



PennState
Behrend

**Penn State Behrend
Sigma Xi - 2024**

Thirty-Second Annual
Undergraduate Student Research and
Creative Accomplishment Conference

**LUNCH AGENDA,
ORAL PRESENTATION SCHEDULE,
& POSTER PRESENTATION SCHEDULE**

PENN STATE BEHREND-SIGMA XI
THIRTY-SECOND ANNUAL

UNDERGRADUATE RESEARCH AND
CREATIVE ACCOMPLISHMENT CONFERENCE

April 20, 2024
Penn State Behrend
McGarvey Commons – Reed Building

AWARDS LUNCHEON AGENDA

- | | |
|------------|--|
| 12:00 Noon | Buffet Lunch |
| 12:30 pm | Welcome
<i>Sigma Xi President</i> |
| 12:35 p.m. | Announcement of and Presentation by Winner of Sigma Xi Award for Faculty Mentorship of Student Research
<i>Dr. Jason Bennett – Penn State Behrend</i> |
| 1:05 p.m. | Announcement of Conference Awards |
| 1:40 p.m. | Closing |



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Penn State Behrend – Sigma Xi

Thirty-second Annual
Undergraduate Student Research and
Creative Accomplishment Conference

Oral Presentations

Session #	Session Name
Session I	Biology I
Session II	Biology II
Session III	Chemistry
Session IV	Engineering
Session V	Humanities – Social Sciences
Session VI	Psychology

ORAL PRESENTATIONS

SESSION I

BIOLOGY I

Nick 171

TIME	Session
8:10 am	Welcome
8:15 am	Role of PCBs in the alteration of inflammatory markers and genetic changes in breast cancer <u>Trinity Prestash</u> (Ashley Russell) <i>Penn State Behrend</i>
8:30 am	Evaluating the Molecular Biology of Biofluorescence in Salamanders <u>Amanda Welsbacher</u> <u>Kevin Slye</u> (Jeremiah Keyes) <i>Penn State Behrend</i>
8:45 am	Monitoring Germination Rates of Arabidopsis thaliana seeds after exposure to 1,4-dimethylnaphthalene <u>Ian Costello</u> (Michael Campbell, Emily Dobry) <i>Penn State Behrend</i>
9:00 am	Genetic Response of Gnomoniopsis castaneae to Different Hosts and Conditions <u>Carra Leavitt</u> (Michael Campbell, Emily Dobry) <i>Penn State Behrend</i>
9:15 am	Break
10:00 am	Oligodendrocyte Derived Extracellular Vesicle Release is Altered by Endoplasmic Reticulum Stress <u>Ethan Evalt</u> <u>Saranraj Govindaraj</u> (Ashley Russell) <i>Penn State Behrend</i>
10:15 am	Computational Solution to the G-Value Paradox: Associating Novel ncDNA-Dependent Ratios with Organismal Complexity <u>Marc Parnell</u> (Benjamin Gerstner) <i>Penn State Behrend</i>
10:30 am	Molecular Mechanism of Macrophage Plasticity Mediated By Dexamethasone and Aldosterone <u>Blake Neiderlander</u> (Mahita Kadmiel) <i>Allegheny College</i>
10:45 am	Examination of Cytochrome C Oxidase Enzyme in Haemophilus ducreyi Through Interactions with Kovac and 'Gaby and Hadley' Reagents <u>Dawit Kahesay</u> (Tricia Humphreys) <i>Allegheny College</i>
11:00 am	Microbiome in Petit Manseng Grape Roots <u>Noah Janes</u> (Michael Campbell) <i>Penn State Behrend</i>
11:15 am	End of Presentations
Noon	Awards Luncheon in Erie Hall

