



Indiana University of Pennsylvania

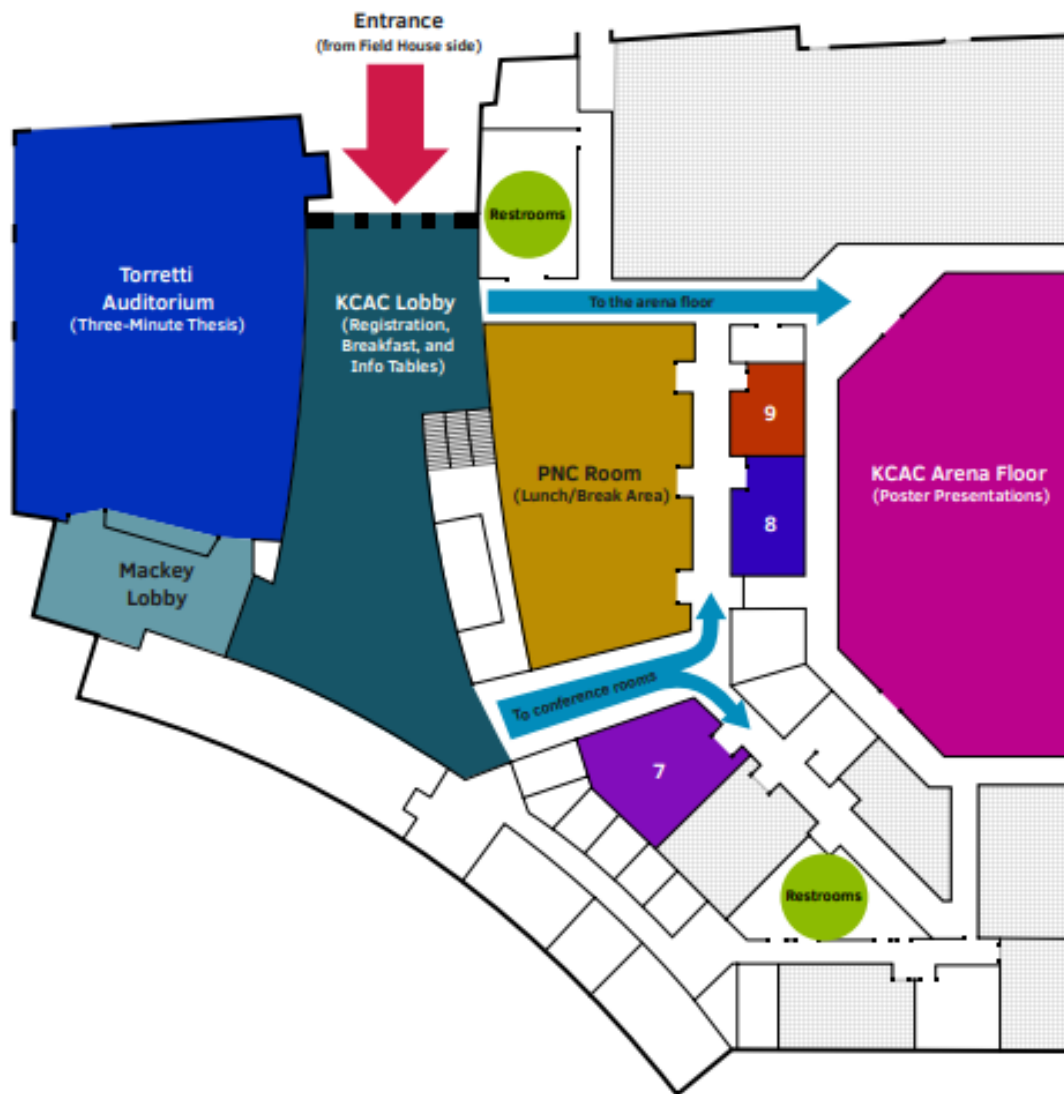
IUP Scholars Forum

Wednesday, April 8, 2026



IUP Scholars Forum

Kovalchick Convention and Athletic Complex



The PNC Room is open from 8:00–11:00 AM as a break room and from 11:00 AM–1:00 PM for lunch.

