THE OFFICE OF UNDERGRADUATE RESEARCH & CREATIVE INQUIRY

AUTUMN UNDERGRADUATE RESEARCH FESTIVAL

NOVEMBER 1, 2018

Ohio Union

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SCHEDULE

POSTER AND ORAL PRESENTATIONS

Session 1: 10:00-11:00 am Session 2: 11:30 am-12:30 pm

Session 3: 1:30-2:30 pm

Sesson 4: 3:00-4:00 pm

3-MINUTE THESIS COMPETITIONS

Senate Chamber Room, Hayes Cape Room and Tanya Rutner Hartman Room 12:00-2:00 pm

BUCK TANK COMPETITION

Senate Chamber Room 3:30-4:30 pm (Details Pending)

WELCOME FROM THE OUR&CI TEAM

DEAR STUDENTS AND COLLEAGUES,

It is our great pleasure to welcome you to the Autumn Undergraduate Research Festival. Over two hundred undergraduates are presenting their research and creative endeavors throughout the day. Under the direction of their research mentors, students carried out collaborative research projects to solve pressing local, statewide, national and global issues.

We would like to extend a special thank you to our research mentors, volunteers and visitors. Congratulations to our students on their research accomplishments. Have a wonderful day.

Sincerely,
The Office of Undergraduate Research & Creative Inquiry Team

OFFICE OF UNDERGRADUATE RESEARCH & CREATIVE INQUIRY STAFF

Lorraine S. Wallace, PhD Director

Amanda Jovanovich, BS Program Coordinator

Kayla Daniel, BA Program Assistant

Mikafui Dzotsi, BS Program Assistant

Megan Ferriby, MS Graduate Assistant

MAPS OF OHIO UNION

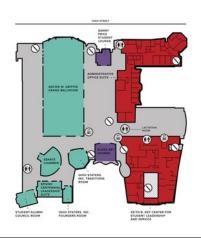


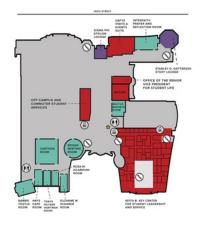
First Floor:

Registration
Poster Presentations
(Great Hall Meeting
Rooms)

Second Floor:

3-Minute Thesis and
Buck Tank
Competitions
(Senate Chamber
Room)





Third Floor:

Oral Presentations and
3-Minute Thesis Competitions
(Hayes Cape Room
Suzanne M Scharer
Room and Tanya Rutner
Room)

SESSION 1: ORAL PRESENTATIONS

Suzanne M Sharer Room

Time	Presenter	Presentation Title
10:05-10:15 am	Sameed Pervaiz	GPU-Accelerated Computation of Femtoscopic Correlation Functions for Heavy-Ion Collisions
10:15-10:25 am	Eitan Rothberg	Localized Adversarial Training for Better Image Classification
10:25-10:35 am	Andrea Stanic	Discrimination Against the San and the Reproduction of Inequality in Botswana
10:35-10:45 am	Jayant Thankappan	What parent-led cues successfully gain attention of hearing-impaired infants and effectively guide them to task completion?
10:45-10:55 am	Samanta Turner	Session Notes as a Professionalization Tool for Writing Center Staff: Conducting Discourse Analysis to Determine Training Efficacy and Tutor Growth

SESSION 1: ORAL PRESENTATIONS

Hayes Cape Room

Time	Presenter	Presentation Title
10:05-10:15 am	Victor Amesoeder	Degradation of Southern Yellow Pine by Growth of Brown Rot Fungi in Simulated post- Hurricane Conditions
10:15-10:25 am	Michael Boazzo	Analysis of Nuclear Thermal Propulsion (NTP) enabled heliopause trajectories using Solar-Oberth Maneuvers
10:25-10:35 am	Corey Keyser	Impact of Philosophy Education on Critical Thinking and Motivated Reasoning
10:35-10:45 am	Avery Meyer	Psychiatric Comorbidities and Treatment Adherence in Women Receiving Prenatal Medication Assisted Treatment for Opioid Use
10:45-10:55 am	Aditya Mistry	Using Crystallography to Explore Alternative Topologies in the Four-helix Bundle Protein, Rop
10:55-11:05 am	Clifford Goertemiller	Improving Spring Back Prediction through Inverse Analysis and Four Point Bending

