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**Penn State Behrend - Sigma Xi**

**Twenty-Fifth Annual**

**Undergraduate Student Research and**

**Creative Accomplishment Conference**

**Poster Presentations**

**Group I** [**Biology I**](#I) **– Microbiology**

**Group II** [**Biology II**](#II) **– Ecology, Environmental Science, and**

 **Zoology**

**Group III** [**Biology III**](#III) **– Ecology, Environmental Science, and**

 **Zoology**

**Group IV** [**Biology IV**](#IV) **– Cellular & Molecular Biology and Genetics**

**Group V** [**Biology V**](#V) **– Cellular & Molecular Biology and Genetics**

**Group VI** [**Biology VI**](#VI) **– Neuroscience**

**Group VII** [**Chemistry and Physics**](#VII)

**Group VIII** [**Computer Science, Software Engineering, Economics, and Accounting**](#VIII)

**Group IX** [**Engineering**](#IX)

**Group X** [**Psychology I and Political Science**](#X)

**Group XI** [**Psychology II**](#XI)

| **POSTER PRESENTATIONS****GROUP I** **BIOLOGY I - Microbiology****21 Witkowski** |
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| **70.** | **Antifungal Effects of 1,4-Dimethylnapthalene**Stephen Drozda and Jessica Hultberg (Kelly Miller), Penn State Behrend  |
| **71.** | **Effects of 1,4-Dimethylmaphthalene on Plant and Human Pathogens**Jessica Hultberg, Destiny Davis, and Stephen Drozda (Kelly Miller), Penn State Behrend |
| **72.** | **Biosynthesis of Silver Nanoparticles from Root Nodule Microorganisms**Erik Beeler, Jonathan Josephs-Spaulding, and Selma Sosic (Om Singh), University of Pittsburgh-Bradford  |
| **73.** | **Identification of Bacteria Influencing the Growth of *Ceratopteris richardii* Using Biochemical Tests**Lauren Cooper and Nicole McAllister (Mike Ganger and Sarah Ewing), Gannon University and  |
| **74.** | **Microbial Production of L-Asparaginase from Endophytic Microorganisms** Alassia Cousins, Edith Lloyd Etuwewe (Om Singh), University of Pittsburgh-Bradford  |
| **75.** | **Inactivation of Pathogenic Bacteria on Media Containing Fruit Juices and Spices Using Radiant Catalytic Ionization**Brittany Benjamin1; William Mackay1; David Fulford1; Christopher Sommers2; Craig Steele1; Adrian Babel1; Riley Hardval1; Laura Mummert1; Ivy Kuberry1; Khyati Patel1; Richa Patel1; Lindsey Schwanke1; Oladapo Afolabi1; Caroline Mackay3; 1:Department Of Biology and Health Services Edinboro University of Pennsylvania Edinboro PA,16444 2: Food Safety Intervention Technologies Research Unit, Eastern Regional Research Center USDA3:Department of Chemistry and Biochemistry Duquesne University, Pittsburgh, PA 15282Riley Hardval, Lindsey Schwanke, Brittany Benjamin, Adrian Babel, Laura Mummert, Ivy Kuberry, Richa Patel, Khyati Patel, and Oladapo Afolabi (Craig Steele, David Fulford, and William Mackay), Edinboro University |
| **76.** | **How Does the Use of Agion Silver Technology Change the Bacterial Flora Found on Door Handles?**Michelle Hornedo and Kathryn Carl (Beth Potter), Penn State Behrend  |
| **77.** | **Identification of the Microflora Found on the Feathers of Purple Martins Compared to the Microflora Found on Eggs**MaryAnn Mason and Kristen Webster(Beth Potter), Penn State Behrend  |
| **78.** | **Reduction of Pathogens on Food Contact Surfaces Using Ultraviolet Radiation**Richa Patel, Khyati Patel, Oladapo Afolabi, Riley Hardval, Laura Mummert, Brittany Benjamin, Adrian Babel, Ivy Kuberry, and Lindsey Schwanke (Craig Steele, David Fulford and William Mackay), Edinboro University  |
| **79.** | **A Strategy for Identifying Upstream Regulators of the HitRS Two-Component System of *Bacillus anthracis***Allen Toth, Jonathan Mathes, and Anthony Smaldino (Devin Stauff), Grove City College  |
| **80.** | **Antibacterial Effects of Benzisoxazole Compounds**Aimee Duda, R. John McCrea, and Patrick Stevens (Kelly Miller and Martin Kociolek), Penn State Behrend  |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP II****BIOLOGY II****Ecology, Environmental Science, and Zoology****21 Witkowski** |