Twenty-First Annual IUP Scholars Forum

sponsored by
IUP Research and Innovation
IUP Research Institute

| | |
|---------------------|---|
| 8:00 AM – 9:00 AM | Registration KCAC Lobby Atrium |
| 9:00 AM – 12:00 PM | Podium Presentations Conference Rooms 7-9 |
| 9:00 AM – 12:00 PM | Poster Presentations KCAC Arena Floor |
| 11:00 AM – 11:45 AM | Three-Minute Thesis Toretti Auditorium |
| 11:00 AM - 12:30 PM | Lunch PNC Conference Room |

Judges

* Alumni judges

B. Angelini* | J. Barner | J. Baum Mehus | C. Bishop | R. Blahus* | S. Brown | T. Carson* | Y. Chen | J. Chernega* | B. Christy* | K. Chunta | C. Clouser | H. Creely | N. Deardorff | S. Dusack | T. Edwards | T. Eisenhower | S. Emel | R. Fetchkan* | R. Floyd* | B. Ford | T. Fries | M. Fryling | S. Ghosh | L. Hao | S. Haque* | H. Hastings | P. Hawkins | K. Heider | J. Heisler | R. Hildebrand* | L. Homsey-Messer | P. Y. Hsiao | K. Isaiah-Bojomimo | B. Jackson | C. J. Jaynes* | S. Jozefowicz | K. Kowalski | Y. Kuo | J. Levey | L. Luetkehans | F. Mahmood | B. Martin* | S. Muir* | E. Musiime | B. Nuth | K. O'Donnell* | A. Palmiotto | M. Pararai | C. Rafferty* | M. Richards | M. Secrist* | B. Shinsky* | R. Sickles* | Y. Sissoko | V. Stapf | L. Stroup* | T. Thompson | C. Vaccaro | J. Villemain | J. Warnock | L. Weddell* | S. Wheeler | E. Yerger

Volunteers

R. Adkins | A. Appleman | E. Ayi-Kumi | Z. Beblar | C. Bishop | T. Boring | K. Boyle | P. Bretz | T. Cabrera | C. Clouser | L. Cramer | H. Creely | J. Dragovich | D. Driscoll | T. Eisenhower | S. Evans | B. Farabaugh | C. Gambino | J. Grengs | P. Hawkins | K. Heider | M. House | B. Hunter | B. Jackson | C. Kayes | K. Kowalski | L. Krulikowski | J. Lundberg | J. McCray | T. McCroskey | L. McIntosh | D. Minser | M. Morris | R. Muth | K. Pivdori | J. Risinger | R. Whiskeyman | E. Yingling

Award Sponsors

- Academic Deans (Dean's Award)
- Applied Research Laboratory (Excellence in Data Analysis Award)
- IUP Libraries (IUP Libraries' Research Award)
- IUP Research Institute (Outstanding Poster and Podium Awards)
- Kopchick College of Natural Sciences and Mathematics (Women in STEM Award)

Special Thanks

- IUP Alumni Office
- IUP Applied Research Lab
- IUP Career and Professional Development Center
- IUP Center for Scholarly Communication
- IUP Graduate Admissions
- IUP Libraries
- IUP Office of Marketing and Communications
- IUP Office of Student Research
- IUP Print Center
- IUP Research and Innovation
- IUP Research Institute

Podium Presentation Sessions
9:00-10:00 a.m.

SESSION A
Conference Room 7

| Time | Presentation | Author(s) | Faculty Mentor |
|---------------------------------|---|--|-----------------------|
| A-1 09:00 a.m. | Graduate Writers in the Digital Age: Navigating Reddit for Academic Writing Development | Dalia SelfAllah, Lamia Dawood, Farheen Mahmoud | Dana Driscoll |
| A-2 09:20 a.m. | Muslim Mothering as a Site of Resistance and Empowerment: An Autoethnographic Study | Dalia SelfAllah, Nafisah Ahmad Sulaiman | Gloria Park |

SESSION B
Conference Room 8

| Time | Presentation | Author(s) | Faculty Mentor |
|--------------------------------|--|---|-----------------------|
| B-1 9:00 a.m. | Economic Strain and Crime: Examining the Relationship Between Financial Strain and Criminal Behavior | Jordyn Trusnovic, Alice de Oliveira Finisterra* | James Jozefowicz |
| B-2 9:20 a.m. | The Macroeconomic Forces that Affect Equity Returns and Why They Vary Across Equity Sectors | Ryan Little, Tyler Blystone | James Jozefowicz |
| B-3 9:40 a.m. | The Attendance Curveball: Examining What Drives Fans to MLB Ballparks | Nate Kociela, Jackson White | James Jozefowicz |

SESSION C
Conference Room 9

| Time | Presentation | Author(s) | Faculty Mentor |
|--------------------------------|---|------------------|-----------------------|
| C-1 9:00 a.m. | Is the Efficiency of AI Worth the Ethical Concerns in the Insurance Industry? | Aaron Burkhart | Yaya Sissoko |
| C-2 9:20 a.m. | Leveraging Low-Beta Healthcare Equities for Risk-Averse Portfolio Growth | Riley Wilson | Yaya Sissoko |

