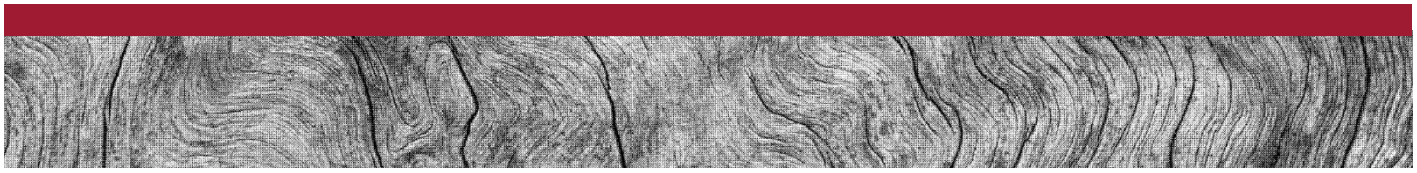
Indiana University of Pennsylvania

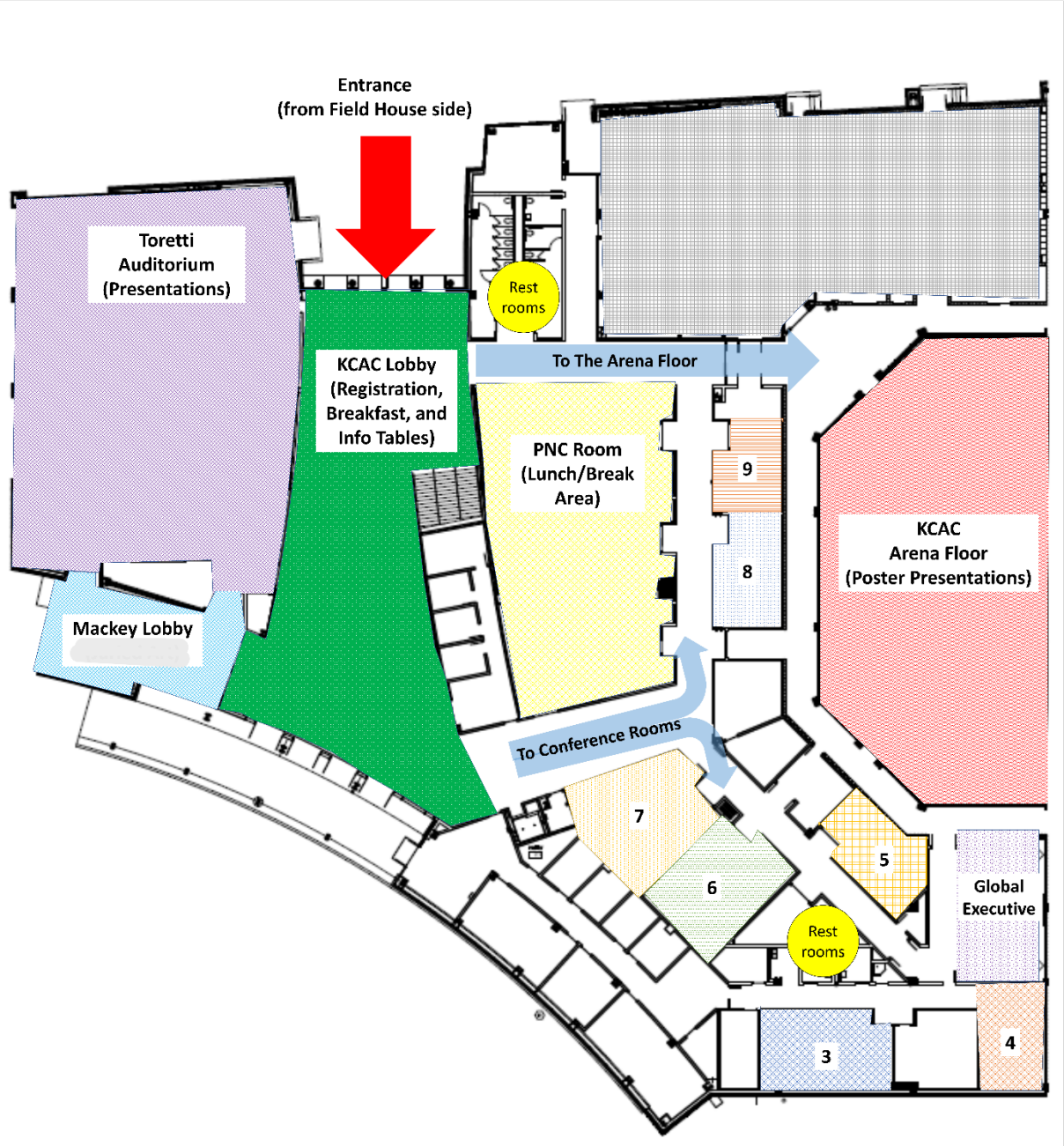
IUP Scholars Forum

Wednesday, April 9, 2025



IUP Scholars Forum

Kovalchick Convention and Athletic Complex



The PNC Room is open from 8:00 -11:00 a.m. as a break room, and from 11:00 a.m. to 12:30 p.m. with lunch.

