The Seventh Annual Undergraduate Scholars Forum
Tuesday, April 3, 2012

PROGRAM
# Program at a Glance

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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:30 – 8:30</td>
<td>Registration, Poster Set-up, Breakfast</td>
<td>HUB Atrium/Ohio Room</td>
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<tr>
<td>8:00 – 12:00</td>
<td>Business Case Competition</td>
<td>HUB Susquehanna Room</td>
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<td>8:30 – 9:50</td>
<td>Concurrent Sessions A</td>
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<tr>
<td></td>
<td>Performing Arts</td>
<td>Cogswell Hall Room 126</td>
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<td></td>
<td>Applied Economics</td>
<td>HUB Monongahela Room 1</td>
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<td>Myth and Contemplation through Literature</td>
<td>HUB Monongahela Room 2</td>
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<td>Behaving Badly</td>
<td>HUB Allegheny Room 1</td>
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<td>Chemistry</td>
<td>HUB Allegheny Room 2</td>
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<td>9:50 – 10:00</td>
<td>Refreshments</td>
<td>HUB Atrium</td>
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<td>10:00 – 11:20</td>
<td>Concurrent Sessions B</td>
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<td>Economic Development</td>
<td>HUB Monongahela Room 1</td>
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<td>Religion and Literature</td>
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<td>Emotion and Identity in Art</td>
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<td>11:20 – 1:30</td>
<td>Poster Discussions</td>
<td>HUB Ohio Room</td>
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<td>1:30 – 2:50</td>
<td>Concurrent Sessions C</td>
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<td>Business and Careers</td>
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<td>People and the Environment</td>
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<td>2:50 – 3:00</td>
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<td>3:00 – 4:20</td>
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<td>Poverty in Africa</td>
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<td>Education</td>
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<td>Reflections of Life on the Screen</td>
<td>HUB Allegheny Room 2</td>
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<tr>
<td>4:30 – 6:30</td>
<td>Undergraduate Juried Art Exhibition</td>
<td>Kipp Gallery, Sprowls Hall</td>
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<td>4:30 – 5:15</td>
<td>Reception</td>
<td>Sprowls Hall</td>
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<td>5:15 – 6:30</td>
<td>Awards Ceremony and Program</td>
<td>McVitty Auditorium, Sprowls</td>
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*Juried Art Awards, Poster Session Awards, Bibliography Awards, Session Awards, Sigma Xi Awards, Teacher Work Sample Awards, Best Computational Science Poster, and Door Prizes*
Seventh Annual IUP Undergraduate Scholars Forum

Sponsored by

Dr. David Werner, Interim President

and

The School of Graduate Studies and Research

Forum Co-Chairs – Dr. H. Edward Donley, Dr. J. Beth Mabry, Dr. Lisa Price

Forum Facilitator – Dr. Shari Robertson, Dean’s Associate, School of Graduate Studies and Research

Special Recognition:

➢ IUP Undergraduate Scholars  ➢ IUP Faculty Sponsors

Special Thanks to:

➢ Dr. David Werner, President
➢ McNair Scholars Program
➢ Jean Serio, Autumn Shannon – School of Graduate Studies and Research
➢ Software Development Center
➢ Kyle Houser, Department of Art
➢ Session Chairs
➢ Forum Judges
➢ Kathy Matty and the HUB setup crew

Award Sponsors:

➢ ARAMARK
➢ College of Fine Arts
➢ Co-op Store
➢ IUP Research Institute
➢ S-COAM Program
➢ College of Education & Educational Technology
➢ IUP Libraries
➢ Sigma Xi, the Scientific Research Society
➢ IUP Ecology Club
PROGRAM