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| **81.** | **Ancient Freshwater Sharks and Rays from the Middle Campanian of Southern Alberta, Canada**R. John McCrea (Todd Cook1 and Alison Murray2), 1Penn State Behrend and 2University of Alberta  |
| **82.** | **The Effects Glycophosphate Has on Organisms and Their Environment**Allison Beck (Nina Thumser), Edinboro University  |
| **83.** | **A GIS Approach to Investigating Conductivity and Chloride Distributions from Deicing Salt at Penn State Behrend**Devin Beggs (Michael Naber and Pamela Silver), Penn State Behrend  |
| **84.** | **Measurement of Atrazine Concentrations in Local Water and Common Foods**Anthony Concilla (He Liu), Gannon University  |
| **85.** | **A High Paleolatitudinal Ancient Shark Assemblage from the Late Albian Western Interior Seaway**Taylor Francis (Todd Cook1 and Alison Murray2), 1Penn State Behrendand 2University of Alberta  |
| **86.** | **Bioaccumulation and Distribution of Microcystins at Different Trophic Levels of Fishes in the Pymatuning Reservoir, Pennsylvania, USA**Elizabeth Handley-Samick (Casey Bradshaw-Wilson), Allegheny College  |
| **87.** | **Terrestrial Invasive Species Control: Weed Warriors at Penn State Behrend Campus**Catherine Hensley, David Hersh, Valerie Kwong, Kyle Lambing, Madison Schaeffer, and Riley Waugaman (Michael Naber and Ann Quinn), Penn State Behrend  |
| **88.** | **New Tick Tricks: Regional Pennsylvania Tick Species Utilizing Collections from Pennsylvania Game Commission CWD Hunter Check Stations 2013 and 2014**Amy Lind, Amanda Hutzelmann, Ryan Braumann, and Colin Fort (Tracy Farone), Grove City College  |
| **89.** | **Release Rate Determination for Metal-Diffusing Substrates for use in Acid Mine Drainage Field Studies**Aaron Onufrak (Michael Stapleton and Dean DeNicola), Slippery Rock University  |
| **90.** | **Apps to Oranges: Using Smartphones to Eat Sustainably**Amanda Sandor (Eric Pallant), Allegheny College  |
| **91.** | **A Small Mammal Population Census of the Habitat Islands at the Tom Ridge Environmental Center at Presque Isle State Park, Erie Pennsylvania**David Shearer (Steve Ropski), Gannon University  |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP III****BIOLOGY III****Ecology, Environmental Science, and Zoology****21 Witkowski** |
| --- |
| **92.** | **Effects of Climate-Induced Distributional Shifts in Caddisfly Larvae on Detritus Processing and Ecosystem Function in High-Elevation Ponds and Wetlands**Jared Balik (Scott Wissinger), Allegheny College  |
| **93.** | **An Upper Campanian Selachian Assemblage from the Northern Region of the Western Interior Seaway**Eric Brown (Todd Cook1 and Takuya Konishi2), 1Penn State Behrend and 2University of Cincinnati  |
| **94.** | **The Soil Bacterium *Pseudomonas nitroreducens* Alters Rhizoid Growth in Gametophytes of the Fern *Ceratopteris richardii***Rachel Hiles (Mike Ganger and Sarah Ewing), Gannon University  |
| **95.** | **Sexual Dichromatism in Painted Turtles**Jessica Hultberg and Stephen Drozda (John Steffen), Penn State Behrend  |
| **96.** | **Presence of Triclosan in Local Water, Foods, and Cleaning Products**Joshuva John (He Liu), Gannon University  |
| **97.** | **The Effects of Salinity on Dragonfly Larvae Behavior (Order: Odonata, Family: Gomphidae)**Hunter Kline (Denise Piechnik), University of Pittsburgh-Bradford  |
| **98.** | **Effects of Seasonal Environmental Risk Factors on Birth Weight**Maya Puleo(Caryl Waggett and Amelia Darrouzet-Nardi), Allegheny College  |
| **99.** | **Utilizing Fossil Shark Teeth as a Biostratigraphical Tool to Date the Karabogaz Formation in Southeast Turkey**Katherine Rebman (Todd Cook1, Ismail Yilmaz2, I. Hosgor3, Michael Wagreich4, and Alison Murray5), 1Penn State Behrend1, 2Middle East Technical University, 3Calik Energy Company, 4University of Vienna, 5University of Alberta |
| **100.** | **The Behavioral Altercations on Terrestrial Organisms that Encounter Herbicides**Shelby Rog (Nina Thumser), Edinboro University |