Twentieth Annual IUP Scholars Forum

Sponsored by
Office of Research and Innovation
IUP Research Institute

8:00 AM – 9:00 AM	**Registration** KCAC Lobby Atrium
9:00 AM – 12:00 PM	**Podium Presentations Sessions** Conference Rooms 3-9
9:00 AM – 12:00 PM	**Poster Presentations** KCAC Arena Floor
11:00 AM – 11:30 AM	**Three Minute Thesis** Toretti Auditorium
11:00 AM - 12:30 PM	**Lunch** PNC Conference Room

Judges

* Alumni judges

A. Adams | B. Angelini* | K. Baker | J. Barner | J. Baum Mehus | W. Black | J. Boothby | A. Brady* | S. Brown | W. Chadwick | J. Chernega* | B. Christy* | K. Chunta | D. Driscoll | C. Dugan | S. Dusack |T. Edwards | T. Eisenhower | S. Emel | R. Floyd* | R. Fox | T. Fries | M. Fryling | K. Heider| C. Gambino | D. Ganassi* | K. Gardner* | L. Hao | R. Hildebrand* | L. Homsey-Messer | P. Hsiao | T. Huntington | D. Janetski | C. Jaynes* | T. Johnson | S. Jozefowicz | J. Jozefowicz | C. Kalcich* | S. Keppich | L. Knight | K. Kowalski* | Y. Kuo | L. Kurtz* | E. Lauber | J. Levey | E. Little | S. Lu | A. Mahmoud | B. Martin | A. McCoach | S. Mihalacki* | E. Morschhauser | N. Muchtar | S. Muir* | C. Navaratna | T. O'Connor* | A. Palmiotto | N. Pinizzotto* | N. Pipkin-Hutchinson | K. Pividori | C. Rafferty* | M. Richards | M. Robb | S. Sibert | R. Sickles* | Y. Sissoko | J. Stango* | L. Stroup* | L. Succheralli | V. Sutton* | T. Thompson | J. Townsend | H. Travis | C. Vaccaro | J. Villemain | W. Waugh* | E. Wender | S. Wheeler | J. Wiley* | L. Yan | E. Yerger | M. Zambrano-Paff | M. Zreiqat | N. Zuraikat

Volunteers

A. Appleman | Z. Beblar | J. Bishnoi| C. Bishop | P. Bretz | T. Cabrera | C. Clouser | L. Cramer | D. Driscoll |T. Eisenhower | E. Ekuban| S. Evans | B. Farabaugh | C. Gambino | M. Hamid| P. Hawkins | K. Heider | B. Hunter | B. Jackson | L. Krulikowski | T. McCroskey | D. Minser | K. Pividori | A. Reinard | H. Sammour| H. Wick | B. Wild

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Special Thanks

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- Alumni and Volunteers
- Jones White Writing Center
- Graduate Student Assembly
- IUP Research Institute
- Applied Research Lab
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- Center for Scholarly Communication
- IUP Alumni Office

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

SESSION A
Conference Room 5

Time	Presentation	Author(s)	Faculty Mentor
A-1 **09:00 a.m.**	Roots in the Wild: A Student's Journey with Nature	Seth Koch	Abigail Adams
A-2 **09:20 a.m.**	VBAC: The Birthing Experience of Women	Hope Wright	Abigail Adams
A-3 **09:40 a.m.**	Learning from the Land: The Role of Gendered Recreation in Environmental Stewardship and Gas Well Monitoring in Appalachia	Abigail Trimble*	Amanda Poole

SESSION B
Conference Room 9

Time	Presentation	Author(s)	Faculty Mentor
B-1 **9:00 a.m.**	Examining the Correlation Between Life Expectancy and Health Disparities Among the 50 States	Catherine Martsolf*	James Jozefowicz
B-2 **9:20 a.m.**	Determinants of National Football League (NFL) Regular-Season Game-Day Attendance	Chloe Stoner, Katelyn Krish	James Jozefowicz
B-3 **9:40 a.m.**	Impact of Marijuana Legalization and Capital Punishment on the Unemployment - Property Crime Relationship	Connor Sowers, Kylie Miller	James Jozefowicz