ORAL PRESENTATIONS

SESSION II

BIOLOGY II

Nick 170

TIME	Session
8:10 am	Welcome
8:15 am	Thar She Glows: Patterns of Biofluorescence in Snakes <u>Holden Cooper</u> (Lynne Beaty) <i>Penn State Behrend</i>
8:30 am	Uncoiling the Mysteries of Invasive Mysterysnail Populations in Presque Isle State Park <u>Haley Altadonna</u> (Lynne Beaty, Samuel Nutile, Adam Simpson) <i>Penn State Behrend</i>
8:45 am	Effects of Secondary Metabolites and Coevolution on Insect Herbivory in the Plant Families Asteraceae and Fabaceae <u>Sofia Maass</u> (Matthew Venesky, Kelly Pearce) <i>Allegheny College</i>
9:00 am	Eye-Spy: Documenting Variation in Lake Erie Round Goby Eyespots <u>Mallory Causer</u> (Lynne Beaty, Samuel Nutile, Adam Simpson) <i>Penn State Behrend</i>
9:15 am	Break
10:00 am	Using egg mass density and mating call frequency as estimates for wood frog (<i>Lithobates sylvaticus</i>) breeding dynamics at four sets of vernal pools <u>Josephine Reiter</u> (Mark Kirk) <i>Allegheny College</i>
10:15 am	Investigating the Evolutionary History of Isurus (Mako Shark) Through Enameloid Analysis <u>Isabella Forster</u> (Todd Cook) <i>Penn State Behrend</i>
10:30 am	Sampling Vertebrate Microfossils in Upper Cretaceous (Maastrichtian) Hell Creek Formation Microsites of Garfield County, Montana, U.S.A <u>Noel Ouellette</u> (Lisa Whitenack) <i>Allegheny College</i>
10:45 am	Census of the Bat Population of Gannon University, Erie, PA <u>Della Mamani</u> <u>Kira Armstrong</u> (Steve Ropski) <i>Gannon University</i>
11:00 am	Investigating the potential relationships between Spotted Salamander (<i>Ambystoma maculatum</i>) body size, phenology, and climate change in Northwestern Pennsylvania <u>Anthony DeMarkco</u> (Mark Kirk) <i>Allegheny College</i>
11:15 am	Here, There, Everywhere: Influence of <i>Hyaella azteca</i> Space Use on Pesticide Exposure and Toxicity <u>Aster Harvey</u> (Samuel Nutile, Lynne Beaty, Adam Simpson) <i>Penn State Behrend</i>
11:30 am	End of Presentations
Noon	Awards Luncheon in Erie Hall

ORAL PRESENTATIONS

SESSION III

CHEMISTRY

Nick 169

TIME	Session
8:25 am	Welcome
8:30 am	Synthesis and Biochemical Activity of Isatin-based Cholinesterase Inhibitors <u>Isabelle Oberhauser</u> Amelia Decker (Todd Eckroat) <i>Penn State Behrend</i>
8:45 am	Mercury and Selenium in Round Goby from the Pennsylvania Waters of Lake Erie and its Tributaries <u>Jason Chen</u> (Lynne Beaty, Samuel Nutile, Jason Bennett) <i>Penn State Behrend</i>
9:00 am	Exploring the Use of Hypervalent Iodine Complexes to Aid in the Selective Electrochemical Detection of THC and CBD <u>Timothy Socash</u> (Jason Bennett, Michael Justik) <i>Penn State Behrend</i>
9:15 am	Break
10:00 am	Fabrication of ERGO/PEDOT Layers on Etched Platinum-Iridium Wires for Future Flexible Sensing Applications <u>Kolton Mehalko</u> (Jason Bennett) <i>Penn State Behrend</i>
10:15 am	Spectroscopic Determination of the Composition of Binary Liquids using Merocyanine Dyes <u>Sawyer Oppenheer</u> Jonas Simora Isabelle Price (Allan Cardenas) <i>SUNY Fredonia</i>
10:30 am	Progress Towards the Total Synthesis of Hyrtinadines C and D <u>Matthew Politeski</u> (Todd Eckroat) <i>Penn State Behrend</i>
10:45 am	End of Presentations
Noon	Awards Luncheon in Erie Hall

