SAVE THE DATE
URC 2018 | APRIL 13

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PROMOTING EXCELLENCE IN UNDERGRADUATE RESEARCH since 1987

CIVIC ENGAGEMENT: AGENCY and ADVOCACY for EMPOWERING COMMUNITIES

APRIL 7, 2017
Stephen Hunt, serves as Professor of Communication and Executive Director of the School of Communication at Illinois State University. He recently completed an assignment serving as Chair of Illinois State’s American Democracy Project. As a Carnegie Fellow for Political Engagement, he helps lead national efforts to sharpen the political and civic leadership skills of today’s college students. Hunt is the author of over 30 scholarly articles, many focused on civic and political engagement, and is co-author of a public speaking textbook focused on critical thinking and civic engagement that is used by several communication departments throughout the country. Dr. Hunt earned his Ph.D. in communication education from Southern Illinois University in 1998.

Share your experience using #ButlerURC
Welcome to Butler University’s Annual Undergraduate Research Conference, and congratulations on the outstanding work that has brought you here today.

This marks the 29th year of the Butler URC, one of the largest and longest-running interdisciplinary undergraduate research conferences in the nation. More than 700 students representing 58 institutions in 12 states will share their presentations today. Over 300 Butler student researchers are participating, and I am pleased that they have this opportunity to interact with so many talented peers.

This year’s URC theme, “Civic Engagement: Agency and Advocacy for Empowering Communities” is more important than ever. Although not every presentation focuses on this theme, when students and faculty join together to advance learning in their respective fields, the common thread among their aspirations is a desire to improve our world. And a key part of the Butler mission—and the mission of so many like-minded institutions of higher education—is civic engagement. For example, every Butler undergraduate is required to participate in community service through our Center for Citizenship and Community. Some of the many Butler initiatives aimed at empowering our local community include a partnership with Indianapolis Public Schools; a weekend pharmacy in a low-income neighborhood; free or low-cost music and arts lessons for children; and a campus farm that is used to teach about local food production, ecology, and sustainability.

I would like to extend special thanks to Conference Director Dacia Charlesworth and Conference Coordinator Melissa Friedman, both of whom represent Butler’s Center for High Achievement and Scholarly Engagement, along with the many others on Butler’s campus who have worked hard to make this conference so enriching for its participants and the disciplines they represent.

I am also delighted to welcome to our campus Stephen Hunt, Interim Executive Director of the School of Communication at Illinois State University, who will deliver our keynote address today.

Best of luck with your presentations, and please remember to support your conference colleagues by attending as many other presentations as you can. I hope URC 2017 inspires you to continue exploring knowledge and sharing it with a world eager for your insights and solutions.

Sincerely,

James M. Danko, President
Butler University
As Butler University’s Director of Undergraduate Research and Prestigious Scholarships, it is my sincere privilege to welcome you to our 29th Undergraduate Research Conference (URC).

As a rhetorician, the theme of this year’s URC, “Civic Engagement: Agency and Advocacy for Empowering Communities,” holds special significance for me. I chose to study communication because of our power to use language to create and deflect particular types of reality; I chose to become a professor because of my desire to help create engaged citizens who would utilize rhetorical techniques in responsible, meaningful, and ethical ways. Essentially, I was hoping to tap into Quintilian’s definition of a rhetorician: A good [person] speaking well. No matter how you feel about the outcome of the 2016 presidential election, the general population is now coming to understand how discourse can be used to call into being alternate realities. Since it is now commonplace for individuals to assert claims without evidence, undergraduate scholarship is more important than ever: For it is my hope that the skills our presenters developed during the completion of their projects—the abilities to think creatively and critically, solve problems, and communicate effectively—can be transferred to one’s everyday life and manifest itself as civic virtue.

This year I introduced a Competitive Paper division and was pleased to receive 21 submissions in this category from students representing five different universities. I am especially proud of our Top Four Competitive Paper authors as I had the pleasure of observing their projects begin as a kernel of an idea in my HN 300: Gender as Performance course and evolve into extraordinary term projects.

As you attend today’s conference, I invite you to embody our theme and recognize the important role you play in serving as agents and advocates on your campuses and in your communities. Be sure to ask questions of the presenters—during the Question and Answer sessions, poster presentations, discussions in the hallways, or lunch. If you’re a presenter, seek out students engaging in the same type of research you conduct—discuss the challenges and rewards that you’ve encountered and perhaps learn an alternative approach you might use in the future.

This conference would not be as successful as it is without assistance from Butler University staff, faculty, and students—please be sure to thank any individuals you might know who volunteered to assist us today. In terms of creating and organizing this conference, I must extend my sincere appreciation to Melissa Friedman, URC Coordinator, and Andrea Scarlett, Assistant Director of the Office of University Events, for their creative insights and logistical skills. Finally, I recognize my extraordinarily supportive spouse, Bill McKinney, for his understanding and tolerance of all the late-night and weekend hours devoted to the URC.

Please introduce yourself to me today and let me know about your URC experience via #ButlerURC on Twitter. I thank you for attending the URC and hope to welcome you to our campus again next year.

All the best,

Dacia Charlesworth, PhD
Director, Undergraduate Research Conference
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**Questions related to the PhD in school psychology’s accreditation status should be directed to the Office of Program Consultation and Accreditation, American Psychological Association, 750 First St. NE, Washington, D.C. 20002; (202) 336-5979; apaaccred@apa.org; or apa.org/ed/accreditation.**

*bsu.edu/edpsy*
GRADUATE SCHOOL
2016-2017 FAST FACTS

NUMBER OF GRADUATE STUDENTS
650
DOMESTIC: 380
INTERNATIONAL: 270
COUNTRIES REPRESENTED: 20

40+ PROGRAMS
20 CERTIFICATES
20 MASTER’S DEGREES

55% FULL-TIME
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BUTLER JOURNAL OF
UNDERGRADUATE RESEARCH
VOLUME 4 (2018)

Volumes 1 (2015) and 2 (2016) now available online!

Volume 3 (2017) to be online this April
digitalcommons.butler.edu/bjur/

We are now soliciting student submissions for Volume 4 of BJUR that will be published April 2018. Undergraduate students presenting at the URC who have completed significant research and scholarship, such as a Senior Project, Honor’s Thesis, or other major work, are encouraged to submit their papers for potential publication in BJUR. Submission of papers is open to undergraduates from all colleges and universities and all papers will be reviewed by Butler faculty for possible inclusion. BJUR is international in scope, multidisciplinary, and publishes the best empirical or scholarly research from undergraduate students. Details regarding submission guidelines and deadlines are available online. First consideration will be given to papers received by June 5, 2017. Papers will continue to be accepted through 2017.

Butler University has long been distinguished by its commitment to high quality undergraduate education which includes significant support for undergraduate research. This is reflected by the establishment of the first Undergraduate Research Conference in 1988 (held annually ever since). The publication of BJUR represents another major milestone on Butler’s commitment to student success in scholarship and research.

Kenneth Colburn, PhD
Inaugural Editor, BJUR
Department of Sociology and Criminology

Tara Lineweaver, PhD
Associate Editor, BJUR
Department of Psychology

bjur@butler.edu bjur@butler.edu
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GH = Gallahue Hall  JH = Jordan Hall  LH = Lilly Hall  PB = Pharmacy & Health Sciences Building

**Box Lunch Distribution Locations**

**11:30 AM – 1:30 PM**

Atherton Union, Reilly Room
Gallahue Hall Atrium
Jordan Hall
Pharmacy & Health Sciences Building, Lower Level
CONFERENCE ORGANIZERS

Dacia Charlesworth  
Conference Director

Melissa Friedman  
Conference Coordinator

Andrea Scarlett  
Special Events Coordinator

Whitney Bryant  
Information Technology Specialist

Ann Ehinger  
Marketing & Communications

Zachary Skidmore  
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Teresa Williams  
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Brian Wilson  
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History

Amanda Gingerich  
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Xianming Han  
Physics & Astronomy

Nicholas Johnson  
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R. Jeremy Johnson  
Biochemistry & Molecular Biology

Casey Ryan Kelly  
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Chad Knoderer  
Pharmacy, Health Sciences, & Exercise Science

Jennifer Kowalski  
Biology

Lynne Kvapil  
Classical Studies

Philosophy & Religion

Stacy McGaha  
Pharmacy, Health Sciences, & Exercise Science

Antonio Menendez-Alarcon  
Sociology

Paul Morgan  
Chemistry

Alex Quintanilla  
Modern Languages, Literatures, & Cultures

Gautam Rao  
Art History

Sholeh Shahrokhi  
Anthropology

Sofia Soutto  
Communication Sciences & Disorders

Robin Turner  
Political Science

Rebecca Wahl  
Mathematics & Computer Science

COMPETITIVE PAPER REVIEWERS

Nancy Curtin  
Millikin University

Amy Darnell  
Columbia College

Todd Lee Goens  
Christopher Newport University

A. J. Grant  
Robert Morris University

Carrie Kennedy-Lightsey  
Stephen F. Austin State University

Lance Lippert  
Illinois State University

Caroline Parsons  
University of Alabama

Neil Patten  
Ferris State University

Jennifer Rigdon  
Washington University

Elizabeth Tolman  
South Dakota State University

Diana Tucker  
Western Governors University
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<td>Melody Adkins</td>
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<td>Amy Arnold</td>
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<td>Sally Childs-Helton</td>
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<td>Mikaela Drake</td>
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The URC Planning Committee would also like to thank each faculty member who volunteered to serve as a Session Moderator. In addition, we would like to recognize staff members in the offices of University Events, Campus Impressions, Facilities, Marketing & Communications, Information Technology, University Library, and Butler University Police Department for their valuable contributions.
ORAL PRESENTATIONS

10:30 AM – 11:45 AM  DIRECTOR’S SESSION  Jordan Hall 242

TOP FOUR COMPETITIVE PAPERS

Moderator: Steve Hunt

10:30 AM — Recontextualizing Rhetorical Constructions of Hegemonic Masculinity in Jessica Jones
   Kelsey McDougall Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

10:45 AM — Strength in Numbers: How the NBA Dunk Contest Reifies Hegemonic Masculinity for its Audience
   John Anderton Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

11:00 AM — Selective Sexualization and Censorship: Freeing the Nipple and Challenging the Male Gaze
   Taylor Pearson Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

11:15 AM — Reifying Hegemonic Masculinity in Tau Kappa Epsilon Recruitment Videos
   Viki Tomanov Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

10:30 AM – 11:45 AM  DIRECTOR’S SESSION  Jordan Hall 276

COMPETITIVE PAPERS 1

Moderator: Dacia Charlesworth

10:30 AM — Clicking with The Clique in Young Adult Literature: Conspicuous Consumption and Feminine Gender Performance
   Avery Charron Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

10:45 AM — Ki and Ka Challenges and Reifies South Asian Gender Stereotypes
   Verda Mirza Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

11:00 AM — Subversive Knowledge and the Negation of the City: Or, the Awakening of the Critical Manipulator
   Ben Slightom Ball State University
   Faculty Sponsor: Sarah E. Vitale Ball State University

11:15 AM — Doubt Truth: The Story of an Apathetic Teenager who Accidentally Started Caring About Shakespeare’s Hamlet
   Anna Canfield Grace College
   Faculty Sponsor: Lauren Rich Grace College
12:00 PM – 1:15 PM  DIRECTOR’S SESSION  Jordan Hall 242

COMPETITIVE PAPERS 2

Moderator: Rusty Jones

12:00 PM — Bug Bytes: Musical Narrative and Timbral Relationships in Mason Bates’ Rusty Air in Carolina
   Natalie Farrell Butler University
   Faculty Sponsor: Andrew Farina Butler University

12:15 PM — “Who Killed the World?”: Monstrous Masculinity and Mad Max
   Kathryn Hampshire Ball State University
   Faculty Sponsor: Joyce Huff Ball State University

12:30 PM — Re-establishing the Sacred from the Secular at St. Giles’ Cathedral, Edinburgh
   Allison Parker Butler University
   Faculty Sponsor: Sholeh Shahrokhi Butler University

12:45 PM — PECS-based Interactive, Visual Application to Facilitate Comprehension and Communication for Autistic Children
   Daniel Cubillos Purdue University Northwest
   Faculty Sponsor: Magesh Chandramouli Purdue University Northwest

12:00 PM – 1:15 PM  DIRECTOR’S SESSION  Jordan Hall 276

COMPETITIVE PAPERS 3

Moderator: Jason Lantzer

12:00 PM — Residual Hauntings: The Specter of Feminism in Daphne du Maurier’s Rebecca
   Taylor Turner Wilmington College
   Faculty Sponsor: Ursula McTaggart Wilmington College

12:15 PM — “That’s Why I’m Lively and Colorful”: The Conflation of Heteronormativity, Palatable Feminism, and Overdetermined Femininity in April Ludgate of Parks and Recreation
   Neil Reinke Butler University
   Faculty Sponsor: Dacia Charlesworth Butler University

12:30 PM — The Deplorables Question: Why Race Still Matters in Indiana Elections
   Alaina May Franklin College
   Faculty Sponsor: Randall Smith Franklin College

12:45 PM — Religious Belief and the Holocaust
   Abby Busse Ball State University
   Faculty Sponsor: Frank Felsenstein Ball State University
1:30 PM – 2:45 PM  COMPETITIVE PAPERS 4  Jordan Hall 242

**DIRECTOR’S SESSION**

**COMPETITIVE PAPERS 4**

**Competitive Papers 4**

Moderator: **Rusty Jones**

1:30 PM — H&M’s “Close the Loop” Campaign: Breaking Gender Binaries While Challenging and Reifying Hegemonic Masculinity and Emphasized Femininity

_Samreen Uzzama Butler University_

Faculty Sponsor: _Dacia Charlesworth Butler University_

1:45 PM — Lesbian Adolescents and their Relationship to Bodies in Young Adult Fiction: 1978-2015

_Ashley Eden Hanover College_

Faculty Sponsor: _Sara Patterson Hanover College_

2:00 PM — Patterns in Chaos: A Study of Turbulent Flame-Fronts

_Benjamin Stevens Rose-Hulman Institute of Technology_

Faculty Sponsor: _Maarij Syed Rose-Hulman Institute of Technology_

2:15 PM — Retrospective Analysis of Probiotic Effectiveness in Acute Myeloid Leukemia and Transplant Patients Receiving Chemotherapy

_Daniel Przybylski Butler University_

Faculty Sponsor: _David Reeves Butler University_

1:30 PM – 2:45 PM  ANTHROPOLOGY  Jordan Hall 238

**Intersectionality in Fieldwork: Anthropology of Power and Difference**

Moderator: **Sholeh Shahrokhi**

1:30 PM — Access to Reproductive Health Care in Mapleton-Fall Creek: An Ethnographic Project

_Aspen Christian Indiana University-Purdue University Indianapolis_

Faculty Sponsor: _Susan Hyatt Indiana University-Purdue University Indianapolis_

1:45 PM — Cultural Perceptions of Antiretroviral Therapy in Native American Contexts

_Shelby Crum Butler University_

Faculty Sponsor: _Elizabeth Pfeiffer Butler University_

2:00 PM — Re-presenting the Peace Walk: Booker T. Washington and His Presence in Indiana

_Reed Meece Indiana University-Purdue University Indianapolis_

Faculty Sponsors:  _Owen J. Dwyer Indiana University-Purdue University Indianapolis_ and _Modupe G. Labode Indiana University-Purdue University Indianapolis_


_Huseyin Atakan Keskin University of Tampa_

Faculty Sponsor: _Andrew DeMil University of Tampa_
### ART HISTORY
Lilly Hall 133

**THE PURSUIT OF HAPPINESS: PERSONAL AND POLITICAL ARTISTIC EXPLORATION**

**Moderator:** Gautam Rao

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
<th>Sponsor</th>
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<tbody>
<tr>
<td>12:00 PM</td>
<td>Vision of Utopia: Albert Saverys’ <em>Premier Neige</em></td>
<td>Asumi Oba  Hanover College</td>
<td>Xiaolong Wu  Hanover College</td>
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<tr>
<td>12:15 PM</td>
<td>Mixed</td>
<td>Kaylin Greer  Butler University</td>
<td>Gautam Rao  Butler University</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>There is No Ordinary Card</td>
<td>Brooke Benoit  Butler University</td>
<td>Gautam Rao  Butler University</td>
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<tr>
<td>12:45 PM</td>
<td>Uncapped</td>
<td>Margaret Citron  Butler University</td>
<td>Gautam Rao  Butler University</td>
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<tr>
<td>1:00 PM</td>
<td>Maganda</td>
<td>Alexandrea Sanders  Butler University</td>
<td>Gautam Rao  Butler University</td>
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### BIOCHEMISTRY & MOLECULAR BIOLOGY
Gallahue Hall 105

**BIOCHEMICAL BASIS OF DISEASE**

**Moderator:** Mark Macbeth

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 AM</td>
<td>Identification of <em>M. tuberculosis</em> Enzymes Expressed Under Dormant Growth Conditions</td>
<td>Brent Waibel  Butler University</td>
<td>R. Jeremy Johnson  Butler University</td>
</tr>
<tr>
<td>10:45 AM</td>
<td>TBCB1R and its Effects on Metabolic Homeostasis and Glucose Regulation</td>
<td>John Cupit  Butler University</td>
<td>Mark Macbeth  Butler University</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Determining the Effects of Methanol, Ethanol, Isopropanol, and Glycerol on the Thermal Stability and Catalytic Activity of Rv0045c</td>
<td>Katelyn Baumer  Butler University</td>
<td>Geoffrey C. Hoops  Butler University</td>
</tr>
<tr>
<td>11:15 AM</td>
<td>Effect of Metals on Catalytic Activity of Mutated Rv0045c Esterase from <em>M. tuberculosis</em></td>
<td>Isobel Bowles  Butler University</td>
<td>Geoffrey C. Hoops  Butler University</td>
</tr>
</tbody>
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ECOLOGY AND BEHAVIOR

Moderator: Carmen Salsbury

10:30 AM — Comparison of the Prey Base for Eastern Hellbenders between Three Streams
Veronica Yager Purdue University West Lafayette
Faculty Sponsor: Rod Williams Purdue University West Lafayette

