC STRAIN BACILLUS AMYLOLIQUEFACIENS 143-EN04 Gift Maureen OBUNUKWU*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Margaret Mmbaga
10:00 AM	AGR-022	INTEGRATING ECOLOGICAL CITIZENSHIP INTO THE THEORY OF PLANNED BEHAVIOR: EVIDENCE FROM LOCAL FOOD CONSUMPTION IN TENNESSEE Santosh Kafle*, Stinson Parks. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Lap Tran, Prabodh Illukpitiya, Aditya Khanal, Chetan Sharma
10:30 AM	AGR-003	COMPARATIVE GENOMICS OF INTERFERON GENE REPERTOIRES ACROSS SWINE BREEDS REVEALS DOMESTICATION-DRIVEN IMMUNOGENETIC DIVERSITY Jiuyi Li*. Food and Animal Science, College of Agriculture. Advisor(s): Yonngming Sang
10:45 AM	AGR-020	INFLUENCE OF TRANSPLANTING DEPTH ON GROWTH AND SURVIVAL OF FLORAL HEMP (CANNABIS SATIVA L.) UNDER SOUTHERN BLIGHT PRESSURE Chiamaka Nnadi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Emmanuel Omondi
11:00 AM	AGR-026	ON-FARM ASSESSMENT OF SOIL HEALTH IN DOMINANT ANNUAL CROPPING SYSTEM AND PERENNIAL FORAGE SYSTEM IN TENNESSEE. Mukesh Chaudhary*, Pooja Chaudhari. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Krishna Bhandari, Dr. Jianwei LI, Dr. Resham Thapa, Dr. Philip Hinson
11:15 AM	AGR-023	INTEGRATING PRECISION AGRICULTURE AND BIOSTIMULANTS: SENSOR-TRIGGERED APPLICATIONS IN KALE Leah Reeves*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): ZaDarreyal Wiggins

**Denotes Presenters*

11:30 AM AGR-021 **INFLUENCE OF WINTER COVER CROP SPECIES AND VARIETIES ON RHIZOSPHERE FUNGAL COMMUNITY STRUCTURE REVEALED BY ITS AMPLICON SEQUENCING.**
Laxmi Prasad Joshi*. Agricultural Sciences and Engineering, College of Agriculture.
Advisor(s): Matthew Blair

UNDERGRADUATE SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

1:00 PM AGR-131 **SEED TRAIT VARIABILITY IN A GLOBAL MUNG BEAN GERMPLASM PANEL**
Christian White*, Josh Relyea. Agricultural Sciences and Engineering, College of Agriculture.
Advisor(s): Matthew Blair

1:15 PM AGR-124 **A 'MIXOMICS' PIPELINE MERGES METHYLOMICS AND TRANSCRIPTOMICS TO REVEAL NEW PLANT-PEPTIDE TARGETS**
Kyla Hughes*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):
Sonali Roy, Rajni Parmar

1:30 PM AGR-126 **CRISPR-Cas9 MEDIATED TARGETED MUTAGENESIS TO ASSESS THE FUNCTION OF MtBAK1 IN THE MEDICAGO TRUNCATULA**
Shania Dean-Motley*. Agricultural Sciences and Engineering, College of Agriculture.
Advisor(s): Sonali Roy, Rajni Parmar

1:45 PM AGR-125 **CONTINUED ASSESSMENT OF A HYBRID GRAVEL BED + TREE SYSTEM FOR URBAN STORMWATER MANAGEMENT**
Sydney Wyche*. Environmental Science, College of Agriculture. Advisor(s): Yujuan Chen

2:15 PM AGR-130 **GREENING CITIES FROM THE GROUND UP: THE IMPACT OF URBAN SOIL MANAGEMENT PRACTICES ON SOIL PROPERTIES AND URBAN TREE GROWTH**
Todd Stansberry*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):
Yujuan Chen, Diksha Tamang, Dr. De'Etra Young

2:30 PM AGR-127 **CULTIVATING LEADERSHIP AND PROFESSIONAL GROWTH THROUGH ENGAGEMENT: THE IMPACT OF AGRICULTURAL AMBASSADOR PROGRAM AT TSU**
Satoria North*, Kaylan Banks. Agribusiness and Education, College of Agriculture.
Advisor(s): Akua Adu-Gyamfi

2:45 PM AGR-128 **DEVELOPING A COMMUNICATION PLATFORM TO PROMOTE RESILIENT TOMATO PRODUCTION THROUGH UNIVERSITY-SMALL FARM**
Makiya Stephens*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):
Suping Zhou

3:00 PM AGR-129 **DEVELOPING NUTRIENT INFORMATION PROFILES FOR TOMATOES PRODUCED UNDER DIFFERENT PRODUCTION SYSTEMS**
Nylah Spivey*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s):
Suping Zhou, Katrina Seaman

