

27th Student Research and Creative Scholarship Day

Thursday, April 4th, 2024

7:45 am - 5:30 pm

Agricultural Science Building

Program at a Glance

7:45am-8:00am	Registration	4th Floor Lobby	
8:05am - 9:20am	Oral Session A Room 4004	Poster Session A 3 rd Floor Lobby	9:15am - 10:30am
9:30am - 10:45am	Oral Session B Room 4004		
11:00am - 12:00pm	Davis-Michael Lecture - Dr. Sina Samii Room 4004		
1:30pm - 2:30pm	Oral Session C Room 4004	Poster Session B 3 rd +4 th Floor Lobby	12:00am - 1:15pm
2:45pm - 4:00pm	Oral Session D Room 4004	Poster Session C 3 rd Floor Lobby	2:00pm - 3:30pm
4:15pm - 5:30pm	Oral Session E Room 4004		

The organizing committee:

Ana Claudia Sant'Anna (Chair), Elizabeth Rowen, James Kotcon, Aaron Giorgi, Caroline Chaves Arantes, Kirsten Stephan, Jacquelyn Strager,
Jason Hubbart (Associate Dean of Research)

Presenter	Title
Oral Session A: 8:05 am - 9:20am	
Cuervo, J	The Butterfly Effect in Soils: From Soil Health to Plant Diversity
Enyetornye , F	Effects of Additional Attributes in Discrete Choice Experiments: A Case Study of Lionfish
Hernandez, I	Tomato Pre-Breeding for <i>Septoria</i> leaf spot (SLS) resistance
Lowther, A	Fish beta diversity relationships with anthropogenic stressors in Central Appalachian streams
Oral Session B: 9:30 am - 10:45am	
Ajilboye, A	The Effects of Different Sources of Omega-3 Polyunsaturated Fatty Acids on Hepatic Lipogenic Gene Expression and Lipid Metabolism
Estanich, E	Varying branched-chain amino acid ratio in diets using corn gluten meal, L-isoleucine, and L-valine influences 0-21d turkey hen performance and amino acid digestibility
Israelsen, I	Formulation, Sensory Evaluation, and Physicochemical Assessment of a Novel Energy Bar
Korte, K	LGBTQ+ Clothing Habits in Appalachia
Stewart, C	Adding Value to Waste Wool Through Textile Design
Davis-Michael Lecture 11:00am-12:00pm	
Oral Session C: 1:30 pm - 2:30pm	
Lambongang, M	Enhancing fish farming in Ghana Influence of effective aquaculture management on fingerlings survival
Naharki, K	The Detection of Tree of Heaven (<i>Ailanthus altissima</i>) Using Drones and Optical Sensor
Reed, K	Pasture plant community composition and structure in West Virginia
Shepta, E	Modeling factors impacting the recruitment success of invasive bighead and silver carp populations in the Ohio River
Oral Session D: 2:45 pm - 4:00pm	
Cook, A	Evaluating Genetic Differences in West Virginia's Reintroduced Elk (<i>Cervus canadensis</i>)
Nitza, E	We reintroduced them, now what? Assessing the impact of river otter reintroductions and contemporary conservation needs across Appalachia, USA
Brown, H	Caring for Scarabs: Sustaining Dung Beetle Populations with Responsible Endectocide Choice
Mead, S	Iron-Coated Sand as a Sustainable Substrate Amendment for Nutrient Management of Containerized Floriculture Crops
Khanal, N	Counting the Costs: Evaluating the Economic Impact of PFAS Contamination on Pennsylvania's Housing Market
Oral Session E: 4:15 pm - 5:30pm	
Cade, C	Economic Valuation of Endangered Species – A Case Study of Candy Darter
Chaddock, L	Adhesion of THM Densified Yellow-poplar (<i>Liriodendron tulipifera</i>)
Harris, C	Impacts of Hemlock Woolly Adelgid and Landscape Configuration on Eastern Hemlock Associated Bird Species
Siegan, S	Examining Temporal and Spatial Variation in Native Brook Trout Spawning Events in Appalachian Headwater Streams
Smith, T	Testing of a metabolic engineering strategy to increase phenylalanine in plants