SESSION 2: ORAL PRESENTATIONS

Suzanne M Sharer Room

Time	Presenter	Presentation Title
11:35-11:45 am	Naim Abubaker	Protocadherin-19 and N-cadherin interact to control cell movement during eye formation and embryonic development
11:45-11:55 am	Luke Hearon	Establishing a correlation between soybean presence and soybean foraging by A. mellifera
11:55-12:05 pm	Colleen Hoynes	A One-Year Review of Routine Social Work Evaluations for Children Less Than Twenty- Four Months of Age with Burn Injury
12:05-12:15 pm	Akanksha Malhotra	Imputing HLA-A Genotypes in Kenyans: A Proof of Principle
12:15-12:25 pm	Ruojing Peng	A Novel Theoretical Approach for Strongly Correlated Systems Based on Tailored Density Cumulant Theory
12:25-12:35 pm	Alexander Williams	Rationality and Efficiency in NFL Gambling Markets

SESSION 3: ORAL PRESENTATIONS

Suzanne M Sharer Room

Time	Presenter	Presentation Title
1:35-1:45 pm	Hannah Bradley	Ecopoetry in Translation: A critical rendition of Ulrike Almut Sandig's "so I've heard it said"
1:45-1:55 pm	Ladan Navari	Significance of METTL3 in Hepatocellular Carcinoma Progression
1:55-2:05 pm	Heather Pechtl	Effects of 3-nitrooxypropanol on feeding behavior, rumen fermentation, and methane production in beef cattle fed a growing diet

SESSION 4: ORAL PRESENTATIONS

Suzanne M Sharer Room

Time	Presenter	Presentation Title
3:05-3:15 pm	Aliya Ansari	The Use of Computed Tomography-Assessed Skeletal Muscle Mass as a Predictor of Outcomes in Thoracic Surgery: A Systematic Review and Meta-Analysis
3:15-3:25 pm	Anthony English	Investigation of Pharmacological Activity of Novel Bacterial Topoisomerase II Inhibitors Against S. aureus Topoisomerase IV
3:25-3:35 pm	Emily Roberts	Contradictory Characters: Lady Detectives and their Depoliticization

3-MINUTE THESIS COMPETITION

Senate Chamber Room Lived Experiences of Human Societies

Time	Presenter	Presentation Title
12:00-12:15 pm	Registration	
12:15-12:20 pm	Slide Set-Up	
12:20-12:25 pm	Sydney Clark	The Effects of Training on Pre-Algebraic Pattern Thinking in Preschoolers
12:25-12:30 pm	Natalie Hurst	Increasing Postsecondary Attainment in Ohio through Advanced High School Programs: A Comparison of AP and College Credit Plus
12:30-12:35 pm	Alexis Scharrer	The Phonological Aquisition of L2 Phonemes: An Investigation of Kiche; Glottalic Consonants Effect on Spanish Consonant Production
12:35-12:40 pm	Chris Newman	A Cloak for a Dagger: Searching for the Jesus of Matthew 10:34 and Luke 22:36
12:40-12:45 pm	Tabulation Break	
12:45-12:50 pm	Natalie Delea	Specters of Violence: Communicating Trauma in Carmen Maria Machado's "Especially Heinous"
12:50-12:55 pm	Emma Megla	Why We Forget: Modality-Specific Forgetting Following Restudy
12:55-1:00 pm	Laura Janakiefski	The Duration of Recognition-Induced Forgetting
1:00-1:05 pm	Autumn Perkey	Industrialized Democracies and Eros Populism: Mass Societies, a Culture of Narcissism, and a Proto-Authoritatian Leader
1:05-1:10 pm	Tabulation Break	
1:10-1:15 pm	Isaiah Johnson	The Great Mediator: Jeff Corey Collection
1:15-1:20 pm	Tal Shutkin	Cross-Cultural Collaboration in British Colombia's Muskwa-Keckika Management Area
1:20-1:45 pm	Judge Deliberation	
1:45-2:00 pm	Awards Presentatio	n