**Denotes Presenters*

PRESENTATION SCHEDULES

TUESDAY, APRIL 7, 2026

COLLEGE OF ENGINEERING

GRADUATE SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

9:00 AM	ENGR-050	OPTIMIZATION OF ELECTROSPINNING PARAMETERS FOR HIGH-QUALITY PVDF NANOFIBER PRODUCTION FOR SENSORY AND ENERGY APPLICATIONS. Ojiugo Ucheji*. Mechanical and Manufacturing Engineering, College of Engineering Technology and Computer Science. Advisor(s): Richard Mu, Mulugeta Wayu, Akira Ueda, Anthony Hmelo
9:15 AM	ENGR-051	OPTIMIZING CONCENTRATION AND ELECTROSPINNING PARAMETERS FOR ENHANCED MORPHOLOGY OF ELECTROSPUN PVDF-TrFE (70:30, 75:25, 80:20) FIBERS Joshua Adjei - Yeboah*, Sadiqa Akbar, Erin James. TIGER Institute, College of Engineering Technology and Computer Science. Advisor(s): Richard Mu, Axel Hoffmann, Hanna Terletska, Akira Ueda
9:30 AM	ENGR-056	REAL-TIME HARDWARE-IN-THE-LOOP CONTROL OF A VIRTUAL POWER SYSTEM USING ONLINE REINFORCEMENT LEARNING WITH NOVEL BACKEND THREADED OPTIMIZATION TECHNIQUE Richard Wiencek*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Sagnika Ghosh
9:45 AM	ENGR-059	SIMULATION BASED EVALUATION OF DYNAMIC VEHICLE REROUTING AT URBAN RAIL CROSSINGS USING SUMO Masanja Madalo*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
10:00 AM	ENGR-045	FREIGHT OPERATIONAL PERFORMANCE ASSESSMENT AND OPTIMIZATION USING MICROSIMULATION-BASED AND ARTIFICIAL INTELLIGENCE DRIVEN METHODS Erickson Senkondo*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
10:30 AM	ENGR-040	A STAKEHOLDER-INFORMED ECONOMIC AND SUPPLY CHAIN IMPACT ANALYSIS OF AI-ENABLED FREIGHT LOGISTICS OPTIMIZATION Afia Yeboah*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
10:45 AM	ENGR-060	SPATIAL ANALYSIS TO IDENTIFY FREIGHT TRUCK CRASH HOTSPOTS IN TENNESSEE Rheecha Sharma*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Deo Chimba
11:00 AM	ENGR-054	PHYSICS-EMBEDDED FEATURE LEARNING FOR AI IN MEDICAL IMAGING Pulock Das*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Kamrul Das
11:15 AM	ENGR-058	SECOM MALICIOUS ROUTING ATTACKS AND DEFENSE USING MACHINE LEARNING AND BLOCKCHAIN INTEGRITY ANCHORING Samer Al Musawi*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Liang Hong, Kamrul Hasan

**Denotes Presenters*

11:30 AM ENGR-062 **THERMAL IMAGE PROCESSING WITH ARTIFICIAL INTELLIGENCE FOR GLUCOSE CONCENTRATION ESTIMATION**
Parth Dineshbhai Pandya*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Rassel Shazzad

MIXED SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

1:00 PM ENGR-063 **THERMAL PERFORMANCE OPTIMIZATION OF NANO-ENHANCED PHASE CHANGE MATERIALS (NePCM) THERMAL STORAGE SYSTEM USING COMPUTATIONAL FLUID DYNAMICS TECHNIQUE**
Mashiur Rahman*, Maher Niger Prova. Mechanical and Manufacturing Engineering, College of Engineering Technology and Computer Science. Advisor(s): Aung Myat

1:15 PM ENGR-047 **HIERARCHICAL FLOW DECOMPOSITION FOR TURNING MOVEMENT PREDICTION AT SIGNALIZED INTERSECTIONS**
Md Atiqur Rahman Mallick*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science. Advisor(s): Kamrul Hasan, Pulock Das, Liang Hong, SM Shazzad

1:30 PM ENGR-065 **UNIFYING ENVIRONMENTAL STRESS CRACKING AND MECHANO-SORPTIVE CREEP UNDER THE UMBRELLA OF MECHANO-SORPTIVE PHENOMENA**
Yue Yan*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science. Advisor(s): Ranganathan Parthasarathy, Anil Misra, Paulette Spencer

1:45 PM ENGR-132 **MEASURING EFFECTS OF PHYSICAL INPUT MODALITY ON PLAYER PRESENCE IN A CAVE XR ENVIRONMENT**
Egypt Garrett*, Aimee Rollins*, Jada Anthony*. Computer Science, College of Engineering Technology and Computer Science. Advisor(s): Caleb Vatrál

2:00 PM ENGR-133 **OPTIMIZING CONCENTRATION AND ELECTROSPINNING PARAMETERS FOR ENHANCED MORPHOLOGY OF ELECTROSPUN PVDF-TrFE (75:25) FIBERS**
Sadiqa Akbar*, Erin James. TIGER Institute, College of Engineering Technology and Computer Science. Advisor(s): Richard Mu, Joshua Adjei-Yeboah