**Women in STEM presentation*

Additional 9:00 a.m. sessions continue on next page

Podium Presentation Sessions
9:00-10:00 a.m. (continued)

SESSION C
Conference Room 3

Time	Presentation	Author(s)	Faculty Mentor
C-1 **9:00 a.m.**	Testing a Rapid Assessment Protocol for Quality of Allegheny Woodrat (Neotoma magister) Habitat in Southwestern Pennsylvania.	Samantha Miron*, Ashley Moll*, Colton Moyer	Joseph Duchamp
C-2 **9:20 a.m.**	Connective Tissue Disorders: How They May Affect the Voice	Amanda Iandiorio*	Matthew Baumer

SESSION D
Conference Room 7

Time			
D-2 **9:20 a.m.**	Corporate Social Responsibility and Customer Bond in Brand Building: A Case Study of Safaricom	Ednah Biwot*	Nurhaya Muchtar
D-3 **9:40 a.m.**	Parasocial Dynamics and Isolation: Victim Vulnerability to Online Dating Scams	Nafisah Sulaiman	Zachary Stiegler

**Women in STEM presentation*

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

SESSION E
Conference Room 8

Time	Presentation	Author(s)	Faculty Mentor
E-1 10:00 a.m.	Inflation And How It Affects Real Personal Savings Rates	Anna Horvath*, Dominick Ditoro	James Jozefowicz
E-2 10:20 a.m.	Cryptocurrencies and Exchange Rate Systems	Aaron Burkhart, Dylan McAnulty	Yaya Sissoko
E-3 10:40 a.m.	Navigating the AI Revolution: A Double-Edged Sword for the Future Workforce	Maxwell Paul-Cook	Yaya Sissoko

SESSION F
Conference Room 6

Time	Presentation	Author(s)	Faculty Mentor
F-1 10:00 a.m.	Reforming and Rehabilitating the Offender: The Power of Specialized Treatment for Juvenile Sex Offenders	Ainsley Shyk	Alida Merlo
F-2 10:20 a.m.	Affordable Housing and Adaptive Reuse: A Comparative Analysis of Two Adaptive Reuse Projects in Los Angeles, CA	Daniel Kukula	Sudeshna Ghosh
F-3 10:40 a.m.	Effects of Transit on Traffic: A Case Study of the Metro A Rapid Bus Transit Line in Minneapolis, MN	Steven Simonetti	Sudeshna Ghosh

SESSION G
Conference Room 3

Time	Presentation	Author(s)	Faculty Mentor
G-1 10:00 a.m.	Perspectives of Parental Mediation in Social Media	Hanna Mikesic*	Tara Johnson
G-2 10:20 a.m.	The Effects of Parent and Child Gender on Parental Mediation Strategies	Ashtyn Hileman*	Tara Johnson
G-3 10:40 a.m.	Androgynism: Recognition of the Internal Hieros Gamos upon Western Civilization	Brian Sateriale	Christopher Orchard

**Women in STEM presentation*

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

SESSION H
Conference Room 9

Time	Presentation	Author(s)	Faculty Mentor
H-1 11:00 a.m.	Technology Acceptance in Taiwanese High Schools: Teachers' Evolving Perspectives During and After COVID-19	Chin-Yi Huang*	Julie Ankrum
H-2 11:20 a.m.	A Qualitative Exploration of Women Faculty's Experiences in Hybrid Classrooms: Navigating Job Demands and Wellness	Emmanuella Musiime*, Crystal Machado	Crystal Machado
H-3 11:40 a.m.	Student Governance at Indiana University of Pennsylvania: The Evolution of the Student Government Association into the Organization it is Today	Kaylee Becker-George	Scott Moore

SESSION I
Conference Room 5

Time	Presentation	Author(s)	Faculty Mentor
I-1 11:00 a.m.	We All Want to Retire: Diverging Paths Leading to Retirement	Angel Alcantara*	Yu-Ju Kuo
I-2 11:20 a.m.	Climate Risk, Insurance Premiums, and the Future of Expected Claim Payout	William Kamau Ngigi	Yu-Ju Kuo
I-3 11:40 a.m.	Enhancements of Portfolio Immunization	Grace Modlin*	Yu-Ju Kuo