3-MINUTE THESIS COMPETITION

Hayes Cape Room Emerging Issues in STEM

Time	Presenter	Presentation Title
12:00-12:15 pm	Registration	
12:15-12:20 pm	Welcome	
12:20-12:25 pm	Ivan Pires	Quantifications of Active Apohemoglobin Heme-Binging Sites via Dicyanohemin Incorporation
12:25-12:30 pm	Jinghan Zhao	Identify Rbfox-regulated Transcripts Important for Muscle Function
12:30-12:35 pm	Stephen Gant	2D Material Modeling with Density Functional Theory: Applications in Scanning Tunneling Microscopy
12:35-12:40 pm	Junzi Xiang	Fabric-Based Battery-Assisted Passive
12:40-12:45 pm	Tabulation Break	RFID Tags
12:45-12:50 pm	Yu Gu	Process Analysis and Simulation of Hydrogen Generation from Natural Gas using an Iron-based Chemical Looping Technology Integrated with Solid Oxide Fuel Cell Stacks
12:50-12:55 pm	Rohan Casukhela	Towards the Development of a Computational Framework for Nickel- Titanium-Hafnium Shape Memory Alloy Design
12:55-1:00 pm	Hilary Kordecki	The Effects of Pesticide, Fungicide, and Adjuvant Combinations on Honey Bee Brood Development
1:00-1:05 pm	Alexandra Smith	Natural Variability in the Contribution of Heterotrophic Carbon to Tissues of Hawaiian Corals
1:05-1:10 pm	Tabulation Break	Hawaiian Corais
1:10-1:15 pm	Sarah Soloman	Lipid Class Profiles of Annually Bleached Caribbean Corals inform Coral Selection for Restoration
1:15-1:20 pm	Zac Graber	Raising Recovery Rates
1:20-1:45 pm	Judge Deliberation	
1:45-2:00 pm	Awards Presentation	ı

3-MINUTE THESIS COMPETITION

Tanya Rutner Hartman Room Improving Human Health

Time	Presenter	Presentation Title
12:00-12:15 pm	Registration	
12:15-12:20 pm	Welcome	
12:20-12:25 pm	Sarah Ewig	Paraphrase Generation to Increase Performance of Machine Classification
12:25-12:30 pm	Scott Stuckey	Quantifying Material Properites of Human Ribs from Structural Dynamic Bending Tests
12:30-12:35 pm	Jenna Wilson	VWF Inhibition by an RNA Aptamer Improves Functional Outcome Compared to rTPA in Ferric Chloride-Induced Carotid Artery Thrombosis in Mice
12:35-12:40 pm	Evan Kania	Characterization of miRNAs as Post- Transcriptional Modulators of DNA Topoisomerase III Expression in Etoposide Resistant cells
12:40-12:45 pm	Tabulation Break	
12:45-12:50 pm	Mindy Hoang	Ceramide Addition as a potential Treatment for Dedifferentiated Liposarcomas (DDLPS)
12:50-12:55 pm	Melanie Sich	A Comparison of Function in Partial Hand Amputees Manipulating SMall Objects with and without a Myoelectric Controlled Prosthesis
12:55-1:00 pm	Bryce Boron	Neural Correlates of Emotion Regulation in Multiple Sclerosis
1:00-1:05 pm	Camille Bratton	Biology Prevention of Blood Clots: From Mice to Men
1:05-1:10 pm	Tabulation Break	
1:10-1:15 pm	Aminat Adewumi	Maternal Exposure to Racial Discrimination and Risk for Low Birth Weight
1:15-1:20 pm	Vikranth Mirle	Mechanism of Active Hexose-Correlated Compound in Killing AML Blast Cells via Extrinsic Apoptotic Pathway and Effects in MLL/FLT3 double knock-in mice
1:20-1:45 pm	Judge Deliberation	ı
1:15-2:00 pm	Awards Presentation	n