**Denotes Presenters*

WEDNESDAY, APRIL 8, 2026

COLLEGE OF HEALTH SCIENCES

MIXED SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

9:00 AM	LPS-068	CRITICAL ROLE OF DEFENSINS IN RESPIRATORY VIRAL INFECTION INDUCED BREAST CANCER PROGRESSION Umer Ali*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Venkataswarup Tiriveedhi
9:15 AM	LPS-069	DEVELOPING AN ORGANOID MODEL SYSTEM FOR PRECLAMPSIA INDUCED RENAL INJURY Duraneisha Firmin*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Sarika Saraswati
9:30 AM	LPS-072	sFRP2 PROMOTES CARDIAC REGENERATION BY MULTIMODAL REGULATION OF WNT, TGF-BETA AND MAP KINASE SIGNALING PATHWAYS Delany Bradford*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Sarika Saraswati
9:45 AM	LPS-071	IMMUNOLOGICAL IMPACTS OF OBESITY MAY CONTRIBUTE TO VIRAL SEVERITY AND COMPLICATIONS Madison Hilliard*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Kimberly Cooney, Sarika Saraswati
10:00 AM	LPS-070	EXPLORING GENE EXPRESSION IN EARLY CHICKEN EMBRYOS: TOTAL RNA SEQUENCING AT 24, 32, 40, AND 48 HOURS POST-INCUBATION Nevein (Vaana) Soliman*, Deanthony Solomon, Sadiye Aras. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Xiaofei Wang
10:30 AM	LPS-135	BIOPHYSICAL ANALYSIS OF THE ANTIMICROBIAL PEPTIDE COMBI-2 AND ITS INTERACTIONS WITH MODEL MEMBRANES Jalen Mask*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Bashiyar Alamarwani, Nsoki Phambu
10:45 AM	LPS-136	PENTACHLOROPHENOL INCREASES EXPRESSION OF TOLL-LIKE RECEPTOR 4 IN HUMAN IMMUNE CELLS Ellie Bray*, Emerie Eddins. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen

HYBRID SESSION

MIXED SESSION ORAL PRESENTATIONS, NHF - 1201 (F.I.S)

1:00 PM	EDU-039	LISTENING TO THE NERVOUS SYSTEM: SOMATIC AWARENESS AS A FOUNDATION FOR SUSTAINABLE ADVOCACY Jada Carter*. Psychology, College of Education. Advisor(s): Thurman Webb
1:15 PM	HS-067	AN EDUCATIONAL AND TREATMENT MODEL FOR POSTURAL ORTHOSTATIC TACHYCARDIA SYNDROME (POTS) FROM A PHYSICAL THERAPY PERSPECTIVE Olivia Cochran*, Audrey Foyle*, Rachel Cullison*, Lauren Terry*. Physical Therapy, College of Health Sciences. Advisor(s): Deborah Edmondson
1:30 PM	LA-134	FOOD DESERTS EXIST Kilyn Booker*. History Geog and Pol Science, College of Liberal Arts. Advisor(s): Ian Shapiro

**Denotes Presenters*

PRESENTATION SCHEDULES

THURSDAY, APRIL 9, 2026

POSTER PRESENTATIONS

GRADUATE POSTER PRESENTATIONS, NHF - 1201 (F.I.S)

9:00 AM – 12:00 PM	AGR-001	A DETERMINISTIC IMAGE BASED FRAMEWORK FOR HIGH THROUGHPUT PHENOTYPING OF SOYBEAN SEED MORPHOLOGY AND COLOR TRAITS Shubh Yadav*, Upama Adhikari. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): Lyle Wallace
9:00 AM – 12:00 PM	AGR-002	ASSESSING POST-WINTER PLANT ESTABLISHMENT AND GREEN COVER OF WINTER CANOLA VARIETIES IN TENNESSEE. Suraj Dhakal*, Sudip B.K.. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): Jason de Koff, Matthew Carpenter
9:00 AM – 12:00 PM	AGR-006	DO PEPTIDE HORMONES CONTROL EPIGENETIC REGULATION OF LEGUME-RHIZOBIA SYMBIOSIS ? Hyndavi Yammanuru*. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): Sonali Roy
9:00 AM – 12:00 PM	AGR-008	DOES AGRICULTURAL MANAGEMENT DRIVE SOIL HYDROPHOBICITY? INVESTIGATING THE INTERPLAY OF TILLAGE, COVER CROPS, AND ORGANIC AMENDMENTS Dorcas Kayode*. Environmental Science, College of Agriculture.. Advisor(s): Felix Ogunmokun
9:00 AM – 12:00 PM	AGR-010	EFFECTS OF MICROBIAL BIOSTIMULANTS ON BIOMASS PRODUCTION AND CELLULOSIC ETHANOL YIELD IN SWEET SORGHUM Andrew McClarty*. Agricultural Sciences and Engineering, College of Agriculture.. Advisor(s): ZaDarreayal Wiggins
9:00 AM – 12:00 PM	AGR-011	EFFECTS OF MICROBIAL INOCULANTS ON RHIZOSPHERE NUTRIENT DYNAMICS AND SECONDARY METABOLITE PROFILES IN ACTAEA RACEMOSA AND HYDRASTIS CANADENSIS Himani Gautam Singh*. Environmental Science, College of Agriculture.. Advisor(s): Huseyin Baris Tecimen
9:00 AM – 12:00 PM	AGR-015	EXTRACTING TREE ATTRIBUTES FROM UNMANNED AERIAL VEHICLE-BORNE IMAGERY FOR URBAN AREAS Manoj Burlakoti*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Bharat Pokharel, Yujuan Chen
9:00 AM – 12:00 PM	AGR-019	INFLUENCE OF CITRUS PECTIN MOLECULAR WEIGHT ON PROBIOTIC GROWTH AND GUT MICROBIOTA FERMENTATION IN VITRO Subir Das*, CheKenna Fletcher, Suhua Zhang. Food and Animal Science, College of Agriculture. Advisor(s): Ying Wu
9:00 AM – 12:00 PM	AGR-024	INVESTIGATING DIETARY FLAVONOIDS AS NATURAL SENOLYTICS FOR HEALTHY AGING Khwahish Jawariya*. Food and Animal Science, College of Agriculture. Advisor(s): Brahmaiah Pendyala