7:30 – 8:30  Registration, Poster Set-up, Breakfast       Atrium, HUB Ohio

8:00 – 12:00   Business Case Competition

*Susquehanna Room*

**Faculty Advisor:** Dr Joette Wisnieski

*Netflix’s Business Model and Strategy in Renting Movies and TV Episodes*

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<thead>
<tr>
<th>Team 1</th>
<th>Jamie L Czech</th>
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<tr>
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<td>Vincent S Hall</td>
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<td>Kurt R Stridinger</td>
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<tr>
<th>Team 2</th>
<th>Olivia A Horning</th>
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<tr>
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<td>Joel M Bender</td>
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<td>Jordan R Pasch</td>
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*Redbox’s Strategy in Movie Rental Industries*

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<tr>
<th>Team 3</th>
<th>Vittoria L Buzzelli</th>
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<tr>
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<td>Jacob E Hickey</td>
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<td>Mackenzie J Traxler</td>
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<th>Team 4</th>
<th>Ryan P Egan</th>
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<td>Megan E Morris</td>
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<td>Joshua T Noble</td>
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<th>Team 5</th>
<th>Ashely N Frankenfield</th>
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<td></td>
<td>Victoria McKay</td>
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<td>Ehtan Y Wang</td>
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<td>Courtner A Price</td>
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8:30 – 9:50 Concurrent Sessions A

A01 Performing Arts

Cogswell Room 126

A Wind Band Arrangement of Jean Francaix’s L’Horloge de Flore
Speakers: Hannah M. Senft
Faculty Advisor: Dr. Stephanie B. Caulder

Studying the Music of a Master Composer on a Modern Day Instrument
Speakers: Brant E. Roberts
Faculty Advisor: Dr. Michael G. Kingan

Marriage, Then Love
Speakers: Angelica M. Dunsavage, Alexandria C. Hull
Faculty Advisor: Dr. Laura S. Ferguson

Early Dawn
Speakers: Jonathan Donath
Faculty Advisor: Dr. Laura S. Ferguson

A02 Applied Economics

Monongahela Room #1

The Effect of Immigration on State Wages
Speakers: Jennifer M. Johnson
Faculty Advisor: Dr. James J. Jozefowicz

The Effects of Defense Spending on the Real Gross Domestic Product in the United States
Speakers: Andrew E. Arter
Faculty Advisor: Dr. James J. Jozefowicz

Trade Openness and Economic Growth in Malaysia
Speakers: Jin Qin
Faculty Advisor: Dr. Yaya Sissoko
8:30 – 9:50  Concurrent Sessions A (Cont)

**A03 Myth and Contemplation through Literature**

*Monongahela Room #2*

**Fairies and Their Impact on Victorian Literature**
Speakers: Amira I. Minazzi, Tiffany E. Murdy  
Faculty Advisor: Dr. Michael T. Williamson

**Understanding Wisdom**
Speakers: Ashley N. Barclay, Faith M. Elmes  
Faculty Advisor: Dr. Gail I. Berlin

**How to Closely Read a Piece of Literature, and, at the Very Same Time, Closely Re-Read the Stories of Our Lives**
Speakers: Amanda M. Weaver, Amanda M. Slupski, Brendan F. Cope, Perry J. Manley, Erica L. Luczakowsky, Taylor K. Harvey  
Faculty Advisor: Dr. Bruce Novak

**A04 Behaving Badly**

*Allegheny Room #1*

**Outcomes of Post Treatment Services for Chemically Dependent Young Males in Indiana County**
Speakers: AnnaMarie N. Lydic  
Faculty Advisor: Dr. Melissa L. Swauger

**The Neuroscience Debate: Does Education Impact How Students Feel About Juveniles Serving Life in Prison**
Speakers: Amber C. Fishel  
Faculty Advisor: Dr. John A. Lewis

**Sex Trafficking: 'Out of Sight Out of Mind' For IUP Students?**
Speakers: Kyle B. Novak  
Faculty Advisor: Dr. Jennifer L. Gossett
8:30 – 9:50 Concurrent Sessions A (Cont)

A05 Chemistry

Allegheny Room #2

Synthesis of IMPDH Type II Inhibitor
Speakers: Eboni C. Ramsey
Faculty Advisor: Dr. Keith S. Kyler