Session 1: 10:00-11:00 am

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
1 N	Iuhammad Anandika	An Experimental Investigation of the Effect of Random Spacing Errors on the Loaded Transmission Error of Spur Gear Pairs
2	Maryam Bainazar	Characterizing transcriptional states of colon cancer cell lines using mRNA gene expression data to provide clinical insights and improve targeted therapies
3	Alex Buga	A Eucaloric Carbohydrate-Restricted Diet Significantly Improves VAT Mass and Markers of Metabolic Health in Subjects with MetS: A Crossover Feeding Trial
4	Iona Campbell	Fungal Growth on and Degradation of Polyurethane Foam
5	Yuyi Chang	Traffic Congestion - Understanding Driver Behavior from Traffic Trajectories
6	Pearl Chen	Effects of pH, Electrolyte Concentration, and Organic Acid Coating on the Aggregation Kinetics of Hematite Nanoparticles
7	Julia Evans	Mutated Calmodulin to Treat Cardiac Arrhythmias
8	Luke Fannin	Dental chipping in Tai Forest cercopithecoid primates: Implications for dietary reconstruction
9	Taylor Fitzgerald	High temperature co-electrolysis of CO2 and H2O to produce synthesis gas using Ni and Co doped La0.7Sr0.2FeO3-Î′ perovskite cathode catalysts
10	Amanda Gibson	Rapid Microwave-Assisted Synthesis of Thermochromic W-doped Vanadium Dioxide
11	Mukul Govande	Absence of skin carcinoma in C/EBP knockout mice after UVB exposure: Role of apoptosis and carcinogenesis signaling pathways revealed by global gene expression profiling

Session 1: 10:00-11:00 am

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
12	Andrew Harley	Molecular Identity and Spatial Topography of Transient A-type Potassium Channels in the Rostral Nucleus of the Solitary Tract
13	Cole Harlow	SAW filter Sensing through Impedance Measurements of Material Tensors
14	Browning Haynes	The Role of Microglia in Chemotherapy- Induced Fatigue
15	Michael Heinz	New resummation techniques of divergent series: the Painlevé equation PII
16	Sarah Holbert	Legacies of a Strong Welfare State: Attitudes of Young Adult Poles toward the Role of Government in Economic Redistribution, 1988 - 2013
17	Cornelius Johnson	The Effect of the CityLYNX Gold Line on Crime Trends in Contiguous Urban Areas
18	Roger Kassouf	Simulating Human-Robot Collaboration with Virtual and Augmented Reality
19	Chase Kayrouz	Diversity and Distribution of Methylphosphonate Synthase and 2- Hydroxyethylphosphonate Dioxygenase in Microbes Illuminates a Key Branch-Point in Phosphonate Biosynthesis
20	Corey Khan	Enlightenment Era Debate Societies
21	Grace Klosterman	The Effect of Galvanic Vestibular Stimulation on Spatial Navigation
22	Ravali Kode	The Preparation of Quinone Methide Precursors to Re-alkylate Aged Acetylcholinesterase
23	David Kormos	Applying a mathematical model to water uptake in house dust
24	Margaret Lakomy	Synthesis of Bolaamphiphilic and Peptide- Based Molecules for the Use in Co-Assembly of Multilayer Nanotubes