**Denotes Presenters*

9:00 AM – 12:00 PM	AGR-025	MACHINE LEARNING-BASED HIGH-THROUGHPUT PHENOTYPING ENABLES RAPID AND ACCURATE QUANTIFICATION OF SOYBEAN ROOT NODULES Kuber Shivashakarappa*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Ali Taheri
9:00 AM – 12:00 PM	AGR-027	OPTIMIZING pKa BASED ORGANIC ACID COMBINATIONS FOR IMPROVED ANTIMICROBIAL EFFICACY AT NEAR NEUTRAL pH Shreya Talan*. Food and Animal Science, College of Agriculture. Advisor(s): Brahmaiah Pendyala, Akhil Rautela
9:00 AM – 12:00 PM	AGR-031	SMALL SPACES, BIG IMPACT: OVERLOOKED URBAN PAVEMENT CREVICES AS A FRONTIER FOR BIODIVERSITY CONSERVATION, CARBON STORAGE, AND POLLUTANT REMEDIATION Matthew Manu*. Environmental Science, College of Agriculture. Advisor(s): Jianwei Li
9:00 AM – 12:00 PM	AGR-032	SOIL HEALTH INDICATORS UNDER CONVENTIONAL AND CONSERVATIONAL CROPPING SYSTEMS Pooja Chaudhari*, Mukesh Chaudhary. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Krishna Bhandari, Jianwei Li
9:00 AM – 12:00 PM	AGR-036	ULTRAVIOLET INACTIVATION (UV-C) OF VIRAL DROPLETS ON FOOD CONTACT SURFACES: A PRELIMINARY STUDY Nirmal Thirunavookarasu Sankaranarayanan*, Jestin Bose. Food and Animal Science, College of Agriculture. Advisor(s): Ankit Patras, Brahmaiah Pendyala
9:00 AM – 12:00 PM	AGR-081	AGRICULTURAL CREDIT AND FARM PRODUCTIVITY IN POST-2008: AN ANALYSIS Binod Bhusal*, Samjhauta Thapa. Agribusiness and Education, College of Agriculture. Advisor(s): Aditya Khanal
9:00 AM – 12:00 PM	AGR-082	AUTOMATED PHENOTYPING OF MUNG BEANS FOR GROWTH RESPONSE UNDER DROUGHT Josh Relyea*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Matthew Blair
9:00 AM – 12:00 PM	AGR-083	CHARACTERIZATION OF YIELD-RELATED SEED TRAITS AND COLOR VARIATION IN THE SYNADAPT POPULATION BY FIELD SELECTION OF MULTIPLE GENERATIONS Sumayea Khan*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Matthew Blair
9:00 AM – 12:00 PM	AGR-084	COMPARISON OF BIOACTIVE COMPOUNDS AND THEIR ANTI-AGING EFFECTS IN DISTINCT BLUEBERRY CATEGORIES Fnu Annu*, Yang Zhang. Food and Animal Science, College of Agriculture. Advisor(s): Hongwei Si
9:00 AM – 12:00 PM	AGR-085	CONTRIBUTION OF GRASSES AND LEGUMES ROOT VS SHOOT LITTER DERIVED CARBON CONTRIBUTION ACROSS POM AND MAOM FRACTIONS OF SOIL: A GLOBAL SYSTEMATIC REVIEW Bipin Rijal*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Resham Thapa
9:00 AM – 12:00 PM	AGR-086	EFFECTS OF FLOODING DURATION ON CANKER DEVELOPMENT CAUSED BY DIAPORTHERES IN FLOWERING DOGWOOD. Shahla Borzouei*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel

**Denotes Presenters*

9:00 AM – 12:00 PM	AGR-087	FACTORS AFFECTING RESILIENCE CAPACITY OF HOUSEHOLDS IN TENNESSEE: AN EVALUATION FROM HOUSEHOLD PERCEPTIONS. James Clay II*, Myles Bolton. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Lap Tran
9:00 AM – 12:00 PM	AGR-088	FOOD SYSTEMS AND YOUTH: EXPLORING YOUTH SKILLS FOR AGRICULTURAL WORKFORCE Anthony Garner*. Agribusiness and Education, College of Agriculture. Advisor(s): John Ricketts, Lana Petrie
9:00 AM – 12:00 PM	AGR-089	GENETIC VARIABILITY AND TRAIT RELATIONSHIPS OF SEED MORPHOLOGICAL AND NUTRITIONAL TRAITS IN SOYBEAN FOR TARGETED BREEDING Upama Adhikari*, Shubh Yadav. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Lyle Wallace
9:00 AM – 12:00 PM	AGR-090	GREEN CONSUMPTION BEHAVIOR AND WILLINGNESS TO PAY PRICE PREMIUM FOR ORGANIC FOOD AMONG TENNESSEE RESIDENTS Stinson Parks*, Santosh Kafle. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Tran, Prabodh Illukpitiya
9:00 AM – 12:00 PM	AGR-091	GREEN CONSUMPTION VALUES AND THEIR INFLUENCE ON LOCAL FOOD PURCHASING DECISIONS: A CASE FROM TENNESSEE Santosh Kafle*, Stinson Parks. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Lap Tran, Prabodh Illukpitiya
9:00 AM – 12:00 PM	AGR-092	HIGH-PERFORMING WINTER COVER CROPS VARIETIES FROM NATIONAL TRIALS FOR MIDDLE TENNESSEE. Laxmi Prasad Joshi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Matthew Blair
9:00 AM – 12:00 PM	AGR-093	HOUSEHOLD COPING STRATEGIES FOR FOOD INSECURITY AND FINANCIAL CHALLENGES: A MULTI-DIMENSIONAL APPROACH Myles Bolton*, James Clay II*. Agribusiness and Education, College of Agriculture. Advisor(s): Lap Tran
9:00 AM – 12:00 PM	AGR-094	IDENTIFYING ADAPTED SOFT RED WINTER WHEAT VARIETIES FOR DUAL-PURPOSE USE IN TENNESSEE. Hemant Kumar Sahani*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Philip Hinson
9:00 AM – 12:00 PM	AGR-095	IN VITRO EVALUATION OF ENGINEERED NANOMATERIALS FOR SUPPRESION OF BOTRYOSPHERA DOTHIDEA IN EASTERN REDBUD Anvesh Sankuratri*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel
9:00 AM – 12:00 PM	AGR-096	LEADERSHIP AND PROFESSIONAL DEVELOPMENT NEEDS OF EXTENSION AGENTS IN TENNESSEE Ifeoma Nwakoza*. Agribusiness and Education, College of Agriculture. Advisor(s): Akua Adu-Gyamfi
9:00 AM – 12:00 PM	AGR-097	LETHAL AND SUB-LETHAL EFFECTS OF HERBICIDE ON GREEN LACEWINGS, CHRYSOPA OCLATA (NEUROPTERA: CHRYSOPIDAE) Manju Yogi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Kaushalya Amarasekare
9:00 AM – 12:00 PM	AGR-098	MANAGEMENT OF CANKER DISEASES CAUSED BY BOTRYOSPHERA DOTHIDEA AND DIAPORTHE ERES IN EASTERN REDBUD (CERCIS CANADENSIS) Pratima Subedi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Fulya Baysal-Gurel, Christina Jennings

**Denotes Presenters*

9:00 AM – 12:00 PM	AGR-099	MAPPING AND MONITORING WEED CANOPY DYNAMICS IN WINTER WHEAT USING UAV-BASED MULTISPECTRAL IMAGERY AND MACHINE LEARNING Bipin Panthi*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Clement Akumu
9:00 AM – 12:00 PM	AGR-100	OFF-FARM WORK AS A PATHWAY TO IMPROVED DIETARY DIVERSITY AMONG FARM FAMILIES Samjhauta Thapa*, Binod Bhusal. Agribusiness and Education, College of Agriculture. Advisor(s): Aditya Khanal
9:00 AM – 12:00 PM	AGR-101	REARING METHODS OF DIFFERENT LIFE STAGES OF ORIUUS INSIDIOSUS (HEMIPTERA: ANTHOCORIDAE) Akriti Adhikari*, Manju Yogi. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Kkaushalya Amarasekare, Matthew Carpenter
9:00 AM – 12:00 PM	AGR-103	WARMING IMPACTS ON PATTERNS AND DRIVERS OF SOIL RESPIRATION IN SWITCHGRASS CROPLANDS Monika Gaire*, Matthew Manu. Environmental Science, College of Agriculture. Advisor(s): Jianwei Li, Lahiru Gamage
9:00 AM – 12:00 PM	EDU-104	IMPROVEMENT OR IMPOSTER: INVESTIGATING THE RELATIONSHIP BETWEEN BURNOUT AND USE OF ARTIFICIAL INTELLIGENCE IN THE WORKPLACE BY EARLY CAREER PROFESSIONALS AND STUDENTS IN PSYCHOLOGY AND COUNSELING. Tayler Thomason*. Psychology, College of Education Advisor(s): Tayler Thomason, Robin Oatis-Bellew
9:00 AM – 12:00 PM	EDU-105	THE WEIGHT OF SUCCESS: EXPLORING THE EVOLUTION AND DIMINISHMENT OF THE SUPERWOMAN SCHEMA AMONG BLACK WOMEN WITH ADVANCED DEGREES Kiara Tookes-Williams*. Psychology, College of Education Advisor(s): Esther Lynch
9:00 AM – 12:00 PM	EDU-106	UNPACKING THE LAYERS: TOXIC MASCULINITY’S INFLUENCE ON BLACK MEN’S IDENTITY DEVELOPMENT Raymond Popplewell*. Psychology, College of Education Advisor(s): Brooke Rappaport
9:00 AM – 12:00 PM	EDU-107	WHEN THE MIRROR DON’T LOOK LIKE YOU: THE IDENTITY FORMATION OF BLACK WOMEN RAISED IN PREDOMINANTLY WHITE NEIGHBORHOODS CharMayne Jackson*. Psychology, College of Education Advisor(s): Brooke Rappaport
9:00 AM – 12:00 PM	ENGR-041	AERODYNAMIC PERFORMANCE OPTIMIZATION OF A TRUSS-BRACED WING AIRCRAFT USING CFD TECHNIQUES FOR SUSTAINABLE AVIATION WITH A SOLID OXIDE FUEL CELL (SOFC) PROPULSION SYSTEM Md. Mashiur Rahman*. Mechanical and Manufacturing Engineering, College of Engineering Technology and Computer Science Advisor(s): Muhammad Akbar
9:00 AM – 12:00 PM	ENGR-042	COMPUTATIONAL FLUID DYNAMICS AND MAGNETOHYDRODYNAMICS MODELING OF LIQUID METAL FLOWS FOR FUSION BLANKET APPLICATIONS Vailet Magidanga*. Civil and Environmental Engineering, College of Engineering Technology and Computer Science Advisor(s): Parthasarathy Ranganathan