10:45 AM — Impacts of Larval Nutrition on Colony Growth of Lasius Neoniger
Marwah Saleh Earlham College
Brianna Crawley Earlham College
Faculty Sponsor: Chris Smith Earlham College

11:00 AM — Investigation of the Anthropogenic Effects on Sciurus niger Tree Squirrel Distribution and Abundance in Urban Residential Areas
Gabrielle Vinyard Butler University
Faculty Sponsor: Carmen Salsbury Butler University

11:15 AM — Microhabitat Preferences of American Bullfrog (Lithobates catesbeianus) Tadpoles in Freshwater Pond Ecosystems in East-Central Indiana
Dörte Neumeister Earlham College
Erin Lewis Earlham College
Olivia Honigman Earlham College
Faculty Sponsor: Brent Smith Earlham College

11:30 AM — The Effect of Social Gregariousness on the Foraging and Consensus Decision Making Behavior of the German Cockroach (Blatella germanica)
Eliza Balch Earlham College
Laura Caldwell Earlham College
Andrea Ball Earlham College
Faculty Sponsor: Brent Smith Earlham College
CELL SIGNALING AND PHYSIOLOGY

Moderator: Jennifer Kowalski

10:30 AM — Peroxidase Activity and Signaling Molecules in Moss Defense Pathways
Tyler Schenck Butler University
Faculty Sponsor: Phil Villani Butler University

10:45 AM — Preliminary Investigation into the Effects of Nicotine on Urinary Bladder Cancer Cell Lines
Maria Rechtin Thomas More College
Nicholas J. Auteri Thomas More College
Kyle Damen College of Mount St. Joseph
Laura Felix Thomas More College
Taylor Schnebelt Xavier University
Avery Henderson Thomas More College
Rachel Bender Capital University
Evan Birmingham University of Dayton
Alex White Miami University of Ohio
Alexandra Wright University of Louisville
Faculty Sponsors: Julia Carter Wood Hudson Cancer Research Laboratory and Bonnie Richmond Wood Hudson Cancer Research Laboratory

11:00 AM — Investigation of the Neuronal Functions of the SUMO enzyme UBC-9 in C. elegans
Victoria Kreyden Butler University
Kristen Rush Butler University
Morgan Harrison Butler University
Faculty Sponsor: Jennifer Kowalski Butler University

11:15 AM — The Use of Caenorhabditis elegans as a Model for Anthelmintic Drug Study
Kathryn Weaver Bethel College
Faculty Sponsors: Brian Ellis Bethel College and Cassandra May Bethel College
**CELL, MOLECULAR, AND DEVELOPMENTAL BIOLOGY**

Moderator: Lindsay Lewellyn

12:00 PM — Characterizing a Role for the Misshapen Kinase in Growth of the Germline Ring Canals in the Developing Egg Chamber

*Ashley Kline Butler University*
Faculty Sponsor: Lindsay Lewellyn Butler University

12:15 PM — Evaluation of Dyrk1a as a Therapeutic Target for Rescuing Behavioral and Bone Deficits in the Ts65Dn Mouse Model for Down Syndrome

*Roshni Patel Indiana University-Purdue University Indianapolis*
Faculty Sponsors: Randall Roper Indiana University-Purdue University Indianapolis and Charles Goodlett Indiana University-Purdue University Indianapolis

12:30 PM — Expression of Osteoarthritis of the Knee in a Modern Cadaver Sample

*Ashley Ronvik University of Indianapolis*
Faculty Sponsor: Stephen Nawrocki University of Indianapolis

12:45 PM — The Investigation of SYD-2 as a Potential Substrate of the Anaphase Promoting Complex in Promoting GABA release at the *C. elegans* Neuromuscular Junction

*Lauryn Campagnoli Butler University*
*Daniel Lester University of South Florida*
Faculty Sponsor: Jennifer Kowalski Butler University

1:00 PM — Tissue-Specific Bioengineering of Factor VIII Transgenes

*Stephan George University of Georgia*
Faculty Sponsors: Christopher Doering Emory University, Trent Spencer Emory University, and Harrison Brown Emory University

**MICROBIOLOGY**

Moderator: Sean Berthrong

12:00 PM — Human Antimicrobial Resistance in Plant Pathogens *P. syringae* and *E. amylovora*

*Clayton Taylor Butler University*
Faculty Sponsor: Mike Trombley Butler University

12:15 PM — Isolation of a Novel Virus with the Infectivity Rate Tested at Various Temperatures

*Katie Wegenast Bellarmine University*
Faculty Sponsor: Joanne Dobbins Bellarmine University

12:30 PM — Comparison and Characterization of *Ralstonia pickettii* Copper Resistance with Soil Bacteria

*Edmond Talbott Bellarmine University*
Faculty Sponsor: Joanne Dobbins Bellarmine University
**SUSTAINABILITY**

Moderator: **Julia Angstmann**

1:30 PM — Self-thinning in Historically Monospecific and Even-aged Plots of *Prunus serotina*

- Liyuan Gao *Earlham College*
- Emily Buttrum *Earlham College*
- Cassie Olmsted *Earlham College*
- Rachel Riggs *Earlham College*

Faculty Sponsor: **Brent Smith Earlham College**

1:45 PM — Effects of Campus Housing on Sustainable Decision-Making

- Marissa Byers *Butler University*

Faculty Sponsor: **Julia Angstmann Butler University**

2:00 PM — Sustainable Engineering: Natural Fiber Bicycle Frame

- Christopher Jones *Butler University*
- Gunabhushan Sathyamurthy *Butler University*
- Madeline Schmitz *Butler University*
- Matthew Beebe *Butler University*
- Matthew Tosino *Butler University*
- Greg Cerabona *Butler University*

Faculty Sponsors: **Jonathan Sorenson Butler University** and **Alan Jones Indiana University-Purdue University Indianapolis**

**EVOLUTION**

Moderator: **Andrew Stoehr**

1:30 PM — Osiris Gene Expression in Harvester Ants and German Cockroaches

- Moataz Noureddine *Earlham College*
- Swati Pant *Earlham College*

Faculty Sponsor: **Chris Smith Earlham College**

1:45 PM — Phenotypic Selection in *Lindera benzoin* over Two Years

- Connor O’Neill-Dee *Denison University*

Faculty Sponsor: **Andrew McCall Denison University**

2:00 PM — Targeted ITS2 rDNA Sequencing to Analyze Morphological Strain Variants in Two Geographically Separated Populations of the Digenean Trematode *Proterometra macrostoma*

- Noah Kelner *Earlham College*
- Maleeka Shrestha *Earlham College*

Faculty Sponsor: **Peter Blair Earlham College**
10:30 AM – 11:45 AM  BUSINESS & ECONOMICS 1  Jordan Hall 172

Moderator: Bryan Foltice

10:30 AM — Catalonia’s Drive for Independence from Spain: The Economic and Cultural Debate of Nationalism and Its Effects
   Emily Heiser  Illinois College
   Faculty Sponsor: Steven Gardner  Illinois College

10:45 AM — The Effect of U.S. Agricultural Subsidies on the U.S. and World Economy
   Brandon Lien  Anderson University
   Faculty Sponsor: Hyeon Joon Shin  Anderson University

11:00 AM — Do Focusing Events Drive Pharma Rentseeking: Evidence from Disease Outbreaks
   Joe Moran  Anderson University
   Faculty Sponsor: Feler Bose  Anderson University

12:00 PM – 1:15 PM  BUSINESS & ECONOMICS 2  Jordan Hall 172

Moderator: Hessamoddin Sarooghi

12:00 PM — Developing a Marketing Mix for a Student Developed Business: Analyzing the Branding Process of a New Student Product for an Undergraduate Business Class
   Alexander Waddell  Butler University
   Lauren Hamilton  Butler University
   Faculty Sponsor: James McKnight  Butler University

12:15 PM — Finding Fraud: Financial Statement Analysis as a Fraud Detection Tool
   Jacob Jimenez  Elon University
   Faculty Sponsor: Catherine Chiang  Elon University

12:30 PM — Relationship between Morningstar’s Environmental, Social, and Governance (ESG) Ratings and Short-term Mutual Fund Performance
   Anna Krukover  Butler University
   Faculty Sponsor: Steven Dolvin  Butler University

12:45 PM — Analysis of Public Accountants: What Personality Traits and Skill Sets Distinguish Auditors and Tax Accountants in the Public Accounting Sphere
   Lauren Wood  Butler University
   Faculty Sponsor: Anne Kelly  Butler University
SYNTHETIC AND MECHANISTIC STUDIES

Moderator: Adam Azman

10:30 AM — Use of Trispyrazolmethane in the Synthesis of Organometallic Compounds
   Claire Hazelton Butler University
   Faculty Sponsor: Stacy O’Reilly Butler University

10:45 AM — Synthesis and Analysis of Tamoxifen Derivatives
   Raghuraj Hoshing Rose-Hulman Institute of Technology
   Faculty Sponsor: Ross Weatherman Rose-Hulman Institute of Technology

11:00 AM — An Exploration of SNAr Reaction Pathways of Aminopyrazole
   Luke Severinac Butler University
   Faculty Sponsor: Luanne McNulty Butler University

11:15 AM — Comparative Studies of the Efficacy of Endogenous Organosulfur Antioxidants
   Kenzie Glassburn Franklin College
   Faculty Sponsor: Edward Chikwana Franklin College

APPLIED CHEMICAL RESEARCH

Moderator: Elizabeth Davis

12:00 PM — Ionic Liquids as Solvents for the Digestion of Biomass for Ethanol Production
   Jeffrey Tribble Rose-Hulman Institute of Technology
   Faculty Sponsor: Rebecca DeVasher Rose-Hulman Institute of Technology

12:15 PM — Synthesis of Fluorogenic Esters Containing Hydrogen-Bond Donors to Determine the Substrate Specificity of Bacterial Esterases
   Thomas Baldwin Butler University
   Faculty Sponsor: Geoffrey C. Hoops Butler University

12:30 PM — Working to Improve the Efficiency of Natural Dye-Sensitized Solar Cells
   Caitlin Behme University of Indianapolis
   Faculty Sponsor: Brad Neal University of Indianapolis
10:30 AM – 11:45 AM  CLASSICAL STUDIES 1  Jordan Hall 216

AGON IN THE ANCIENT WORLD

Moderator: Lynne Kvapil

10:30 AM — It’s All About The Hat: Women in Agriculture
   Hayley Gearheart Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

10:45 AM — Migration and its Impacts on the Labor Market of Rome during the Late Republic and Early Empire
   Kerry Campbell Xavier University
   Faculty Sponsor: Thomas Strunk Xavier University

11:00 AM — Mode of Operations: A Critique of the Agonistic View of the Greek Modes
   Robert Crawford Xavier University
   Faculty Sponsor: Thomas Strunk Xavier University

12:00 PM – 1:15 PM  CLASSICAL STUDIES 2  Jordan Hall 216

MYTH, MYTHICAL HISTORY, AND MEANING

Moderator: Lynne Kvapil

12:00 PM — Archilochus’ Effect on the Homeric Hero: Tracking the Development of the Greek Hero
   Luke Byerly Xavier University
   Faculty Sponsor: Thomas Strunk Xavier University

12:15 PM — Divine Deliverance: A New Look at Euripidean Tragedy through the Athenian Audience
   Samantha Pukys Xavier University
   Faculty Sponsor: Thomas Strunk Xavier University

12:30 PM — Being Satyrical: A Study on Greek Satyr Plays in the Context of History
   Eric Minion Xavier University
   Faculty Sponsor: Thomas Strunk Xavier University

12:45 PM — The Histories of Ancient Mythological and Historical Warrior Queens and their Similarities
   Haley Brinker Ball State University
   Jordynn Miller Ball State University
   Faculty Sponsor: Richard King Ball State University

1:00 PM — The Modern Appeal of Helen of Troy
   Olivia Murfield Butler University
   Faculty Sponsor: Lynne Kvapil Butler University
VIOLENCE, CONFLICT, AND CIVIC IDENTITY: COMMUNICATION IN UNCERTAIN TIMES

Moderator: Casey Ryan Kelly

10:30 AM — Creating Chaos: A Look Into Social Media’s Role in Public Expressions of Fear
Paige Ferise Butler University
Faculty Sponsor: Lindsay Ems Butler University

10:45 AM — Conflict Response Teams: A New Method of Mediation
Christopher Held Ball State University
Faculty Sponsor: Gerald Waite Ball State University

11:00 AM — Defining Civic Mindedness: A Study of the Butler Community Arts School
Emma Edick Butler University
Faculty Sponsor: Christine Taylor Butler University

11:15 AM — When a Storyteller Dies, a Library Burns - Moroccan Storytelling in a Globalizing World
Kevin O’Hare University of Tampa
Nathan Legger University of Tampa
Faculty Sponsor: Andrew Demil University of Tampa

11:30 AM — Helping Local Police Department Improve Communication
Stephanie Hamilton Purdue University Northwest
Jessica Someson Purdue University Northwest
Zach Bouchee Purdue University Northwest
Cassidy Framke Purdue University Northwest
Cain Buchmeier Purdue University Northwest
Michael Vela Purdue University Northwest
Kallyn Jenkins Purdue University Northwest
David Bork Purdue University Northwest
Cassidy Framke Purdue University Northwest
Cain Buchmeier Purdue University Northwest
Kalyn Jenkins Purdue University Northwest
David Bork Purdue University Northwest
Kalyn Jenkins Purdue University Northwest
Stephanie Hamilton Purdue University Northwest

CRITICAL ANALYSIS OF FILM AND TELEVISION

Moderator: Casey Ryan Kelly

12:00 PM — Jean Renoir’s The Rules of the Game
Sarah Damery Indiana University-Purdue University Indianapolis
Faculty Sponsor: Dennis Bingham Indiana University-Purdue University Indianapolis

12:15 PM — Walter, the Magician: El Mago’s Intertextual Role in Breaking Bad
Alison Rydell Butler University
Faculty Sponsor: Melissa Etzler Butler University

12:30 PM — The Maltese Falcon: A Story Told Four Ways
Christopher O’Donnell Indiana University-Purdue University Indianapolis
Faculty Sponsor: Dennis Bingham Indiana University-Purdue University Indianapolis

12:45 PM — The Accumulated Present: Time and Informed Experience in Terrence Malick’s Tree of Life
Griffin Deutsch Ithaca College
Faculty Sponsor: Matthew Holtmeier Ithaca College
COMMUNICATION SCIENCES & DISORDERS
Jordan Hall 238

Moderator: Sofia Souto

10:30 AM — Late L2 Acquisition and Phonological Memory Development
Madeline Westerhoff Butler University
Faculty Sponsor: Sofia Souto Butler University

10:45 AM — Adversity in Education: The Adaptations of Higher Education for Individuals with Mental and Physical Disabilities
Casandra Harris Grace College
Faculty Sponsor: Paulette Sauders Grace College

11:00 AM — English Grammatical Morphology Measures in Spanish-English Speaking Children
Marisa Cozine Butler University
Faculty Sponsor: Sofia Souto Butler University

DANCE & THEATRE
Lilly Hall 145

SOCIAL CONTEXTS OF PERFORMANCE: SOCIETY & THE SELF

Moderator: Owen Schaub

12:00 PM — An Exploration of Dance Therapy, Its Origins, and Its Applications in Parkinson’s Disease
Emilia Floody Butler University
Faculty Sponsors: Derek Reid Butler University and Susan McGuire Butler University

12:15 PM — Dramatic Form: In Theory and in Practice
Alexander Borrello Butler University
Faculty Sponsor: Owen Schaub Butler University

12:30 PM — Racecar: Exploring the Presentation of Dance through the Film Medium
Eliza Woitinnek Butler University
Faculty Sponsor: Susan McGuire Butler University

12:45 PM — Raising the Stakes: The Impact of Emotional Investment on Learning Stage Combat
Sarah Tam Butler University
Faculty Sponsor: Wendy Meaden Butler University

1:00 PM — The Back Pocket Play: Revealing White Privilege and its Contribution to Institutionalized Racism
Sonia Goldberg Butler University
Faculty Sponsors: Owen Schaub Butler University and Terri Jett Butler University
INVESTIGATING EFFECTIVE STUDENT LEARNING SUPPORTS

Moderator: Susan Adams

10:30 AM — Written vs Video Response: The Impact on Learning
Olivia Hayes Indiana Wesleyan University
Kelsey Evey Indiana Wesleyan University
Emily Ragsdale Indiana Wesleyan University
Alexandra Alayan Indiana Wesleyan University
Mackenzie Cook Indiana Wesleyan University
Kaylin Gandy Indiana Wesleyan University
Arthur Cobb Indiana Wesleyan University
Faculty Sponsors: Christopher Devers Indiana Wesleyan University, Jon Conrad Indiana Wesleyan University, and Erin Devers Indiana Wesleyan University

10:45 AM — Discussing Discussion: On Using the Socratic Approach in Twenty-First Century Secondary Classrooms
Kylie Tester Grace College
Faculty Sponsor: Lauren Rich Grace College

11:00 AM — Is Year-Round School a Better Option: A Look at a Year-Round Schedule versus Traditional Schedule
Brooke Biggins Grace College
Faculty Sponsor: Paulette Sauders Grace College

INNOVATION AND ADVOCACY FOR STUDENT LEARNING

Moderator: Susan Adams

12:00 PM — Integrating Computer Science into the School Community
Gwendolyn Kozak Butler University
Faculty Sponsor: Catherine Pangan Butler University

12:15 PM — Black Butterflies: The Unique Challenges Black Girls Face in Schools
Arisa Moreland Butler University
Faculty Sponsor: Susan Adams Butler University

12:30 PM — MOOC Success: Net Promoter Scores
Olivia Hayes Indiana Wesleyan University
Kelsey Evey Indiana Wesleyan University
Emily Ragsdale Indiana Wesleyan University
Alexandra Alayan Indiana Wesleyan University
Mackenzie Cook Indiana Wesleyan University
Kaylin Gandy Indiana Wesleyan University
Arthur Cobb Indiana Wesleyan University
Faculty Sponsors: Christopher Devers Indiana Wesleyan University and Kristin Palmer University of Virginia