Session 1: 10:00-11:00 am

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
25	Samantha Lewis	Effects of Estrogen Deficiency on the Jaw Bone
26	Mohammed Moumen	Designing aerosols to treat Pseudomonas aeruginosa infections
27	Kelly Pan	Investigation of Propylene Glycol to Reduce Hydration and Increase Color Stability of Red Cabbage Anthocyanins
28	Leah Pastor	Structural Insight into the Homophilic Binding of Protocadherin-8
29	Thomas Porter	Photoswitchable Quantum Dot Fluorescent Probes for Stochastic Optical Reconstruction Microscopy
30	Sarthak Shah	Mild traumatic brain injury increases vulnerability to stroke in mice
31	Jacob Socha	How Nurses Identify Hospitalized Patients On Their Personal Notes: Findings From Analyzing 'Brains' Headers With Multiple Raters
32	Uma Subrayan	Androgen Receptor Function in Hepatocellular Carcinoma
33	Hayley Svensson	Numeracy and the Strength of Monetary vs. Non-Monetary Incentives in Task Performance
34	Thushara Thomas	Effect of IVIG on the FcyRIIb mediated small immune complex clearance function of liver sinusoidal endothelial cells.
35	Kamila Thompson	Developing a Bio-Inspired Autonomous Underwater Vehicle for Efficient Marine Exploration
36	Anh Tran	Dental manifestations of the inherited mineralization disorder hypophosphatasia
37	John Vu	Characterization of Arabidopsis thaliana Post- Transfer Editing in vitro

Session 1: 10:00-11:00 am

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
39	Jacob Weaver	The Investigation of Aged Acetylcholinesterase Resurrection Through Synthesis of Quinone Methide Precursors
40	Guozhen Xie	How long does 'stemness' last in cancer?

Session 2: 11:30 am-12:30 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
1	Frances Avila-Soto	Altered TLR Response in HIV Infection
2	Abdulkadir Bashir	Simulation of n-Heptane Injection into a quiescent Environment of hot Air
3	Kevin Berkowitz	Tactile sensitivity of different oral tissues to punctuate pressure
4	Luke Bobay	Toward examining climate effects on yellow perch recruitment: How do Lake Erie larval yellow perch diets vary within a year?
5	Hao Chen	Reinforcement Learning for Connected Autonomous Driving
6	Lang Cheng	Examination of Bitcoin and Ways to Make It A Better Currency
7	Mathew Clement	Copper Iron Oxide as a Carbon Dioxide Reduction Catalyst
8	Leighann Cotter	Subperiosteal Transplantation of Autologous Bone Marrow-Derived Stem Cells: Effects on Local Cell Proliferation
9	Catalin Dragonmirescu	The Relationship between Resting Heart Rate Variability and Facets of Rumination: An Update
10	Claudia Edell	Effects of an inducible CD4 T cell-specific PRMT5 Knockout on inflammatory T cell responses and Experimental Autoimmune Encephalomyelitis disease
11	Jacob Farr	Novel Genes in the EGFR/Ras Pathway
12	Michelle Fiamingo	Surface Properties of Alginate
13	Jack Fioretti	Characterization of potential targets of the Rho5 GTPase involved in cell death under stress

Session 2: 11:30 am-12:30 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
14	Stacy George	The Fit between Rentals and Renters
15	Shannon Gray	Discordance Between Mitochondrial and Nuclear Contact Zones Within White-Tailed Antelope Squirrels (Ammospermophilus leucurus)
16	Elliott Harrod	Forming Limit Diagrams of Annealed 304 Stainless Steel at Multiple Strain Rates with Digital Image Correlation
17	Jingong Huang	Fast Back-projection Algorithm for Synthetic Aperture Radar Imaging System with a Lightweight Unmanned Aircraft System
18	Sandra Lackmann	Advocacy or Abuse? The role of US Immigration Law in the Lives of Asylum- Seeking Central American Women
19	Elizabeth Lima	The Effect of CAR and PXR Genetic Variation (SNPs) on Efavirenz (EFV) Pharmacokinetics (PK) in Ghanaian HIV+ and HIV/TB+ Children.
20	Duncan MacKenzie	The Effect of Surface Area on In Vitro Degradation of 3D Printed Poly(Propylene Fumarate) (PPF) Bone Tissue Engineering Scaffolds
21	Iwan Martin	Imaging Spin Behavior in WSe2/Graphene Heterostructures
22	John Meacham	An Analysis of Funding in the Mexican Film Industry
23	Nicholas Natasi	Microscopic comparison of fungal growth in residential carpets with different carpet fiber materials, at varying relative humidity levels, and presence of household dust
24	Mark Oleson	Democratic Deconsolidation in Poland, Time to Worry?