SESSION J
Conference Room 7

Time	Presentation	Author(s)	Faculty Mentor
J-1 11:00 a.m.	What Drives Crime: Examining White-Collar Crime Rates in the United States	Elizabeth Fox	James Jozefowicz
J-2 11:20 a.m.	NHL Attendance, Will You Be There?	Emily Schumacher*, Micaela Jebitsch	James Jozefowicz
J-3 11:40 a.m.	Exploring the Causes of Rising Tuition of Higher Education in Pennsylvania	Gabriel Kengersky, Kaden Ring	James Jozefowicz

**Women in STEM presentation*

Poster Presentations
KCAC Arena Floor
9:00 AM – 12:00 PM

Pres.	Title	Author(s)	Faculty Mentor
P-1	Megala Mater	Klaus Zeff	Ivan Fortushniak
P-2	Feeding the Future: Designing a Sustainable 3D Printed Bird Feeder	Noah Burke	Sharon Massey
P-3	Easy-Close for Ski Boots	Kayla Check*	Sharon Massey
P-4	A Sketchbook Holder and Supply Holder for Small Case Bound Sketchbooks	Yasir Beeks	Sharon Massey
P-5	Adjustable Rings for Larger Finger-Sizes	Shemiah Ramitt	Sharon Massey
P-6	3D Printed Rescue Albuterol Sulfate Inhaler Holder with Keyring	Madelyn Yaremcho*	Sharon Massey
P-7	Anti-Sweat Grips	Grady Manning	Sharon Massey
P-8	Artist Pencil Grip	Paige Clark	Sharon Massey
P-9	Tree Inspired Wall Mounted Jewelry Display	Percy Starz	Sharon Massey
P-10	Whelk Tool Research at Pockoy Shell Ring #1	Henry DeGarmo	Lara Homsey-Messer
P-11	Preserving the Urban Heritage: Spatial Analysis of Digitized Sanborn Maps for Homestead, PA, 1891	Samantha Ryan*, Laci Crum	John Benhart
P-12	Thermal Drone Surveillance Study for Wildlife Winter Distribution	Elizabeth Knochel*	John Benhart
P-13	Analyzing Elevation, Hydraulic Modeling, and Volume of Coal Refuse Pile in McIntyre, PA with Drone Captured Data	Jacob Engbert	John Benhart
P-14	Mapping Mineral Chemistry in Exhumed Seafloor Rocks, Central Range, Taiwan	Marisol Gonzalez Flores*, Jonathan Lewis	Jonathan Lewis
P-15	Tanoma Acid Mine Drainage Analysis	Zachary Stuart	Jonathan Warnock
P-16	Ceramic Form Analysis at a Western Pennsylvanian Late 18th Century Settlement	Jennifer Ross	Benjamin Ford
P-17	Deep Beneath the Surface: A Geophysical and Geomorphic Assessment of the Mary Rinn Archaeological Site	Nathan Coughlin	William Chadwick
P-18	The Dry Creek Crossroad: Traditional Knowledge and Petroglyphs	Rae Tuite*	Lara Homsey-Messer
P-19	A Geophysical Survey of Camp Security	Connor Winslow	Lara Homsey-Messer

**Women in STEM presentation*

Pres.	Title	Author(s)	Faculty Mentor
P-20	A Study of Mississippian Shell Site Occupation: Analyzing Subsurface Anomalies Detected through Ground Penetrating Radar and Their Chronological Associations at Green's Shell Enclosure	Elena Vories*	Andrea Palmiotto
P-21	Comparing the Range of Artifacts at the North and South Sides of the Squirrel Hill Site	Sarah Guida*	Lara Homsey-Messer
P-22	Using Diatom Microfossils to Understand Paleo Nutrient Availability in the Scotia Sea.	Hannah Taylor*	Jonathan Warnock
P-23	Effects of Global Temperatures on the Abundance of Marine Diatoms	Bailey Campbell*	Jonathan Warnock
P-24	Utilizing Spatial Data Analytics to Identify Human Trafficking Vulnerability	Brett Bowland	John Benhart
P-25	Utilizing Drone-Acquired Imagery to Produce a High Accuracy Basemap and Digital Elevation Model of Confluence Park; Indiana University of Pennsylvania (2025)	Brett Bowland, Angela Briandt*	John Benhart
P-26	Digital Elevation Model Derivation for Confluence Park Area (2025) Utilizing (sUAS)- Acquired Imagery	Easton Cook	John Benhart
P-27	Enhancing Management of Whites Woods: Developing a Comprehensive Spatial Database for Sustainable Park Planning	Easton Cook, Alexander Drumm, Tyler Peterson	John Benhart
P-28	Establishing a Baseline of Stream Characteristics in Indiana County, PA: Leveraging Community Connections	Hope Burbank*, Katherine Farnsworth	Katherine Farnsworth
P-29	Spatial Analysis of Human Trafficking Vulnerability in the Pittsburgh MSA	Daniel Kukula, Taylor Serano	John Benhart
P-30	Use of Remote Sensing and GIS to determine Urban Heat Island Effects based on Urban Vegetation	Daniel Kukula, Steven Simonetti	Christopher Schaney
P-31	Empowering the Local Voice: a Community-Based Archaeology Project at Tall Husban	Isabel Srour	Lara Homsey-Messer
P-32	Sorting and Analyzing Heavy Fraction Sediment from Archaeological Flotation: A Statistical Approach to Understanding 19th Century Lifeways of the Cooper Street Historic District	Ethan Kish	Benjamin Ford
P-33	Paleoenvironmental Reconstruction at the Squirrel Hill Site (36Wm35)	Tyler Fanell	William Chadwick
P-34	Using Diatom Abundance and Diversity to Understand Water Quality of a Rural-Suburban Interface	Austin Konopka	Katherine Farnsworth