Investigation Of Structural And Magnetic Properties In The Solid Solution Na2(Zn0.90,Co0.10)SiO4
Speakers: William D. Moon
Faculty Advisor: Dr. Charles Lake

9:50 – 10:00 Refreshments Atrium

10:00 – 11:20 Concurrent Sessions B

B01 Economic Development

Monongahela Room #1

Argentina: Problems with Economic Development
Speakers: Lindsay J. Bender
Faculty Advisor: Dr. Yaya Sissoko

India and China: Economic Conditions
Speakers: Akshay Bajpai
Faculty Advisor: Dr. Yaya Sissoko

Effectiveness of Anti-Poverty Policies in Africa
Speakers: Antonio A. Mendes
Faculty Advisor: Dr. Yaya Sissoko
10:00 – 11:20  Concurrent Sessions B (Cont)

**B02 Religion and Literature**

*Monongahela Room #2*

**Time and Journeys in Myth**  
*Speakers:* Kristin M. Troilo, Stefanie M. Doyle  
*Faculty Advisor:* Dr. Michael T. Williamson

**Power and Piety: Motivations Behind the Early Stages of the Arian Controversy**  
*Speakers:* Kelsey L. Lowman  
*Faculty Advisor:* Dr. Robert S. Moore

**Grotesque Faith and the Road to Absolution**  
*Speakers:* Robbin Zirkle  
*Faculty Advisor:* Dr. Lynne B. Alvine

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**B04 Sex and Society**

*Allegheny Room #1*

**Platonic Love: Same-Sex Male Friendship in Early Modern Europe**  
*Speakers:* Samantha N. Muir  
*Faculty Advisor:* Dr. Lynn A. Botelho

**Man vs. Beauty: Meeting Unrealistic Standards in a Sexualized World**  
*Speakers:* Elle M. Ladebu  
*Faculty Advisor:* Dr. John Branscum

**Effect of Feminine Birth Control on Condom Usage Among College Students**  
*Speakers:* Sarah E. Smith, Scott A. Harris, Shannon K. Sullivan  
*Faculty Advisor:* Dr. William R. Donner
10:00 – 11:20 Concurrent Sessions B (Cont)

B05 Emotion and Identity in Art

Allegheny Room #2

The Expression of Emotion in the Arts: Where is it?
Speakers: Jedidiah T. Fetterman
Faculty Advisor: Dr. Carol L. Caraway

Cover-up Uncovered: The Painting Process and Layered Memories, Dreams and Thoughts
Speakers: Elizabeth M. Plakidas
Faculty Advisor: Dr. Susan M. Palmisano

The Socialization of Identity Formation: Recent Works by Claira Heitzenrater
Speakers: Claira J. Heitzenrater
Faculty Advisor: Dr. Susan M. Palmisano

Cock Tale: Religion, Sexuality and Chickens
Speakers: Alison P. Terndrup
Faculty Advisor: Dr. Susan M. Palmisano

11:20 – 12:30 POSTER SESSIONS Ohio Room

Poster authors will be available throughout this period to answer questions about the scholarship represented through their poster or static display.

See page 18 for poster titles and authors.

*Posters will be displayed from 8:30-3:30.
1:30 – 2:50 Concurrent Sessions C

C01 Business and Careers

Monongahela Room #1

Does Utilization of Social Media Help Increase ROI for Small Businesses?
Speakers: Lisa McCann
Faculty Advisor: Dr. Joette M. Wisnieski

Socioeconomic Status and Career Aspirations
Speakers: Caitlyn N. Cook, Eve R. Hoffman
Faculty Advisor: Dr. William R. Donner

Social Networks and the Recruitment/Hiring Process
Speakers: Moncure Vaden
Faculty Advisor: Dr. Paul M. Kosicek

"Is Middle Management the Dying Breed?" An Analysis of Middle Management within Modular and Prefabricated Home Construction Industry of Clarion County
Speakers: Sarah M. Stone
Faculty Advisor: Dr. Paul M. Kosicek