ORAL PRESENTATIONS

SESSION IV

ENGINEERING

Nick 168

TIME	Session
8:10 am	Welcome
8:15 am	2D Motion Analysis to Determine Effective ACL Prevention Programs for Athletes <u>Nicole Croushore</u> (Yi (Elisa) Wu) <i>Penn State Behrend</i>
8:30 am	Detect Cross-Site Scripting (XSS) based on Text Analysis <u>Divyesh Gabbireddy</u> (Suman Saha) <i>Penn State University Park</i>
8:45 am	Enhanced Captcha: Leveraging Behavioral Biometrics and AI Can Provide Smarter Captcha Tests <u>Kartikey Singh</u> (Suman Saha) <i>Penn State University Park</i>
9:00 am	Enhancing Productivity in GPU Programming: A Proposal for Streamlined CUDA Syntax <u>David Anthony Saldubehere</u> <u>Lok Yiu Wu</u> (Suman Saha) <i>Penn State University Park</i>
9:15 am	Break
10:00 am	Addressing Depression on Social Media: A Personalized Recommendation Tool <u>Avanish Grampurohit</u> (Mahfuza Farooque) <i>Penn State University Park</i>
10:15 am	Breaking the Cycle: Predicting Depression on Social Media using Contextual Data and Graph Convolutional Networks <u>Joshua David Lyzinski</u> <u>William Christopher Irwin</u> (Mahfuza Farooque) <i>Penn State University Park</i>
10:30 am	Utilizing Nature-Inspired Designs in 3D-Printed Materials for Enhanced Resistance to High-Velocity Impacts <u>Adam Sacherich</u> (Seyed Hamad Reza Sanei) <i>Penn State Behrend</i>
10:45 am	Demonstration of Robust and Expedited Methodologies for Resolving Radiation View Factors of GPHS RTG Hot Shoes <u>Nata Herzog</u> (Matthew Barry) <i>University of Pittsburgh</i>
11:00 am	End of Presentations
Noon	Awards Luncheon in Erie Hall
	WITHDRAWN Advancing Twitter Sentiment Analysis: A Dual-Stage Approach Incorporating Open and Closed Vocabulary Strategies <u>Chen-Kuan Liao</u> <u>Feiting Ren</u> (Mahfuza Farooque) <i>Penn State University Park</i>

ORAL PRESENTATIONS

SESSION V

HUMANITIES – SOCIAL SCIENCES

Nick 167

TIME	Session
8:10 am	Welcome
8:15 am	Hero For Black Hope Through Afrofuturism <u>Jah'Farri Brown</u> (Ishita Sinha Roy) <i>Allegheny College</i>
8:30 am	Intersecting Realities: Feminist Politicization and Systemic Violence in Pakistan <u>Hassan Javed</u> (Ishita Sinha Roy) <i>Allegheny College</i>
8:45 am	Frankenstein Variorum Project <u>Yuying Jin</u> (Elisa Beshero-Bondar, Raffaele Viglianti) <i>Penn State Behrend</i>
9:00 am	Empowering the Backbone: Elevating Developing Nations as Indispensable Fashion Partners and Reshaping the Global Fashion Paradigm <u>Binderiya Batsaikhan</u> (Stephen Onyeiwu) <i>Allegheny College</i>
9:15 am	" Things Just Got Spicy" -- Podcasting, Political Engagement, and Gen Z <u>Bintou Fofana</u> (Ishita Sinha Roy) <i>Allegheny College</i>
9:30 am	End of Presentations
Noon	Awards Luncheon in Erie Hall

ORAL PRESENTATIONS

SESSION VI

PSYCHOLOGY

Nick 166

TIME	Session
8:10 am	Welcome
8:15 am	Do Classroom Decorations Really Effect Testing Stress and Performance <u>Caleb Rainbow</u> <u>Quanah Graham</u> (Dawn Blasko) <i>Penn State Behrend</i>
8:30 am	Spiritual Bridges: Navigating Childhood Adversity, Coping, and Resilience <u>Alyssa Mooney</u> <u>Amanda Weber</u> <u>Lillian Camp</u> (Victoria Kazmerski) <i>Penn State Behrend</i>
8:45 am	Sex Differences with Body Dysmorphia: Mediating Role of Fitness <u>Amy Love</u> <u>Conner Schnupp</u> <u>Madison Geis</u> (Victoria Kazmerski) <i>Penn State Behrend</i>
9:00 am	Potentially Distressing Content & Anxiety Levels as Explored Through Short Form Social Media <u>Sophia Diplacido</u> <u>Hannah Khamis</u> <u>Maddie Shafer</u> (Victoria Kazmerski) <i>Penn State Behrend</i>
9:15 am	Break
10:00 am	Influence of Expectations on Visually Induced Motion Sickness <u>Garrett Beebe</u> <u>Paige Cochran</u> <u>Hailey DiSanto</u> <u>Trista Buskirk</u> (Victoria Kazmerski) <i>Penn State Behrend</i>
10:15 am	Effect of Nature Therapy on Mood and Cognition Among Individuals Reporting ADHD-like Symptoms <u>Sophia Galietta</u> (Jessica Rhodes) <i>Westminster College</i>
10:30 am	Does Affirming Your Values Improve Your Spatial Skills in the Context of Stereotype Threat <u>Julia Anders</u> <u>Shanna Maleski</u> <u>Lyssabeth Linden</u> <u>Tamara Cavanaugh</u> (Dawn Blasko) <i>Penn State Behrend</i>
10:45 am	Social Media Influence on Body Image <u>Aarati Poudel</u> <u>Isobel Mathis</u> (Victoria Kazmerski) <i>Penn State Behrend</i>
11:00 am	The Effectiveness of The Mentor Project on Adolescents' Outcomes <u>Amanda Welsbacher</u> <u>DeseRai Sweat</u> <u>Sophia Diplacido</u> (Charisse Nixon) <i>Penn State Behrend</i>
11:15 am	End of Presentations
Noon	Awards Luncheon in Erie Hall