Presenter		Title
Poster Session A 9:15 am - 10:30am		
A-1	Renner, A	The Effects of Varying Ambient Conditions and Conditioning Temperatures on Enzyme Activity, Moisture, and Pellet Quality.
A-2	Shaw, K	The Use of Drones and Machine Learning in the Mapping and Treatment of Invasive Multiflora Rose (<i>Rosa multiflora</i>) Shrubs
A-3	Vargas, J	Using Humorous Threats in Safety and Rules Signage in Recreation Areas to Influence Behavioral Intentions
A-4	Choudhary, M	Study of the in planta metabolic role of putative cytosolic enzyme ncADH in tomato
A-5	Deo, B	Role of minor cannabinoids as defense chemicals in response to insect herbivory in hemp (<i>Cannabis sativa</i>)
A-6	Haridas, S	The status of dung beetles in West Virginia pastures
A-7	Issaka, N	Assessment of the Recycling Program in West Virginia: A Case Study of Monongalia County
A-8	Jin, L	Assessing SWAT Performance: Ksat, DEM Resolution, and Climate Change Effects in Appalachia
A-9	Ktil, N	Growth performance and nutritional quality of yellow mealworm (<i>Tenebrio molitor</i>) fed apple pomace-supplemented diet
A-10	Lasmar dos Reis, G	The potential role of miR6024-3p as a repressor of the anthocyanin biosynthesis pathway in tomato plants
A-11	Laws, M	Proposed Experimental Design for Testing the Presence of Known Ambrosia Beetle Behaviors in West Virginia's invasive Ambrosia Beetle <i>Euwallacea validus</i>
A-12	Mackereth, I	Economic Value of Rural State Parks using Mobile Device Data
A-13	Salehipour, P	Creative Integration of Artificial Intelligence and Geospatial Data for Regional Wealth Estimation
A-14	Turner, M	Vintage reseller contributions in curbing T-shirt disposal
A-15	Walker, M	The impacts of flood hazards on property values: Evidence before and after a 1000-year flood
A-16	Malik, Z	Blossom
A-17	Wong, I	What are the costs and benefits from carbon sequestration to livestock producers in Appalachia?
A-18	Mundy, B	Assessment of the Relationship Between Zooplankton and Larval Fish in the Ohio River
A-19	Pierce, R	Post fire effects on the growth and development of California black oak in the central Sierra Nevada mountains.
A-20	Thompson, W	Development of Community Size-Spectra-Based Indices of Biotic Integrity for West Virginia
A-21	Stone, G	Departure (Poison)
Davis-Michael Lecture 11:00-12:00		

Presenter		Title
Poster Session B 12:00pm - 1:15pm		
B-1	Ajayi , K	Evaluating the adaptation of Taro (<i>Colocasia esculenta</i>) to West Virginia Climatic Conditions
B-2	Baker, J	Influence of Soil Characteristics on Two Species of Plethodon Salamanders (<i>P. cinereus</i> , <i>P. glutinosus</i>)
B-3	Benelli, A	Knowledge and Perceptions of Divers and Snorkelers Regarding Coral Reef Environmental Stressors and Restoration in the Florida Keys National Marine Sanctuary
B-4	Cheshire, L	Do Dung Beetles Sink or Swim? Exploring Scarabaeidae Response to Climate Change Induced Precipitation
B-5	Heitzman, N	Distribution of Hair Types on <i>Osmia cornifrons</i> (Hymenoptera: Megachilidae): implications for pollination efficiency
B-6	Keane, S	Employing Machine Learning and UAS for Effective Autumn Olive Treatment on Reclaimed Surface Mines
B-7	Kinder, I	Utilizing sUAS-Based Remote Sensing for Sustainable Outdoor Recreational and Interpretive Trail Design in a Mitigation Context
B-8	Kohrs, K	Evaluating land cover change and opportunities for bioenergy crop development on surface mine sites in West Virginia, U.S.A.
B-9	Petroněk, H	Exploring the biology and host range of <i>Neonectria magnoliae</i>
B-10	Abesh, B	Soil-Water Interactions in Riparian Wetlands: A Study of Hydraulic Conductivity and Nutrient Concentrations
B-11	Goddard, E	Microbial Response to Varied Manure Treatments for Organic Agricultural Methods
B-12	Kim, G	The impact of the changes of Macro economy on the transport cargo volume in South Korea and forecasting.
B-13	Mikolajewski,D	Removal and Analysis of American Chestnut Stands Infected with <i>Cryphonectria parasitic</i> and Treated with Super Donor C. <i>parasitic</i> strains
B-14	Miller, M	Assessing the population structure, genetic diversity, and hybridization of the Appalachian cottontail (<i>Sylvilagus obscurus</i>), in West Virginia, USA
B-15	Musekwa, M	Manure Management and Weeds: Implications for Organic Grain Production
B-16	Nahyan, H	A digital memoir of landscape: a multi-layer landscape model for mapping cultural heritage.
B-17	Preble, R	Improving artemisinin biosynthesis by leveraging genetic and metabolic diversity in the WVU <i>Artemisia annua</i> collection
B-18	Wolff, R	Evaluating Environmental Stewardship Short Term Service-Learning at Campus Urban Natural Greenspaces Campus to Foster Community Engagement
B-19	Abigail, C	Enhancing Reproducibility and Comparability: Standardizing a Rapid Soil Aggregation Method for Appalachian Region Soil Testing Laboratories.
B-20	Black, T	Improved Engineered Wood I-Joists
B-21	Hazel, C	A new species of fungus symbiotic with the morning glory <i>Ipomoea tricolor</i>
B-22	Long, C	Effect of Vinegar Water on Chicken Carcasses Contaminated with Salmonella Typhimurium and WV Poultry Survey
B-23	Lusk, P	A Foldable Modular Home Made from Forest Products
B-24	McCandless,K	Spatial Analysis and Repurposing of Coal Refuse Sites in Appalachia: From Environmental Challenge to Economic Opportunity
B-25	Tripp, J	Steam Bending Treatments on American Beech Wood
B-26	Bohn, G	A method to standardize soil respiration assessment as a soil health indicator for Soil Testing Labs in the Appalachian Region