12:45 PM — Speech Education in Indiana High Schools
Grace Eitel Grace College
Faculty Sponsor: Lauren Rich Grace College
10:30 AM – 11:45 AM ENGLISH LITERATURE & CREATIVE WRITING 1 Jordan Hall 303

CLASSIC BRITISH LITERATURE

Moderator: William Walsh

10:30 AM — Warming the Wintry Heart: Redemptive Storytelling in “Rime of the Ancient Mariner” and Adela Cathcart
- Abigail Palmisano Taylor University
- Faculty Sponsor: Nancy Dayton Taylor University

10:45 AM — Nobility, Loyalty, and Aid: The Core of English Medieval Heroes
- Shelby Sims Taylor University
- Faculty Sponsor: Nancy Dayton Taylor University

11:00 AM — Something is Rotten in the Cuckoo’s Nest: Examining Madness in One Flew over the Cuckoo’s Nest and Hamlet
- Jessica Wise Taylor University
- Faculty Sponsor: Nancy Dayton Taylor University

10:30 AM – 11:45 AM ENGLISH LITERATURE & CREATIVE WRITING 2 Jordan Hall 305

MONSTERS AND THE MONSTROUS

Moderator: J. Rocky Colavito

10:30 AM — Digital Literature Review: The Inner Workings of a Student-Led Undergraduate Academic Journal
- Cassandra Grosh Ball State University
- Leah Heim Ball State University
- Faculty Sponsor: Joyce Huff Ball State University

10:45 AM — Monsters: How to Research and Write About Them
- Natali Cavanagh Ball State University
- Noah Patterson Ball State University
- Faculty Sponsor: Joyce Huff Ball State University

11:00 AM — Toxicity in Themes of Control: An Analysis of Anglo-Western Cancer Rhetoric Portrayed in A Monster Calls
- Natali Cavanagh Ball State University
- Faculty Sponsor: Joyce Huff Ball State University

11:15 AM — When Podcasts Become Monstrous: Welcome to Night Vale
- Cassandra Grosh Ball State University
- Faculty Sponsor: Joyce Huff Ball State University

11:30 AM — Kinderbrutanstalt and Kindchenschema: The Child Hatchery and the Psychology of Cute
- Kathryn Hampshire Ball State University
- Amory Orchard Ball State University
- Nikole Darnell Ball State University
- Faculty Sponsor: Joyce Huff Ball State University
WOMEN WRITING AND WOMEN WRITERS

Moderator: Natalie Carter

12:00 PM — Monstrous Women: Exploring Historical Witchcraft and its Presence in The Witch
   Noah Patterson Ball State University
   Faculty Sponsor: Joyce Huff Ball State University

12:15 PM — From Girls’ Literature to New Women Texts: Scribbling Women for Girls to Read
   Alexis Schmidt Butler University
   Faculty Sponsor: Natalie Carter Butler University

12:30 PM — The Cost of Cognitive Dissonance in The Help and Go Set a Watchman
   Hannah Hood Taylor University
   Faculty Sponsor: Nancy Dayton Taylor University

12:45 PM — “Docile Bodies,” Corrective Training, and Panopticism in Charlotte Perkins Gilman’s The Yellow Wallpaper
   Bridget Peden Butler University
   Faculty Sponsor: Natalie Carter Butler University

POETS AND POETRY

Moderator: J. Rocky Colavito

1:30 PM — Inside the Self: Exploring Memoir Writing through Poetry
   Noel Ortega Butler University
   Faculty Sponsor: Alessandra Lynch Butler University

1:45 PM — When Poetry and Humor Get Hitched
   Christian Hartselle Butler University
   Faculty Sponsor: Chris Forhan Butler University

GRACE, MORALS, LOVE, AND HONOR

Moderator: J. Rocky Colavito

3:00 PM — “Things Never Happen the Same Way Twice”: A Comprehensive Look at Two of Christian Fantasy’s Most Influential Heroes
   Rachael Elliott Grace College
   Faculty Sponsor: Lauren Rich Grace College

3:15 PM — Agape: The Unfathomable Love in C. S. Lewis and J. K. Rowling
   Jennie Gold Grace College
   Faculty Sponsors: Lauren Rich Grace College and Paulette Sauders Grace College

3:30 PM — Progressions of Grace in Saint Augustine’s Confessions and Marilynn Robinson’s Lila
   Kate Boxell Taylor University
   Faculty Sponsor: Nancy Dayton Taylor University

3:45 PM — The Immorality of Society’s Moral Code: A Rejection of Societal Norms in The Criminal of Lost Honor and The Accountant
   Jaclyn Boyer Butler University
   Faculty Sponsor: Melissa Etzler Butler University
10:30 AM – 11:45 AM              HISTORY 1                Jordan Hall 278

OF GODS AND SPIRITS: RELIGION AND HISTORY

Moderator: John Ramsbottom

10:30 AM — The Historical Accuracy of Schindler’s List
Isaac Warshawsky Butler University
Faculty Sponsor: Jason Lantzer Butler University

10:45 AM — Church vs. State: The Guatemalan Genocide
Lacey Turner Wilmington College
Faculty Sponsor: Anne Daniels Wilmington College

11:00 AM — The Gods of Salem: The Puritan’s Ideological Control of Salem
Bobby Johnson Butler University
Faculty Sponsor: Vivian Deno Butler University

11:15 AM — The Struggle of Native Americans to Maintain Their Religious Identity: From Wounded Knee to the Present
Jessica “Charles” Talamantez-Ludwig Franklin College
Faculty Sponsor: Richard Gawthrop Franklin College

10:30 AM – 11:45 AM              HISTORY 2                Jordan Hall 301

DISCOVERING THE AMERICAN IDEAL, 1850-1935

Moderator: Vivian Deno

10:30 AM — Mapping the Oratory of Frederick Douglass
Lynette Taylor Indiana University-Purdue University Indianapolis
Peter Harrah Indiana University-Purdue University Indianapolis
Olivia MacIsaac Indiana University-Purdue University Indianapolis
LeAnn West Indiana University-Purdue University Indianapolis
David Lewis Indiana University-Purdue University Indianapolis
Matthew Young Indiana University-Purdue University Indianapolis
Faculty Sponsor: John R. Kaufman-McKivigan Indiana University-Purdue University Indianapolis

10:45 AM — The Aggravating Alloy: Mercury Amalgam’s Effect on Dentistry in the United States in the Mid Nineteenth-Century
Gracen Dunn Butler University
Faculty Sponsor: Ageeth Sluis Butler University

11:00 AM — The Reality of Growing Up in the Great Depression
Jenna Auber Hanover College
Faculty Sponsor: Sarah McNair Vosmeier Hanover College

11:15 AM — The Second Wave of the Ku Klux Klan: ca. 1915 - ca. 1930: Citizens or Terrorists?
Dan Harris Franklin College
Faculty Sponsor: Rick Gawthrop Franklin College

11:30 AM — The Game That Held it All Together: Baseball and the Southern Textile Community, 1919-1935
Aaron Perch Butler University
Faculty Sponsors: Vivian Deno Butler University and Antwain Hunter Butler University
IDENTITARIAN POLITICS FROM ANCIENT ROME TO THE SOVIET UNION

Moderator: Zachary Scarlett

12:00 PM — Roman Identity: What Does it Take to be Roman?
   Hannah Banks Ball State University
   Summer Alaniz Ball State University
   Faculty Sponsor: Richard King Ball State University

12:15 PM — Comparing and Analyzing Spartan and Athenian Women
   Colleen Cramer Taylor University
   Faculty Sponsor: Kevin Johnson Taylor University

12:30 PM — Cross-Dressing Female Identity and Agency in the Golden Age of Piracy
   Wendy Vencel Butler University
   Faculty Sponsor: Vivian Deno Butler University

12:45 PM — Lyudmila Pavlichenko: Soviet and American Wartime Gender Roles
   Joseph Mosse Taylor University
   Faculty Sponsor: Steve Messer Taylor University

WARS DOMESTIC AND CARCERAL:
TRANSNATIONAL STRATEGIES OF WAR, RESISTANCE, CONTAINMENT, AND BIOPOLITICS

Moderator: Vivian Deno

12:00 PM — Divisions on the Left: An Analysis of the Internal Tensions of the Aid Spain Movement in Britain and in Spain
   Sierra Newby-Smith Earlham College
   Faculty Sponsors: Elizabeth Schlabach Earlham College and Greg Mahler Earlham College

12:15 PM — Elmer Davis’ “Strategy of Truth” & the Struggle to See the Casualties of War
   Michael Faust Butler University
   Faculty Sponsor: Vivian Deno Butler University

12:30 PM — Our Nuclear Quandary: Deliberating U.S. Nuclear Armament & its Alternatives for Execution 1946-1961
   Andrew Ross Butler University
   Faculty Sponsor: Zachary Scarlett Butler University

12:45 PM — Imprisoning Sexuality: The Abuses of the State in Homosexual Male Incarceration at Alcatraz Federal Penitentiary (1934-1957)
   Vic Overdorf Butler University
   Faculty Sponsor: Vivian Deno Butler University

1:00 PM — Starving for Attention: The Role of Personal and Political Agency during the Maze/Long Kesh Hunger Strike of 1981
   Miren Mohrenweiser Butler University
   Faculty Sponsor: Vivian Deno Butler University
10:30 AM – 11:45 AM
MATHEMATICS & COMPUTER SCIENCE 1
Jordan Hall 236

CUBES, CANTOR, COLORS, AND CLASSIFICATION

Moderator: Rebecca Wahl

10:30 AM — Complexities of Bi-Colored Rubik’s Cubes
   Taylor Pieper Butler University
   Faculty Sponsor: Jonathan Webster Butler University

10:45 AM — Constructing Cantor Polynomials
   Justina Kaiser Butler University
   Faculty Sponsors: Bill Johnston Butler University and John Herr Butler University

11:00 AM — Color Map Building Based on Regression Model
   Anqi Wang Purdue University West Layfayette
   Faculty Sponsor: Greg Francis Purdue University West Layfayette

11:15 AM — Title Classification for Data Analysis
   Patrick Burns Butler University
   Faculty Sponsor: Mike Burroughs Butler University

12:00 PM – 1:15 PM
MATHEMATICS & COMPUTER SCIENCE 2
Jordan Hall 236

FIELD EXTENSIONS, OFFICE HOURS, CODES, AND JULIA SETS

Moderator: Rebecca Wahl

12:00 PM — Crossed Product Algebras over Dihedral Field Extensions
   Kaitlyn Lee Butler University
   Faculty Sponsor: Chris Wilson Butler University

12:15 PM — Effects and Usage of Office Hours
   Jacob Smith Franklin College
   Faculty Sponsors: Justin Gash Franklin College and Tim Garner Franklin College

12:30 PM — Using Concepts in Coding Theory to Improve Bounds of Optimal Error Correcting Binary Codes
   Alex Glickfield Butler University
   Faculty Sponsor: Prem Sharma Butler University

12:45 PM — Geometric Limits of Julia Sets
   Micah Brame Butler University
   Faculty Sponsor: Scott Kaschner Butler University
MODERN LANGUAGES, LITERATURES, & CULTURES 1  
Jordan Hall 336C

10:30 AM – 11:45 PM

Sociedad

Moderator: Linda Willem

10:30 AM — Domestic Abuse in Spain: 2000 – Present
Jessica Dupree Butler University
Faculty Sponsor: Linda Willem Butler University

10:45 AM — El Impacto del Cambio Social y del Individuo
Megan Lalioff Franklin College
Faculty Sponsor: Sara Colburn-Alsop Franklin College

11:00 AM — La Lucha para la Comunidad de un Sindicato
Ileana Correa Hanover College
Faculty Sponsor: Eduardo Santa Cruz Hanover College

11:15 AM — The Perspective of Abuse: Stylistics in El Bola
Elena DeCook Butler University
Faculty Sponsor: Linda Willem Butler University

11:30 AM — The Spread of HIV/AIDS Through Tattooing
Kathryn McGhehey Butler University
Faculty Sponsor: Linda Willem Butler University

MODERN LANGUAGES, LITERATURES, & CULTURES 2  
Jordan Hall 340

10:30 AM – 11:45 PM

Language and Culture

Moderator: Irune del Rio Gabiola

10:30 AM — The Evolution of Latin to French from a Linguistic Perspective
Austin Moore Ball State University
Faculty Sponsor: Ellen Thorington Ball State University

10:45 AM — Teaching Culture in Lower-Level Language Classrooms: A Methodological and Reflective Exploration
Lori Stanfield Ball State University
Faculty Sponsor: Lisa Kuriscak Ball State University

11:00 AM — Transcribing, Coding and Eating Our Way Through a Renaissance French Cookbook
Jennifer LeCaptain Valparaiso University
Andrea Sanchez Valparaiso University
Faculty Sponsor: Timothy Tomasik Valparaiso University

11:15 AM — Der Frankfurter Auschwitz-Prozess
Chelsea Yedinak Butler University
Faculty Sponsor: Sarah Painitz Butler University

11:30 AM — Getting Graphic With Hermeneutics: From Novel to Graphic Novel
Chelsea Yedinak Butler University
Molly Edwards Butler University
Brianna Bean Butler University
Faculty Sponsor: Melissa Etzler Butler University
**MODERN LANGUAGES, LITERATURES, & CULTURES 3**

**LATIN AMERICA I**

**Moderator:** Gabriela Muniz

10:30 AM — Los Dos Elementos de la Realidad
- **Maggie Brauch** Butler University
  - Faculty Sponsor: Gabriela Muniz Butler University

10:45 AM — Representations of Mental Illness in the Works of Horacio Quiroga
- **Bilal Jawed** Wabash College
  - Faculty Sponsor: Ivette Wilson Wabash College

11:00 AM — Un Análisis breve del Suspenso de Crónica de una Muerte Anunciada
- **Emily Pool** Butler University
  - Faculty Sponsor: Gabriela Muñiz Butler University

11:15 AM — La Mujer en el Policial: Transgrediendo las Normas Tradicionales
- **Noemi Ponzoni** Butler University
  - Faculty Sponsor: Gabriela Muniz Butler University

11:30 AM — How Juan Padrón and Quino Utilize Humor to Talk About Issues that Are Not Funny
- **Austin Dukes** Wabash College
  - Faculty Sponsor: Ivette Wilson Wabash College

**MODERN LANGUAGES, LITERATURES, & CULTURES 4**

**MUJER**

**Moderator:** Liliana Goens

12:00 PM — Feminización del Nuevo Mundo y su influencia en el desarrollo de Hispanoamérica
- **Alexandra Weeden** Hanover College
  - Faculty Sponsor: Eduardo Santa Cruz Hanover College

12:15 PM — El Poder Femenino
- **Jaqueline Rosales** Franklin College
  - Faculty Sponsor: Daniel Alsop Franklin College

12:30 PM — A Literary Exploration of Feminist Theory of Intersectionality in Colonial Latin America
- **Heather Armor** Franklin College
  - Faculty Sponsor: Kathryn Johnston Franklin College

12:45 PM — Las Mujeres Espanolas Como la Otra Durante la Contrarreforma en el Siglo XVII
- **Sarah Ramon** Franklin College
  - Faculty Sponsor: Sara Colburn-Alsop Franklin College

1:00 PM — La Vida Criptográfica de Santa Teresa de Jesús
- **Jocelyne Rico Medina** Ball State University
  - Faculty Sponsor: Stephen Hessel Ball State University
MODERN LANGUAGES, LITERATURES, & CULTURES 5  
Jordan Hall 344

**SPAIN**

**Moderator:** Gabriela Muniz

12:00 PM — Spain within the Ottoman Empire  
*Samreen Uzzama Butler University*  
Faculty Sponsor: *Juan Pablo Rodriguez Butler University*

12:15 PM — Santiago: A Propagandist Tool for Franco  
*Rebecca Duke Hanover College*  
Faculty Sponsor: *Celia Dollmeyer Hanover College*

12:30 PM — Miguel de Unamuno: The Relationship among Women, His Life, Spanish Society, and “El marqués de Lumbria”  
*Tina Marie Ball State University*  
Faculty Sponsor: *Stephen Hessel Ball State University*

1:30 PM – 2:45 PM  
MODERN LANGUAGES, LITERATURES, & CULTURES 6  
Jordan Hall 340

**SPANISH FILM**

**Moderator:** Linda Willem

1:30 PM — Exploring the Use of Sound and Music in the Spanish Film, *Taxi* (1996)  
*Elizabeth Fecht Butler University*  
Faculty Sponsor: *Linda Willem Butler University*

1:45 PM — Exploring the Cinematographic Effects of Lighting in the Spanish Film, *Taxi* (1996)  
*Devon Roese Butler University*  
Faculty Sponsor: *Linda Willem Butler University*

2:00 PM — Flowers and Puzzles: The Five Principles of Film Form as seen in the Film *Amador*  
*Emily Kenworthy Butler University*  
Faculty Sponsor: *Linda Willem Butler University*

2:15 PM — Escaping Uncertainty: Immigration from Latin America to Spain  
*Kathryn Allee Butler University*  
Faculty Sponsor: *Linda Willem Butler University*
1:30 PM – 2:45 PM  MODERN LANGUAGES, LITERATURES, & CULTURES 7  Jordan Hall 336C

LATIN AMERICA II

Moderator: Liliana Goens

1:30 PM — La Malinche: Por qué Recibe Tanto Odio?
  Bryn Wigney  Hanover College
  Faculty Sponsor: Eduardo Santa Cruz  Hanover College

1:45 PM — En la Vida Todos Pagamos: The Psychology of Rulfo’s Juan Preciado in Pedro Páramo
  Dena Dunn  Franklin College
  Faculty Sponsors: Kate Johnston  Franklin College and Jarrod Brown  Franklin College

2:00 PM — Estrellas Muertas: The Destruction of the Port of the Pacific
  Stephan Jones  Wabash College
  Faculty Sponsor: Ivette Wilson  Wabash College

2:15 PM — The Characters of Sab as Metaphors for the 18th Century Cuban World
  Paige Reiss  Muskingum University
  Faculty Sponsor: Sandra Alzate  Muskingum University

2:30 PM — The Representation of the Indigenous People through the Character of Martina in the Novel Sab
  Shayla Cohen  Muskingum University
  Faculty Sponsor: Sandra Alzate  Muskingum University

10:30 AM – 11:45 AM  MUSIC 1  Lilly Hall 112

Moderator: Clare Carrasco

10:30 AM — “Earthy Beats:” Alternative Political Participation at the Mousetrap Bar in Indianapolis
  Daniel White  Butler University
  Faculty Sponsor: Clare Carrasco  Butler University

10:45 AM — Hip-Hop as a Tool to Heal Racial Divides: A St. Louis Based Case Study
  Joel Pettus  Butler University
  Faculty Sponsor: Chris Speckman  Butler University

11:00 AM — Musical Expression in French Harpsichord Music of the Late 17th and Early 18th Century
  Cade Leinbach  Butler University
  Faculty Sponsor: Nicholas Johnson  Butler University

11:15 AM — Shostakovich’s Personal Requiem: Disability Style in the Eighth and Fifteenth String Quartets
  Loren Baumberger  Anderson University
  Faculty Sponsor: Christopher Holmes  Anderson University

11:30 AM — The Role of Affektenlehre in J.S. Bach’s Violin Sonata No. 1 in G minor
  Eleanor Mellin  Butler University
  Faculty Sponsor: Nicholas Johnson  Butler University
10:30 AM – 11:45 AM

**MUSIC 2**

**Lilly Hall 120**

**Moderator:** Nicholas Johnson

10:30 AM — The Apollo Paradigm Shift: Changing Representations of Louis XIV in Baroque Ballets de Cour and Tragedie Lyrique

Valerie Lines Butler University  
Faculty Sponsor: Nicholas Johnson Butler University

10:45 AM — From Versailles to Paris: Dissolution of Cultural Tension in the Music of François Couperin

Daniel White Butler University  
Faculty Sponsor: Nicholas Johnson Butler University

11:00 AM — Rameau’s Treatise on Harmony: Fact or Religion?