Session 2: 11:30 am-12:30 pm

Great Hall Meeting Rooms 1 & 2

Poster	Number Presenter	Presentation Title
25	Shivani Patel	Development of Computational Model to Visualize Gene Activity
26	Phinu Philip & Ali Razv	The Surface Availability and Dispersal of Bioglass 45S5 in 3D-printed Poly(propylene fumarate) (PPF) Bone Tissue Engineering Scaffolds
27	Emily Preston	Have You a Favorite Hymn?
29	Nicole Reinhold-Larsso	n The role of tonsillar innate immune cells during HIV/SIV pathogenesis
30	Abu Rogers	Plasmodium falciparum hexokinase activity is regulated by S-glutathionylation
31	Karina Sobieraj	A Guiding Figure in Research
32	Emma Thaci	Married with Children: Assessing the Relationships between Marital Status, Presence of Children, and Mental Health in Poland, 2008– 2013
33	William Timmermeyer	Paul and Politics: The Historical Influence of Romans 13:1-7
34	Jarod Wade	Ohio Industries Of Growth Analysis
35	Zachary Wilson	Validating flow cytometry methods to distinguish T-cell phenotypes in EAE
36	Dennis Yang	Study of Fluorinated Quinone Methide in the Resurrection of Aged Acetylcholinesterase
37	Matthew Sconce	The Influence of Visual Salience on The Processing of Plurals

Session 3: 1:30-2:30 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
1	Colin Angell	The role of Melusin in muscular dystrophy
2	Lovette Azap	Synthesis of Novel Bacterial Topoisomerase Inhibitors
3	Emma Crawford	Defining how BRAF and NRAS mutations cooperate with UVA and UVB light to initiate melanoma
4	Phillip Dalke	Driveline Design, Testing, and Improvements Made During Year 4 for the Ohio State EcoCAR Drivetrain
5	Cara Dauch	KMT2D Impact on Metastasis in Squamous Cell Carcinoma
7	Shivani Deshpande	Cognitive Neurodevelopmental Studies after Necrotizing Enterocolitis Stress in an Experimental Rat Model
8	Ellen Dunkle	Body size of ground beetles (Coleoptera: Carabidae) decreases with urbanization
9	Nick Fadell	Soybean Calmodulin 4: A Promising Candidate for Gene Therapy Approaches to Cardiovascular Disease
10	Harrison Fried	How do algal and sedimentary turbidity affect the swimming performance of Emerald Shiner (Notropis atherinoides) and Golden Shiner (Notemigonus crysoleucas) in Lake Erie?
11	Allison Howell	Inhibition of Salmonella Typhimurium growth by probiotics LGG and BB12 in vitro
12	Kristen Hsu	Functional characterization of regulatory T cells (FoxP3+CD25+) in Crohn's disease-like ileitis