Presenter		Title
Poster Session C 2:15pm-3:30pm		
C-1	Alimario, A	Developing an Assay for Identifying Volatile Compounds in Pork
C-2	Bartram, D	Implementing Unmanned Aerial Vehicles to Collect Human Gait Data at Distance and Altitude for Identification and Re-identification
C-3	Cunningham, G	Synergetic Effect of Cellulose and Chitosan Polymers in Cancer Treatment
C-4	DiStefano, N	Establishing Transient and Stable Genetic Transformation Protocols for Industrial Hemp (<i>Cannabis sativa</i>)
C-5	Glover, L	Understanding River Otter (<i>Lontra canadensis</i>) Survival and Spatial Ecology in West Virginia
C-6	Marques Do Amaral, L	Assessing ecological impacts of invasive carp in the Ohio River
C-7	Plaughter, P	Northern Red Oak Seedlings Planted in a Strip Clearcut: Nine Year Results
C-8	Taul, T	Preliminary Analysis of Volatile Organic Compounds in Soils as Soil Health Indicator
C-9	Vandiver, M	Simulated climate-change-related environmental stressors can alter the yield and metabolomics of tomato
C-10	Campbell, S	Efficacy of the nematode-trapping fungus, <i>Arthrobotry oligospora</i> , against the root lesion nematodes <i>Pratylenchus penetrans</i> and <i>P. scribneri</i>
C-11	Fuss, J	Ergot Alkaloid Biosynthesis in <i>Aspergillus aspearensis</i>
C-12	Hall, E	New Records of Invasive Hydroid <i>Cordylophora caspia</i> In the Ohio River
C-13	Korade, M	Examining Methods of Establishing Running Buffalo Clover (<i>Trifolium stoloniferum</i>)
C-14	Krisulevicz, C	Identifying the Purpose of the Chloroplast-Mediated CEBP Protein in Petunia
C-15	Marshall, G	The Modern Doll
C-16	McIntire, C	Fall 2023 Fashion Design Final Abstract
C-17	Oliveira, E	CRISPR-Cas9 prime editing of long-array tandem repeats of maize knobs: Impact on heterochromatin structure, organization and behavior.
C-18	Ritchea, J	Characterizing the effectiveness of monofilament fencing in protecting oak regeneration from deer browsing within the West Virginia University Research Forest
C-19	Shovlin, E	The use of woody components in stereolithography additive manufacturing
C-20	Mueller, V	Drinking High Fructose Corn Syrup Solution Altered Gene Expression Indicating Hypothalamic Dysfunction in Young Adult Female Rats
C-21	Zepfel, B	Evaluating State Policies and Incentives for Solar Energy Adoption: Comparing Successes, Challenges, and Global Perspectives