**Denotes Presenters*

9:00 AM – 12:00 PM	ENGR-043	DESIGN AND CONCEPTUAL DEVELOPMENT OF A NON-CONTACT PIEZOELECTRIC THRUSTER FOR SAFER COLONOSCOPY Christopher Buford II*. Computer Science, College of Engineering Technology and Computer Science Advisor(s): Erdem Erdemir
9:00 AM – 12:00 PM	ENGR-044	EFFICIENT SECURE INFERENCE FOR VISION TRANSFORMERS VIA TOKEN REDUCTION AND KNOWLEDGE DISTILLATION Pulock Das*. Electrical and Computer Engineering, College of Engineering Technology and Computer Science Advisor(s): Kamrul Hasan
9:00 AM – 12:00 PM	ENGR-046	FROM 1D CONFINEMENT TO 3D DISORDER: PROBING THE LIMITS OF POLARITONIC THERMAL COHERENCE Tyler Sax*. TIGER Institute, College of Engineering Technology and Computer Science Advisor(s): Akira Ueda, Richard Mu
9:00 AM – 12:00 PM	ENGR-061	TECHNOLOGIES FOR IMPROVING PEDESTRIAN RAILROAD GRADE CROSSINGS IN URBAN AREAS Sunam Shrestha*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Deo Chimba
9:00 AM – 12:00 PM	ENGR-108	CEMENT ELECTROLYTES WITH INTERCONNECTED MICROPOROUS STRUCTURES FOR CEMENT SOLID STATE BATTERIES Ziyu Liu*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Shihui Liu, Lin Li
9:00 AM – 12:00 PM	ENGR-111	INFLUENCE OF HEMP SHIV PARTICLE SIZE ON THE COMPRESSIVE PERFORMANCE OF MYCELIUM-BASED MATERIALS Yanhai Liu*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Shihui Liu
9:00 AM – 12:00 PM	ENGR-112	PERFORMANCE COMPARISON OF PHYSICS-INFORMED AND MACHINE LEARNING MODELS FOR DETECTING OPERATIONAL FAULTS IN AIR HANDLING UNITS Mercy Sammy*. Civil and Environmental Engineering, College of Engineering Technology and Computer Science Advisor(s): Zufen Wang
9:00 AM – 12:00 PM	ENGR-113	REUSING C&D WASTE FINES FOR SUSTAINABLE SOIL IMPROVEMENT AND GROUNDWATER SAFETY Fatemeh Ghiasvand*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Roger Painter
9:00 AM – 12:00 PM	ENGR-114	UNIFYING MECHANO-SORPTIVE PHENOMENA IN POLYMERS: FROM ENVIRONMENTAL STRESS CRACKING TO MECHANO-SORPTIVE CREEP Yue Yan*. Architectural and Civil Engineering, College of Engineering Technology and Computer Science Advisor(s): Ranganathan Parthasarathy, Anil Misra
9:00 AM – 12:00 PM	HS-115	A HOLISTIC APPROACH TO REDUCING COLON CANCER RISK THROUGH NUTRITION AND LEISURE EXERCISE Eva Kilgore*, Amos Tan*, Olivia Tilton*, Jacob Watts*. Physical Therapy, College of Health Sciences Advisor(s): David Lehman
9:00 AM – 12:00 PM	HS-116	CRITERIA FOR INTEGRATION OF HIGH-SPEED TRAINING AS REHABILITATION TO REDUCE REINJURY FOLLOWING HAMSTRING STRAIN INJURY IN PROFESSIONAL ATHLETES: A SYSTEMATIC REVIEW. Jahari Bell*, David Edgren*, Adam Pleasants*. Physical Therapy, College of Health Sciences Advisor(s): Richad Clark