| **101.** | **Measurement of Glyphosate Levels in Water, Foods, and Beverages**Rachel Stauffer (He Liu), Gannon University |
| **102.** | **Does Increased Soil Carbon Result from Slower Decomposition Due to Additional Nitrogen in a Northwest Pennsylvania Forest?**Susan Washko (Rich Bowden), Allegheny College |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP IV****BIOLOGY IV - Cell & Molecular Biology/Genetics****Roche Hall North** |
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| **24.** | **Investigating Putative Genomic Sequence Variation between Normal Skin Tissue and Skin Lesions Collected from Brown Bullhead, *Ameiurus nebulosus***Justine Bensur, Antony DiNunzio, Sarah Miller, and Natalie Spaeder (Steve Mauro and Sarah Ewing), Gannon University  |
| **25.** | **The Genetic Knockdown of Genes Involved in Folate Metabolism in Zebrafish with the Use of the CRISPR/Cas System**Drew Cobert and Emily Mitchell (James Warren), Penn State Behrend  |
| **26.** | **Effects of OSM-9, EGL-30 and EAT-16 Knockout on the Avoidance Response of *C. elegans* to Octanol and Octanone**Kristin Davis (He Liu), Gannon University  |
| **27.** | **The Search for Inhibitors of Angiogenesis in the Hemolymph of the Fishing Spider, *Dolomedes tenebrosus***John Ferko, Stephanie Buczkowski, and Julia Jagielo-Miller (Matthew Foradori), Edinboro University  |
| **28.** | **Annotation and Analysis of the Genome of the Primary Endosymbiont from *Puto echinatus***Haley Flick and Alex Campbell (Matthew Gruwell), Penn State Behrend  |
| **29.** | **The Role of ENT Adaptors in Nitrogen-Regulated Growth of *Saccharomyces cerevisiae***Olivia Haile, Robert Ramirez, and Alexander MacFarlane (Quyen Aoh), Gannon University  |
| **30.** | **Comparison** **of** **Brown Bullhead Catfish Tumor and Non-Tumor Tissue using mtDNA**Garrett Hitzel, Brittany Peachey, Tiina Negron, Micaela Carter, and Thane Feldeisen (Fred Brenner), Grove City College |
| **31.** | **Expression of *Drosophila melanogaster* Homologs of *fbxA* in *Dictyostelium discoideum fbxA-* Mutants**Kaley Kuntz (Margaret Nelson), Allegheny College  |
| **32.** | **“Evo-Devo” of the Pharyngeal Apparatus of Bluegill and Pumpkinseed Sunfish**Corrie Olson, Michael Vitullo, Bradley Nowosielski, and Sourabh Goyal (Greg Andraso and Kelly Grant), Gannon University  |
| **33.** | **The Use of Software Package Mothur to Determine Fungal and Microbial Diversity of Potatoes Treated with 1,4-dimethylnaphthalene**Ravi Patel and René Díaz (Michael Campbell), Penn State Behrend |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP V****BIOLOGY V - Cell & Molecular Biology/Genetics****22 Witkowski** |
| --- |
| **103.** | **The Development of Pharyngeal Bones and Teeth in Bluegill and Pumpkinseed Fish**Sofiya Bychkova and Julia Melnyk (Kelly Grant), Gannon University  |
| **104.** | **Effects of Barriers on Genetic Dispersal of Mobile and Non-Mobile Fishes**Margaret McClain (Scott Wissinger and Kristen Webb), Allegheny College  |
| **105.** | **Preliminary Examination of the Hemolymph of the Corn Furrow Spider, *Larinioides cornutus*, for Antiangiogenic Agents**Elizabeth Rudzki (Matthew Foradori), Edinboro University  |
| **106.** | **Effects of Carotenoid Access and Food Intake on Blood Reactive Oxygen Species Levels in Painted Turtles**Stephen Drozda and Jessica Hultberg (John Steffen), Penn State Behrend  |
| **107.** | **Effects of G Protein and Its Regulatory Proteins on Chemical Avoidance Behavior of *C. elegans***Deborah Sajan (He Liu), Gannon University  |
| **108.** | **Uncovering the *Ceratopteris richardii ANI1* Gene Structure** Shivali Singh and Nicole McAllister (Mike Ganger and Sarah Ewing), Gannon University  |
| **109.** | **Roles of TRPA and TRPV Channel in *C.* *elegans* Chemosensation** Jennie Thies (He Liu), Gannon University  |
| **110.** | **The Role of SCAMP3 in Regulating the Transport from the TGN to the Lysosomes**Priscilla Thomas (Quyen Aoh), Gannon University  |