**Women in STEM presentation*

**Podium Presentation Sessions
10:00-11:00 a.m.**

**SESSION D
Conference Room 7**

| Time | Presentation | Author(s) | Faculty Mentor |
|---------------------------|--|--|-----------------------|
| D-1 10:00 a.m. | Does the Presence of Universities Increase Part II Crime Rates in Pennsylvania Counties? | Allison Johnson, Paige Clawson* | James Jozefowicz |
| D-2 10:20 a.m. | Keystone Crimes: Understanding the Reasons for Crime in Pennsylvania Counties | Saniya Metcalf- Harris, Kaitlyn Donaldson* | James Jozefowicz |
| D-3 10:40 a.m. | We Want a Pitcher: Determinants of Regular Season MLB Pitcher ERA | Kelly Szolek, Brianna Pusateri* | James Jozefowicz |

**SESSION E
Conference Room 8**

| Time | Presentation | Author(s) | Faculty Mentor |
|---------------------------|--|--------------------------------------|-----------------------|
| E-1 10:00 a.m. | What are Nursing Students' Knowledge, Attitudes, Social Norms, and Perceived Controls Regarding Environmental Health in Patient Practice: Using the Theory of Planned Behavior to Inform and Improve Communication Messaging for a Health Care Provider Audience | Susan Schrack Wood* | Stephen Kleinman |
| E-2 10:20 a.m. | HIV, PrEP, and Women of Color: Illuminating Disparities in HIV Care | Jacob Kingzett | Meigan Robb |
| E-3 10:40 a.m. | Go With the Flow: The 24-hour Post Extubation Success of the Heated High Flow Nasal Cannula | Kendyl Steighner, Cassidy Makray* | Jackie Heisler |

**Women in STEM presentation*

Additional 10:00 a.m. sessions continue on next page.

Podium Presentation Sessions

10:00-11:00 a.m. (continued)

SESSION F

Conference Room 9

| Time | Presentation | Author(s) | Faculty Mentor |
|--------------------------|---|-------------------------|-------------------|
| F-1 10:00 a.m. | Analogue Roots, Digital Future, and the Rise of AI: Autoethnographic Study of Evolving Learning Modalities in Higher Education | Nafisah Ahmad Sulaiman* | Zack Stiegler |
| F-2 10:20 a.m. | Eliciting Behavioral Change in College Students: An Evaluation of Outcomes of a Motivational Interviewing and Wellness Coaching Program | John Ograh | Christian Vaccaro |
| F-3 10:40 a.m. | Examining Technological Pedagogical Content Knowledge (TPACK) Among In-Service Secondary Teachers in Taiwan: A Pilot Survey Study | Chin-Yi Huang* | Julie Ankrum |

**Women in STEM presentation*

Podium Presentation Sessions
11:00 a.m.-12:00 p.m.

SESSION G
Conference Room 7

| Time | Presentation | Author(s) | Faculty Mentor |
|--------------------------|---|------------------|-----------------------|
| G-1 11:00 a.m. | Eastern Whip-poor-will Response to Prescribed Fire in Managed Oak Forests | Nicholas Logan | Jeffrey Larkin |
| G-2 11:20 a.m. | Stochastic Simulation of Chemical Reactions | Belinda Lin Xu* | Yu-Ju Kuo |
| G-3 11:40 a.m. | Factorization of Polynomials Over the Boolean Semifield | Micah Sherry | Francisco Alarcon |

SESSION H
Conference Room 8

| Time | Presentation | Author(s) | Faculty Mentor |
|--------------------------|--|------------------|-----------------------|
| H-1 11:00 a.m. | Legacy in Limbo: Energy Transition and AI Data Centers in a Former Appalachian Coal Town | Abigail Trimble* | Amanda Poole |
| H-2 11:20 a.m. | Maternal and Infant Health: An Exploration of Food Assistance Programs in Indiana County | Avery Gretz* | Abigail Adams |
| H-3 11:40 a.m. | Young Mothers in Appalachia | Adiya Murrell* | Abigail Adams |

SESSION I
Conference Room 9

| Time | Presentation | Author(s) | Faculty Mentor |
|--------------------------|--|------------------|-----------------------|
| I-1 11:00 a.m. | The Impact of Roadside Design on Driver Behavior: Crash Site Analyses from Indiana, Pennsylvania | Samantha Ryan | Sudeshna Ghosh |
| I-2 11:20 a.m. | From Liability to Landscapes: Green Infrastructure Solutions for Brownfield Redevelopment | Jacob Engbert | Sudeshna Ghosh |