Session 3: 1:30-2:30 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
13	Asish Katta	Lack of interleukin-1 receptor type 1 decreases neurodegeneration following magnetic nanoparticle-induced focal cerebral ischemia.
14	Alyssia Keil	Impact of Hides on Duration of Stage Two Labor in Dairy Cows
15	Maura Kopchak	Re-alkylation of Aged Acetylcholinesterase Using Quinone Methide Precursors
16	Callista Krebs	Exploring Chloride Poisoning Resistance for Carbon-Based Catalysts for Applications as Oxygen Depolarized Cathodes
17	Jack Kucinski	Examining the function and mechanism of histone H2A.z (HTZ-1) in chromatin regulation
18	Lauren Mansour	Improving Identifiability of Type and Urgency of Auditory Alarm Sounds: A Laboratory Experiment with Registered Nurses
19	Ryan McConnell	Characterization of Extinction Time and Approximation by Explicit Solutions for Total Variation Flow
20	Steven McFarland	Characterization of Hydrophobic Core Variants of DYV4-6 Library of Rop
21	Carter Morris	Undergraduate Engineering Students' Beliefs About Intelligence and the Role of Socioeconomic Status in Belief Formation
22	Lav Patel	Expression and Purification of T4 DNA Ligase to Use in Creating DNA Substrates for Single Molecule Fluorescent Studies
23	Lauren Pham	Computational Fluid Dynamic Analysis of Bioreactor Flow through Bone Tissue Engineering Scaffolds
24	Adithe Rivaldi	Novel internal autocrine mechanism of VEGF signaling in hippocampal neural stem and progenitor cells

Session 3: 1:30-2:30 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
25	Ishan Rola	Use of proximity labeling to identify proteins contributing to ASIC-mediated acidotoxicity
26	Allen Ronis	Defining the structure and function of serinerich repeat proteins in Streptococcus oralis
27	Shruthi Sethuraman	Altered macrophage phenotype results in elevated collagen by fibroblasts in Idiopathic Pulmonary fibrosis
28	Stavan Shah	Effect of Fixatives on Chemical and Magnetic Properties of Tissue Iron
29	Karissa Smith	Screening Compounds for Potential Treatments of Nosema Ceranae
30	Patrick Smith	Overcoming Necrotic Core Formation in the Preimplantation Culturing of Large Format Tissue Engineered Bone Implants
31	Zachary Smotzer	Neurogenesis associated with Histone Acetyltransferase 1
32	Benjamin Stone	Traversing the Last Mile: Getting Central Ohio to Work
33	Michael Stotts	Liquid Metal Embrittlement in Resistance Spot Dissimilar Welds of Advanced High Strength Steels: Microstructure and Fracture Characteristic
34	Dan-Ho Tran	Determining signaling outputs from single growth factors using a Drosophila model
35	Lauren Tucker	Discovery of Human Bile-mediated Regulation of Curli Fimbriae by In vitro Modeling of Typhoid Chronic Gallbladder Infection
36	Nicole Wahlstrom	Surface Flooding Potentials of Model Terrestrial Bodies

Session 3: 1:30-2:30 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
37	Haoran Wang	Effects of Missing Data on Species Tree Estimation
38	Chenxi Yuan	Molecular factors involved in C. elegans pronuclear complex centration and rotation force regulation

Session 4: 3:00-4:00 pm

Great Hall Meeting Rooms 1 & 2

Poster Number Presenter Presentation Title

1	Valeria Acuna	Protein-Protein Surface Modeling of DSB Repair Complexes
2	Gwenyth Ambroski	Differences in MicroRNA Expression in Cutaneous Squamous Cell Carcinoma by Anatomical Site
3	Cole Anderson	Timecourse of KLF-2 Expression After Murine Intracranial Hemorrhage
4	Wesley Barnhart	Effects of acute pain and pain-related fear on risky decision making and effort during cognitive tests
5	Jeremy Bilfield	A Bayesian Reanalysis of Correlations between Cortical Thickness and Strategic Choices in Economic Games
6	Fernando Blank	Morphological variation in retinal architecture of diurnal and nocturnal frogs
7	Simon Bogason	BiSb Nernst-Ettingshausen Coolers
8	Olivia Britt	Evaluating Education: Analyzing Pre-Service Teachers' Assessments in Light of Equity Pedagogy and Mathematical Practices
9	Wyatt Bunstine	Exploring Automatic Sample Characterization using image Recognition and Motion Control Software
10	Trent Cash	Various Measures of Socioeconomic Status As Predictors of Formal and Informal Home Literacy Environments
11	Andrew Cypcar	Hydrogen atom abstraction reactivity of distorted dicopper(III) bis-µ-oxo complexes
12	Kyle Deistler	Developing a novel model of retinal light damage in chicks to test the neuroprotective efficacy of different pharmacological agents