C02 Pain and Perception

Susquehanna Room

Do Visual Adaptation Aftereffects Support A Model Of How Neural Interactions Result In Visual Surface Perception?
Speakers: Iryna Yavorska
Faculty Advisor: Dr. Raymond P. Pavloski

Infant Imitation from Object-Specific and Conceptually Learned Action Sequences
Speakers: Rachel A. Snyder
Faculty Advisor: Dr. Lisa C. Newell

Does It Hurt? Influential Factors Of Infant Pain Response To Vaccinations
Speakers: Lauren L. McQuiston
Faculty Advisor: Dr. Lisa C. Newell
C03 The Magic of Ritual (or, There is No Such Thing as a Muggle)

Monongahela Room #2

Santería: The Ritual of Initiation
Speakers: Rachel S. Scherer
Faculty Advisor: Dr. C. Todd White

Islamic Funeral: Ceremony and Practices
Speakers: Carly L. Ryther
Faculty Advisor: Dr. C. Todd White

My Experience with the Tibetan Buddhist Mandala at IUP
Speakers: Shane C. Myers
Faculty Advisor: Dr. C. Todd White

Thirty Days to a Better Man: A Surrogate Coming of Age Ritual in the Art of Manliness Community
Speakers: Rebecca A. Godshall
Faculty Advisor: Dr. C. Todd White

C04 Perspectives on the Puritan and Revolutionary Period

Knowlton Room

Perspectives on the Puritan and Revolutionary Period
Speakers: Paige A. Peterson, Morgan A. Allman, Samuel T. Sullivan, Chelsea G. Murray
Faculty Advisor: Dr. Carolyn K. Camp
1:30 – 2:50

Concurrent Sessions C (Cont)

C05 Social Interaction

Allegheny Room #1

Overcoming Stereotype Threat: The Effects of L-sharing on Women’s Test Performance
Speakers: Mallory L. Clark
Faculty Advisor: Dr. Anson E. Long

Sifting Behaviors: An Exploratory Study on How We Meet People and Make Friends
Speakers: Michelle L. Dufford
Faculty Advisor: Dr. Victor Q. Garcia

The Art of Interaction: Community and Conversation
Speakers: Amber N. Niedomys
Faculty Advisor: Dr. Sean M. Derry

Social Value Orientation and Cooperation: The Mediating Role of Dispositional Empathy and Reading the Mind in the Eyes Ability
Speakers: Sultan A. Magruder
Faculty Advisor: Dr. John A. Mills

C06 People and the Environment

Allegheny Room #2

Lithic Analysis: The Raw Materials Present in the Lithic Artifacts of the Johnston Site (36In2)
Speakers: Michele L. Troutman
Faculty Advisor: Dr. Beverly M. Chiarulli

Diversity and Affordability in LEED-ND Neighborhoods
Speakers: Jawanda Jackson
Faculty Advisor: Dr. Whit Watts

Walking for Britain: The Ramblers’ Association and the Creation of Britain’s National Parks
Speakers: Teresa M. Stage
Faculty Advisor: Dr. Tamara L. Whited

The Sticks
Speakers: Joseph R. Lovenduski
Faculty Advisor: Dr. Susan M. Palmisano
2:50 – 3:00 Refreshments Atrium

3:00 – 4:20 Concurrent Sessions D

**D01 Poverty in Africa**

*Monongahela Room #1*

*Globalization and African Poverty*
Speakers: Melissa K. Aasness
Faculty Advisor: Dr. Yaya Sissoko

*Rural Poverty Versus Urban Poverty in Sub-Saharan Africa*
Speakers: Jocelyn R. Amevuvor
Faculty Advisor: Dr. Yaya Sissoko

*African Poverty and Foreign Aid*
Speakers: William F. Frederick, Matthew Stephenson
Faculty Advisor: Dr. Yaya Sissoko

*Who are the Poor in Africa?*
Speakers: Chad R. Good, Eric J. Storm
Faculty Advisor: Dr. Yaya Sissoko