**Women in STEM presentation*

Poster Presentations

KCAC Arena Floor

9:00 AM – 12:00 PM

| Pres. | Title | Author(s) | Faculty Mentor |
|--------------|--|---|-----------------------|
| P-1 | IUP RA Perceptions: Stress, Burnout, Self-Esteem, and Self-Efficacy | Jenna Sorensen | David Berberich |
| P-2 | Bronze Age Trading in the Aegean | Madison Schramm | R. Scott Moore |
| P-3 | Large-Cap Blue Chip Stocks | Chloe Brown* | Yaya Sissoko |
| P-4 | Is the Efficiency of AI Worth the Ethical Concerns in the Insurance Industry? | Aaron Burkhart | Yaya Sissoko |
| P-5 | Portfolio Strategy and Risk Analysis in a Simulated Market Environment | Alice de Oliveira Finisterra, Rachel Kopicko | Yaya Sissoko |
| P-6 | Portfolio Diversification | Quintin Robison, Jenna Wilt | Yaya Sissoko |
| P-7 | Leveraging Low-Beta Healthcare Equities for Risk-Averse Portfolio Growth | Riley Wilson | Yaya Sissoko |
| P-8 | The Effects of Intermediate Punishment on Recidivism | Jackson White | Brandon Vick |
| P-9 | An Analysis of the Impact of NIL and the Transfer Portal on Division 1 NCAA Men's Basketball on Team Performance | Evan Lewis, Benjamin Hodge, Tanner Krevokuch, Jacob Black | Joshua Castle |
| P-10 | Virtual MTSS: Measuring Success and Lessons Learned Implementing a Comprehensive Program | Anthony Grande | Courtney Leone |
| P-11 | Justice For All? Evaluating Public Defender Effectiveness in Pennsylvania | Kelly Szolek* | Angel Alcantara |
| P-12 | Settled, Unsettled, Resettled | Lamia Dawood* | Alex Heckert |
| P-13 | Impact of Service Duration on Victim Services Satisfaction in Pennsylvania | Reia Sanchez* | Alex Heckert |
| P-14 | Examining Satisfaction Rates with Victim's Services Programs Across Age Groups | Lauren Connor* | Christian Vaccaro |
| P-15 | A.R.I.S.E. and Shine: Energizing the Nursing Classroom | Christopher de la Victoria | Kristy Chunta |
| P-16 | From Barriers to Empowerment: Increasing Health Literacy in Older Adults | Megan Maclellan* | Meigan Robb |
| P-17 | The Effect of Phosphene Characteristics on the Perception of Letters Designed to Simulate Prosthetic Vision | Caleigh Robb, Elizabeth Ashe, Bailey Bevington, Julia Marshall* | William Farrell |
| P-18 | I-sharing with Friends and Strangers | Caylyn Shirey | Anson Long |

**Women in STEM presentation*

| Pres. | Title | Author(s) | Faculty Mentor |
|-------|---|---------------------|----------------------|
| P-19 | Maternal and Infant Health: Food Insecurity and Malnutrition in Westmoreland County | Shanya Coshey | Abigail Adams |
| P-20 | Correlation between Nature-Connectedness, Food Sovereignty, and Well-Being: Farming Experience and Engagement in Western PA | Grace Wilcox | Abigail Adams |
| P-21 | Geophysical Survey and Archaeological Testing at the Basilica of the Sacred Heart of Jesus (Conewago Chapel) | Elena Frye* | William Chadwick |
| P-22 | Initial Bathymetric Analyses of the Comoros Volcanic System | Josephine LaPierre* | Katherine Farnsworth |
| P-23 | Assessment of Microplastic Contamination in Stream Sediments of the Stoney Run Watershed | Toni Venslosky* | Katherine Farnsworth |
| P-24 | A Proposed Geophysical Survey of a Late 19th Century Farmstead Site in Chesterfield County, Virginia | Meaghan Burton | Benjamin Ford |
| P-25 | The John and Julia Hopkins House: Excavating Black History in Gettysburg's Third Ward | James Duke | Benjamin Ford |
| P-26 | Archaeological Investigation of a 19th-Century Historic Mill | David Hay | Benjamin Ford |
| P-27 | Brown's Farm: A 19th and 20th century African American Farmstead | Abdul Jones | Benjamin Ford |
| P-28 | A Glass Analysis of the Woodville Plantation | Catherine Rosler* | Benjamin Ford |
| P-29 | Using Porcelain to Compare the Economic Status of Woodville Occupants | Ella Sabilia* | Benjamin Ford |
| P-30 | Get to the Point | Matthew Valenti | Benjamin Ford |
| P-31 | Subsistence, Settlement, and Legacy Collections: Reevaluating the Mary Rinn Site (36IN29) through Fire-Cracked Rock and Paleoethnobotanical Analysis | Heidi Hepburn | Lara Homsey-Messer |
| P-32 | The Problem of <i>Gray</i> : Archaeological Recordation and Landscape Use in the North Fork of The Shenandoah Valley | Jennifer Kennedy | Lara Homsey-Messer |
| P-33 | A Comparison of Groundstone Assemblanthropology, Geospatial, and Earth Sciences from Two Archaeological Paleoindian and Archaic-Period Sites in Shenandoah and Warren County , Virginia | Robert Sopin | Lara Homsey-Messer |
| P-34 | Reorganizing in the Curation Crisis | Brendon Ward | Lara Homsey-Messer |
| P-35 | Identification and Analysis of Bone and Bone Tool Debitage at Parrot Point, South Carolina | Ryan Devanny | Andrea Palmiotto |