Jenny Snedeker Butler University  
Faculty Sponsor: Nicholas Johnson Butler University

11:15 AM — The Dauntless Diva: How Intelligence, Not Intimidation, Drove Maria Malibran’s Compositional Career

Whitney Cleveland Butler University  
Faculty Sponsor: Nicholas Johnson Butler University

11:30 AM — The Use of Music During King Louis XIV’s Reign as Propaganda

Claire Hazelton Butler University  
Faculty Sponsor: Nicholas Johnson Butler University

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10:30 AM – 11:45 AM

**MUSIC 3**

**Lilly Hall 124**

**Moderator:** Sheri Stormes

10:30 AM — Cumulative Development of Melody and Rhythm in Mozart’s Piano Sonata, K. 284

Rachel Worley Butler University  
Faculty Sponsor: Andrew Farina Butler University

10:45 AM — Repertoire Project

Mikkel Beavers Eastern Illinois University  
Faculty Sponsor: Anna Cromwell Eastern Illinois University

11:00 AM — Structural Ambiguity in Mozart’s Sonata for Violin and Piano in E minor, KV 304

Natalie Cole Butler University  
Faculty Sponsor: Andrew Farina Butler University

11:15 AM — “Are We There Yet?”: An Analysis of Tension Building Techniques used in Dominick DiOrio’s Ding, Dong, Bell

Jordyn Newett Butler University  
Faculty Sponsor: Andrew Farina Butler University
10:30 AM – 11:45 AM  MUSIC 4  Lilly Hall 133

Moderator: Andrew Farina

10:30 AM — Rhythm Song: A Song Full of Rhythms
   Gwendolyn Spencer  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

10:45 AM — Spindrift: A Sea of Notes
   Jenny Snedeker  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

11:00 AM — ‘So Not a Sonata’: A Form Analysis of the First Movement from Saint-Saëns’s Sonata for Clarinet and Piano
   Elizabeth Schmidt  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

11:15 AM — “Let There Be Motifs”: An Analysis of Motivic and Textural Development in Aaron Copland’s In The Beginning
   Ashley Kaser  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

11:30 AM — Suspensions of Disbelief in Movement One of Aleksandr Gedike’s Horn Concerto in F Minor
   Valerie Lines  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

10:30 AM – 11:45 AM  MUSIC 5  Lilly Hall 145

Moderator: Jeff Gillespie

   Natalie Evans  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

10:45 AM — Employing Motivic and Timbral Analyses to Examine Rhythm and Klangfarbenmelodie in Cangelosi’s Meditation no. 1
   Alec Larner  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

11:00 AM — Bach to Basics: The Development of Melodies and Motifs in Bach’s Fugue, BWV 578
   Daniel Knauff  Butler University
   Faculty Sponsor: Andrew Farina  Butler University

11:15 AM — The Key to Developing Ideas in the Hummel Trumpet Concerto
   Kent Hickey  Butler University
   Faculty Sponsor: Andrew Farina  Butler University
Moderator: Larry Kennedy

10:30 AM — An Analysis of the Utilization and Effectiveness of Weight Loss Medications Covered Under a Hospital Health Plan

Zach Huston Butler University
Faculty Sponsor: Chad Knoderer Butler University

10:45 AM — An Evaluation of Mumps Antibody Titers Among Pharmacy Students Before and After a University Mumps Outbreak

Kiley Shelley Butler University
Faculty Sponsor: Kendra Damer Butler University

11:00 AM — An Evaluation of Point-of-Care, Screenings, and Physical Assessments Utilized at Clinical Rotation sites and Expectations of Students

Heather Thomas Butler University
Carly Messinger Butler University
Faculty Sponsor: Tracy Sprunger Butler University

11:15 AM — Measuring Professional Pharmacy Student Understanding of Leadership Principles and Self-Awareness of Their Leadership Abilities

Matthew Moehl Butler University
Ryan Junkins Butler University
Faculty Sponsor: Meghan Bodenberg Butler University

11:30 AM — Analysis of High Intensity Interval Training in Chronic Stroke Patients

Laura Finke Thomas More College
Faculty Sponsor: Pierce Boyne University of Cincinnati

Moderator: Jeanne VanTyle

10:30 AM — Assessment of Lipid Therapy in Men and Women in the Veterans Affairs Medical Center Population

Allyson Bican Butler University
Faculty Sponsors: Jeanne VanTyle Butler University and Veronica Vernon

10:45 AM — Assessment of Pharmacist-Patient and Dietitian-Patient Follow-Up sessions on Diabetes-Related Outcomes Following Completion of an Accredited Diabetes Self-Management Education Group Class

Ryan Schneck Butler University
Margaret DiRenzo Butler University
Faculty Sponsor: Jessica Triboletti Butler University

11:00 AM — Assessment of Pharmacy Robbery Awareness and Education in Butler University Students

Nicole Hudec Butler University
Faculty Sponsor: Annette McFarland Butler University

11:15 AM — Assessment of Knowledge on Contraception and Lactation in Health Care Providers

Katie Lefevers Butler University
Faculty Sponsors: Chad Knoderer Butler University and Amy Lenell
<table>
<thead>
<tr>
<th>10:30 AM – 11:45 AM</th>
<th>PHARMACY, HEALTH SCIENCES, &amp; EXERCISE SCIENCE 3</th>
<th>Pharm. &amp; Health Sci. Bldg. 106B</th>
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</thead>
</table>

**Moderator:** Darin Ramsey

10:30 AM — Evaluation of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* Infections at a University Student Health Clinic

_Kelsey Kurey_ Butler University  
Faculty Sponsor: Kendra Damer Butler University

10:45 AM — Impact of Multitasking on Medication Errors in a Pharmacy

_Aaron Wentzlof_ Butler University  
_Julia Courtney_ Butler University  
_Christina Ancelet_ Butler University  
Faculty Sponsor: Margaret Stratford Butler University

11:00 AM — Attitudes Toward Vegetarianism in Rural Indiana

_Kelly Gehlbach_ Hanover College  
Faculty Sponsor: Bryant Stamford Hanover College

11:15 AM — Can GLP-1-RAs Cause Significant A1c Reduction and Weight Loss in a Veterans Affairs Population

_Shelby Beutel_ Butler University  
Faculty Sponsor: Darin Ramsey Butler University

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<th>10:30 AM – 11:45 AM</th>
<th>PHARMACY, HEALTH SCIENCES, &amp; EXERCISE SCIENCE 4</th>
<th>Pharm. &amp; Health Sci. Bldg. 150</th>
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</thead>
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**Moderator:** Isabel Hagedorn

10:30 AM — Music First: A Butler University and Indiana State Department of Health Collaborative, Resident-Centered Study of the Effect of Music Intervention on the ABCs (Affect-Behavior-Cognition/Memory) of Older Adults with Dementia

_Kaci Kehrt_ Butler University  
_Bridget Veldman_ Butler University  
_Katie Binger_ Butler University  
Faculty Sponsor: Dane Shiltz Ferris State University

10:45 AM — Community Pharmacy and Breastfeeding: A Study of the Knowledge and Confidence of Pharmacists when Recommending Safe Medications

_Nicole Beck_ Butler University  
_Anna-Mae Beswick_ Butler University  
Faculty Sponsor: Chad Knoderer Butler University

11:00 AM — Clinical Impact of Extensive Medication Education and Prescription Procurement Assistance on 30-Day Outcomes in Post-Acute Coronary Syndrome Patients

_Catherine Skoog_ Butler University  
Faculty Sponsor: Alexander Ansara Butler University

11:15 AM — Comparison of Online Module-Based Orientation with Traditional, Face-to-Face Orientation to an Electronic Health Record Program

_Tyler Lasky_ Butler University  
_ Kevin Kniery_ Butler University  
Faculty Sponsor: Lindsay Saum Butler University
Moderator: Kim Beck

10:30 AM — Effect of Artificial Sweeteners on Glucose Intolerance and Insulin Resistance
  Kylie Hawks Hanover College
  Faculty Sponsor: Bryant Stamford Hanover College

10:45 AM — Efficacy & Safety Comparison for Systemic Corticosteroid Therapy With & Without Inhaled Corticosteroids for Acute COPD Exacerbation Management
  Jordan Pearce Butler University
  Faculty Sponsor: Dane Shiltz Ferris State University

11:00 AM — DOMS Recovery and Compression Garments: An Analysis of the Placebo Effect on Suppressing Inflammation and Soreness
  Celeste Harris Hanover College
  Faculty Sponsor: Molly Winke Hanover College

11:15 AM — Emergency Department Treatment of Children with Asthma Exacerbations
  Allyson Trossen Butler University
  Faculty Sponsor: Dennis Gardner Butler University

11:30 AM — Music First: A Butler University and Indiana State Department of Health Collaborative, Resident-Centered Study of the Effect of Music Intervention on the ABCs (Affect-Behavior-Cognition/Memory) of Older Adults with Dementia
  Christine Kliman Butler University
  Alex Cairns Butler University
  Dalena Vo Butler University
  Faculty Sponsor: Dane Shiltz Ferris State University
10:30 AM – 11:45 AM

PHARMACY, HEALTH SCIENCES, & EXERCISE SCIENCE 6

Moderator: Sheena Sanders

10:30 AM — Unraveling the Mystery of Transcription Activation Domains
Zachary Geyer Butler University
Eric Chen Butler University
Faculty Sponsor: Alexandre Erkine Butler University

10:45 AM — Empiric Management of Fever of an Unknown Source in Pediatrics less than 90 Days Old: A Retrospective Chart Review
Andrew Taschler Butler University
Jeremy Kauffman Butler University
Faculty Sponsor: Dennis Gardner Butler University

11:00 AM — Epidermal Growth Factor Receptor (EGFR) and Anaplastic Lymphoma Kinase (ALK) Fusion Oncogene Testing in Patients with Metastatic Non-small Cell Lung Cancer
Adam Rominger Butler University
Alyssa Jenkins Butler University
Faculty Sponsor: David Reeves Butler University

11:15 AM — Evaluating Patient Hospital Admission while on Daptomycin or Ertapenem Outpatient Parenteral Antibiotic Therapy
Kevin Corressell Butler University
Ryan Fraher Butler University
Andrew Hart Butler University
Faculty Sponsors: Jarrett Amsden Butler University and Tyler Scott

11:30 AM — Evaluating Prescriber Adherence to Guideline-Based Treatment Pathways of a Newly Initiated Antimicrobial Stewardship Program at a Rehabilitation Hospital
Christie Bertram Butler University
Faculty Sponsors: Chad Knoderer Butler University and Mary Escalante

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10:30 AM – 11:45 AM

PHARMACY, HEALTH SCIENCES, & EXERCISE SCIENCE 7

Moderator: Lauren Czosnowski

10:30 AM — Impact of Medication Education for Hospital Nurses
Jessi Heinowski Butler University
Faculty Sponsor: Lauren Czosnowski Butler University

10:45 AM — Evaluation and Analysis of the Adult Delirium Nursing Protocol in Patients with Documented Delirium in the Medical-Surgical Setting at an Adult Tertiary Medical Center
Jacqueline Wasynczuk Butler University
Faculty Sponsor: Lauren Czosnowski Butler University

11:00 AM — Evaluation of Medication Risks for Falls on an Inpatient Medical/Surgical Unit
Joseph Zegar Butler University
Faculty Sponsor: Lauren Czosnowski Butler University

11:15 AM — Assessment of Unfractionated Heparin Discontinuation Prior to Planned Surgical Procedures and Practice Improvement at IU Health Methodist Hospital: A Retrospective Chart Review
Martina Fraga Butler University
Faculty Sponsor: Lauren Czosnowski Butler University

11:30 AM — Evaluation of Epstein-Barr Virus Reactivation in Post-Allogeneic Bone Marrow Transplant Patients: A Retrospective Review
Elizabeth Diller Butler University
Faculty Sponsors: Chad Knoderer Butler University and Jill Leslie
Moderator: Laura Ruekert

10:30 AM — Evaluation of the Influence of Education on the Attitudes of Butler University Pharmacy Students towards Mental Illness

Courtney Schindler Butler University
Faculty Sponsors: Laura Ruekert Butler University and Priscilla Ryder Butler University

10:45 AM — Persistence in Addiction Recovery: Pharmacist Role in Transition of Care to Outpatient Rehab

Taylor Harlow Butler University
Faculty Sponsor: Laura Ruekert Butler University

11:00 AM — Exploring Air Medical Transport in Rural Environments

Colton Junod Butler University
Faculty Sponsor: Catherine Pangan Butler University

11:15 AM — Fosfomycin Versus Ertapenem for the Treatment of Extended-Spectrum $\beta$-Lactamase Urinary Tract Infections in the Outpatient Settings: A Retrospective Chart Review

Andrew Pak Butler University
Faculty Sponsor: Jarrett Amsden Butler University

11:30 AM — Evaluation of Pharmacy Student Opinions of an Interactive Trivia Game Based on OTC Special Population Topics

Brittany Wells Butler University
Emily Keith Butler University
Faculty Sponsor: Sheel M. Patel Butler University

Moderator: Alison Walton

10:30 AM — Adult Antimicrobial Renal Dosing Policy Evaluation: A Retrospective Chart Review

Sarah Lowry Butler University
Kelly Davidson Butler University
Faculty Sponsor: Alison Walton Butler University

10:45 AM — Assessing Proper Over-the-counter Medication Selection Before and After Implementation of a Treatment Guide

Lauren Palmer Butler University
Sonya Aghili Butler University
Nicole Jackson Butler University
Krista Plocchio Butler University
Faculty Sponsor: Alison Walton Butler University

11:00 AM — “Lucas the Lion Fights Leukemia”: An Educational Coloring Book for Children

Alexandra Mauer Butler University
Kelsey Lucas Butler University
Faculty Sponsor: Alison Walton Butler University

11:15 AM — The Effectiveness of a Hyperglycemic Action Plan in Diabetic Patients: A Retrospective Study

Brittany Urbaniak Butler University
Faculty Sponsor: Deborah Zeitlin Butler University

11:30 AM — Assessing Engagement and Knowledge Regarding Advanced Care Directives

Jacob Bradshaw University of Indianapolis
Cheyenne Kern University of Indianapolis
Ariel Galliher University of Indianapolis
Faculty Sponsor: Amie Wojtyna University of Indianapolis
12:00 PM – 1:15 PM
PHARMACY, HEALTH SCIENCES, & EXERCISE SCIENCE 10
Pharm. & Health Sci. Bldg. 103

Moderator: Isabel Hagedorn

12:00 PM — Impact of the New Pregnancy and Lactation Rule on Clinical Decision Support
   
   **Eric Black** Butler University
   Faculty Sponsors: **Joseph Jordan** Butler University and **Lisa Starost**

12:15 PM — Interactions Between Patients and Payers - Where do Pharmacists Lie? The Path Through Researching, Writing, and Publishing
   
   **Danielle Stone** Butler University
   Faculty Sponsor: **Carriann Richey Smith** Butler University

12:30 PM — Impact of Peptide Nucleic Acid Fluorescence in situ Hybridization Testing for Coagulase-negative Staphylococci in a Pediatric Setting in the Absence of Antimicrobial Stewardship Protocol
   
   **Mallory Kaschak** Butler University
   **Ashley Walter** Butler University
   Faculty Sponsor: **Kristen Nichols** Butler University

12:00 PM – 1:15 PM
PHARMACY, HEALTH SCIENCES, & EXERCISE SCIENCE 11
Pharm. & Health Sci. Bldg. 106A

Moderator: Tina Vawter

12:00 PM — The Association of Patient-Level Factors and Adherence to Statins for Patients in a Self-Insured, Employer-Sponsored Health Plan
   
   **Matthew Polston** Butler University
   Faculty Sponsors: **Jason Range** and **Priscilla Ryder** Butler University

12:15 PM — Nutritional Website for the CUE Farm
   
   **Juengsun Park** Butler University
   Faculty Sponsor: **Jane Gervasio** Butler University

12:30 PM — Older Patients’ Perception of Pharmacist’s Role
   
   **Alison Oen** Butler University
   **Arthur Valdoz** Butler University
   Faculty Sponsor: **Priscilla Ryder** Butler University