**Denotes Presenters*

9:00 AM – 12:00 PM	LPS-117	THE ROLE OF IMMUNE CELLS AND FIBROBLAST IN MOUSE MYOCARDIAL INFARCTED MODULE: DYNAMICS OF INFLAMMATION AND TISSUE REPAIR Cecilia Koko*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Cooney Kimberly, Saraswati Sarika
9:00 AM – 12:00 PM	LPS-118	ESTIMATION OF GENETIC PARAMETERS FOR PARASITE RESISTANCE AND GENOME-WIDE IDENTIFICATION OF RUNS OF HOMOZYGOSITY ISLANDS IN FLORIDA CRACKER SHEEP Rafeq Jambi*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Rafeq Jambi, Xiaofei Wang
9:00 AM – 12:00 PM	LPS-119	IMPACT OF PRECIPITATION VARIABILITY ON SWITCHGRASS GROWTH AND PRODUCTIVITY Jaekedah Christian*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Dafeng Hui
9:00 AM – 12:00 PM	LPS-120	RSK1/2 PROMOTES AN INFLAMMATORY MICROENVIRONMENT IN TRIPLE NEGATIVE BREAST CANCER Jayla Moore*. Biological Sciences, College of Life and Physical Sciences Advisor(s): Venkataswarup Tiriveedhi, Deborah Lannigan
9:00 AM – 12:00 PM	LPS-121	TOLL-LIKE RECEPTOR (TLR) 2, TLR3, TLR4, AND TLR8 IN THE MECHANISM OF HEXABROMOCYCLODODECANE-INDUCED PRODUCTION OF IL-1B Wenjun Zhu*, Zinia Hunter, Brian Townsend. Chemistry, College of Life and Physical Sciences Advisor(s): Margaret Whalen
9:00 AM – 12:00 PM	LPS-122	VITAMIN C SUPPLEMENTS INTAKE EFFECT ON DNA METHYLATION AND GENE REGULATION Sadiye Aras*, Jiajun Shi, Shuai Xu. Biological Sciences, College of Life and Physical Sciences Advisor(s): Xiaofei Wang, Qiuyin Cai

**Denotes Presenters*

PRESENTATION SCHEDULES

THURSDAY, APRIL 9, 2026

POSTER PRESENTATIONS

UNDERGRADUATE POSTER PRESENTATIONS, NHF - 1201 (F.I.S)

1:00 PM – 4:00 PM	AGR-144	ASSESSING FOREST DIVERSITY AT PLOT AND LANDSCAPE SCALES IN LAND BETWEEN THE LAKES USING FIELD DATA AND TREEMAP 2022 Destini Wright*. Environmental Science, College of Agriculture. Advisor(s): Bharat Pokharel, Xiaoyu Xu
1:00 PM – 4:00 PM	AGR-146	EVALUATION OF SUBSTRATES ON YIELD AND PROFITABILITY OF ORGANIC MICROGREENS GROWN UNDER CONTROLLED ENVIRONMENTAL CONDITIONS Elana Bodude*, Sai Prakash Naraju. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Dilip Nandwani
1:00 PM – 4:00 PM	AGR-147	IMPACT OF 4-H IN TENNESSEE: STRATEGIES FOR REINTRODUCTION IN URBAN COUNTIES Olivia Whitmore*. Human Sciences, College of Agriculture. Advisor(s): LaPorsha Davis
1:00 PM – 4:00 PM	AGR-148	REPRODUCTIVE PERFORMANCE OF MYOTONIC-SIRED F1 DOES COMPARED TO KIKO AND SPANISH DOES Sierra Richmond*, Jai'Da Seafous*, Julian Harding*. Food and Animal Science, College of Agriculture. Advisor(s): Richard Browning, Emily Hayes
1:00 PM – 4:00 PM	AGR-149	THE ROLE OF ACCREDITATION IN FOSTERING POSITIVE SOCIAL-EMOTIONAL DEVELOPMENT: A QUALITATIVE STUDY Kristian Butler*. Human Sciences, College of Agriculture. Advisor(s): LaPorchia Davis, Margaret Machara
1:00 PM – 4:00 PM	AGR-150	UNDERSTANDING THE ROLE OF LRR-RLK GENES IN LEGUME ROOT NODULATION VIA PROMOTER ANALYSIS AND HAIRY ROOT TRANSFORMATION Miracle walker*. Agricultural Sciences and Engineering, College of Agriculture. Advisor(s): Sonali Roy, Rajni Parmar
1:00 PM – 4:00 PM	AGR-151	UPCYCLED FOOD AWARENESS AND CONSUMER PERCEPTION: A STUDY OF TENNESSEE CONSUMERS Olivia Giannuzzi*. Agribusiness and Education, College of Agriculture. Advisor(s): Doc Tran
1:00 PM – 4:00 PM	EDU-152	BURNOUT ZONES AND PROFESSIONAL EFFECTIVENESS: A REVIEW OF STRESS AND RECOVERY IN HELPING PROFESSIONS Daelyn Lyons*, Dorien Brown*, Eliana Alford*, Madisson Dixon*, Paige Chuma*, Maylyn Mann *. Psychology, College of Education. Advisor(s): Thurman Webb
1:00 PM – 4:00 PM	ENGR-153	MAGNETO-OPTICAL EFFECT OF BISMUTH FERRITE AND ITS MEASUREMENTS India Gooch*. TIGER Institute, College of Engineering Technology and Computer Science. Advisor(s): Akira Ueda
1:00 PM – 4:00 PM	ENGR-167	ENERGY EXASCALE EARTH SYSTEM MODEL (E3SM) FOR HIGH-RESOLUTION PREDICTION OF HURRICANE-INDUCED HYDROLOGICAL RISKS IN THE APPALACHIAN REGION Hailey Hunt*. Center of Excellence - Information Systems and Engineering Management, Research and Sponsored Programs. Advisor(s): Amber Spears, Peter Thornton