**Women in STEM presentation*

| Pres. | Title | Author(s) | Faculty Mentor |
|-------|--|---|----------------------|
| P-36 | Zooarchaeological Analysis of Green's Shell Enclosure: A Coastal Mississippian Shell Ring in Beaufort County, South Carolina | Brenden Patterson | Andrea Palmiotto |
| P-37 | Vessel Technology and Function at the Chester Field Shell Ring Site | Savannah Weinrich* | Andrea Palmiotto |
| P-38 | Branding Bigfoot: How Folklore Fuels Rural Futures | Samantha Langley* | Amanda Poole |
| P-39 | An Assessment of Passive Abandoned Mine Drainage Treatment in Headwater Streams of Indiana County | Matthew Silk | Sudeshna Ghosh |
| P-40 | Assessing the Effects of Acid Mine Drainage on Streams and Ponds within The Aultman Run Watershed in Indiana, PA | Benjamin Aujay, Cameron Danchanko, James Latson, Matthew Silk | Christopher Schaney |
| P-41 | Investigating Microplastic Contamination in the Streams of Stoney Run Watershed in Indiana, PA | Cameron Danchanko* | Katherine Farnsworth |
| P-42 | The Evaluation of 3D Gaussian Splatting and Photogrammetry for Drone-Based 3D Modeling | Tyler Peterson, Joshua Mix | Christopher Schaney |
| P-43 | Assessing Potential Economic Impacts on PA Agriculture from the Spread of the Spotted Lanternfly | Keith Sprenger | Sudeshna Ghosh |
| P-44 | Thermal and Multispectral Drone Assessment of the Buffalo Native American Site: Advancing Non-Invasive Archaeological Survey Methods | Michael Wood, Francis Mielke, Keith Sprenger | Christopher Schaney |
| P-45 | Kentucky's Agricultural Industry: An Analysis of Nutrient Management Strategies and Their Impacts | Michael Wood | Sudeshna Ghosh |
| P-46 | Stormwater Pipes along Marsh Run, Indiana PA | Sophie Dombroski | Sudeshna Ghosh |
| P-47 | Geovisualizing Rural Healthcare Needs in Pennsylvania | Noah Grattan | Richard Hoch |
| P-48 | Analyzing Foliations to Aid Understanding in the Formation of Taiwan | Lauren Fike | Jonathan Lewis |
| P-49 | Constraining Mineral Chemistry in a Well-Preserved Seafloor Stratigraphic Section of the Eastern Central Range, Taiwan | Megan McCracken | Jonathan Lewis |
| P-50 | Strain Partitioning Between Clasts and Matrix in a Pebbly Phyllite from the Eastern Central Range, Taiwan | Nolan Read | Jonathan Lewis |