**Women in STEM presentation*

Pres.	Title	Author(s)	Faculty Mentor
P-35	Identifying the Orientation and Grouping of Stegosaurus Vertebrate Fossils	Autumn Jones*	Jonathan Warnock
P-36	Implementing Living Shorelines for Coastal Resilience: A Case Study of Newport, Rhode Island	Kathryn Burke*	Sudeshna Ghosh
P-37	Reconstructing Urban Geography: Spatial Analysis of Homestead, PA from 1891 to 1901	Elena Frye*	John Benhart
P-38	Geophysical Investigations at the Basilica of the Sacred Heart of Jesus (Conewago Chapel), Hanover, PA	Elena Frye*	William Chadwick
P-39	Fetal Pig Decomposition in Western Pennsylvania: Characterization of Burial Environment and Decomposition Processes in Western Pennsylvania Non-Human Decomposition Facility	Dakota Dickerson*	Andrea Palmiotto
P-40	Integrated Remote Sensing and Peat Probe Measurements for Wetland Basin Volume Estimation: A Case Study of The Glades Nature Conservancy, Maryland	Angela Briandt*	Christopher Schaney
P-41	Spatial Health Disparities in Rural Appalachia: A Case Study of Indiana, PA	Shannen Baker*	Sudeshna Ghosh
P-42	Using Diatom Abundance and Diversity to Understand the Water Quality of a Suburban Neighborhood Stream	Alexa Pechulis*	Katherine Farnsworth
P-43	Environmental Change Through Time as Identified Through the Rock Record at Cleveland-Lloyd Dinosaur Quarry	Samuel Jubin	Jonathan Warnock
P-44	Sediments of the Ross Sea	Joshua Mitchell	Jonathan Warnock
P-45	From Quarry to Village: Lithic Resource Exploitation in Monongahela Cultural Tradition Johnston Phase Sites	Emma Kinsinger	Lara Homsey-Messer
P-46	Assessing Winter Wildlife Distribution Using Thermal Drone Technology	Nicholas Logan, Connor Richey	John Benhart
P-47	Generation and Enhancement of a 3D Spatial Representation of an Underground Mine	Gunnar Holsopple	John Benhart
P-48	Drone Derived Volume Estimate of a Coal Refuse Disposal Area Using Remotely Sensed Data: McIntyre, Pennsylvania	Brandon Taylor, Gunnar Holsopple	John Benhart
P-49	Following the Extent of Damage from the Palisades and Eaton Fires in Los Angeles County, California	Gunnar Holsopple	Christopher Schaney
P-50	GIS-Approach for Gas Well Extraction from Historical Coal Map located in Indiana County	Aaron Nickas	Sudeshna Ghosh