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Poster Presentations

Session #	Session Name
Session I	Biology I
Session II	Biology II
Session III	Biology III
Session IV	Chemistry
Session V	Engineering – Mathematics – Physics
Session VI	Humanities – Social Sciences
Session VII	Psychology

POSTER PRESENTATIONS

SESSION I

BIOLOGY I

Upper Fasenmyer

Poster #	Session
1-B1	Literature Review of Testosterone's Genomic and Non-Genomic Mechanisms <u>Jason Kindland</u> <u>Max Paris</u> (He Liu, Prasad Dalvi) <i>Gannon University</i>
2-B1	The Impact of Urbanization on Stream Microbial Communities Located Near Erie, PA. <u>Brooklynn Murlin</u> (Matthew Gacura, Gary Vanderlann, Chris Dempsey) <i>Gannon University</i>
3-B1	Testing anti-bacterial effects of Cordyceps militaris <u>Chelsea Spatara</u> (Michael Campbell, Emily Dobry) <i>Penn State Behrend</i>
4-B1	Optimization of Growth Conditions for Pleurotus Ostreatus for Production of Mushrooms and Biomaterials <u>Harrison Miller</u> (Matthew Gacura, Gary Vanderlann, Davide Piovesan) <i>Gannon University</i>
5-B1	Enhancing the Wrestling Mat Disinfection Process for the Penn State Behrend Wrestling Team <u>Haley Allen</u> (Beth Potter) <i>Penn State Behrend</i>
6-B1	Identification and Molecular Characterization of Lactobacillus sp. Isolated From Commercial Yogurts <u>Abby Dawson</u> (Habibul Bakht) <i>Hilbert College</i>
7-B1	Antibacterial Activity Evaluation of Lactobacillus sp. Isolated From Commercial Yogurts <u>Cassandra Troy</u> (Habibul Bakht) <i>Hilbert College</i>
8-B1	The effect of extracellular calcium concentration on dopamine-induced fictive crawling in the medicinal leech <u>Shawn Romanowski</u> (Habibul Bakht, Andrew Hill) <i>Hilbert College</i>
9-B1	Determining if Kraft Lignin Nanoparticle Surface Coatings Inhibit Pseudomonas aeruginosa Biofilm Formation Using ImageJ Quantification Methods <u>Ian Sullivan</u> (Erin Wilson) <i>Westminster College</i>
10-B1	Determining the effect of cranberry extract on the expression of the gene <i>fliC</i> in Eschericia coli <u>Victoria Holmes</u> (Michael Ganger) <i>Gannon University</i>
11-B1	Review on Diabetes and Obesity Treatments <u>Varvara Liashenko</u> <u>Molly Sawyer</u> Emily Misko Praveer Singh Domenic Pearson Gabrielle Hollenbeck (Prasad, Dalvi, He Liu) <i>Gannon University</i>
12-B1	Study of acute and chronic effects of NSAIDs on SH-SY5Y neuronal cells in their neuroprotective ability and therapeutic potential against Alzheimer's disease <u>Katelyn Campbell</u> <u>Airen Kelso</u> Harini Dasi (Natasha Dias) <i>PennWest Clarion</i>