12:45 PM — Outcomes of Extended Infusion Cefepime in Pediatric Patients
   
   **Lauren C. Beauchamp** Butler University
   Faculty Sponsors: **Chad A. Knoderer** Butler University and **Kristen R. Nichols**

1:00 PM — Pegfilgrastim Administration: A Comparison of the On-Body Injector and the Prefilled Syringe
   
   **Carley Thompson** Butler University
   Faculty Sponsors: **Cathy Ramey** Butler University and **Sarah Pfahler**
12:00 PM — Pharmacoeconomic Study Comparing Memantine IR and Memantine XR in the Long-Term Care Setting for the Symptomatic Treatment of Moderate to Severe Alzheimer’s Disease

Timothy Davis Butler University
Faculty Sponsor: Laurence Kennedy Butler University

12:15 PM — Characterization of Vitamin D Deficiency among Trauma Patients with Fractures

Thernell Anderson IV Butler University
Faculty Sponsor: Carolyn Jung Butler University

12:30 PM — Pharmacy Practice and Health Administration: A Case-Based Approach to Navigating the Healthcare Environment

Paulina Phan Butler University
Daniel Cutter Butler University
Faculty Sponsor: Jessica Wilhoite Butler University

12:45 PM — Pharmacy 2.0: An Analysis of Labs in Pharmacies Thus Far, and a Proposed Business Plan for Adding Laboratory Services Inside Community Pharmacies

Emily Bailey Butler University
Faculty Sponsor: Joe Jordan Butler University

1:00 PM — Pharmacy Interventions in Transitions of Care from Hospital Discharge (PITCH) Pilot Program for Medicare Part D Patients at High-Risk for Readmission

Muirisha N. Lavender Butler University
Faculty Sponsor: Carolyn M. Jung Butler University

12:00 PM — A Novel Formulation for Overcoming P-glycoprotein Induced Docetaxel Resistance in MCF-7 Breast Cancer Cells

Ryan Dimmitt Butler University
Faculty Sponsor: Sudip Das Butler University

12:15 PM — Assessment of Drug Take-Back Utilization Based on Medication Cost

Sienna Reuter Butler University
Steven Meuleman Butler University
Faculty Sponsor: Angela Ockerman Butler University

12:30 PM — A Readability Assessment on the Health Information Available when searching for Zika Virus on the Top Three Search Engines

Christian Schall Butler University
Jacob Ready Butler University
Faculty Sponsor: Jeanne VanTyle Butler University

12:45 PM — Assessment of Butler University Pharmacy Students’ and Physician Assistant Students’ Knowledge and Confidence on Proper Medication Disposal

Joseph Kahles Butler University
Mike Park Butler University
Kyle Saunders Butler University
Faculty Sponsor: Tracy Sprunger Butler University

1:00 PM — A Qualitative Assessment of Attitudes and Behaviors Surrounding Bottled Water Consumption Among Students at Butler University

J. Logan Goff Butler University
Eric Black Butler University
Faculty Sponsor: Priscilla Ryder Butler University
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenters</th>
<th>Faculty Sponsors</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 PM</td>
<td>Prescribing Behaviors of Family Medicine Residents for the Treatment of Urinary Tract Infections and Pyelonephritis</td>
<td>Danielle Thomas, Brandon Elpers, Bradley Carqueville</td>
<td>Tracy Costello</td>
</tr>
<tr>
<td>12:15 PM</td>
<td>Quantitative Research: Student Perspectives on Pharmaceutical Industry in Professional Curriculum</td>
<td>Ellen Clauss</td>
<td>Chad Knoderer</td>
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<tr>
<td>12:30 PM</td>
<td>Rate of Evidence-based Treatment for Native Valve Infective Endocarditis Caused by Viridans Group Streptococci, <em>Staphylococcus aureus</em>, and <em>Enterococcus spp</em>: A Retrospective Review</td>
<td>Conor Pardo, Mitchell Lees</td>
<td>Kevin Tuohy</td>
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<tr>
<td>12:45 PM</td>
<td>Assessment of Drug Take-Back Utilization Based on Medication Cost</td>
<td>Sarah Levenson, Kameron Baker</td>
<td>Angela Ockerman</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Safe Sexual Behavior on Public and Private Campuses</td>
<td>Autumn McCormick, James Meyer, Marcy Kiger</td>
<td>Matthew Ringenberg</td>
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<tr>
<td>12:00 PM</td>
<td>Evaluation of a Business Plan Assignment in an Ambulatory Care Pharmacy Elective</td>
<td>Kristina Traxler, Andrea Baker</td>
<td>Jessica Wilhoite</td>
</tr>
<tr>
<td>12:15 PM</td>
<td>Impact of Interprofessional Education in Geriatric Medicine among Pharmacy and Physician Assistant Students at Butler University as Evaluated by RIPLS</td>
<td>Paige Detzler, Nicole Coglianese, Lindsey Sopetti</td>
<td>Cathy Ramey, Sheel Patel</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>Stress and Coping Mechanisms Utilized by Pharmacy Students</td>
<td>Zoe Castellano, Macy Plummer</td>
<td>Jane Gervasio</td>
</tr>
<tr>
<td>12:45 PM</td>
<td>The Association of Specific Factors and Medication Adherence for Diabetic Patients in a Self-Insured Employer Health Plan</td>
<td>Ryan Rust</td>
<td>Jason Range, Priscilla Ryder</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>The Causes of Crohn’s Disease</td>
<td>Destiny Blake</td>
<td>Paulette Saunders</td>
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</tbody>
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Moderator: Brenda Caudill

Moderator: Laura Ruekert
Moderator: Jennifer McCann

12:00 PM — Empiric Antimicrobial Therapy in Patients with Healthcare-Associated, Hospital-Acquired, or Ventilator-Associated Pneumonia in Septic Shock: Does Antimicrobial Reuse Influence Outcomes?

Nicole Stagge Butler University
Faculty Sponsor: Jennifer McCann Butler University

12:15 PM — Intermittent versus Continuous IV Pantoprazole Therapy in Non-variceal Upper Gastrointestinal Bleeds: Outcomes of a Local Drug Shortage Conservation Effort

Jasmine Coatie Butler University
Allie Hissong Butler University
Faculty Sponsor: Jennifer McCann Butler University

12:30 PM — Medication Stock Bottle Recycling: A Business Proposal

Elisabeth Mader Butler University
Faculty Sponsor: Joseph Jordan Butler University

12:45 PM — Usage of Idarucizumab for Reversal of Dabigatran in the Indiana University Health System

Nathan Hantz Butler University
Faculty Sponsor: Deborah Zeitlin Butler University

1:00 PM — Impact of a Bedside Medication Delivery Program on Readmission Rates

Jordan Clark Butler University
Faculty Sponsor: Chad Knoderer Butler University

Moderator: Darin Ramsey

12:00 PM — Implementation of a Student-developed Electronic Medical Record in a Dominican Republic Underserved Health Clinic

Bethany Feitshans Butler University
Thomas Muma Butler University
Ryan Barton Butler University
Faculty Sponsor: Trish Devine Butler University

12:15 PM — Assessment of the Impact a Global Health Experience has on Students’ Self-Awareness, Innovation, and Leadership Perceptions

Kelly Mahoney Butler University
Elizabeth Willis Butler University
Caroline Betts Butler University
Faculty Sponsor: Trish Devine Butler University

12:30 PM — Impact of Medication Synchronization on Patient Medication Adherence

Morgan VanWynsbergh Butler University
Morgan Bolton Butler University
Megan Hyer Butler University
Faculty Sponsor: Sheel Patel Butler University

12:45 PM — Continued Adherence to Clinical Practice Treatment Guidelines for Acute Ischemic Stroke at Indiana’s First Certified Comprehensive Stroke Center

Storm Van Wey Butler University
Faculty Sponsor: Kevin Tuohy Butler University

1:00 PM — Impact of Online Poverty Simulation on Pre-Professional Students’ Perceptions Toward People in Poverty

Liana Tzanetakis Butler University
Faculty Sponsor: Carriann Smith Butler University
Moderator: Dillon Wyatt

12:00 PM — Rate of Evidence-based Treatment for Native Valve Infective Endocarditis Caused by Viridans Group Streptococci, *Staphylococcus aureus*, and *Enterococcus spp.*: A Retrospective Review
   - Tyler Barton, Butler University
   - Meghan Blais, Butler University
   - Faculty Sponsor: Kevin Tuohy, Butler University

12:15 PM — Student Perceptions of Risks and Abilities Related to Sterile Hazardous Drug Compounding
   - Swathi Vadhi, Butler University
   - Faculty Sponsor: Angela Ockerman, Butler University

12:30 PM — Is There a Symbiotic Relationship Between the Themic Effects of Food and Physical Activity?
   - Carly Bentz, Hanover College
   - Faculty Sponsor: Bryant Stamford, Hanover College

12:45 PM — Limbal Stem Cell Deficiency (LSCD): Demographics and Clinical Features
   - Nicholas J. Auteri, Thomas More College
   - Faculty Sponsors: Edward J. Holland, University of Cincinnati, Lorena Loverde, University of Cincinnati, Enrica Sarnicola, and Brad M. Genereux

1:00 PM — Investigation of the Solubility and Stability of Concentrated Naloxone Hydrochloride Intravenous Infusions
   - Carolyn Honigford, Butler University
   - Faculty Sponsor: Hala Fadda, Butler University

10:30 AM — Aristotle’s Opposition to Usury
   - Nyree Modisette, Butler University
   - Faculty Sponsors: Margaret Brabant, Butler University and Richard McGowan, Butler University

10:45 AM — Civic Friendship: In the Streets and on the Internet
   - Quintin Thompson, Ball State University
   - Faculty Sponsor: Kevin Harrelson, Ball State University

11:00 AM — Effects of Reading Religious Texts on Perspectives of Social Issues
   - Lily Conklin, Valparaiso University
   - Callum Casey, Valparaiso University
   - Ben Zibricky, Valparaiso University
   - Faculty Sponsor: Matthew Ringenberg, Valparaiso University

11:15 AM — An Analysis of Religious Acceptance in Indianapolis, IN
   - Jessica Dupree, Butler University
   - Faculty Sponsor: Chad Bauman, Butler University
10:30 AM – 11:45 AM  PHYSICS & ASTRONOMY  Gallahue Hall 348

Moderator: Xianming Han

10:30 AM — Investigating Atomic Transitions in Noble Gasses by Laser Optogalvanic Spectroscopy

Ashley Dale  Butler University
Faculty Sponsor: Xianming Han  Butler University

10:45 AM — Observing the Orbitals of Jupiter’s Galilean Moons

Thomas Kennedy  Butler University
Jordan Hochstetler  Butler University
Rober Wray  Butler University
Shannon Suttles  Butler University
Ashley Dale  Butler University
Amanda Hashimoto  Butler University
Michael Pajkos  Butler University
Michael Kostelnik  Butler University
Faculty Sponsor: Xianming Han  Butler University

11:00 AM — Spectral Absorption of Silver Nanoparticles in Gel Phantom

Scott Szatkowski  Rose-Hulman Institute of Technology
Faculty Sponsor: Renat Letfullin  Rose-Hulman Institute of Technology

11:15 AM — The Role of Black Hole and Neutron Star Interaction on the Dynamical Evolution of Dense Stellar Systems

Michael Pajkos  Butler University
Faculty Sponsor: Brian Murphy  Butler University

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10:30 AM – 11:45 AM  POLITICAL SCIENCE 1  Jordan Hall 170

COMPARATIVE AND INTERNATIONAL POLITICS

Moderator: Terri Jett

10:30 AM — Sustainability and Recycling Programs of Honduras and Guatemala
Samantha Roberts Franklin College
Faculty Sponsor: Allison Fetter-Harrott Franklin College

10:45 AM — Comparing Economic and Sexual Freedom in 22 OECD Nations
Zachary Van Duyn Anderson University
Faculty Sponsor: Feler Bose Anderson University

11:00 AM — The Future of the Responsibility to Protect: A Comparison of Libya and Syria
Anastasia Perry DePaul University
Faculty Sponsor: Gil Gott DePaul University

1:30 PM – 2:45 PM  POLITICAL SCIENCE 2  Jordan Hall 170

LOCAL, STATE, AND NATIONAL POLITICS IN THE USA

Moderator: Robin Turner

1:30 PM — A Community’s Collective Courage: A Case Study of a Local Food Cooperative’s Impact on Food Insecurity, Community and Economic Development, and Climate Change
Tabitha Barbour Butler University
Faculty Sponsor: Terri Jett Butler University

1:45 PM — Who Gets to Reimagine the American Identity? An Investigation of Popular Reactions to Hamilton and 216 Star-Spangled Banner Protests
Sam Thomas Butler University
Faculty Sponsor: Siobhan McEvoy-Levy Butler University

2:00 PM — Public Financing and the Underrepresentation of Women in United States Elected Political Offices
Libby Moyer Butler University
Faculty Sponsors: Gregory Shufeldt Butler University and Margaret Brabant Butler University

2:15 PM — What is the Two-Party System doing to America’s Democracy?
James Cecil Butler University
Faculty Sponsor: Greg Shufeldt Butler University
10:30 AM – 11:45 AM  PSYCHOLOGY 1  Gallahue Hall 106

PERCEPTIONS OF OURSELVES AND OTHERS I

Moderator: Jennifer Berry

10:30 AM — The Role of Self-Efficacious Beliefs in the Frustration-Aggression Hypothesis
Clayton Martin Hanover College
Eulalio Hernandez Hanover College
Faculty Sponsor: Taylor Wadian Hanover College

10:45 AM — Ecological Momentary Assessment of the Relationship Between Self-Critical Perfectionism, Event Type, and Event Appraisal
Kelsey Evey Indiana Wesleyan University
Sarah Pierce Indiana Wesleyan University
Faculty Sponsor: Tim Steenbergh Indiana Wesleyan University

11:00 AM — Father Daughter Relationships: Intimacy and Self-Esteem
Callie Shelby Huntington University
Tashnah Dixon Huntington University
Chantal Williams Huntington University
CeCe Cherry Huntington University
Faculty Sponsor: Rebekah Benjamin Huntington University

11:15 AM — Using the Placebo Effect as a Potential Mediator for Stereotype Threat
Nicholas Denney Butler University
Faculty Sponsor: Joel Martin Butler University

10:30 AM – 11:45 AM  PSYCHOLOGY 2  Gallahue Hall 202

PERCEPTIONS OF OURSELVES AND OTHERS II

Moderator: Robert Padgett

10:30 AM — Influence of Individual Characteristics on Reported Levels of Anticipated Sexual Jealousy
Peyton L. Schneider Ball State University
Kaylee J. Thatcher Ball State University
McKenzie Cremeans Ball State University
Faculty Sponsor: George Gaither Ball State University

10:45 AM — Predicting Hookup Attitudes and Behaviors from Global Self-Esteem, Domain-Specific Self-Esteem, and Domain-Specific Importance Ratings
Marguerite Boone Hanover College
Courtney Markland Hanover College
Faculty Sponsor: Ellen Altermatt Hanover College

11:00 AM — Awareness, Knowledge and Acceptance of the Autistic Individual: A Comparison in the Neurodiversity Framework
Margaret Boyland Ball State University
Faculty Sponsor: Guy Mittleman Ball State University

11:15 AM — Why Can’t a Woman Fail Like a Man? Gender Differences in Perceived Competence Following a Mistake
Katie Kincaid Butler University
Faculty Sponsor: Robert Padgett Butler University
PSYCHOLOGY 3
Gallahue Hall 106

STRESS, EXERCISE, AND SOCIAL COGNITION

Moderator: Amanda Gingerich

12:00 PM — Brand Memory Conquers All: Violence is Not (Necessarily) the Answer
Elizabeth McGlone Butler University
Emily Leiderman Butler University
Eva Highberg Butler University
Faculty Sponsor: John Neil Bohannon III Butler University

12:15 PM — The Effects of Pet Dogs and Human Friends on Stress and Performance
Rachel Anderson Hanover College
Katherine Tierney Hanover College
Faculty Sponsor: Stephen Dine Young Hanover College

12:30 PM — The Impact of Dogs on Stress and Cognition: Not All Dogs Are the Same
Kelsey Watterson Hanover College
Faculty Sponsor: Stephen Dine Young Hanover College

12:45 PM — Exercise & Delay: Effects on Visual vs. Verbal Memory
Avery Charron Butler University
Faculty Sponsor: John Neil Bohannon III Butler University

PSYCHOLOGY 4
Gallahue Hall 202

DISORDERS AND TREATMENT

Moderator: Joel Martin

12:00 PM — Disordered Eating Habits and Theory of Mind in Undergraduate Students
Stephanie Kuhlman Butler University
Faculty Sponsor: Joel Martin Butler University

12:15 PM — Correlation Between Depression and College Satisfaction in Relation to Loneliness
Leah Faber Hanover College
Tommaso Girelli Hanover College
Faculty Sponsor: Bill Altermatt Hanover College

12:30 PM — Relationships between Autism Spectrum Disorder Related Symptoms and Sexuality
Cassandra Aker Ball State University
Faculty Sponsors: George Gaither Ball State University and Thomas Holtgraves Ball State University

12:45 PM — The Effect of a Therapist’s Disposition on the Success of Systematic Desensitization
Mattie Borders Hanover College
Jess Comorosky Hanover College
Rebecca Tumlin Hanover College
Faculty Sponsor: Stephen Dine Young Hanover College
12:00 PM – 1:15 PM  PSYCHOLOGY 5  Gallahue Hall 348

RELIGION & SPIRITUALITY

Moderator: **R. Brian Giesler**

12:00 PM — Are the Religious Really Better at Resisting Temptation?