1:00 PM – 4:00 PM	HS-154	ISOKINETIC STRENGTH COMPARISON BETWEEN HEALTHY AND POST-ACL RECONSTRUCTION LEGS IN COLLEGIATE ATHLETES Kierra Washington*. Human Performance and Sports Science, College of Health Sciences. Advisor(s): Sarah Martinez-Sepanski, Poliala Dickson, Robbie Cochrum, Jason Smith
1:00 PM – 4:00 PM	HS-155	STRENGTHENING DATA GOVERNANCE: ADDRESSING HIDDEN ERRORS IN TENNESSEE'S MEDICAID ELIGIBILITY RECORDS FOR ROBUST PUBLIC HEALTH REPORTING Jennifer Barlow*. Public Health, Health Administration, and Health Sciences, College of Health Sciences. Advisor(s): Krystal Massey
1:00 PM – 4:00 PM	HS-156	THERAPEUTIC INTERVENTION FOLLOWING A NAVICULAR FRACTURE IN A COLLEGIATE FOOTBALL PLAYER Aliyah Moore*. Human Performance and Sports Science, College of Health Sciences. Advisor(s): Poliala Dickson, Sarah Martinez-Sepanski, Robbie Cochrum, Jason Smith
1:00 PM – 4:00 PM	LPS-157	METAL-ORGANIC FRAMEWORKS: SYNTHESIS OF PORUS MATERIALS AND SEPARATION OF RARE EARTH METALS Janasica Joyner*. Chemistry, College of Life and Physical Sciences. Advisor(s): Dr. Tasneem Siddiquee
1:00 PM – 4:00 PM	LPS-158	1 SOL-GEL METHOD-BASED BISMUTH FERRITE (BiFeO₃) SYNTHESIS Taryah Burrell*. Chemistry, College of Life and Physical Sciences. Advisor(s): Mulugeta Wayu, Richard Mu
1:00 PM – 4:00 PM	LPS-159	ALCOHOL INDUCED LUNG INJURY WITH POTENTIAL CARCINOGENIC Kimora Utai*. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Dr. Jamie Sturgill, Cheyenne Chandler, Emily Huffman
1:00 PM – 4:00 PM	LPS-160	COLLECTION AND ISOLATION OF THERMOPHILIC MICROORGANISMS FOR WASTE VALORIZATION Sadiqa Akbar*, Shannon Jeffries, Keyon'dre Boyd, Ma'Kyah Washington. Biological Sciences, College of Life and Physical Sciences. Advisor(s): Joshua OHair
1:00 PM – 4:00 PM	LPS-161	EFFECT OF PENTACHLOROPHENOL EXPOSURES ON EXPRESSION OF THE INTRACELLULAR TOLL-LIKE RECEPTORS 3 AND 8 IN HUMAN IMMUNE Emerie Eddins*, Ellie Bray. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen
1:00 PM – 4:00 PM	LPS-162	EFFECTS OF TRIBUTYLTIN ON EXPRESSION OF TOLL-LIKE RECEPTOR (TLR) RNA IN HUMAN IMMUNE CELLS Janeli Centeno*. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen, April Falconer-Turner
1:00 PM – 4:00 PM	LPS-163	HEXABROMOCYCLODODECANE-INDUCED STIMULATION OF IL-6 PRODUCTION BY HUMAN IMMUNE CELLS RELIES ON MyD88 Brian Townsend*, Ellie Bray. Chemistry, College of Life and Physical Sciences. Advisor(s): Margaret Whalen
1:00 PM – 4:00 PM	LPS-164	HYDROTHERMAL SYNTHESIS AND CHARACTERIZATION OF BISMUTH FERRITE (BiFeO₃) NANOSTRUCTURES Destiny Curtis*. Chemistry, College of Life and Physical Sciences. Advisor(s): Mulugeta Wayu
1:00 PM – 4:00 PM	LPS-165	STUDY OF THE PHYSICAL (IN)STABILITY OF MELANIN-LIKE MATERIALS Tylor Miller*. Chemistry, College of Life and Physical Sciences. Advisor(s): Koen Vercruyssen, Margaret Whalen

1:00 PM – LPS-166

4:00 PM

**TRIBUTYLTIN-INDUCED INCREASES IN TOLL-LIKE RECEPTOR
EXPRESSION IN HUMAN IMMUNE CELLS**

Cameron Bennett*, Ellie Bray. Chemistry, College of Life and Physical Sciences.

Advisor(s): Margaret Whalen