POSTER PRESENTATIONS

SESSION II

BIOLOGY II

Upper Fasenmyer

Poster #	Session
1-B2	Beyond Uniformity: Probing ERK Activation Variability in Response to PDGF in NIH-3T3 Cells <u>Brady Marshall</u> Caroline Scott Taylor Romania (Jeremiah Keyes) <i>Penn State Behrend</i>
2-B2	Comparative Assay: Selecting Optimal Cell Lines for ROS Signal Measurement Using DCF Staining <u>Caroline Scott</u> Kevin Slye Brady Marshal (Jeremiah Keyes) <i>Penn State Behrend</i>
3-B2	Illuminating Cellular Signals: Advanced Microscopy in Signaling Pathway Analysis <u>Kevin Slye</u> Brady Marshall Caroline Scott Taylor Romania (Jeremiah Keyes) <i>Penn State Behrend</i>
4-B2	Effects of cortisol on the expression of iron transport proteins and extracellular vesicles <u>Abigayle Lipscomb</u> (Ashley Russell) <i>Penn State Behrend</i>
5-B2	The Role of SCAMP3 in Regulating CXCR4 Trafficking <u>Jordyn Gaines</u> <u>Madylin Leach</u> <u>Della Mamani</u> (Quyen Aoh) <i>Gannon University</i>
6-B2	Assessment of HSP70 and HSP90 Protein Expression in Human Neuronal Cells Exposed to Imidacloprid <u>Melana Vaughn</u> (Stacy Hrizo, Martin Buckley, Miranda Falso) <i>Slippery Rock University</i>
7-B2	Effect of Glucocorticoids on Zonula Occludens 1 (ZO-1) Expression in Human Retinal Pigmented Epithelial Cells <u>Saiananya Yendluri</u> Marissa Hooks Taylor Besch (Mahita Kadmiel) <i>Allegheny College</i>
8-B2	Utilizing RNA-seq to understand the molecular effects of sublethal concentrations of imidacloprid in the human cell lines SHSY5Y and MCF7 Ashton Reposky <u>Aliyah Slifkin</u> Martin Buckley Stacy Hrizo Miranda Falso (Martin Buckley, Stacy Hrizo, Miranda Falso) <i>Slippery Rock University</i>
9-B2	Examining the Role of SCAMP3 in b-Amyloid Production <u>Joann George</u> <u>Ryan Fisher</u> (Quyen Aoh) <i>Gannon University</i>
10-B2	Measuring the Effect of Corticosteroid on Epithelial Integrity of the Human Corneal Epithelial Monolayer in the Presence and Knockdown of the Glucocorticoid Receptor <u>Sydney Thompson</u> (Mahita Kadmiel) <i>Allegheny College</i>
11-B2	TGN-Endosomal Adaptors are required for ATP-dependent but not Nitrogen-Specific Growth <u>Hannah Barnett</u> <u>Mariam Alkhafaji</u> (Quyen Aoh) <i>Gannon University</i>
12-B2	Secretory Carrier Membrane Protein 3's (SCAMP3) Role in β-Amyloid Production and Secretion <u>Anna Wiza</u> <u>Jared Marchiori</u> (Quyen Aoh) <i>Gannon University</i>
13-B2	Epidermolysis Bullosa: Genetics and Genetic Therapy <u>Lucille Pol</u> <u>Josephine Frisina</u> <u>Selena Rose</u> (He Liu, Prasad Dalvi) <i>Gannon University</i>