| **111.** | **The Search for Angiongenic Inhibitors in the Hemolymph of the Orb-Weaving Spider, *Araneus diadematus***Jessy Wall, Cassidy Christian, and Abigail Warner (Matthew Foradori), Edinboro University  |
| **112.** | **Conserving Life on the Penn State Behrend Campus by Barcoding the C01 Gene in Arthropods**Skylar Woolman (Matthew Gruwell), Penn State Behrend  |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP VI****BIOLOGY VI - Neuroscience****Roche Hall North** |
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| **34.** | **Behavioral and Cellular Effects of a Short-term High-fat Diet on the Unilateral 6-Hydroxydopamine Rat Model of Parkinson’s Disease**Katelyn Cassel (Jeffrey Cross and Christy Donmoyer), Allegheny College  |
| **35.** | **An Investigation of the Relationship Between Spatial Memory and Cholinergic Signaling in the Rat Striatum using the Morris Water Maze**Adriani Cherico and Elda Tutic (Catherine Mattinson), Gannon University  |
| **36** | **Hemispheric Remodeling of Astrocytes Following Unilateral Seizure Induction**Olivia Dack (Jeffrey Cross), Allegheny College  |
| **37.** | **Effects of Caffeine and Propentofylline on Fetal Tissue Graft Survival in the Unilateral 6-Hydroxydopamine Model of Parkinson’s Disease in the Valproic Acid Rat Model of Autism**Jacob Gordon (Jeffrey Cross), Allegheny College  |
| **38.** | **Exercise-Induced Anorexia: Effects of Feeding Conditions**Yuan Jie (Rodney Clark), Allegheny College  |
| **39.** | **The Effects of Minocycline as a Microglial Inhibitor following Intracerebral Hemorrhaging**Natalya Nannen (Rodney Clark and Jeffrey Cross), Allegheny College  |
| **40.** | **The Neuroprotective Effect of Fulvestrant in the Unilateral 6-Hydroxydopamine (6-OHDA) Rat Model of Parkinson’s Disease**Andrea Ortiz (Jeffrey Hollerman and Rodney Clark), Allegheny College  |
| **41.** | **Effects of Propentofylline and Minocycline on Fetal Graft Tissue Survival in Unilateral 6-hydroxydopamine Rat Models of Parkinson’s Disease**Mikayla Saunders (Jeffrey Cross), Allegheny College  |
| **42.** | **Effects of a Tactile Discriminative Stimulus on Reinstatement of Drug-Seeking Behavior**Elizabeth Sever, Adam Brandner, Daniel Daugherty, and Abigail Walters (Rodney Clark), Allegheny College  |
| **43.** | **Injury to Neural and Hepatic Development Following Prenatal Ethanol Exposure**Samantha Skobel (Jeffrey Cross), Allegheny College |
| **44.** | **The Relationship between the Effects of Prenatal Valproic Acid Exposure and Bilateral Amygdala Lesions to the Medial, Central, and Basolateral Nuclei in Sprague Dawley Rats**Sarah Stanko (Jeffrey Cross), Allegheny College |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP VII****CHEMISTRY AND PHYSICS****Fasenmyer** |
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| **10.** | **Multi-band High-Altitude Balloon Tracking**Kaitlyn Babiarz, Tenger Batjargal, Alejandro Ferrero, Stephen Karpinsky, Maia Mackellar, Carter Miller, Lauren Reilly, and Donovan Starks (Nicholas Conklin and Wookwon Lee), Gannon University |
| **11.** | **Characterization of a Carbon Dioxide-Hexafluorobenzene Complex Using Matrix Isolation Infrared Spectroscopy**Bradley Gall (Jay Amicangelo), Penn State Behrend |
| **12.** | **Hydrogen Adsorption and Storage on Carbon Nanotubes**Christian Gamboa (Ronald Brown), Mercyhurst University |
| **13.** | **Determining the Effect of Polymerization Technique on the Electrochemical Response of Cyanide-Coordinated Ferriprotoporphyrin towards Gastrotransmitters**Andrew Lawrence (Jason Bennett), Penn State Behrend |
| **14.** | **Optimizing the Synthesis of Fluorescent Silver Nanoclusters Templated with Double- Stranded DNA**Robert Passerotti and Ian Campbell (Bruce Wittmershaus), Penn State Behrend |
| **15.** | **Understanding How White Diffusive Backgrounds Improve Luminescent Solar Concentrators**Jonathon Schrecengost and Seth Bowser (Bruce Wittmershaus), Penn State Behrend |
| **16.** | **A Planet's Light Contribution from its Ring System**Nicholas Yanik (Darren Williams), Penn State Behrend |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