3:00 – 4:20 Concurrent Sessions D

**D02 Human Health**

*Susquehanna Room*

*The Training Effects of a Seven Week Heavy Rope Training Program*
Speakers: Daniel Cuevas
Faculty Advisor: Dr. Robert E. Alman

*A Comparison of Pressure Ulcer Risk Assessments*
Speakers: Deanna Mehalko, Kayla Painter, Devin Convery
Faculty Advisor: Dr. Michele A. Gerwick
D03 Women and Marriage in Religion

Monongahela Room #2

The First Woman Eve in Art
Speakers: Renee E. Murren
Faculty Advisor: Dr. Tawny Holm

A Comparison of Two Eves in Christianity
Speakers: Clark E. Aitkins
Faculty Advisor: Dr. Tawny Holm

Divine Marriage: An Analysis of Bridal Imagery in the Bible
Speakers: Elizabeth Thomas
Faculty Advisor: Dr. Tawny Holm

Hagar in Monotheistic Traditions
Speakers: Jerod H. Elias
Faculty Advisor: Dr. Tawny Holm

D04 Education

Allegheny Room #1

Future leaders of the classroom: Factors that Influence Senior Education Majors' Decision on Where they will Educate Once they Enter the Work Force
Speakers: Naporje D. Washington
Faculty Advisor: Dr. Melanie D. Hildebrandt

Would You Pass the Test?: How Education Reform is Moving Students in the Wrong Direction
Speakers: Laurin D. Jefferson
Faculty Advisor: Dr. Judith H. Villa

The Meaning of True Education in My Life
Speakers: Timothy J. Lynch, Jessica E. Jones, Maura K. Sadler, Lameera D. Pine
Faculty Advisor: Dr. Bruce Novak

Is the Social Studies Curriculum being Phased Out?
Speakers: Kimberly A. Hofstetter
Faculty Advisor: Dr. Mary G. Gainer
D05 Reflections of Life on the Screen

Allegheny Room #2

The Good, The Bad, and The TV Western
Speakers: Thomas J. Brown
Faculty Advisor: Dr. Mary Beth Leidman

Speakers: Sarah L. Daxton
Faculty Advisor: Dr. Thomas Slater

Making Place Without Landscape: A Look At How Video Games Create Spatial Imagery Without Building The Location In-Game
Speakers: Dustin Mendus
Faculty Advisor: Dr. Gail S. Sechrist

Female Characters in Video Games: Shouldn't They Be As Awesome As Us?
Speakers: Melissa R. King
Faculty Advisor: Dr. John Branscum

4:30 – 6:30 Undergraduate Juried Art Exhibition
Kipp Gallery, Sprowls Hall

4:30 – 5:15 Reception for Scholars and Faculty
Sprowls Hall

5:15 – 6:30 Awards Ceremony and Program
McVitty Auditorium, Sprowls Hall
Poster Session Details

HUB Ohio Room
Time: 8:30-3:30
Setup 7:30am to 8:30 am; Q&A 11:20am–1:30pm

**P01** A Database Study of the Trans Effect in Square Planar and Octahedral Metal Complexes
**Student:** Daniel Kozina
**Faculty Advisor:** Dr. Ronald F. See

**P02** A Study on the Effects of Copper as a Stressor on the Life History and Physiological Characteristics of Multiple Generations of Zebra Fish, *Danio rerio*
**Student:** Rebecca L. Beadling
**Faculty Advisor:** Dr. David Pistole

**P03** A Water Quality Study of Marcellus Gas-Shale Drilling Impact at Beaver Run Reservoir
**Student:** Jason P. Wolfe
**Faculty Advisor:** Dr. Nathan R. McElroy, Dr. Brian W. Okey

**P04** Analysis Of Abandon Mine Drainage (AMD) Impacts on Bear Run, Indiana County, PA During Times Of Abnormally High Precipitation in 2011
**Students:** Heather E. McGinnis
**Faculty Advisor:** Dr. Katherine L. Farnsworth