POSTER PRESENTATIONS

SESSION III

BIOLOGY III

Upper Fasenmyer

Poster #	Session
1-B3	Declining Growth in a Red Pine Growth Plantation: Management Recommendations <u>Tommy Johnson</u> <u>Thia Ferderbar</u> <u>Alyssa Klim</u> <u>Libby Babcock</u> <u>Jacqueline Digiacomo</u> Rosaria Betton Shafia Bhatti Ryan Cox Sarah Csonka Eric Dorr Athena Drollas Alejandra Fernandez Gabi Kyle Kathryn Leach Iris Styers (Rich Bowden) <i>Allegheny College</i>
2-B3	Beech Leaf Disease symptoms in American beech trees are more prevalent among small trees than large trees <u>Deborah Nalesnik</u> (Rich Bowden) <i>Allegheny College</i>
3-B3	Effects of Polymer Nanoparticles on the Mobility of Nematode Caenorhabditis Elegans <u>Sahib Dhillon</u> (Prasad Dalvi, He Liu) <i>Gannon University</i>
4-B3	Summary of nutrient and metal concentration changes (2018-2023) in Little Arnot Run, Allegheny National Forest <u>Michael Sweitzer</u> (Chris Dempsey) <i>Gannon University</i>
5-B3	Changes to the chemical and optical characteristics of dissolved organic carbon extracted from specific leaf types <u>Dylan Schmitzerle</u> (Chris Dempsey) <i>Gannon University</i>
6-B3	Investigation into the soil bacteria that increase the percentage of hermaphrodites in gametophytes of the fern <i>Ceratopteris richardii</i> and the effect of bacterial products on rhizoid length <u>Kiley Williams</u> (Mike Ganger) <i>Gannon University</i>
7-B3	Examining Catch Methods, Body Condition, and Age Distribution of Round Goby (<i>Neogobius melanostomus</i>) in Lake Erie's Pennsylvania Tributaries <u>Keri Saulino</u> (Sam Nutile, Adam Simpson, Lynne Beaty) <i>Penn State Behrend</i>
8-B3	Metal Accumulation of Invasive Mysterysnails and Native Snails in Presque Isle State Park <u>Hannah Phillips</u> (Lynne Beaty, Samuel Nutile, Adam Simpson) <i>Penn State Behrend</i>
9-B3	Determining Breeding Probabilities and Superpopulation Sizes for Spotted Salamanders (<i>Ambystoma maculatum</i>) <u>Ripley Kindervater</u> (Lynne Beaty, Samuel Nutile, Adam Simpson) <i>Penn State Behrend</i>
10-B3	Comparative Histological Analysis of Ancient Shark Serrations <u>Alex Irwin</u> (Todd Cook) <i>Penn State Behrend</i>
11-B3	New Insights into the Dental Histology and Development of the Ancient Guitarfish <i>Myledaphus</i> <u>Skylar Swartz</u> (Todd Cook) <i>Penn State Behrend</i>
12-B3	Identification of Downy Mildew Strains Resistant to Strobilurin and CAA Fungicides <u>Nyla Zorbas</u> (Michael Campbell) <i>Penn State Behrend</i>
13-B3	Comparison of protein isolation methods for downstream metabolic assays <u>John Blum</u> <u>Natalie Mikula</u> (Adam Simpson, Samuel Nutile) <i>Penn State Behrend</i>

POSTER PRESENTATIONS

SESSION IV

CHEMISTRY

Roche Hall

Poster #	Session
1-C	Synthesis of Bis-Isatin Semicarbazide and Thiosemicarbazide Derivatives and Analysis of Biological Activity <u>Blake Olson</u> (Todd Eckroat) <i>Penn State Behrend</i>
2-C	Synthesis of 3-Hydroxylamine and 3-Hydroxyl Bis-Isatin Derivatives and the Investigation into Their Biological Activity <u>Ryan Ochterski</u> (Todd Eckroat) <i>Penn State Behrend</i>
3-C	Investigating the Synthesis and Uses of Diacyl Ureas Derived from Fats and Oils <u>Alicia Polite</u> (Martin Kociolek, Brett Burrell) <i>Penn State Behrend, HERO BX</i>
4-C	Fabrication of PEDOT/ERGO-Coated Microelectrodes for Biological Sensing Applications <u>Andrew Walker</u> Kolton Mehalko (Jason Bennett) <i>Penn State Behrend</i>
5-C	Investigating Hypervalent Iodine Complexes to Aid in the Electrochemical Detection of Phenolic Compounds <u>N Khamis</u> (Jason Bennet) <i>Penn State Behrend</i>
6-C	Structural Comparison of Molecules Containing Nonconventional Hydrogen Bonds <u>Jonas Simora</u> (Allan Cardenas) <i>SUNY Fredonia</i>
7-C	Spectroscopic Determination of the Composition of Binary Liquids using Merocyanine Dyes <u>Isabelle Price</u> Jonas Simora Sawyer Oppenneer (Allan Cardenas) <i>SUNY Fredonia</i>
8-C	FAME Analysis of Bacterium Isolated from an Acid Mine Drainage Stream <u>Nathan Guy</u> (George Lengyel, Christopher Maltman) <i>Slippery Rock University</i>
9-C	Investigating Methods for Cloud Point Reduction of Biodiesel <u>Kiran Raha</u> (Martin Kociolek, Brett Burrell) <i>Penn State Behrend, HERO BX</i>
10-C	Mechanistic insights into the oxidation of phenols with 1-1-hydroxy-1,2,3-benziodoxathiole 3,3-dioxide, a recyclable hypervalent iodine reagent. <u>Meghan Hancock</u> (Michael Justik) <i>Penn State Behrend</i>