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Pres.	Title	Author(s)	Faculty Mentor
P-51	Geospatial Needs Assessment for Watershed-Based Flood Risk of the Yellow Creek Watershed	Ash Eury, AJ Lachimia, Steven Simonetti	John Benhart
P-52	Ecosystem Restoration vs Remediation: A Comparative Review of the Aral Sea Region	Andrew Zupon	Sudeshna Ghosh
P-53	Generation and Processing of a 3-Dimensional Spatial Mine Model	Andrew Zupon	John Benhart
P-54	Analysis of Invasive Pine Beetles Using Remote Sensing Techniques	Andrew Zupon	Christopher Schaney
P-55	Drone Acquired Data for Building Energy Efficiency Analysis; Oak Grove, Indiana University of Pennsylvania Main Campus	Micah Nygren, Timothy Brickner, Austin Little, Benjamin Wolf	John Benhart
P-56	Enhancing Education Through Hydrology: Assessing Marsh Run Flood Patterns and Innovative Teaching Strategies	Adriana Lastra Perez	Katherine Farnsworth
P-57	Imagery Intelligence to Track Development of Gaza Refugee Camps	Danica Stroup*, Matthew Gaul	Christopher Schaney
P-58	Laboratory Evolution Bio-Toxicity Studies on Engineered Yeast Strain with Two Toxic Compounds Found in Fracking Wastewater	Camryn Roche, Nicholas Wright	Sudipta Majumdar
P-59	The Effects of Combining Contextual Chemistry and Mathematical Reform in the Secondary Level Chemistry Classroom	Emma Cloak*, Avijita Jain	Avijita Jain
P-60	Expression and Computational Analysis of the Phosphorylated Srs2 Helicase C-Terminal Domain	Jonah Petruschke	Jana Villemain
P-61	Using Side-Chain Anchoring to Prepare a Drug Conjugate	Alessandra Menie*, Madelyn Shaffer, Lucas Chvilicek	Justin Fair
P-62	Optimization of Fmoc Protected Peptide Synthesis	Seth Stewart, Wyatt Magill, Chloe Benden, Owen Boozer, Anna Cutshall, Madelyn Sheffler, Lucas Chvilicek, Alessandra Menie	Justin Fair
P-63	Determining the Ideal Conditions for Linker-Payload Assembly	Owen Boozer, Anna Cutshall*	Justin Fair
P-64	Identifying Small Molecule Leads for the Inhibition of Receptor A, Site B	Erin Himes*, Noah Mattingly, Allison Krape	Justin Fair

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Pres.	Title	Author(s)	Faculty Mentor
P-65	Analyzing Known Cytokine Inhibitors for Their Affinities Towards Receptor A Site A	Noah Mattingly, Erin Himes*, Allison Krape	Justin Fair
P-66	Course-Based Undergraduate Research Experience (CURE): Exploration of Genetic Mutation on the Catalytic Activity of Small Laccase from S. coelicolor	Caleb Rokosky, Jonah Petruschke, Erin Himes*, Emily Duncan, Madelyn Mawhinney, Brooke Eberly*	Sudipta Majumdar
P-67	Intercalation of an Anticancer Ruthenium-Platinum Bimetallic Complex onto Montmorillonite Clay	Parker Bradley, Noah Conroy	Avijita Jain
P-68	Role of Cinchona Alkaloids in Heterogeneous Asymmetric Catalysis	Belinda Lin Xu*	Carl LeBlond
P-69	Music's Effect on Test Taking	Jason DeJesus	Holly Travis
P-70	Molecular Characterization of Double Stranded RNA (dsRNA) of Rhizoctonia Solani Isolate Isolates	Rachana Bharadwaj*	N. Bharathan
P-71	Survey of Small Mammal Populations in an Acid Mine Drainage Site at Powdermill Nature Reserve	Kathleen Gollmer*, Joseph Duchamp	Joseph Duchamp
P-72	Cloning Planarian Stromal Cell-Derived Factor 1 for a Possible Role in Tissue Regeneration	Margaret Holderer*	Robert Major
P-73	The Interactions Between Transcription and Metabolism Based Circadian Rhythms	Isabel Allerheiligen	Megan Knoch
P-74	Notchless RNAi Experiments Unveil a Potential Role in Planarian Midline Regeneration	Cameron Scaramuzzo	Robert Major
P-75	Studying the Role of TIMP in Planarian Tissue Regeneration	Cassie Ray*	Robert Major
P-76	Cloning the Planarian Teneurin Gene for Study in Planarian Neural Regeneration	Melody Guyett*	Robert Major
P-77	Assessing Seasonal Lyme Disease Risk in White's Woods Nature Center	Isabel Doane*, Julia McConahy	Michael Tyree
P-78	Preliminary Assessment of South American Hadrosauroid Dinosaur Paleobiogeographical Hypotheses Using Tip-Dating Bayesian Methods	Nicholas Hornicak, Eric Gorscak, Eric Morschhauser, Matthew Lamanna	Eric Morschhauser
P-79	The Establishment of a Bladder Cancer Tissue Culture Assay at IUP	Mia Courtalis*, Caileigh Kaminski	Robert Major
P-80	Influence of Long Term Seasonal and Annual Climate Patterns on Reproductive Success of Native Brook Trout (Salvelinus fontinalis) Across Pennsylvania	Matthew Gaul, David Janetski	David Janetski