Session 4: 3:00-4:00 pm

Great Hall Meeting Rooms 1 & 2

Poster Number Presenter Presentation Title The characterization of BRIP1 missense 13 Rachel Doberstein variants Treatment of T cells from Multiple Sclerosis Marissa Farinas 14 patients with novel STAT3 inhibitor improves Teff:Treg balance Drone SAR 15 Sarah Greenbaum 16 Nick Harvey Determining the acid preference of methyl ammonium lead halide perovskites 17 Zhang Jing Motor Learning Comparison between Rotarod and Wheel Running Training on Spinal Cord Injured Mice Lillian Kleban Chemical Weathering of Volcanic Ash as a 18 Carbon Sink 19 Julian Lee Elucidating the Structure of Human Plastins Exon skipping using an AAV-U7snRNA 20 Daniel Lesman approach and its therapeutic implication for Duchenne Muscular Dystrophy. The Impact of Gene Flow on Species Tree 21 Xiaoyu Liang Inference Dirofilaria immitis: Cryopreservation for 22 Sidney Long Diagnostic Teaching Base Excision Repair as a Catalyst for 23 Ryan Messer Retroviral Integration 24 Armin Munir Segmented Filament Bacteria in a Lupus Mouse Model

Session 4: 3:00-4:00 pm

Great Hall Meeting Rooms 1 & 2

Poster Number Presenter Presentation Title Transforming fMRI Ballet Data into 25 Jazmyn Mustafa Intersubject Correlation Maps to Better Characterize Autism Spectrum Disorders Fabrication and Analysis of Graphene and Iron 26 Daniel Pharis Oxide Heterostructures Characterization of Rice Blast Disease 27 Charis Ramsing Resistance Mediated by Partial Resistance (R) Genes in Rice Synthesis and Characterization of a Modified 28 Deja Rush MMP-Degradable Peptide for Detection of Cell Secreted Protease Activity Using Fluorescent Peptide Zymography Environmental enrichment reduces 29 Katarina Schneiderman vulnerability to repeated traumatic brain injury The effect of hippocampal neural stem and 30 Nicholas Soulas progenitor cell specific VEGF knockdown on the activation of microglia in the dentate gyrus in a mouse model of traumatic brain injury. Adapting Touchscreen Technology for a Balb/c 31 Lindsay Strehle Cancer Survivor Model to Assess Cognitive Disturbances A closer look at the mechanical process of 32 Joseph Sudar hearing mediated by prestin and cadherin-23 Exploring the coherence of speech sounds at 33 Elizabeth Trojano the beginning versus the end of a sentence Determination of the influence of SnO2 Alexander Vaeth 34 nanowire amount on resistive-type gas sensors Application of X-ray Computed Tomography 35 Prescott Vayda reveals a (fool's) gold mine of exceptionally preserved fossils in the Silica Shale (Devonian)

AUTUMN UNDERGRADUATE RESEARCH FESTIVAL

of Ohio

Session 4: 3:00-4:00 pm

Great Hall Meeting Rooms 1 & 2

Poster Number	Presenter	Presentation Title
36	Selina Vickery	Chemotherapy-related Anxiety-like Behavior and Cytokine Expression in Mice
37	Isomoni Walker	Perceptions of Marital Conflict from 9 Months to 7.5 Years Postpartum
38	Samantha Walkin	Impact of eccentric-focused downhill treadmill training on locomotor recovery after spinal cord injury
39	Rebecca Weiss	Influences of Muscle Control Patterns on Post- Operative Outcomes of Total Knee Replacement