POSTER PRESENTATIONS

SESSION V

ENGINEERING-MATHEMATICS-PYSICS

Roche Hall

Poster #	Session
1-EMP	Exploring the Physics and Biomechanics of a Disc Golf Throw: A Pilot Study <u>Abigail McClain</u> (Joseph Johnson, Bradley Treece) <i>Mercyhurst University</i>
2-EMP	Radio Recombination Lines and Star Formation in the Orion Nebula <u>Haley Simcic</u> (Matteo Luisi) <i>Westminster College</i>
3-EMP	Conformable Kalman Filter <u>Nathan Murarik</u> <u>Tatiana Sosnovsky</u> <u>Gino Rotellini</u> (Nick Wintz) <i>Penn State Behrend, California State Polytechnic, PennWestern, Lindenwood University</i>
4-EMP	WITHDRAWN: Using Hamiltonian Mechanics to Estimate the Burr Distribution <u>Alexander Kim</u> <u>Kyra Wotorson</u> <u>Olivia Stewart</u> (Woosuk Kim) <i>Slippery Rock University, Seneca Valley Senior High School</i>
5-EMP	Analyzing the Moral & Psychological Consistency of Artificial Intelligence <u>Zebulun Lego</u> <u>Jessie Pensyl</u> <u>Hans Esteban</u> <u>Lukas Rhyner</u> <u>Zachary McKee</u> (David Barnes, Dr. Syed Rizvy) <i>Penn State Altoona</i>
6-EMP	RF Wireless Sensor Network <u>Benjamin Lubina</u> (Ramakrishnan Sundaram) <i>Gannon University</i>
7-EMP	Integration of dissolvable support material into 3d printed investment casting pattern creation <u>Christopher Annear</u> (Paul Lynch, Jing Zhao) <i>Penn State Behrend</i>
8-EMP	Sustainability Analysis of Fused Deposition Modeling Printed Shape Memory Polymers <u>Zayda Riggle</u> (Julia Zhao, Gamini Mendis) <i>Penn State Behrend</i>
9-EMP	Quality analysis in additive manufacturing of shape memory polymers <u>Rachel Gau</u> (Julia Zhao, Gamini Mendis) <i>Penn State Behrend</i>
10-EMP	Development of a Robust Partial Occlusion Detection Algorithm Based on the Möller-Trumbore Intersection Algorithm <u>Eliana Crew</u> (Matthew Barry) <i>University of Pittsburgh</i>
11-EMP	Investigation of the Shape Memory Properties of 3D Printed Thermoplastics <u>Nicholas Maguda</u> <u>Rachel Gau</u> (Julia Zhao, Gamini Mendis) <i>Penn State Behrend</i>