- Ashley Lane  *Butler University*
- Hannah Kruger  *Butler University*
- Abby Law  *Butler University*

Faculty Sponsor: **R. Brian Giesler  Butler University**

12:15 PM — The Impact of Mindfulness on Creativity

- Hannah Faccio  *Butler University*
- Laurel Mikalouski  *Butler University*
- Paige Poure  *Butler University*

Faculty Sponsor: **R. Brian Giesler  Butler University**

12:30 PM — The Relationship between Trait Mindfulness, Specific Cognitive Skills and Mental Health Outcomes: Mediation by Decentering

- Tung Bui  *Wabash College*
- Neil Dittmann  *Wabash College*

Faculty Sponsor: **Neil Schmitzer-Torbert  Wabash College**

12:45 PM — The Bible and the Badge: Exploring the Link Between Religiosity and Police Legitimacy Among College Students

- Sydney Maloy  *Huntington University*
- Darius Hillman  *Huntington University*
- Robert Lindstrand  *Huntington University*

Faculty Sponsor: **Rebekah Benjamin  Huntington University**

1:30 PM – 2:45 PM  PSYCHOLOGY 6  Gallahue Hall 102

NEUROPSYCHOLOGY

Moderator: **Jennifer Berry**

1:30 PM — The Effects of Combined Alcohol and Nicotine on Corticosterone Levels in C57BL/J Mice

- Oreoluwa Akinbo  *Butler University*

Faculty Sponsor: **Jennifer Berry  Butler University**

1:45 PM — Effects of Alcohol and Nicotine in a 3 Bottle Choice Paradigm in Mice

- Brennen Duke  *Butler University*

Faculty Sponsor: **Jennifer Berry  Butler University**

2:00 PM — Does Empathy Have a Heartbeat?: Empathy and its Physiological Correlates in the Lab and in Daily Life

- Sarah Pierce  *Indiana Wesleyan University*
- Chelsea Winner  *Indiana Wesleyan University*
- Lydia Demmitt  *Indiana Wesleyan University*

Faculty Sponsors: **Jason Runyan Indiana Wesleyan University, Tim Steenbergh Indiana Wesleyan University, and Doug Daugherty Indiana Wesleyan University**

2:15 PM — Olfactory Dysfunction in Neurodegenerative Disease: A Meta-Analytic Investigation of Alzheimer’s, Parkinson’s and Huntington’s Diseases

- Tommaso Girelli  *Hanover College*

Faculty Sponsors: **Bill Altermatt Hanover College, Paul J. Moberg, and David R. Roalf University of Pennsylvania**
# PSYCHOLOGY 7

**JUDGMENT AND DECISION MAKING**

Moderator: **Stacy Wetmore**

### 1:30 PM — Sexual Orientation Discrimination in the Hiring Process

- **Kelsey Green** Franklin College
- **Kim Andrade** Franklin College
- **Vanessa Hall** Franklin College
  
  Faculty Sponsor: **Kristin Flora** Franklin College

### 1:45 PM — The Effect of Motherhood on Hiring Decisions

- **Samantha Fain** Franklin College
- **Victoria Martinkovic** Franklin College
- **Dakota DeBaets** Franklin College
  
  Faculty Sponsor: **Kristin Flora** Franklin College

### 2:00 PM — Inferences on Criminality Based on Appearance

- **Morgan Anderson** Huntington University
- **Hannah Johnson** Huntington University
- **Hayden Suter** Huntington University
- **Hayley Caley** Huntington University
  
  Faculty Sponsor: **Rebekah Benjamin** Huntington University

### 2:15 PM — The Effectiveness of Jury Instructions in Combating Jailhouse Informant Testimony

- **Allison White** Butler University
- **Jhovana Cervantes** Butler University
  
  Faculty Sponsor: **Stacy A. Wetmore** Butler University

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# PSYCHOLOGY 8

**SOCIAL COGNITION I**

Moderator: **Amanda Gingerich**

### 1:30 PM — Emotion and Memory: Physical Pain vs. Non-Social Emotional Pain

- **Amanda Wallace** Butler University
- **Trevor Spelman** Butler University
  
  Faculty Sponsor: **John Neil Bohannon III** Butler University

### 1:45 PM — Emotional Effects on Retrograde Memory

- **Brett DeWitt** Butler University
- **Jessica Dupree** Butler University
- **Amanda Wallace** Butler University
  
  Faculty Sponsor: **John Neil Bohannon III** Butler University

### 2:00 PM — The Relationship Between Personal Cell Phone Use and Beliefs About Cell Phone Etiquette

- **Ellie Powell** Hanover College
- **Millie Larson** Hanover College
  
  Faculty Sponsor: **Katherine Tuttle** Hanover College

### 2:15 PM — Recognition and Source Memory Accuracy in Romantic Couples versus Close Friendships

- **Hanna Downs** Butler University
- **Rebecca Robbins** Butler University
- **Amanda Rosenfeld** Butler University
- **Tyler Taylor** Butler University
  
  Faculty Sponsor: **Amanda Gingerich** Butler University
**1:30 PM – 2:45 PM**

**PSYCHOLOGY 9**  
Gallahue Hall 108

### MAKING GOOD CHOICES

**Moderator:** Robert Padgett

#### 1:30 PM — Dishonesty Among College Students: Are College Students More Likely to Cheat on a Test when the Results Lead to Monetary Reward (Self-Gain)?

- **Barbara Hernandez-Walton** *Goshen College*
- **Brandon Vires** *Goshen College*
- **Faculty Sponsor:** Julie Reese *Goshen College*

#### 1:45 PM — The Effect of Online vs. In-Person Sexual Assault Training on Rape Supportive Attitudes

- **Ashton Lunsford** *Hanover College*
- **Paige Shipley** *Hanover College*
- **Faculty Sponsor:** Ellen Altermatt *Hanover College*

#### 2:00 PM — Advertising in New Ways: The Effect of Minimal Logo Elements on Brand Familiarity and Brand Attitude

- **Miranda Reinhart** *Hanover College*
- **Faculty Sponsor:** Bill Altermatt *Hanover College*

#### 2:15 PM — Morality and Virtual Gaming

- **Joey Monje** *Hanover College*
- **Walker Goodbub** *Hanover College*
- **Faculty Sponsor:** Bill Altermatt *Hanover College*

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**1:30 PM – 2:45 PM**

**PSYCHOLOGY 10**  
Gallahue Hall 202

### PERSONALITY AND THEORY OF MIND

**Moderator:** Joel Martin

#### 1:30 PM — Theory of Mind and its Relation to Psychopathy

- **Ariana Hays** *Butler University*
- **Faculty Sponsor:** Joel Martin *Butler University*

#### 1:45 PM — What Am I Thinking Right Now?: Social Anxiety Symptomology and Its Impact on Theory of Mind Ability

- **Shannon Reid** *Butler University*
- **Faculty Sponsor:** Joel Martin *Butler University*

#### 2:00 PM — Parental Marital Status and Personality Traits

- **Madi Winger** *Huntington University*
- **Mariah Harter** *Huntington University*
- **Mekenzie Vachon** *Huntington University*
- **Natania Adams** *Huntington University*
- **Faculty Sponsor:** Rebekah Benjamin *Huntington University*

#### 2:15 PM — The Influence of Personality on Jury Decision Making

- **Devan Smith** *Hanover College*
- **Destini Spicer** *Hanover College*
- **Faculty Sponsor:** Kati Tuttle *Hanover College*
1:30 PM – 2:45 PM

**PSYCHOLOGY 11**

Gallahue Hall 348

**GENDER, CULTURE, AND HOW WE PERCEIVE OTHERS**

**Moderator:** R. Brian Giesler

1:30 PM — Exploring the Association Between Homophobia and Disgust

*Shelby Eaton* Butler University  
*Jazmine Bowens* Butler University  
*Laurel Mikalowski* Butler University  
Faculty Sponsor: **R. Brian Giesler** Butler University

1:45 PM — “Math is Hard”: Replication of a Gender Priming Study

*Emily Kauffman* Goshen College  
*Maddy Garber* Goshen College  
*Nicholas Yoder* Goshen College  
Faculty Sponsor: **Julie Reese** Goshen College

2:00 PM — Violence Against Women and its Impact Across Cultures

*Bayan Fares* Valparaiso University  
*Alejandra Alejos* Valparaiso University  
*Dejah Johnson* Valparaiso University  
Faculty Sponsor: **Matthew Ringenberg** Valparaiso University

2:15 PM — Play it Again! Individualized Music Improves the Social Interaction of Women, but not Men, with Dementia

*Emily Farrer* Butler University  
*Diana Hilycord* Butler University  
Faculty Sponsor: **Tara Lineweaver** Butler University

3:00 PM – 4:15 PM

**PSYCHOLOGY 12**

Gallahue Hall 106

**LEARNING AND MEMORY**

**Moderator:** Amanda Gingerich

3:00 PM — The Effects of Meditation on False Memory Formation

*Lili O’Donnell* Butler University  
*Ben Evans* Butler University  
*Kaelyn Mason* Butler University  
Faculty Sponsor: **Amanda Gingerich** Butler University

3:15 PM — Emotional Auditory Information’s Effect on Specific Visual Recognition

*Nicholas Lewis* Valparaiso University  
*Inga Majewski* Valparaiso University  
Faculty Sponsor: **Andrew Butler** Valparaiso University

3:30 PM — Multitasking: Impact on Students’ Academic Performance

*Ye Ji Park* Huntington University  
*Samantha Recht* Huntington University  
*Celina Myers* Huntington University  
*Jacob Neely* Huntington University  
Faculty Sponsor: **Rebekah Benjamin** Huntington University

3:45 PM — The Limitations of the Testing Effect: Does Presentation Modality Matter?

*Eileen Hogan* Butler University  
Faculty Sponsor: **Amanda Gingerich** Butler University
3:00 PM – 4:15 PM  PSYCHOLOGY 13  Gallahue Hall 105

MOTIVATION AND EMOTION

Moderator: Stacy Wetmore

3:00 PM — Does Positive Affect Promote Goal Achievement?
   Katherine Koschnick Butler University
   Hannah Faccio Butler University
   Faculty Sponsor: R. Brian Giesler Butler University

3:15 PM — The Effect of Facebook on Memory, Satisfaction, and Investment
   Hillary May Butler University
   Allison White Butler University
   Faculty Sponsor: John Neil Bohannon III Butler University

3:30 PM — Forecasting Social Interactions and the Role of Social Motivation in Autism Spectrum Disorder
   Sarah Gawronska Hanover College
   Faculty Sponsor: Bill Altermatt Hanover College

3:45 PM — Mobile Delivery of a Social Belonging and Growth Mindset Intervention for First Year College Students
   Bethany Mathison Indiana Wesleyan University
   Lindsay Wood Indiana Wesleyan University
   Brittany Washington Indiana Wesleyan University
   Nicole Hrabik Indiana Wesleyan University
   Faculty Sponsor: Tim Steenbergh Indiana Wesleyan University

3:00 PM – 4:15 PM  PSYCHOLOGY 14  Gallahue Hall 102

STRESS, EXERCISE, AND SOCIAL COGNITION II

Moderator: Jennifer Berry

3:00 PM — Gender Differences in Stress and Coping Mechanisms
   Sam Wingo Huntington University
   Rachel Cooley Huntington University
   Faculty Sponsor: Rebekah Benjamin Huntington University

3:15 PM — Self-Control in Athletes Versus Non-Athletes
   Brittany Ferrell Hanover College
   Jake Hally Hanover College
   Faculty Sponsor: Bill Altermatt Hanover College

3:30 PM — The Effects of Exercise on Academic Performance
   Conner Kreider Huntington University
   Max Troyer Huntington University
   David Kurtz Huntington University
   Jami Minick Huntington University
   Faculty Sponsor: Rebekah Benjamin Huntington University

3:45 PM — Associations Between Emotional Experience of Music and Intensity, Expertise, Appreciation, and Absorption
   Magen Hauser Valparaiso University
   Faculty Sponsors: Andrew Butler Valparaiso University and Geoffrey Wetherell Valparaiso University
1:30 PM – 2:45 PM

RESEARCH ROUNDTABLE
Jordan Hall 174

Moderator: **Dacia Charlesworth**

1:30 PM — Creating a Culture of Acceptance in all ELL Classrooms

- **Caleb Wakefield** Buter University
- **Arisa Moreland** Butler University
- **Duvante Lane** Butler University
- **Elizabeth Fecht** Butler University

Faculty Sponsor: **Susan Adams** Butler University

1:45 PM — Teaching English through Language Arts

- **Megan Watson** Butler University
- **Hannah Koehler** Butler University
- **Kelly Burger** Butler University

Faculty Sponsor: **Susan Adams** Butler University

2:00 PM — The Online Monitoring of Intimate Partners as a Moderating Variable in the Association Between Ambivalent Sexism and Intimate Partner Violence

- **Jessica R. McGuire** Purdue University Northwest

Faculty Sponsors: **Christabel L. Rogalin** Purdue University Northwest and **Rachel F. Steffens** Purdue University Northwest

10:30 AM – 11:45 AM

SOCIOMETRY 1
Jordan Hall 201

**ALCOHOL CONSUMPTION AND SUBSTANCE ABUSE**

Moderator: **Marvin Scott**

10:30 AM — Alcohol Consumption- Comparing Dry vs. Wet Campuses

- **Kaycie Jones** Valparaiso University
- **Maria Bahena** Valparaiso University
- **Megan Leinard** Valparaiso University

Faculty Sponsor: **Matthew Ringenberg** Valparaiso University

10:45 AM — Craft Breweries, Hops, and Their Impact on American Farmers

- **Mary Hentrup** Franklin College

Faculty Sponsor: **Cheryl Crane** Franklin College

11:00 AM — Gendered Differences and Binge Drinking: How Class, Academic Status, and Campus Involvement Influence Binge Drinking Amongst Men and Women

- **Damesha Wells** Butler University

Faculty Sponsor: **Krista Cline** Butler University

11:15 AM — Substance Abuse and Correlating Causes

- **Jessica Edmonds** Valparaiso University
- **Ashley Simpson** Valparaiso University

Faculty Sponsor: **Matthew Ringenberg** Valparaiso University

11:30 AM — Undergraduate Students’ Perception of the Consequences of Alcohol Consumption

- **Elaine Giglio** Butler University

Faculty Sponsor: **Katherine B. Novak** Butler University
10:30 AM – 11:45 AM  

**SOCIOLOGY 2**  
Jordan Hall 203

**SEXUALITY AND GENDER**

Moderator: Antonio Menendez Alarcon

10:30 AM — Concealment and Disclosure Amongst LGBT+ Students on Butler University’s Campus  
**Lily Pickett** Butler University  
Faculty Sponsor: **Krista Cline** Butler University

10:45 AM — Do You See What I See?  
**Kaitlynnne Mason** Franklin College  
Faculty Sponsor: **Cheryl Crane** Franklin College

11:00 AM — Effects of Social Stigma on Breastfeeding  
**Alice Baker** Valparaiso University  
**Felicia Hunter** Valparaiso University  
Faculty Sponsor: **Matthew Ringenberg** Valparaiso University

11:15 AM — Girls’ Night Out  
**Kennedy Oser** Franklin College  
Faculty Sponsor: **Cheryl Crane** Franklin College

11:30 AM — Police Attitudes Towards Social Media  
**Brandyce Sallee** Butler University  
Faculty Sponsor: **Krista Cline** Butler University

12:00 PM – 1:15 PM  

**SOCIOLOGY 3**  
Jordan Hall 201

**COLLEGE LIFE**

Moderator: Marvin Scott

12:00 PM — Community in Question: Exploring how Butler University’s Expansion Affects the Relationship Between Undergraduates and Administration  
**Will Jonah** Butler University  
Faculty Sponsor: **Krista Cline** Butler University

12:15 PM — Hook-up Culture on Private College Campuses and the Factors that Influence the Attitudes about It  
**Brooke Hammons** Butler University  
Faculty Sponsor: **Krista Cline** Butler University

12:30 PM — Impact of Distracted Driving PSA on College Students  
**Luke Bandyk** Valparaiso University  
**Kayla Caves** Valparaiso University  
**Isabella Kalwasinski** Valparaiso University  
Faculty Sponsor: **Matthew Ringenberg** Valparaiso University

12:45 PM — Perceptions of Sexual Assault On College Campus  
**Doug Hall** Butler University  
Faculty Sponsor: **Krista Cline** Butler University

1:00 PM — The Effects of Background Factors on the Preparedness and Success of Black and White Students  
**Kethan Savage** Butler University  
Faculty Sponsor: **Krista Cline** Butler University
12:00 PM – 1:15 PM

SOCIOLOGY 4  
Jordan Hall 203

FAMILY, COMMUNITY, AND MENTAL ILLNESS

Moderator: **Krista Cline**

12:00 PM — A Child With Family Instability

**Emily Stayer**  
Franklin College

**Kennedy Oser**  
Franklin College

Faculty Sponsor: **Cheryl Crane**  
Franklin College

12:15 PM — A Community’s Fall From Grace

**Nathan Adams**  
Franklin College

Faculty Sponsor: **Cheryl Crane**  
Franklin College

12:30 PM — Effects of Community Living Programs on Adults with Disabilities

**Sadie Stokes**  
Franklin College

Faculty Sponsor: **Cheryl Crane**  
Franklin College

12:45 PM — Mental Illness and Workload

**Olivia Dean**  
Butler University

Faculty Sponsor: **Krista Cline**  
Butler University

1:00 PM — The Effects of Cultural Orientations and Religiosity on Environmental Orientation

**Olivia Buttermann**  
University of Evansville

Faculty Sponsor: **Mari Plikuhn**  
University of Evansville

1:30 PM – 2:45 PM

SOCIOLOGY 5  
Jordan Hall 201

STUDENT LIFE

Moderator: **Jess Butler**

1:30 PM — Sororities and Self-Image

**Kelsey Stallter**  
Valparaiso University

**Emily Kunkle**  
Valparaiso University

**Kylie Foster**  
Valparaiso University

Faculty Sponsor: **Matthew Ringenberg**  
Valparaiso University

1:45 PM — The Butler Bubble: Does a Private College Community Affect Students’ Perception of Crime and Their Safety?

**Taylor Meek**  
Butler University

Faculty Sponsor: **Krista Cline**  
Butler University

2:00 PM — The Effect of a Non-Standard Accent on Perception of Education and Intelligence

**Alex Haddon**  
Butler University

Faculty Sponsor: **Krista Cline**  
Butler University

2:15 PM — The Impact Going Away to College Has on A Student’s Decision to Smoke Marijuana

**Cristina McNeiley**  
Butler University

Faculty Sponsor: **Krista Cline**  
Butler University

2:30 PM — What Do College Students Do to Make Themselves Happy?