**Women in STEM presentation*

| Pres. | Title | Author(s) | Faculty Mentor |
|-------|---|---|-------------------------|
| P-51 | Investigation of Recycling of Tephra and Heating-Induced Crystallization in Volcanic Vents | Grant Baker | Nicholas Deardorff |
| P-52 | Project Based Learning and Its Effect on Student Understanding In 8th Grade Earth and Space Science | Grant Baker | Holly Travis |
| P-53 | Universal Proteomics of Selective Pathogenic and Non-Pathogenic Isolates of <i>Rhizoctonia solani</i> | Rajesh Bogati | Narayanaswamy Bharathan |
| P-54 | Estimating Densities of Medium and Large Mammals of Southwestern Pennsylvania | Maximillian Furimsky | Joseph Duchamp |
| P-55 | Thermal Effects of On-Stream Ponds on Coldwater Biological Communities | Elijah Clevenger | David Janetski |
| P-56 | Influence of Pool Habitat Complexity on Body Size of a Common Non-Game Fish in Pennsylvania Headwater Streams | Daniel McGinity | David Janetski |
| P-57 | Effects of Urbanization on Fish Abundance and Diversity in Stoney Run, Indiana County, Pennsylvania | Isabella Wanless, Jessica Johnson* | David Janetski |
| P-58 | Assessing the Presence of Ruffed Grouse (<i>Bonasa umbellus</i>) in Managed Forests and Shrublands in the Western Great Lakes | Caroline Sandman, Kathryn Schaeffer, Nicholas Logan* | Jeff Larkin |
| P-59 | Assessing the Impact of Sea Level Rise on Vegetation Loss within the Saxis Wildlife Management Area | Caroline Sandman, Maya Adams, Taylor Serrano, Marina Anderson* | Christopher Schaney |
| P-60 | The Study of Teneurin Gene Function in Planarian Regeneration | Melody Guyett* | Robert Major |
| P-61 | Cloning Stromal Cell-Derived Factor 1 to Explore Tissue Regeneration in <i>S. mediterranea</i> | Margaret Holderer* | Robert Major |
| P-62 | The Establishment of a Tissue Culture and Pathway Activation Assay | Caileigh Kaminski, Mia Courtalis* | Robert Major |
| P-63 | Notchless RNAi Experiments in <i>Schmidtea mediterranea</i> may Possibly Lead to Midline Patterning Defects | Cameron Scaramuzzo* | Robert Major |
| P-64 | An Analysis of Microwear of Tyrannosaurid Teeth | Jenna Conrad* | Eric Morschhauser |
| P-65 | Paleobiogeography of South American Hadrosauroid Dinosaurs Using Tip-Dating Bayesian Methods | Nicholas Hornicak (Dr. Eric Gorscak, Dr. Eric Morschhauser, Dr. Matt Lamanna) | Eric Morschhauser |
| P-66 | Planarian as a Novel Animal for Studying Opioid Addiction | Cynthia Roldan* | Christina Ruby |

*Women in STEM presentation

| Pres. | Title | Author(s) | Faculty Mentor |
|-------|--|--|------------------|
| P-67 | Expanding the Available Data for Green Spiny Lizards (<i>Sceloporus hondurensis</i> complex) | Serena Aumick* | Josiah Townsend |
| P-68 | The Effect of Different Note Taking Strategies on Student Test Scores | Rachel Adamson* | Holly Travis |
| P-69 | The Effect of The Flipped Classroom Model on Student Learning | Summer Fairman* | Holly Travis |
| P-70 | The Impact of Teacher-Provided and Student-Constructed Diagrams on Student Learning | Emily Mack* | Holly Travis |
| P-71 | The Effects of the Shade of Colored Paper (Neon vs. Dull) on Learning | Katie Peters | Holly Travis |
| P-72 | Digital vs. Non-Digital Review Games: Effects on Student Learning Outcomes | Isabelle Smith | Holly Travis |
| P-73 | Overwintering Temperatures and Survival of Trees and Shrubs Using Modified Rooftop Growing Beds Located on the Green Roof Terrace of Kopchick Hall | Tamara Hayes | Michael Tyree |
| P-74 | Effect of Vorinostat on Methamphetamine-induced Conditioned Place Preference (CPP) | Emily Duncan, Dasha Hammond* | Daniel Widzowski |
| P-75 | Is Doxepin Effective for Suppressing Methamphetamine-Induced Conditioned Place Preference? | Christian Roemer | Daniel Widzowski |
| P-76 | Utilizing Zeolitic Imidazole Framework-8 as a Drug Delivery Agent for Photoactive metal Complex | Noah Conroy, Matthew Lin Xu, Parker Bradley | Avijita Jain |
| P-77 | Exploration of Drug Carriers for the Delivery of Photoactive Ruthenium-Based Complexes | Parker Bradley, Noah Conroy, Matthew Lin Xu | Avijita Jain |
| P-78 | Iodohydrin Synthesis via In-Situ Formation of Hypoiodous Acid (HOI) | Wyatt Heberlein, Justin Behr, Belinda Lin Xu | Carl LeBlond |
| P-79 | Drug Target-Interactions of Antifungal Molecules | Nicholas Wright | Sudipta Majumdar |
| P-80 | The Impact of Water Chemistry on Beer Characteristics | Owen Boozer | Nathan McElroy |
| P-81 | Chemical Analysis of Surface Water Surrounding Industrial Facilities | Gracie Kirkpatrick* | Nathan McElroy |
| P-82 | Predicting Amusement Park Wait-Times Using an Adapted SIR Model | Jacob Schucker | Frederick Adkins |
| P-83 | Field and Value Extraction from Heterogeneous Paperwork Using a Large Language Model | Isabella Johnson* | Samuel Grieggs |
| P-84 | Position Bias within an AI Stylist | Katherine Powell* | Samuel Grieggs |