**P05** Analysis of Green Roof Water Retention and Insulation Properties
**Student:** Jacob R. Good
**Faculty Advisor:**

**P06** Assessing The Impact on the Digestion Of Biogenic Silica From Deep Sea Sediment And its Impact on the Eolian Dust Component
**Students:** Michael A. Russo
**Faculty Advisor:** Dr. Steven A. Hovan

**P07** Basin-wide synthesis of thermal maturation indices in the Paleozoic Appalachian Basin
**Student:** Patrick R. Boyle
**Faculty Advisor:** Dr. Thomas P. Gerber

**P08** Climate Change Vulnerability Index in Relation to Pennsylvanian Lepidoptera
**Student:** Ashley E. Joa
**Faculty Advisor:** Dr. Timothy J. Nuttle
P09  Comparing Lake and Soil Geochemistry to Understand Limitations on Biology in Antarctica  
**Student:** Renee M. Heldman  
**Faculty Advisor:** Dr. Michael A. Poage

**Student:** Marissa A. Pierson, Lindsay E. Matolyak  
**Faculty Advisor:** Dr. Carl R. LeBlond

P11  Detection of Tomato Mosaic Virus (ToMV) Using One Step Reverse Transcription PCR  
**Students:** Charles M. Voyton, Alan C. Kessler  
**Faculty Advisor:** Dr. Bharathan Narayanaswamy, Dr. Seema Bharathan

P12  Effects of In-situ Wetlands on Abandoned Mine Drainage on the North Fork of the Twolick Creek Watershed: Commodore, Pennsylvania  
**Student:** Joshua D. Putt  
**Faculty Advisor:** Dr. Karen R. Cercone

P13  Isolation and Modification of E. Coli Release Factor 3  
**Students:** Edward W. Sittler, Ronald C. Stewart  
**Faculty Advisors:** Dr. Jonathan N. Southard

P14  Long Term Social Interactions Enhance Circadian Setting in Mice  
**Students:** Kelly Wroblewski  
**Faculty Advisor:** Dr. Megan E. Knoch

P15  Manipulation of Elongation Factor 4 for Alteration of Substrate Binding  
**Students:** Rebecca K. Hartley, Jonbrandon Mullholand  
**Faculty Advisor:** Dr. Jonathan N. Southard

P16  Oxidation of Alcohols to Corresponding Esters using N-bromosuccinimide in Aqueous Media  
**Student:** Mitchell C. Stadler  
**Faculty Advisor:** Dr. Justin Fair

P17  Performance of Native Pennsylvania Wildflowers in North American Green-roof Ecosystems  
**Student:** George E. Tickerhoof III  
**Faculty Advisor:** Dr. Timothy J. Nuttle

P18  Predicting Relative Activities of Enzymes Using Computed Chemical Properties  
**Student:** David B. Williams-Young  
**Faculty Advisor:** Dr. Jaeju Ko
P19  Preliminary Stream Site Characterization for Quaker Run, SCRA Site 19
Student:  Tyson R. Milbrand
Faculty Advisor:  Dr. Karen R. Cercone, Dr. Michael A. Poage

P20  Purification and Folding Characterization of E. coli Peptide Chain Release Factor 1 (RF-1)
Student:  Stephen B. Shiring, Chia Hui Yap
Faculty Advisor:  Dr. Jonathan N. Southard

P21  Reactivation of Compressional Tectonics on Pre-Existing, Rift-Related Normal Faults in SW Taiwan: Evidence from Strain Inversions of Active Seismicity
Student:  Ellen A. Lamont
Faculty Advisor:  Dr. Jonathan C. Lewis

P22  Thermal Alteration of Johnston Site Lithic Materials
Student:  Michael S. Deemer
Faculty Advisor:  Dr. Beverly M. Chiarulli

P23  Stream Discharge Trends and Patterns within the Great Lakes Region
Students:  Stephen G. Norair
Faculty Advisor:  Dr. Karen R. Cercone, Dr. Katherine L. Farnsworth

P24  Synthesis and Characterization of the Solid Solution Na2 (Zn1-xCox)GeO4
Students:  Rebecca L. Beadling
Faculty Advisor:  Dr. Charles Lake