**Alon Patashnik**  
Butler University

Faculty Sponsor: **Krista Cline**  
Butler University
COLLEGE STUDENTS

Moderator: Krista Cline

1:30 PM — Academic Success: Student-Athletes vs. Non-Athletes
  Anthony Smith Jr. Butler University
  Faculty Sponsor: Krista Cline Butler University

1:45 PM — Religiosity and Depression in College Students by Year in School
  Ciara Saylor Butler University
  Faculty Sponsor: Krista Cline Butler University

2:00 PM — STDs and Dating Behaviors Among College Students
  Madelyn Smith Butler University
  Faculty Sponsor: Krista Cline Butler University

2:15 PM — Stress Levels in College Athletes and Non-Athletes
  Taylor Wilson Butler University
  Faculty Sponsor: Krista Cline Butler University

2:30 PM — Student-Athletes’ and Faculty Members’ Perceptions of Academia and Differing Relationships at Butler University
  Shanna Kelly Butler University
  Faculty Sponsor: Krista Cline Butler University

SOCIAL INTERACTIONS

Moderator: Jess Butler

3:00 PM — Cell Phone Usage and Its Effect on Reality
  Julia Mansfield Butler University
  Faculty Sponsor: Krista Cline Butler University

3:15 PM — Female Student’s Treatment Differences Between Majors
  Sarah Giesel Butler University
  Faculty Sponsor: Krista Cline Butler University

3:30 PM — Social Media and its Effect on Aggression in Adolescents and Young Adults
  Kayla Bivins Butler University
  Faculty Sponsor: Krista Cline Butler University

3:45 PM — The Relationship Between Demographic Characteristics, Types of Contact with Police, and Perceptions of Police
  Allison Simko Butler University
  Faculty Sponsor: Katherine Novak Butler University

4:00 PM — Tracking in the Education System
  Sarah Fuquay Butler University
  Faculty Sponsor: Krista Cline Butler University
The number preceding each title indicates the easel number to which each presenter has been assigned. For example, if a “4.” appears before the title of the presentation, the presenter will arrive at the location indicated in the gray bar, identify easel #4, and set up. Volunteers will be available onsite to assist presenters in identifying their correct location.

2:30 PM – 3:30 PM

**BIOCHEMISTRY & MOLECULAR BIOLOGY**

Irwin Library, 3rd Floor

Floor Manager: **Teresa Williams**

1. Analyzing Membrane Binding Ability of FTT258
   
   **Whitney Hart** *Butler University*
   
   Faculty Sponsor: **R. Jeremy Johnson** *Butler University*

2. Building a Synthetic Library of Fluorogenic Ester Substrates to Analyze Serine Hydrolases
   
   **Andrew Koelper** *Butler University*
   
   Faculty Sponsor: **Geoffrey C. Hoops** *Butler University*

3. Characterization of a Hypothetical Hydrolase from *Mycobacterium tuberculosis*
   
   **Jakob Jozwiakowski** *Butler University*
   
   Faculty Sponsor: **R. Jeremy Johnson** *Butler University*

   
   **Kat Morris** *Saint Mary’s College*
   
   Faculty Sponsor: **Don Paetkau** *Saint Mary’s College*

5. Development of a MicroBio PAD with Enzyme-linked Immunosorbent Assay for the Detection of *Escherichia coli* in Water
   
   **Elizabeth Chandler** *Saint Mary’s College*
   
   Faculty Sponsor: **Don Paetkau** *Saint Mary’s College*

6. Development of a Yeast Strain that Secretes β-galactosidase
   
   **Katy Harris-Forkner** *Saint Mary’s College*
   
   **Lauren Johnson** *Saint Mary’s College*
   
   Faculty Sponsor: **Don Paetkau** *Saint Mary’s College*

7. NASH and Aperio Positive Pixel Quantification for Type II Diabetes on FATZO Mouse Model
   
   **Courtney Finnearty** *Indiana University-Purdue University Indianapolis*
   
   Faculty Sponsor: **George Sandusky** *Indiana University-Purdue University Indianapolis*

8. Use of Aperio Whole Slide Digital Imaging and Image Analysis for Pre-Clinical Trial Studies
   
   **Victoria Sefcsik** *Indiana University-Purdue University Indianapolis*
   
   Faculty Sponsor: **George Sandusky** *Indiana University-Purdue University Indianapolis*

9. Targeting Both Aberrant Metabolism and Cell Proliferation in Cancer Therapy
   
   **Bettine Gibbs** *Butler University*
   
   Faculty Sponsor: **Chioniso Patience Masamha** *Butler University*
Floor Manager: Jason Lantzer

1. A Bioassessment of the Fish Populations of the Ohio River near Zimmer Power Plant, Moscow, Ohio
   Riley Kinsella Thomas More College
   William Neltner Thomas More College
   Michael Doust Thomas More College
   Olivia Williams Thomas More College
   Bailey Boulter Thomas More College
   Faculty Sponsor: Christopher Lorentz Thomas More College

2. An Assembly Pheromone in the Terrestrial Red Mite for Successive Years of Biological Control of Plant Pests
   Garrin Bachinski Wittenberg University
   Greyden Yoder Wittenberg University
   Andre Lorenz Wittenberg University
   Faculty Sponsor: Jay Yoder Wittenberg University

3. Analysis of GIRK Channel Subunit Properties that Contribute to Ethanol Association
   Ellen Yos Purdue University Northwest
   Faculty Sponsor: Radmila Sarac Purdue University Northwest

4. Anhydrobiosis in a Leech-like Worm for Maintaining a Cleaning Symbiosis with Crayfish
   Blake Nelson Wittenberg University
   Andre Lorenz Wittenberg University
   Faculty Sponsor: Jay Yoder Wittenberg University

5. Assessment of Coronary Artery Outward Remodeling in Consequence of Epicardial Adipose Tissue in Ossabaw Swine
   Kelly Coderre Butler University
   Faculty Sponsor: Mikaela Drake Butler University

6. Avian Species Richness and Composition in Three Midwestern Successional Forest Habitats in Richmond, Indiana
   Yelitza Garcia Earlham College
   Malia Staab Earlham College
   Julia Freeman Earlham College
   Andrea Ball Earlham College
   Marwah Saleh Earlham College
   Olivia Honingman Earlham College
   Faculty Sponsors: Wendy Tori Earlham College and Adriana Rodriguez-Ferraro

7. Biological Stream Assessment and Stream Habitat Assessment for the Lee Branch on the Midway University Campus
   Guipsy Lopez Midway University
   Faculty Sponsor: John Delfino Midway University

8. Can a Native Species Replace an Exotic Species? Evidence from a Small Ohio Pond
   Andrew Baird Denison University
   Faculty Sponsor: Jessica Rettig Denison University

9. Combinatorial Testing of Nitazoxanide and Tizoxanide with other Anthelmentics on C. elegans
   Kara Gouwens Bethel College
   Faculty Sponsor: Brian Ellis Bethel College

10. Determination of the Role of Dreadlocks (Dock) in the Growth of the Germline Ring Canals in the Developing Drosophila melanogaster Egg Chamber
    Olivia Crowe Butler University
    Faculty Sponsor: Lindsay Lewellyn Butler University

11. Determining the Effects of Ionizing Radiation on Genomic Variance in Metastatic Prostate Cancer Cells (DU 145) Using Next-Generation Sequencing
    Laura Felix Thomas More College
    Faculty Sponsors: Igor Panyutin National Institutes of Health, Irina Panyutin National Institutes of Health, and Ronald Neumann National Institutes of Health
12. Developing a Technique to Label and Isolate Zebrafish Müller Glia Cells for FAC-Sorting
   **Shelby Compton** Saint Mary’s College
   Faculty Sponsors: **Manuela Lahne** University of Notre Dame and
   **David R. Hyde** University of Notre Dame

13. Digital Whole Slide Image Analysis in the Quantification of Colitis-Associated Colon Cancers in Mouse Models
   **Andrew Houser** Indiana University Bloomington
   Faculty Sponsor: **George E. Sandusky** Indiana University-Purdue University Indianapolis

14. Disinfectant Susceptibility of Selected Pathogenic Bacteria Isolate from a Hospital Floor
   **Kaitlyn Syler** Saint Mary’s College
   Faculty Sponsor: **Don Paetkau** Saint Mary’s College

15. Effect of Temperature and Water Activity on Growth and Ochratoxin A Production by *Aspergillus fresenii* and *Aspergillus sulphureus* on Niger seeds
   **Yung-Chen Hsu** Purdue University Northwest
   Faculty Sponsors: **Dawit Gizachew** Purdue University Northwest and
   **W. T. Evert Ting** Purdue University Northwest

   **Grant Ksenak** Butler University
   Faculty Sponsor: **Philip Villani** Butler University

17. Evaluation of Orchids from University Herbaria as a Resource of Mycorrhizal Fungi for Orchid Conservation
   **Savannah Sullivan** Wittenberg University
   Faculty Sponsors: **Matthew H. Collier** Wittenberg University and **Jay A. Yoder** Wittenberg University

18. Evaporative Cooling in a Fiddler Crab as a Thermal Adaptation for a Tropical Environment, and its Implications for Assessing Wetland Health
   **Karen Wildemann** Wittenberg University
   **Savannah Sullivan** Wittenberg University
   Faculty Sponsors: **Matthew H. Collier** Wittenberg University and **Jay A. Yoder** Wittenberg University

19. Fungus Regulation of NewlyEstablished Populations of the Gulf Coast Tick in the Midwest
   **Emily Carson** Wittenberg University
   **Cameron Dobrotka** Wittenberg University
   **Anthony LeBarge** Wittenberg University
   **Benjamin Jump** Wittenberg University
   **Brent Whitehead** Wittenberg University
   Faculty Sponsor: **Jay Yoder** Wittenberg University

20. Genetic Transformation of *C. purpureus* protonemata using UBI-GFP
   **Avery Kirschbaum** Butler University
   Faculty Sponsor: **Phil Villani** Butler University

21. Growth and Aflatoxin Production of *Aspergillus flavus* on Three Different Forms of Niger seeds (whole, ground, and pressed) with 0.98 Water Activity at 35°C
   **Francisco Jesus Hernandez** Purdue University Northwest
   Faculty Sponsors: **W. T. Evert Ting** Purdue University Northwest and
   **Dawit Gizachew** Purdue University Northwest

22. Identifying Potential Regulators of the Anaphase-Promoting Complex and their Effects on GABA Signaling at the *C. elegans* Neuromuscular Junction
   **Kelsey McDougall** Butler University
   Faculty Sponsor: **Jennifer R. Kowalski** Butler University
Floor Manager: Courtney Rousseau

1. Identification of Functions of Pseudouridine Synthase 7 in *Candida albicans*
   Ethan Pickerill *Ball State University*
   Faculty Sponsor: Doug Bernstein *Ball State University*

2. Identification of Pseudomonas species in Leaf Litter, Soil, and Water
   Monze Silva *Midway University*
   Dennise Martinez *Midway University*
   Faculty Sponsor: Cynthia Ryder *Midway University*

3. Investigation of the FSHR-1 Receptor as a Potential Substrate of the Anaphase Promoting Complex at the *C. elegans* Neuromuscular Junction
   David Emch *Butler University*
   Kyle Cherry *Butler University*
   Amy Godfrey *Butler University*
   Faculty Sponsor: Jennifer Kowalski *Butler University*

4. Nociception via Class IV da Sensory Neurons in Drosophila larvae
   Allison Murphy *Denison University*
   Faculty Sponsor: Eric Liebl *Denison University*

5. Patterns and Impacts of Vine Infestation on Trees in a Lowland Old Growth Forest
   Chania Whitaker *Earlham College*
   Faculty Sponsor: Brent Smith *Earlham College*

6. Placement of Bee Colonies in Trees Enhances Beneficial Colony Fungi for Disease Prevention
   Andre Lorenz *Wittenberg University*
   Anthony LeBarge *Wittenberg University*
   Faculty Sponsor: Jay Yoder *Wittenberg University*

7. Possibility for Entomopathogenic Fungus Biocontrol of Winter Tick Infestations on Moose
   Christian Randazzo *Wittenberg University*
   Cameron Dobrotka *Wittenberg University*
   Brett Siemon *Wittenberg University*
   Faculty Sponsor: Jay Yoder *Wittenberg University*

8. Student Involvement in a Small Liberal Arts College: How Does Social Engagement Relate to Indicators of Stress & Success?
   Archit Agarwal *Denison University*
   Faculty Sponsor: Jessica Rettig *Denison University*

9. Testing Anthelmintics on *C. elegans* at the First Larval Stage (L1)
   Kyle Busse *Bethel College*
   Faculty Sponsor: Brian Ellis *Bethel College*

10. The Developmental Mechanisms of Phenotypic Plasticity in Butterfly Wing Patterns
    Shelby Miller *Butler University*
    Faculty Sponsor: Andrew Stoehr *Butler University*

11. The Influence of Single Versus Multisex Access on the Local Microflora of Commonly Used Surfaces at Butler University
    Salman Qureshi *Butler University*
    Faculty Sponsor: Sean Berthrong *Butler University*

12. The Role of HNF4 in Activating Liver Function
    Melissa Nathan *Eastern Illinois University*
    Faculty Sponsor: Gary Bulla *Eastern Illinois University*

13. Update on the Status of the Aquatic Species Collections at the Thomas More College Biology Field Station
    David King *Thomas More College*
    Faculty Sponsor: Chris Lorentz *Thomas More College*

14. Using *C. elegans* to Evaluate Ivermectin Toxicity over Time
    Jordan Schoppen *Bethel College*
    Faculty Sponsor: Brian Ellis *Bethel College*
15. Determinants of Job Satisfaction and Dissatisfaction Among Practitioners Employed in Intercollegiate Sport Organizations
   Chantel Heinsen University of Indianapolis
   Ian Cooper University of Indianapolis
   Faculty Sponsor: Michael Diacin University of Indianapolis

16. Identifying Disconnects that Exist Between Higher Education and the Workplace: A Case Study for Marketing Communications
   Victoria Shaw Anderson University
   Faculty Sponsor: Emmett Dulaney Anderson University

17. The Impact of Living Arrangement and Meal Factors on Total Daily Caloric Intake
   Kalei Sorenson Butler University
   Faculty Sponsors: Courtney Droms Hatch Butler University and Jennifer Rice Butler University

10. A Comparison of Digestion Methods for the Analysis of Human Cremated Remains
    Christina A. Farwick Thomas More College
    Faculty Sponsors: William C. Wetzel Thomas More College and Christa A. Currie College of Mount St. Joseph

11. Ammonium Ligand Binding to dibenzo-18-crown-6 via Density Functional Theory
    Brielle Tilson Taylor University
    Faculty Sponsor: D. Brandon Magers Taylor University

12. Bipolar Electrochemistry Experiments for an Undergraduate Laboratory
    Sarah M. Rapp Millikin University
    Faculty Sponsor: Kyle N. Knust Millikin University

13. Comparison of Elemental Fingerprint and Safety of Herbal Supplements from United States and Nigeria
    Kyle Colston Butler University
    Taylor Smith Butler University
    Warren Travis Butler University
    Allie Cotter Butler University
    Austin Engle Butler University
    Allie Flora Butler University
    Liz Subrin Butler University
    Jeri Smith Butler University
    Faculty Sponsor: Olujide Akinbo Butler University

14. Design and Fabrication of 3D-Printed Microfluidic Devices for Electrochemical Applications
    Adam Peters Millikin University
    Faculty Sponsor: Kyle Knust Millikin University

15. Developing Cancer-Targeted “Smart” Therapeutics
    Maggie Kitt University of Evansville
    Morgan Saiko University of Evansville
    Basel Alhaj University of Evansville
    Faculty Sponsor: Andrew J. Lampkins University of Evansville

16. Efficient Synthesis and Characterization of Thioether Appended α-imino Pyridines and Corresponding Cu2+ Metal Complexes
    Michael Murray Ohio Northern University
    Faculty Sponsor: Bradley Wile Ohio Northern University
17. Elemental Analysis of Brood V Periodical Cicadas
   **Thomas A. Payne** *Thomas More College*
   Faculty Sponsor: **William C. Wetzel** *Thomas More College*

18. Exploring the Usefulness of Ruthenium-based Catalyst RuH2(CO)(PPh3)3 in Reaction with Aromatic Compounds for use in Undergraduate Lab
   **Ane Bain** *Taylor University*
   Faculty Sponsor: **Patricia Stan** *Taylor University*

19. Efforts Toward Developing a New Cyclopentannulation Reaction Employing Fischer Carbenes as Linchpin Reagents
   **Andy Romisch** *University of Evansville*
   Faculty Sponsor: **Michael C. Slade** *University of Evansville*

20. Immunochemiluminescence Detection of Chicken Muscle Lactate Dehydrogenase Using a Digital SLR Camera
   **George Gray** *Taylor University*
   Faculty Sponsor: **Dan Hammond** *Taylor University*

21. Improved Microwave Digestion Methods for Bone Ash and Portland Cement
   **Amy L. Rice** *Thomas More College*
   **Kelsey L. Kaht** *University of Louisville*
   Faculty Sponsors: **William C. Wetzel** *Thomas More College* and **Christa A. Currie** *College of Mount St. Joseph*

22. Lead (II) Detection Utilizing Highly Fluorescent Sulfonamido-Chromone Derivatives
   **Megan Nieszala** *Ohio Northern University*
   **Jonathan Szcerba** *Ohio Northern University*
   Faculty Sponsor: **Jake Zimmerman** *Ohio Northern University*

23. Observing Kinetics through Mass Spectrometry
   **Yechan Moon** *Taylor University*
   Faculty Sponsor: **Daniel King** *Taylor University*

24. One- and Two- Dimensional NMR Spectroscopy of Amino Acids and Dipeptides
   **Payton Thomas** *Franklin College*
   Faculty Sponsor: **Nazir Khatri** *Franklin College*

25. Producing Dihydrofuran Using Palladium (II) Catalyst and Optimized Base
   **Chandler Mitchell** *Butler University*
   Faculty Sponsor: **LuAnne McNulty** *Butler University*