*Women in STEM presentation

| Pres. | Title | Author(s) | Faculty Mentor |
|-------|---|---------------------|-----------------------|
| P-85 | Rebalancing the Ribbon: Correcting Dataset Imbalance in AI-Driven Breast Cancer Detection | Megan Seaman* | Samuel Grieggs |
| P-86 | Machine Learning Strategies on Simulated Quantum Hardware | Ainsley Weidensall* | Soundararajan Ezekiel |

**Women in STEM presentation*

NOTES

STEM High School Poster Presentations

KCAC Arena Floor

9:00 a.m. – noon

This session features exemplary research conducted by students from Blacklick Valley, Indiana Area, and West Shamokin high schools.

Blacklick Valley Junior-Senior High School

| Pres. | Title | Author(s) | Faculty Mentor(s) |
|-------|--|--------------------------------------|--|
| P-87 | Drugs on Bugs: What Antibiotic Ointment Most Affects the Growth of Gram Positive and Negative Bacteria | Mackenzie Bardell, Kamryn Kasecky | Ashley Lieb |
| P-88 | Investigating the Effectiveness of Different Hand Sanitizers on Bacterial Growth | Lukas Brown | Malika Karunaratne, Ashley Lieb |
| P-89 | Glowing and Growing: Studying the Effects of pH and Lighting on Plant Growth | Zoey Goughnour | Ashley Lieb, Jake Lieb |
| P-90 | Evaluating the Filtration Efficiency of Natural Materials | Paige Kelley | Malika Karunaratne, Ashley Lieb, Breanna McGhee |
| P-91 | Neutralizing the Flow: Which Material Best Mediates Acid Mine Drainage | Sarah Mourey | Ashley Lieb, Breanna McGhee |
| P-92 | Quantitative Analysis of Energy Emission in Compounds Producing Green Flame | Noah Popich | Malika Karunaratne, Ashley Lieb |
| P-93 | Evaluating the Acoustic Effects of Different Materials on Sound Transmission | Averi Yewcic | Ashley Lieb, Shane Rudnik |
| P-94 | Biodegradable Plastics | Dennis Zanin | Ashley Lieb |

Indiana Area Senior High School

| Pres. | Title | Author | Faculty Mentor(s) |
|-------|---|---------------------|---------------------------------|
| P-95 | Measuring the Effect of Change on Established Ecosystems | Karter Belfiore | Jamie Edmonds |
| P-96 | Comparing the Effectiveness of Cleaning Products on Water Bottle Microbe Growth | Morgan Blystone | Jamie Edmonds |
| P-97 | Peer Pressure in Group Testing | Alexandrea Brown | Jamie Edmonds |
| P-98 | Transferring Poison Ivy | Makenzie Brown | Jamie Edmonds |
| P-99 | Finding a TLD for a Permanent Moon Base | Alonzo Farrington | Zachary Van Horn |
| P-100 | The Difference between Green Structures in Energy Conservation | Sarah Genchur | Michael Lehman |
| P-101 | Step in Easy | Elizabeth Griffith | Michael Lehman |
| P-102 | Distinguishing Synthetic vs. Organic Text | Keylee Gunnarsson | Emily Hixson |
| P-103 | Magnetic Power Transfer | Luke Halchak | Emily Hixson |
| P-104 | Transmitting Encoded Information with LED | Andy Hao | Michael Lehman |
| P-105 | Reflectivity in Different Sized Leaves | Aaron Herr | Emily Hixson |
| P-106 | Testing Safety of AI Generated Code | William Herr | Brian Schreyer |
| P-107 | Determining the Minimum Inhibitory Concentrations of Essential Oils Against E. Coli | Ella Higbee | Jamie Edmonds |
| P-108 | Bystander Effect | Kaylee Higgins | Scott Layden |
| P-109 | Converting Foot Traffic into Electrical Energy | Isaac Jones | Emily Hixson |
| P-110 | Finding Optimal Conditions for Adsorbing Metal Complexes onto Zeolite Pores | Pranav Kumar | Avijita Jain, Michael Lehman |
| P-111 | Adaptive Assistance Mechanism for Controlled Weight Training | Jack Lehman | Michael Lehman |
| P-112 | The Effect of Fluoride on the Acid Erosion of Teeth | Allison Lichtenfels | Jamie Edmonds |
| P-113 | Liquidity Sweep Signatures and Order Flow Reversals | Edmond Lin | Emily Hixson |
| P-114 | Quantifying the Role of Neurological Efficiency in Strength | Kevin Liu | Michael Lehman |
| P-115 | Is There a Link between Music and Mood? | Marlie Mangold | Scott Layden |
| P-116 | Leading Questions & Influencing Minds | Liliana Manzi | Emily Hixson |
| P-117 | Bioremediation of Hydrocarbon Spills | Sahana Mehta | Jamie Edmonds |
| P-118 | How Aloe Vera Gel Impacts Micrococcus Luteus | Sonam Mehta | Jamie Edmonds |
| P-119 | Varying Forces Effect on Application of Momentum | Drew Mimis | Michael Lehman |
| P-120 | The Effect of Strawberry Notch on the Regeneration of Planaria | Avery Orr | Jamie Edmonds, Robert Major |
| P-121 | The Effects of Microplastics on Plant Growth and Germination | Heather Paul | Jamie Edmonds |