P25  Slip Partitioning Offshore Southeast Taiwan and Southward Propagation of the Longitudinal Valley Fault: Evidence from Strain Inversions and Statistical Analyses
Student:  Daniel J. O'Hara
Faculty Advisor:  Dr. Jonathan C. Lewis

P26  Utility of Conodonts For Refining the Age of the Upper Stonehenge Transgression And Basal Nittany Regression in the Central Appalachians
Student:  Caz M. Bejger
Faculty Advisor:  Dr. John F. Taylor

P27  Smartphone Sensors and Detecting Road Anomalies
Student:  SaraJane E. Parsons
Faculty Advisor:  Dr. Yu-Ju Kuo

P28  Persea Americana as Source of Biofuel
Student:  John K. Kamau
Faculty Advisor:  Dr. Jeffery L. Larkin
P29  The Portrayal of Police Corruption in the Media
Student: Matthew S. Grassi, Dane C. Sampson, Charles T. Livick, Raeanne N. Barrett, Victor Q. Costello
Faculty Advisor: Dr. Robert J. Mutchnick

P30  The Language and Literacy Gap
Student: Bridgett C. Ryan
Faculty Advisor: Dr. Kelli R. Paquette

P31  The Effect of Religious Similarity and I-sharing on Platonic and Romantic Relationships
Students: Thomas W. Trautman
Faculty Advisor: Dr. Anson E. Long

P32  Swim and Recreation Program
Students: Teri L. Gilmore
Faculty Advisor: Dr. Sarah Lynn H. Brown

P33  Spatial Analysis of Senior Citizen Accessibility to Community Assets and Amenities: Indiana Borough and White Township, Pennsylvania
Student: Kenneth A. Tinkey, Ryan C. Mears
Faculty Advisor: Dr. John E. Benhart

P34  Women and Slavery in the Biblical World
Students: Amanda M. Bracken
Faculty Advisor: Dr. Tawny Holm

P35  Reducing Subgroup Score Differences in Academic Prediction
Student: Truman J. Gore, Leann M. Bowman, Caitlyn A. George
Faculty Advisor: Dr. Mark V. Palumbo

P36  "GIS Development and Assessment for the Municipal Authority of Westmoreland County - Beaver Run Water Monitoring Project"
Students: Dana A. Turgeon, Alexander P. Rudowski, Aaron K. Shaffer, Alyssia E. Chapman
Faculty Advisor: Dr. John E. Benhart

P37  Project-Scoping in Powdermill Nature Reserve Using GIS
Students: Victor R. Velez, Rebecca West
Faculty Advisor: Dr. John E. Benhart

P38  A First Hand Perspective in Italian Renaissance Art
Students: Jarret M. Wasko
Faculty Advisor: Dr. Steven C. Loar
P39  Undergraduate Social and Non Social Error Monitoring  
Student: Katrina C. Owens  
Faculty Advisor: Dr. Lisa C. Newell  

P40  Patterns of Visual Attention for Rural/Urban Scenes: A Change Blindness Study  
Students: Ryan J. King  
Faculty Advisor: Dr. Susan T. Zimny  

P41  Palliative Care for Children and Their Families  
Student: Katlyn M. Cekovsky, Jacqueline A. Clark, Ashley M. Bowser, Lura I. Repa  
Faculty Advisor: Dr. Michele A. Gerwick  

P42  Music Lyrics, Drug References and Crime  
Students: Joshua S. Paulson, Mellissa V. Scott, Tyler P. Kelly, Joshua L. Shuster, Nancy J. Luckey, Tiffany L. Carter  
Faculty Advisor: Dr. Robert J. Mutchnick  

P43  Magnetic Susceptibility at the Mary Rinn Site  
Student: Brandon G. Foster, Emily E. Poeppel  
Faculty Advisor: Dr. Beverly M. Chiarulli  

P44  "GIS Development for Public Safety Code Violations"  
Students: Michael M. Bowser, Manuel C. Wilson, John W. Wick, Alexander M. Shubra  
Faculty Advisor: Dr. John E. Benhart  