POSTER PRESENTATIONS

SESSION VI

HUMANITIES-SOCIAL SCIENCES

Witkowski 21

Poster #	Session
1-HSS	Socioscientific Issues: Promoting STEM Teachers' Pedagogy on Social Justice <u>Aden Ricketts</u> (Joseph Johnson, Agosto Macalalag) <i>Mercyhurst University</i>
2-HSS	Social Reasoning and Connection Behind Men's Ice Hockey and Contemporary Adult Romance Books: a Literature Review of Contemporary Academic and Professional Opinion <u>Jem Neumann</u> (Daniel Salamone) <i>Gannon University</i>
3-HSS	Unraveling the Media's Moral Panic: The Case of Meghan Markle and British Identity <u>Katie Perez</u> (Ishita Sinha Roy) <i>Allegheny College</i>
4-HSS	Commodifying Carceral Connection: A Visual Analysis of Privatized Telecommunications in Prisons <u>Lam Vo</u> <u>Jazzmine McCauley</u> <u>Lydia Bundick</u> <u>Marianna Di Balsamo</u> <u>Rachel Kosaka</u> <u>Meghan Koza</u> (Alexander Kinney, Nathan Kruis, Nicholas Rowland) <i>Penn State Altoona, Sam Houston State</i>
5-HSS	Ethical Leadership and its Effects on Moral Flexibility, Bottom-Line Mentality, and Unethical Behavior <u>Sophia Diplacido</u> (Joongseo Kim) <i>Penn State Behrend</i>
6-HSS	Assessing the Effect of COVID-19 Carceral Downsizing on Crime Rates in Pennsylvania <u>Jazzmine McCauley</u> <u>Lam Vo</u> <u>Lily Reid</u> (Nathan Kruis, Dr. Nicholas Rowland, Alexander Kinney) <i>Penn State Altoona, Sam Houston State</i>
7-HSS	Socioeconomic Inequality and School Shootings <u>Jiya Singla</u> (Sudeep Sharma) <i>Arizona State University, University of Illinois at Springfield</i>
8-HSS	Building Bridges with the Pennsylvania State Police: An Assessment of Community Intervention <u>Ziwei Lin</u> <u>Jazzmine McCauley</u> <u>Makaylah Bangura</u> <u>Lam Vo</u> <u>Ray Ncube</u> <u>Katelyn Kurtz</u> (Nathan Kruis, Nicholas Rowland) <i>Penn State Altoona</i>
9-HSS	Media Exposure vs. Lived Experience with Police: What Influences Attitudes? <u>Ziwei Lin</u> <u>Jazzmine McCauley</u> <u>Makaylah Bangura</u> <u>Deyana Dye</u> (Nathan Kruis, Nicholas Rowland) <i>Penn State Altoona</i>
10-HSS	Rape Myth Acceptance: Does Endorsement Influence Sentencing Decisions? <u>Makaylah Bangura</u> <u>Riley Fegley</u> <u>Ellee Garver</u> <u>Lily Reid</u> <u>Yursa Haroon</u> <u>Shannette Wahor</u> (Nathan Kruis, Nicholas Rowland) <i>Penn State Altoona</i>
11-HSS	Early Mobility in Mechanically Ventilated ICU Patients <u>Emily Misko</u> (Diann Cooper, Daniel Salamone) <i>Gannon University</i>

POSTER PRESENTATIONS

SESSION VII
PSYCHOLOGY
Witkowski 21

Poster #	Session
1-P	Examining the Mediating Role of Emotional Impulsivity in the Relationship Between Attention-Deficit/Hyperactivity Disorder Symptoms and Nicotine Consumption in College Students <u>Alaina Kutsch</u> (Jessica Rhodes) <i>Westminster College</i>
2-P	Campus Perceptions of Service Animals <u>Brianna Coluzzi</u> (Timothy Caswell) <i>Gannon University</i>
3-P	Examining Public Attitudes towards Accommodations <u>Brianna Coluzzi</u> <u>Sophia Mavica</u> <u>Brandon Sumney</u> (Luke Rosielle) <i>Gannon University</i>
4-P	Effect of partial notes using varying devices on test scores <u>Emma Snyder</u> <u>Megan Frank</u> (Dawn Blasko) <i>Penn State Behrend</i>
5-P	Social Preference Scale <u>Sophia Mavica</u> (Timothy Caswell) <i>Gannon University</i>
6-P	Exploring Life Outlook <u>Debonay Joseph</u> (Timothy Caswell) <i>Gannon University</i>
7-P	Changes in Anxiety Levels of College Students from Interactions with Virtual and Animatronic Animals <u>Hanna Long</u> <u>Amanda Welsbacher</u> (Victoria Kazmerski) <i>Penn State Behrend</i>
8-P	Social Alignment <u>Ellie Reilly</u> (Timothy Caswell) <i>Gannon University</i>
9-P	The Fear of Public Speaking <u>Michael Kinecki</u> (Timothy Caswell) <i>Gannon University</i>
10-P	Outlook on the Future Scale <u>Brandon Sumney</u> (Timothy Caswell) <i>Gannon University</i>
11-P	What's Funny? A Comparison of humor by Human and AI Comedians <u>Elijah Anderson</u> <u>John Hamill</u> (Dawn Blasko) <i>Penn State Behrend</i>
12-P	A Cultural Perspective on Sarcasm and Workplace Bullying <u>Kerryn Brochey</u> <u>Jemma Bryan</u> <u>Haobo Zhi</u> (Victoria Kazmerski, Erika Edwards, Shariffa Dawood, Dawn Blasko) <i>Penn State University</i>