**Biology**

*An Analysis of the Potential of Eryngial as a Treatment for Neosporosis*

Presenters: Hannah Adams and Gabrielle Bachtel  
Faculty Sponsors: Dr. Wayne Forbes, Dr. Steven Strain and Ms. Joy Strain

*Utilizing Live-Cell Imaging in Drosophila Cells to Identify Stressors that Induce Protein Misfolding*

Presenter: Annette Choi  
Faculty Sponsors: Dr. Martin Buckley and Dr. Stacy Hrizo

*Identification of the Digits in Embryonic Laysan Albatross (Phoebastria immutabilis)*

Presenter: Joshua Jones  
Faculty Sponsors: Dr. Susan Rehorek and Dr. Timothy Smith

*Evaluation of Activation of HSF and UPR Protein Folding Pathways by Chemical Stressors Using a Yeast Reporter System*

Presenter: Emily Lackner  
Faculty Sponsors: Dr. Stacy Hrizo and Dr. Martin Buckley

*Examination of Nuptial Pads in Xenopus laevis Exposed to the Pesticide Imidacloprid*

Presenter: Victoria Pasquale  
Faculty Sponsors: Dr. Miranda Falso and Dr. Paul Falso

*Analysis of the Role of Melatonin in Tissue Regeneration in Drosophila melanogaster*

Presenter: Ryan Riegel  
Faculty Sponsors: Dr. Martin Buckley and Dr. Simon Beeching

*Evaluation of Heat Shock Factor Activation by the Chemotherapeutic Agent, Bortezomib, in a Drosophila melanogaster Model System*

Presenter: Austin Shirk  
Faculty Sponsors: Dr. Stacy Hrizo and Dr. Martin Buckley

*Examination of HSF Activation In a Saccharomyces cervisiae Model for TPI Deficiency*

Presenters: Kathryn Skolnick and Lily-Jean Schlosser  
Faculty Sponsor: Dr. Stacy Hrizo

**Chemistry**

*Investigating Solution Properties of Manganese 12-Metallacrown-4*

Presenter: Jacob Palmer  
Faculty Sponsor: Dr. Thaddeus Boron

*Increased Expression of Transglutaminase 2 in Human Erythroleukemia Cells*

Presenter: Shannon Schultz  
Faculty Sponsor: Dr. Paul Birckbichler

*A Study of L-Neplanocin Analogues: Synthesis and Antiviral Properties*

Presenter: Alexander Smith  
Faculty Sponsor: Dr. Qi Chen

*Cell Growth Inhibition and Transglutaminase Expression in Human Erythroleukemia Cells*

Presenter: Gabi Spencer  
Faculty Sponsor: Dr. Paul Birckbichler

*Purification and Reconstitution of Recombinant H-chain Ferritin*

Presenter: Austin Wilhelm  
Faculty Sponsor: Dr. Donald Zapien

**Communication**

*The Development and Benchmarking of Contemporary Sustainability Indicators for Rural Ethnic Chinese Villages: A Case Study of the Social, Economic and Ecological Issues of Two Gelao Villages Near Chongqing Municipality*

Presenters: Marlee Theli, Marshall Tuten, Thomas Fabian and Aisha Aldubayan  
Faculty Sponsors: Dr. Li Pu and Dr. John Golden

**Computer Science**

*Towards Modeling the Scheduling of Scientific Applications*

Presenter: Alexander Gessinger  
Faculty Sponsor: Dr. Nitin Sukhija

*Implementing Multiple Clustering Techniques While Progressing Towards a Simpler Dynamic Routing Process in Vehicle Routing Problems*

Presenter: Alexander Gessinger  
Faculty Sponsor: Dr. Sam Thangiah

*An Analysis of Data Mining Techniques as Related to Induced Seismic Activity*

Presenters: Cory Milligan, William Herb and Nathaniel Zeiger  
Faculty Sponsor: Dr. Sam Thangiah

**Criminology and Criminal Justice**

*The Effectiveness of Mental Health Courts in the Criminal Justice System: When Examined in Western Pennsylvania*

Presenter: Austin Morà  
Faculty Sponsor: Dr. Jeffrey Roth
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<td>Head Start Pre-School Teachers Phonemic Awareness Coaching</td>
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Psychology

**Depression Symptoms are Associated with Electroencephalography Alpha Power in College Students**
Presenter: Amanda Bruscemi
Faculty Sponsor: Dr. Jennifer Willford

**Suicidal Thoughts, Insomnia and Social Support Predict Depression in PTSD in Young Adults**
Presenters: Emily Goldinger, Alexis Cadwallader, Collin Darby and Kelsey Arner
Faculty Sponsor: Dr. Jennifer Willford

**Masculinity and Femininity: Testing Associations with Sex Segregation and Sexual Orientation**
Presenters: Kourtney Kotvas, Emily Dodge and Cassandra Oleksak
Faculty Sponsor: Dr. Emily Keener

**What’s in a Name or Pronoun? An Examination of the Effects of Gender Inclusive Pronouns on Memory**
Presenters: Kourtney Kotvas and Shawna Skoczynski
Faculty Sponsor: Dr. Emily Keener

**Conditioning of a Novel Food in the Terrestrial Hermit Crab (Coenobite clypeatus)**
Presenter: Mia Radevski
Faculty Sponsor: Dr. Beth Ann Rice

**The Prevalence of Depressive Symptoms in College Students**
Presenter: Morgan Sabatini
Faculty Sponsor: Dr. Jennifer Willford

**Observations of Collaborative Learning in a Museum Setting**
Presenters: Kandis Shamblin, Cherice Jackson, Megan Kausmeyer, Cassie Oleksak, Sydney Kresconko, Meredith Willard, Darian Hum, Holly Stiller, Lois Page and BayLee Lehr
Faculty Sponsors: Dr. Elizabeth Boerger, Dr. Emily Keener and Dr. Catherine Massey

**The Role of Gender, Sexual Orientation and Relationship Context on Emerging Adults’ Endorsement of Agentic Conflict-Management Strategies**
Presenters: Shawna Skoczynski and Kourtney Kotvas
Faculty Sponsor: Dr. Emily Keener

**The Relationship Between Locus of Control, Social Support and Mental Toughness on Perceptions of Sport Success**
Presenters: Patrick Spaulding and Khyren Ross
Faculty Sponsor: Dr. Catherine Massey

**Does Feminism Look Good on Me?: An Examination of Types of Feminism, Body Image and Disordered Eating**
Presenters: Alison Williams and Chloe Dauer
Faculty Sponsors: Dr. Jennifer McGraw and Dr. Emily Keener

**Frontal Brain Volume Asymmetry: A Neurobiological Marker of Prenatal Tobacco Exposure in Young Adults**
Presenter: Jenna Simon
Faculty Sponsor: Dr. Jennifer Willford

School of Business

**Using the Theory of Reasoned Action to Understand First Generation College Students’ Intent to Major in Accounting**
Presenters: Nathan Endres, Cassidy Davis, Ralph Delio Jr. and Zachary Gallaher
Faculty Sponsor: Dr. Edward Scott

School of Physical Therapy

**Do Cranial Synchondroses Influence Basicranial Angulation and Facial Orientation?**
Presenter: Rebecca Reynolds
Faculty Sponsor: Dr. Timothy Smith

Secondary Education/Foundations of Education

**Exploration and Literature Review: EV3 Designing and Programming for Elementary Classroom**
Presenter: Jessica Bauer
Faculty Sponsor: Dr. Timothy Smith

Special Education

**The Need for Clean Water in the Dominican Republic**
Presenter: Nicole Auen
Faculty Sponsor: Dr. Jeremy Lynch