P45  Indigo Bus Project and TIRAMASU Data Development  
Students: Andrew M. Singer, Kyle M. Ritenour, Todd R. Walters  
Faculty Advisor: Dr. John E. Benhart  

P46  Indiana Borough Parking Inventory/Analysis  
Students: Kelsey L. Sevin, Keith J. Reesman  
Faculty Advisor: Dr. John E. Benhart  

P47  Health Benefits of Regular Yoga Practice at IUP  
Students: Emily E. Poeppel  
Faculty Advisor: Dr. Victor Q. Garcia  

P48  GIS Development for the Jeannette Redevelopment Authority  
Students: Christopher D. Townley, Mark E. Shaffer, Elizabeth A. Thomas  
Faculty Advisor: Dr. John E. Benhart  

P49  Investigation of Polished Bone at the Johnston Site  
Students: Laura J. Ellyson  
Faculty Advisor: Dr. Sarah W. Neusius
Reactions to Psychological Abuse as a Function of Gender, Actor Intention, and Target Response  
**Student:** Samantha M. Rakowski  
**Faculty Advisor:** Dr. Maureen C. McHugh

Poetry & Art: A Lesson Based on Connecting with Literature  
**Students:** Amanda L. Stamm  
**Faculty Advisor:** Dr. Linda C. Norris

GIS Development and Analysis for the Western Pennsylvania Conservancy, Sinnemahoning and Portage Watershed  
**Student:** Paul W. Jackel, Elliot D. Lesser  
**Faculty Advisor:** Dr. John E. Benhart

Effective Tools Preventing Falls in the Hospital for those Aged 50 and Older  
**Student:** Christine E. Marks  
**Faculty Advisor:** Dr. Michele Gerwick

Classroom Management Strategies: Planned Ignoring & "Catching Them Being Good"  
**Students:** Kristin R. Long, Lauren E. Meuschke  
**Faculty Advisor:** Dr. Janice M. Baker

Effectiveness of Graphic Organizers with Students with Emotional Disturbance in Reading  
**Students:** Kristin R. Sestina  
**Faculty Advisor:** Dr. Laurie Nicholson, Dr. Janice M. Baker
Juried Art Exhibitors

Beth Plakidos
Composition 6
Mixed media on canvas

Daniel Zobel
Creature Cabinet
Maple and ash

Seth Barnes
Receptary
Oil on canvas

Ally Mitchell
Inside
Oil on raw canvas mounted on masonite

Andrew Fecik
Trivet
Mixed media

James Raneri
Fertility Bracelet
Red brass

Mary Beth Heicher
Sun Bleached Bones
Bone and sterling silver

Nick Volpe
Acquiesce
Red brass, patina

Melissa Davenport
Woven Chain with Pearls
Sterling silver, pearls

Mark J. Regitz
Wire Tea Set
Wire

Jordan Frantz
Teapot
Copper, patina
Kyla Groat
_The Straw that Broke the Camel’s Back_

Patrick Camut
_Kissing Machine_

Alison Terndrop
_Christos Peyagos_
Mixed media on board

Mike Guy
_City Life_
Copper etching

Chelsea McDonnell
_Consumption_
Oil on canvas

McKenzie Gross
_Night Drive_
Oil on masonite

McKenzie Gross
_In Tall Buildings_
Acrylic and embroidering on tea stained fabric

Nicolena Loshonkohl
_Ode to my Mother and the Framed Picture of Her Dead Dog_
3 color screen print on BFK

Nicolena Loshonkohl
_My Troubling Decomposition of Mind_

Rachel Horner
_Father and Daughter_
Print

Chelsea Long
_Taken Away_
Oil on desktop

Stephanie Martin
_Sight_
Print Media

Karina Robarge
_Clean Wind (Brooches)_
Fabricated copper
Special Thanks to

Forum Judges

Poster Session Judges

Business Case Competition Judges

Sigma Xi Judges

Student Juried Art Exhibition Judge