Indiana Area Senior High School (continued)

| Pres. | Title | Author | Faculty Mentor(s) |
|--------------|---|------------------|--------------------------|
| P-122 | The Generational Perception of Nonverbal Texting Cues | Emma Runge | Jamie Edmonds |
| P-123 | Range Changes in Birds Using Six Decades of Bird Banding Data | Brennan Saxfield | Erin Janetski |
| P-124 | How Music Affects the Mind | Lizzy Sexton | Scott Layden |
| P-125 | Educational Assistant vs. the Engineering Process | Brayden Stevens | Brian Schreyer |
| P-126 | Flaming Hot Paint | Liliana Vello | Marisa Huntsman |
| P-127 | Effects of Herd Mentality | Marie Vu | Scott Layden |
| P-128 | How Does UV, NaOH Modulate PET Biofilms? | Teresa Wang | Jamie Edmonds |
| P-129 | Comparative Analysis of Transformation Efficiency Across Escherichia coli Strains | Julia Weber | Jamie Edmonds |
| P-130 | Testing the Effectiveness of an Oobleck Speed Bump | Xander Wheeler | Emily Hixson |
| P-131 | The Quantitative Effect of Instrument Geometry on Timbre | Audrey Yang | Michael Lehman |

West Shamokin Junior-Senior High School

| Pres. | Title | Author | Faculty Mentor(s) |
|--------------|--|------------------------|----------------------------|
| P-132 | All Is True...Until It's Not | Sophie Baker | Adam Moyer, Karen Risinger |
| P-133 | How Different Lights Affect the Heart rate of Daphnia | Lydia Heckman | Adam Moyer, Karen Risinger |
| P-134 | The Effects of Microplastics on Living Organisms | Peyton Henderson-Meyer | Adam Moyer, Karen Risinger |
| P-135 | Vitamin D Absorbance Around the World | Chasity Shultz | Adam Moyer, Karen Risinger |
| P-136 | Think Pink, Treat Bravely: Updates in Breast Cancer Medicine | Addison Stiveson | Adam Moyer, Karen Risinger |
| P-137 | How Protein Intake Affects ACL Recovery | Aleya Talmadge | Adam Moyer, Karen Risinger |
| P-138 | Which Herb Is the Most Beneficial Against Bacteria? | Alexia Wilson | Adam Moyer, Karen Risinger |
| P-139 | Radiation in Electronics | Kaitlyn Young | Adam Moyer, Karen Risinger |

Three-Minute Thesis Competition

Toretti Auditorium
11:00– 11:45 AM

This exciting event features graduate students advancing from the preliminary competition into the final round of the 3-Minute Thesis competition. Students have exactly three minutes to present their original scholarship with the aid of one static PowerPoint slide and are competing for judges scores and audience votes. This event is hosted by the Office of Research and Innovation. Bring your phone; the audience can text their vote for their favorite presenter!

| Pres. | Title | Participant | Program |
|-------|--|--------------|--|
| T-1 | The Culture of Resettling Lives | Lamia Dawood | Administration and Leadership Studies, PhD |
| T-2 | Brown's Farm: A 19th and 20th Century African American Farmstead | Abdul Jones | Applied Archaeology, MA |
| T-3 | College Students' Expectations from Their Instructors in Today's Classroom | Amar Mmoud | Curriculum and Instruction, DEd |

STUDENT RESEARCHER INDEX

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