**Women in STEM presentation*

Pres.	Title	Author(s)	Faculty Mentor
P-81	Paleontological Microsite Analysis of Jurassic National Monument: Preliminary Results	Eric Buzzelli	Eric Morschhauser
P-82	Comparative Analysis of Brook Trout Length Distributions Upstream and Downstream of Impassable Culverts	Hayden Moyer*, Brady Blackburn	David Janetski
P-83	Impacts of Culverts on Macroinvertebrate Abundance and Species Composition in a Western Pennsylvania Watershed	Lily Palfrey*, Brady Blackburn	David Janetski
P-84	Effects of Thinning and Genotype on Southern Loblolly Pine Growth	Lily Palfrey*	Michael Tyree
P-85	The Effectiveness of using Selfie Cameras to Monitor the Movement of Allegheny Woodrats	Ashley Moll*, Samantha Miron*, Joseph Duchamp	Joseph Duchamp
P-86	The Impact of Project-Based Learning on Student Achievement	Lucia Rakoci*	Holly Travis
P-87	The Efficacy of Bupropion and Naltrexone in Treating Methamphetamine Addiction	Catherine Martsolf*	Daniel Widzowski
P-88	Resistance of Saccharomyces Cerevisiae to Anti-Fungal Drugs	Alexxa Kowalski*	Cuong Diep
P-89	Cloning Mediators of Nutrient Sensing in the Planarian Model System	Amisha Vinde*	Robert Major
P-90	Do Compounds with Anti-Depressant-like Properties Reduce Methamphetamine Locomotor Sensitization?	Brooke Eberly*, Madelyn Mawhinney	Daniel Widzowski
P-91	Does Using Non-Academic Incentives Positively Impact Student Participation and Their Learning Outcomes?	Kamryn Powell	Holly Travis
P-92	Effect of Chosen Incentive on 12th Grade Anatomy Students	Dana Kalcevic	Holly Travis
P-93	Social Support, Instruction, and Coaching Behavior: How Do Athletes Perceive their Coaches	Amanda Morales	Richard Hsiao
P-94	Mental Health In Sports: Stigmas, Beliefs, and Solutions	Lauren Sutton*	Richard Hsiao
P-95	Assessing Risk and Enhancing Safety in the Steel Industry through Virtual Reality Training	Micah Nygren, Eric Gaston, Wanda Minnick, Majed Zreiqat, Luz Marin	Luz Marin
P-96	Evaluating a Forum-Style Simulation for Enhancing Interprofessional Attitudes on Communication and Collaboration Among Healthcare Students	Olivia Jean Gambill*	Pao Ying Hsiao

**Women in STEM presentation*

Pres.	Title	Author(s)	Faculty Mentor
P-97	Manipulating the Dosage of an Explicit-Timing and Goal-Setting Mathematics Intervention	Lauren Lucas*	Lynanne Black
P-98	Trends Associated with the Inclusion of a Court Order to Relinquish Weapons as Part of a Protection from Abuse Order in Armstrong, Clarion, and Indiana Counties	Symia Taimuty-Loomis*	Robert Orth
P-99	Prevalence of Violations of Pennsylvania's Uniform Firearms Act (VUFA Crimes or VUFA Offenses) that are "Co-Charged" with Specific Violent Criminal Offenses in Pennsylvania	Emily Seebold*	Alex Heckert
P-100	Did the Arab Spring Introduce a New Type of Leadership?	Lamia Dawood	Alex Heckert
P-101	Learning Partnerships Model: A Framework for Promoting Self-Authorship	Ammar Mahmoud	John Lowery
P-102	The Importance of Diversification in Creating a Successful and Sustainable Stock Portfolio	Chloe Stoner	Yaya Sissoko
P-103	Foreign Exchange Rates and Their Impacts on the Global Economy	Ashton Perfetti	Yaya Sissoko
P-104	The Impact of Trade Agreements on Financial Markets	Daniela Shaughnessy, Alice Finisterra, Hedda Folkhage	Yaya Sissoko
P-105	Dollar Cost Averaging for Your Future	Dylan McAnulty, Logan Mumma, Isaac Griffith, Jacob Rose, Aaron Burkhart	Yaya Sissoko
P-106	Exploring Day Trading Strategies for Rapid Portfolio Growth	Isaac Griffith, Logan Mumma, Jacob Rose	Yaya Sissoko
P-107	A Diverse Portfolio Focused on the Distinction Between Day Trading and Long-Term Investing	Malaika Wilmore*, Allison Johnson	Yaya Sissoko
P-108	Short-Selling in the Market	Caleb Johnson, Myca Torreance, Gage Henry	Yaya Sissoko
P-109	Recidivism and Correctional Cost Incurrence Among Indiana County's Individuals Under Supervision	Emily Schumacher*	Brandon Vick
P-110	The Role of Environmental and Social Factors in Portfolio Performance	Daniela Shaughnessy, Karlie Modrak	Yaya Sissoko
P-111	Optimization in Sports Scheduling	Jonah Arone	Frederick Adkins