26. Promoted Reactions of Benzyl Alcohols and Ethers via a Carbocation Intermediate
   **Nick Newberry** *Eastern Illinois University*
   Faculty Sponsor: **Daniel Sheeran** *Eastern Illinois University*

27. Qualitative Characterization of the Mass Spectra Intensities of Butane Derivatives via ab initio Computational Studies
   **Gabriel Saliba** *Taylor University*
   Faculty Sponsor: **D. Brandon Magers** *Taylor University*

28. Stereochemical Control via a 1,3-dithiane Group: Auxiliary Performance with Enolate Nucleophiles
   **Amir Khayat Kahale** *University of Evansville*
   Faculty Sponsor: **Michael C. Slade** *University of Evansville*

29. Stereochemical Control via a 1,3-dithiane Group: Auxiliary Performance with Organometallic Nucleophiles and Stereochemical Proof
   **Michael Mannchen** *University of Evansville*
   Faculty Sponsor: **Michael C. Slade** *University of Evansville*
30. Synthesis of Ligands Bearing Amino Acid Functional Groups Using the Mannich Reaction for Complexation
   Cheyanne Laux Ohio Northern University
   Faculty Sponsor: Amelia Anderson-Wile Ohio Northern University

31. Synthesis of Novel Nitrogen Analogs for Prozac and Cymbalta as Potential Antidepressants
   Anthony Knepp Ball State University
   Faculty Sponsor: Robert Sammelson Ball State University

32. Synthesis of a Polymer Bound Copper Catalyst
   Bailey Masingo Butler University
   Faculty Sponsor: Stacy O’Reilly Butler University

33. Synthesis and Spectroscopy of Benzil-Based Ligands
   Eric Dobias Thomas More College
   Faculty Sponsor: Tyler Green Thomas More College

Floor Manager: Elesia Yoon

1. Hair and the Art of Ancient Greek and Roman Styles
   Anya Gouloff Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

2. Helen of Troy
   Deepa Namburi Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

3. Ideals of the Roman Matrona
   Hayley Gearheart Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

4. The Ara Pacis Augustae
   Hannah Bennett Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

5. Virgin Women in Ancient Greece
   Wendy Vencel Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

6. Women in Classical Greek Religion: A Discussion of the Peplos Scene and the Panathenaia
   Justina Kaiser Butler University
   Faculty Sponsor: Lynne Kvapil Butler University

Floor Manager: Courtney Rousseau

18. A Comparison of Human Video Modeling and Animated Video Modeling on the Social Skills of a Child with Autism
   Delaney Killian Eastern Illinois University
   Faculty Sponsors: Trina Becker Eastern Illinois University and Naomi Gurevich Eastern Illinois University
Floor Manager: Courtney Rousseau

19. Cross-Cultural Education
   Lauren Wiley Butler University
   Faculty Sponsor: Susan Adams Butler University

20. Geolocative Gameplay at Prairie Creek Reservoir to Promote Outdoorsmanship and Environmentalism
   Lauren Taylor Ball State University
   Darby Siscoe Ball State University
   Dakota Malchow Ball State University
   Catherine Galbraith Ball State University
   David Wisenberg Ball State University
   Kate Rader Ball State University
   Kay Rittichier Ball State University
   Zachary Bube Ball State University
   Garret Evers Ball State University
   Jordan Lewers Ball State University
   Dylon Price Ball State University
   Faculty Sponsor: Paul Gestwicki Ball State University

   Bradley Ridge Ball State University
   Spencer Kolbus Ball State University
   Isaac Walling Ball State University
   Faculty Sponsor: Paul Gestwicki Ball State University

22. What Students Think about Instructors’ Feedback on Written Assignments
   Kelly Eby Ball State University
   Faculty Sponsor: Jill Walls Ball State University

Floor Manager: Elesia Yoon

7. A Composition Operator on a Finite-dimensional Hilbert Space
   Mario Guzman Butler University
   Faculty Sponsor: Bill Johnston Butler University

8. Applying Classification Techniques to Predict Bank Term Deposits
   Lucas LaRosa Butler University
   Faculty Sponsor: Rasitha Jayasekare Butler University
Floor Manager: Mikaela Drake

1. A Qualitative Assessment of Attitudes and Behaviors Surrounding Bottled Water Consumption Among Students at Butler University
   J. Logan Goff Butler University
   Eric Black Butler University
   Faculty Sponsor: Priscilla Ryder Butler University

2. Assessing Proper Over the Counter Medication Selection Before and After Implementation of a Treatment Guide
   Sonya Aghili-Mehrizi Butler University
   Lauren Palmer Butler University
   Krista Policchio Butler University
   Nicole Jackson Butler University
   Faculty Sponsor: Alison Walton Butler University

3. Constructing a Survey to Assess Indiana Pharmacy Students’ Knowledge of and Attitudes toward HIV
   Erin Hays Butler University
   Faculty Sponsors: Priscilla Ryder Butler University and Jason Range Butler University

4. Effect of Active, Passive, and Cold Water Immersion on Muscle Recovery and Subsequent Performance
   Benjamin Wheeler Hanover College
   Faculty Sponsor: Bryant Stamford Hanover College

5. Effect of Static Stretching on Preferred Stride Length During Walking and Jogging
   Sydnie McKinley Hanover College
   Faculty Sponsor: Bryant Stamford Hanover College

6. Effect of Transcutaneous Electrical Nerve Stimulation (TENS) on Hamstring Flexibility
   Alexandria Combs Hanover College
   Faculty Sponsor: Bryant Stamford Hanover College

7. Effects of Caffeine on Induced Hyperemia Within Upper Extremities
   Austin Butler Hanover College
   Faculty Sponsor: Bryant Stamford Hanover College

8. Effects of Knee Braces on Strength and Range of Motion
   Shelby Adams Hanover College
   Faculty Sponsor: Bryant Stamford Hanover College

9. Effects of Resistance Training, Moderate Intensity, and High Intensity Cycling on Insulin Sensitivity
   Michael Braun Hanover College
   Faculty Sponsor: Bryant Stamford Hanover College

10. Empiric Management of Fever of an Unknown Source in Pediatrics less than 90 Days Old: A Retrospective Chart Review
    Jeremy Kauffman Butler University
    Andrew Taschler Butler University
    Faculty Sponsor: Dennis Gardner Butler University

11. Impact of a Bedside Medication Delivery Program on Readmission Rates
    Jordan Clark Butler University
    Faculty Sponsor: Chad Knoderer Butler University

12. Impact of Online Poverty Simulation on Pre-Professional Students’ Perceptions Toward People in Poverty
    Liana Tzanetakos Butler University
    Faculty Sponsor: Carriann Smith Butler University

13. Investigating the Dissolution and Precipitation of Nifedipine from Soft Gelatin Capsules in an in vitro Model Simulating the Upper Gastrointestinal Tract
    Carolyn Honigford Butler University
    Faculty Sponsor: Hala Fadda Butler University
14. Modulation of the Dopamine Transporter Protein Conformation by Tamoxifen
   Stefanie Schneck Butler University
   Jack Trittipo Butler University
   Rishi Das
   Faculty Sponsor: Conrad Hong Butler University

15. Moxifloxacin versus Levofloxacin or Ciprofloxacin prophylaxis in Acute Myeloid Leukemia Patients Receiving Chemotherapy
   Daniel Przybyski Butler University
   Faculty Sponsor: David Reeves Butler University

16. Pharmacy Interventions in Transitions of Care from Hospital Discharge (PITCH) Pilot Program for Medicare Part D Patients at High-Risk for Readmission
   Muirisha N. Lavender Butler University
   Faculty Sponsor: Carolyn M. Jung Butler University

17. Robust Responses of Neural Stem Cells to Traumatic Brain Injury in Juvenile Animal
   Andrew Chen Indiana University-Purdue University Indianapolis
   Xiaoting Wang Indiana University-Purdue University Indianapolis
   Shu Zhao Indiana University-Purdue University Indianapolis
   Faculty Sponsor: Jinhui Chen Indiana University-Purdue University Indianapolis

18. Survey of Medical Diseases and Cause of Death on the Grounds of the Old Central State Hospital in Central Indiana from 1899 - 1947
   Lisa McRee Indiana University-Purdue University Indianapolis
   Faculty Sponsor: George Sandusky Indiana University-Purdue University Indianapolis

19. Usage of Idarucizumab for Reversal of Dabigatran in the Indiana University Health System
   Nathan Hantz Butler University
   Faculty Sponsor: Deborah Zeitlin Butler University

2:30 PM – 3:30 PM PHYSICS & ASTRONOMY Irwin Library, 2nd Floor

Floor Manager: Elesia Yoon

9. Nonlinear Wave Motion along the Earth’s Surface from a Source Array with Varying Amplitudes
   Marvin Scott Butler University
   Faculty Sponsor: Dan Kosik Butler University

11:00 AM – 12:00 PM PSYCHOLOGY Irwin Library, 3rd Floor

Floor Manager: Teresa Williams

1. An Analysis of the Semantic/Syntactic Content of Conversational Narratives Told by European American Toddlers
   Karah Ellis Saint Mary-of-the-Woods College
   Faculty Sponsor: Douglas Sperry Saint Mary-of-the-Woods College

2. A Comparison of Discordant Speech Acts Addressed to Toddlers Across Two American Communities
   Katia Orozco Saint Mary-of-the-Woods College
   Na-Shaunda Rayford Saint Mary-of-the-Woods College
   Faculty Sponsor: Douglas Sperry Saint Mary-of-the-Woods College

3. A Correlational Study between Self- Efficacy and Eye Contact
   Lauren Jakubczyk Saint Joseph’s College
   Nicole Walsh Saint Joseph’s College
   Faculty Sponsor: Mark Seely Saint Joseph’s College
4. An Examination of Early Language Learning in Deaf and Hearing Children: Strategies, Challenges and Interventions
   Amanda Brown Purdue University Northwest
   Faculty Sponsor: Cynthia Zdanczyk Purdue University Northwest

5. Assessing Reaction Time as a Proxy for Accuracy in Eyewitness Identification Decisions
   Morgan Peterson Butler University
   Caroline Yank Butler University
   Elly Mawi Butler University
   Faculty Sponsor: Stacy Wetmore Butler University

6. Attitudes and Knowledge of Future Teachers to Identify Struggling Readers
   Abigail Reiff Ball State University
   Faculty Sponsors: Janay Sander Ball State University and Thomas Holtgraves Ball State University

7. Can You Feel It? How Asking Influences Psychophysiological States
   Trevor Spelman Butler University
   Kyle Dillon Harvard University
   Faculty Sponsor: R. Brian Giesler Butler University

8. Connecting Impulsivity Dimensions to Externalizing Behaviors with the MMPI-2-RF
   Andrew J. Kremyar Ball State University
   Cameron S. McNeely Ball State University
   Celie L. McKinley Ball State University
   Sarah J. Hapner Ball State University
   Faculty Sponsors: Johnathan D. Forbey Ball State University and Tayla T. C. Lee Ball State University

9. Disabilities and Sexuality
   Kierstin Riels Ball State University
   Mary Ford Ball State University
   Faculty Sponsor: George Gaither Ball State University

10. Emotional Inferences and Reading Genres
    Kaleigh Byrd Ball State University
    Faculty Sponsors: Kristin Ritchey Ball State University and Thomas Holtgraves Ball State University

11. Examining the Imposter Phenomenon: A Contribution from the Locus of Control Theory
    Jordan T. Hall Ball State University
    McKenzie R. Cremeans Ball State University
    Kaylee J. Thatcher Ball State University
    Hannah J. Wikert Ball State University
    Faculty Sponsors: Johnathan D. Forbey Ball State University and Tayla T.C. Lee Ball State University

12. Gender Differences in Externalizing Dysfunction and Sexual Preoccupation
    Andrew J. Kremyar Ball State University
    Ana Marie Ball State University
    Peyton L. Schneider Ball State University
    Faculty Sponsors: Johnathan D. Forbey Ball State University and Tayla T.C. Lee Ball State University

13. Generational and Gender Differences in Employees’ Work Values
    Shelby Hawkins Manchester University
    Miriam Cruz Manchester University
    Larriane Graham Manchester University
    Lucas Al-Zoughbi Manchester University
    Maureen Rammel Manchester University
    Faculty Sponsor: Jack Wiley Manchester University
14. MMPI-2 RF Externalizers and Coping Styles on the Proactive Coping Inventory
   - Jordan Hall  Ball State University
   - Adrianna Caballero  Ball State University
   - Julia Bollwitt  Ball State University
   - Becky Ash  Ball State University
   - Chad Reynolds  Ball State University
   - Faculty Sponsors: Johnathan D. Forbey  Ball State University and Tayla T. C. Lee  Ball State University

15. Physical Effort as a Context for Object Location Memory
   - Erin Murphy  Eastern Illinois University
   - Brian Silverman  Eastern Illinois University
   - Faculty Sponsor: Dan Nardi  Eastern Illinois University

16. Political Affiliation as a Predictor of Response to Uncanny Valley Stimuli
   - April Mullen  Manchester University
   - Faculty Sponsor: David Johnson  Manchester University

17. Students’ Perceptions of Campus Clubs
   - Ashleigh Ridenour  Manchester University
   - Faculty Sponsor: Marcie Coulter-Kern  Manchester University

18. Students’ Perceptions of Men and Women’s Work-Family Conflict in Gender Typical and Atypical Fields
   - Adrianna Caballero  Ball State University
   - Faculty Sponsor: Katie Lawson  Ball State University

19. The Effect of Fear-Based Politics on Implicit Attitudes
   - Dena Dunn  Franklin College
   - Faculty Sponsor: Ryan Rush  Franklin College

20. The Effect of Situational Stress on Fear Extinction Learning
   - Taylor Crisman  Manchester University
   - Amber Willwerth  Manchester University
   - Leah Smith  Manchester University
   - Faculty Sponsor: David Johnson  Manchester University

21. The Effectiveness of Career Fairs in Meeting Student Expectations
   - Marilyn Godinez  Manchester University
   - Mariam Aly Ibrahim  Manchester University
   - Faculty Sponsor: Marcie Coulter-Kern  Manchester University

22. The Effects of Color Paper on Short Term Memory
   - Ruthanne Ekwealor  Manchester University
   - Marilyn Godinez  Manchester University
   - Faculty Sponsor: David Johnson  Manchester University

23. The Effect of Rate of Threat Reinforcement on Fear Learning and Extinction
   - Delaney Ray  Manchester University
   - Lia Gregory  Manchester University
   - Faculty Sponsor: David Johnson  Manchester University

24. The Effects of Laptop Use on Neighboring Students in a Classroom Setting
   - Sarah Harnish  Butler University
   - Eileen Hogan  Butler University
   - Faculty Sponsors: Amanda Gingerich  Butler University and Tara Lineweaver  Butler University

25. What Millennials Want Most from the Work Itself
   - Leah Smith  Manchester University
   - Katy Asphole  Manchester University
   - Kaitlin Powers  Manchester University
   - Faculty Sponsor: Jack Wiley  Manchester University
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<td>11:00 AM – 12:00 PM</td>
<td><strong>SOCIOLOGY 1</strong></td>
<td>Irwin Library, 3rd Floor</td>
<td>Teresa Williams</td>
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<td>26.</td>
<td>Recidivism Rates Among Veterans</td>
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<td>Megan Lalioff <em>Franklin College</em></td>
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<td>Elijah Kellem <em>Franklin College</em></td>
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<td>Kenneth Federmann <em>Franklin College</em></td>
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<td>Faculty Sponsor: Cheryl Crane <em>Franklin College</em></td>
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<td>27.</td>
<td>Social Rejection and Ostracism in the Gay and Bisexual Male Community</td>
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<td>Brandon Million <em>Indiana University-Purdue University Columbus</em></td>
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<td>Faculty Sponsor: Joan Poulsen <em>Indiana University-Purdue University Columbus</em></td>
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<td>2:30 PM – 3:30 PM</td>
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<td>Elesia Yoon</td>
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<td>The Media and Teenage Violence: How Much Is Too Much When It Comes to Adolescent Aggression?</td>
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<td>Taylor Pearson <em>Butler University</em></td>
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<td>Krista Cline</td>
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<td>11:00 AM – 12:00 PM</td>
<td><strong>SUSTAINABILITY, URBAN ECOLOGY, &amp; ENVIRONMENTAL STUDIES</strong></td>
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<td>A Combined Sedimentological and Multi-Proxy Geochemical Analysis of Southern Indiana Phosphate Rock</td>
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<td>Daniel Orazi <em>Indiana University-Purdue University Indianapolis</em></td>
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<td>Julian May <em>Indiana University-Purdue University Fort Wayne</em></td>
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<td>Faculty Sponsors: William Gilhooly <em>Indiana University-Purdue University Indianapolis</em> and Benjamin Dattilo <em>Indiana University-Purdue University Fort Wayne</em></td>
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<td>A Promotional Package for Cloth Diapers</td>
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<td>Kayla D’Alessandro <em>Ball State University</em></td>
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<td>Faculty Sponsor: Paige Waters <em>Ball State University</em></td>
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<td>30.</td>
<td>Assessment of the Parameters and Techniques of the Hoosier Riverwatch Water Quality Monitoring System for Chemical Analysis</td>
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<td>Angela Bittner <em>Taylor University</em></td>
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<td>How Consistent is Volunteer Water Monitoring Data? - From Elementary School Students to Professional Technicians</td>
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<td>Jaylin Gadel <em>Taylor University</em></td>
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<td>Anderton, John: Director’s Session Top Four Papers</td>
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Stephen Hunt, serves as Professor of Communication and Executive Director of the School of Communication at Illinois State University. He recently completed an assignment serving as Chair of Illinois State’s American Democracy Project. As a Carnegie Fellow for Political Engagement, he helps lead national efforts to sharpen the political and civic leadership skills of today’s college students. Hunt is the author of over 30 scholarly articles, many focused on civic and political engagement, and is co-author of a public speaking textbook focused on critical thinking and civic engagement that is used by several communication departments throughout the country. Dr. Hunt earned his Ph.D. in communication education from Southern Illinois University in 1998.

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