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| **POSTER PRESENTATIONS****GROUP VIII** **COMPUTER SCIENCE, SOFTWARE ENGINEERING, ECONOMICS, AND ACCOUNTING****Fasenmyer** |
| **17.** | **Design of a Relational Database of Geoscience, Computer Science, and Biology**Michael Curtis (Michael Naber), Penn State Behrend |
| **18.** | **The Cost of Welfare Drug Screening**Kevin Dieterle (Stephanie Martin), Allegheny College |
| **19.** | **Review and Analysis of the Erie, Pennsylvania Locomotive Industry** Eric Dye (Aaron Mauro), Penn State Behrend |
| **20.** | **Leveraging Sustainability Grant Funds**Erick Greiner (Ann Quinn and Linda Hajec), Penn State Behrend |
| **21.** | **What are the Economics of Efficient Sustainable Fisheries?**Michael Meiran (Stephanie Martin), Allegheny College |
| **22.** | **Real-Time Analysis of User Gait**Arin Reese (David Loker), Penn State Behrend |
| **23.** | **“A Work in Progress” Interactive Fiction Games and Mental Health**Kimberly Shaner (Joshua Shaw), Penn State Behrend |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP IX** **ENGINEERING****Fasenmyer** |
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| **1.** | **The Effects of Conventional Heating versus Electrical Heating on Compression Testing**Shaun Chiesa and Jamie Gloeckner (Ihab Ragai), Penn State Behrend |
| **2.** | **Electrically Assisted Forming**Scott DeLaney (Ihab Ragai and John Roth), Penn State Behrend |
| **3.** | **First-Person Viewing System in International-Border Protection**Josh Gloeckner (David Loker), Penn State Behrend |
| **4.** | **Magnetorheological (MR) Dampers on Late-Model Dirt Track Race Cars**Ryan Ciuca (Philip Jones), Penn State Behrend |
| **5.** | **Electrically Assisted Global Springback Elimination in AMS-T-9046 Titanium after Single Point Incremental Forming**Tyler Grimm (John Roth), Penn State Behrend |
| **6.** | **Acoustic Noise Emission Data Collection**Samantha Muhhuku, Sara O’Boyle, and Travis Rooney (Chetan Nikhar, Ihab Ragai, and David Loker), Penn State Behrend  |
| **7.** | **Optimal Performance Characteristics of UAV / Quad-Copter**John Nowakowski (David Loker and Amy Bridger), Penn State Behrend |
| **8.** | **Properties and Processing of Advanced High Strength, Cost-Effective Steels**Dan Smith, Tyler Rigby, and Joseph Helbling (Paul Lynch), Penn State Behrend |
| **9.** | **First-Response System for Erie Harbor using Furuno FR7252 Radar**Tyler Stazer (David Loker), Penn State Behrend |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP X****PSYCHOLOGY I AND POLITICAL SCIENCE****Roche Hall South** |
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| **45.** | **Person Perception and Race: The Effect of Person Perception on Product Perception** Stephanie Carson (Lydia Jackson), Allegheny College |
| **46.** | **The Effects of Ego Depletion on Spatial Attention**Leah Krainz (Allison Connell Pensky), Allegheny College |
| **47.** | **Trumping the Boss: Sarcasm in the Workplace**Hau Tuang, Rebecca Misterovich, Alysha Simmons, Rachel Mooney, Cherylann Carter, and Abigail Di Sanzo (Shariffah Sheik Dawood, Victoria Kazmerski, and Dawn Blasko), Penn State Behrend |
| **48.** | **Nurse Turnover: A Study of Work Engagement Outcomes**Hau Tuang, Nick Spurgeon, and Josh Deck (Melanie Hetzel-Riggin), Penn State Behrend |
| **49.** | **Investigating the N170 Adaptation Effect of Perceived and Imagined Famous Faces: A Partial Replication, Rapid Adaptation Study**Trista Musich (Allison Connell Pensky), Allegheny College |
| **50.** | **Public Perception of Effect Size**Emily Galeza and Rachel Zimmerman (Eric Corty, Carol Wilson, and Michael Rutter), Penn State Behrend |
| **51.** | **Navigating Your Way Through a Virtual World**Grace Waldfogle, Nick Bowser, Jacob Benedict, and Dominik Dodds (Dawn Blasko and Heather Lum), Penn State Behrend |
| **52.** | **The Effects of Word Searches on Concentration While Listening to Music**Richard Greatbatch and Nicholas Bowser (Victoria Kazmerski and Heather Lum), Penn State Behrend |
| **53.** | **Gaming Immersion Levels Using Oculus Rift**Kyle Mink, Richard Greatbatch, and John Strange (Heather Lum), Penn State Behrend |
| **54.** | **Relationships of Several Governmental Organizations at the Urban Scale**Juan Nino (Robert Speel and Ann Quinn), Penn State Behrend |
| **55.** | **Effects of Male and Female Objectification within Popular Music**Taylor Morris, Nur Amira Kamaruddin, Jessica Stoker, and Christa Franco (Victoria Kazmerski), Penn State Behrend |
| **56.** | **Are Sexual Assault Prevention Programs Effective?**Jessica Stoker, Brittany Smith, Ashley Master, Taylor Brecht, and Richard Greatbatch (Melanie Hetzel-Riggin), Penn State Behrend |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |

| **POSTER PRESENTATIONS****GROUP XI****PSYCHOLOGY II****Roche Hall South** |
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| **57.** | **The Effects of Music on Compassion**Stephen Anderson (Lydia Jackson), Allegheny College |
| **58.** | **Awkward: Is Social Media Creating A Less Social You?**Grace Waldfogle, Julie LeVan, Kasey Jerioski, and Amber Kinney (Victoria Kazmerski), Penn State Behrend |
| **59.** | **The Bystander Effect in Non-Emergency Helping Situations**Allison Gage, Ashley Master, Emily Galeza, Elizabeth Seng, and David Campbell (David Herring), Penn State Behrend |
| **60.** | **Does Studying Abroad Affect Cultural Empathy and Environmental Attitudes Among Allegheny College Students?**Emily Dodge (Allison Connell Pensky), Allegheny College |
| **61.** | **Can Self-Compassion Foster Adaptive Behaviors in the Classroom? The Effect of Self-Compassion on Achievement Goals of College Students**Ye-eun (Maria) Kim (Lydia Jackson), Allegheny College |
| **62.** | **The Effects of Natural Soundscapes on Physiological and Psychological Restoration**Benjamin Cherian (Jacob Benfield), Penn State Abington |
| **63.** | **The Effect of Self-Compassion on Immoral Transgressions**Natasha Torrence, Alana Picozzi, Stephen Anderson, and Randall Violette (Lydia Jackson), Allegheny College |
| **64.** | **Linguistic Differences During and After Conflict for Survivors of Betrayal Trauma**Allison Rupe and Jessica Stoker (Melanie Hetzel-Riggin), Penn State Behrend |
| **65.** | **The Influence of Money on Romantic Couple Conflicts**Jessica Stoker, Jason Shultz, Leanne Confer, Leslie Hasty, and Emma Walton (Carol Wilson), Penn State Behrend |
| **66.** | **Examining Motivation in First Generation College Students** Shannon Whitaker (William McGuigan) Penn State Shenango |
| **67.** | **A Novel Psychophysiology Measure of Emotional Engagement with Implications for Social Anxiety**Rachel Zimmerman (David Herring), Penn State Behrend |
| **68.** | **A Comparison of Pain Empathy Directed Toward Individuals Depicted in Self-Harm Situations versus Interpersonal Harm Situations**Rachel Zimmerman, Kaela Coppersmith, Taylor Brecht and Allison Bailey (David Herring), Penn State Behrend |
| **69.** | **Bystander Physiological Response Survey**Rachel Zimmerman, Allison Rupe, and Taylor Brecht (Melanie Hetzel-Riggin), Penn State Behrend |
| 11:30 a.m. | **End of Poster Display** |
| Noon | **Awards Luncheon in Erie Hall** |