**Women in STEM presentation*

Pres.	Title	Author(s)	Faculty Mentor
P-112	Automated Zero Trust Architecture	Dominic Bruno	Waleed Farag
P-113	Should We Be Worried About Inflation? An Analysis of U.S. Inflation Time Series Data	Alexander Tseng, Kasey Boring*	Frederick Adkins
P-114	Scheduling High School Using Markov Chains	Grace Modlin*, Lauren McIntosh	Yu-Ju Kuo

**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
P-120	Investigating the Effects of Aspartame on Daphnia Magna Heart Rate	Savannah Woods	Ashley Frank
P-121	When Sound Meets Sight: Exploring the McGurk Effect	Kayla Woods	Ashley Frank
P-122	How Protein Shakes Affect Germination Rate of Seeds	Eli Sheesley	Ashley Frank
P-123	Thirsty for Growth: The Effects of Sports Drinks on Plant Growth	Ethan Luko	Ashley Frank
P-124	An Analysis of Vitamin C Concentration in Different Types of Orange Juice	Madelyn Kinter	Ashley Frank
P-125	The Plastic Plague: Algae's Fight for a Future	Mackenzee Palko	Ashley Frank
P-126	Germ Warfare: The Antiseptic Showdown	Skyler Baldish	Ashley Frank
P-127	Predatorily	Mackenzie Jacobson	Breanna McGhee
P-128	Glowing Blood	Danica Gailey	Breanna McGhee
P-129	The Fight for the Best Water Dissolver	Serenity Rager	Breanna McGhee
P-130	Banana Breakdown	Lyla McConnell	Breanna McGhee
P-131	Tornado Formation	Hayden Carney	Breanna McGhee
P-132	Venus Fly Traps	Sydney Byich	Breanna McGhee
P-133	Potato Power	Lyla Emerson	Breanna McGhee
P-134	Plant's Behavior with Different Liquids	Jamison Zoskey	Breanna McGhee
P-135	Does Music Affect Plant Growth?	Cassandra Bowers	Breanna McGhee
P-136	Crawling Depths	Myla Swanson	Breanna McGhee
P-137	Regenerating Roots	Emma Lecuyer	Breanna McGhee

Pres.	Title	Author(s)	Faculty Mentor
P-138	The Effect of Dark Chocolate on Alzheimer's Disease	Vania Ali	Nate McElroy
P-139	Testing the Effects of C&T on Invertebrates	Matthew Blystone	Jamie Edmonds
P-140	The Correlation Between Running Shoes and Injuries	Morgan Blystone	Scott Layden
P-141	AI Trolley Problems	Asher Brode	Scott Layden
P-142	How Well Different Shampoos Clean Chlorinated Hair	Makenzie Brown	Mike Lehman
P-143	Liquid Energy: A Growth Boost or a Plant Bust?	Alexandrea Brown	Marissa Huntsman
P-144	Problem Solving Capabilities of AI vs Non AI	Ethan Coleman	Brian Schreyer
P-145	Enhancing Word Learning in the Kindergarten Classroom	Hannah Cowburn	Jamie Edmonds
P-146	Electrifying Revolutions	Gavin Dunmyer	Mike Lehman
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Three-Minute Thesis Competition
Toretti Auditorium
11:00– 11:30 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!

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T-2	Fetal Pig Decomposition in Western Pennsylvania: Characterization of Burial Environment and Decomposition Processes in a Western Pennsylvania Non-Human Outdoor Decomposition Facility	Dakota Dickerson	Applied Archaeology, MA
T-3	The Effectiveness of Using Selfie Cameras to Monitor the Movement of Allegheny Woodrats	Ashley Moll	Biology, MS
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