CIVIC ENGAGEMENT:
AGENCY and ADVOCACY for EMPOWERING COMMUNITIES

APRIL 7, 2017

PROMOTING EXCELLENCE IN UNDERGRADUATE RESEARCH since 1987

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URC 2018 | APRIL 13

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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.
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
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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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• Theology
• Theology and Ministry
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Dual J.D./M.S. in Sports Administration
See also Media and Communication

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• Theology
• Theology and Ministry
See also Liberal Studies

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Volume 3 (2017) to be online this April
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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
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Nicholas Johnson
Music

R. Jeremy Johnson
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Chad Knoderer
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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
### Volunteers

**Butler University Staff & Faculty**

<table>
<thead>
<tr>
<th>Melody Adkins</th>
<th>Mary Duffer</th>
<th>Katelyn Sussli</th>
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<tr>
<td>Amy Arnold</td>
<td>Franny Gaede</td>
<td>Jill Thompson</td>
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<td>Sally Childs-Helton</td>
<td>Claudia Johnson</td>
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<td>Pam Crea</td>
<td>Vicki Lickliter</td>
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<td>Bonnie Danison</td>
<td>Emily O'Neal</td>
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<td>Mikaela Drake</td>
<td>Kathy Schmid</td>
<td>Teresa Williams</td>
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<td>Rena Duerksen</td>
<td>Sheridan Stormes</td>
<td>Elesia Yoon</td>
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**Butler University Students**

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<tr>
<th>Alyssa Abdelnour</th>
<th>Nicholas Huang</th>
<th>Maria Rapisarda</th>
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<tr>
<td>Karl Agger</td>
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<td>Jacob Applegarth</td>
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<td>Brittany Bluthardt</td>
<td>Allison Keane</td>
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<td>Megan Borries</td>
<td>Brandon Knepper</td>
<td>Graham Stecz</td>
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<td>Morgan Buckley</td>
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<td>Vickie Cook</td>
<td>Nate Lemen</td>
<td>Anna Thomas</td>
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<td>Darby DeFord</td>
<td>Sarah Lenahan</td>
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<td>Jaylah DeGout</td>
<td>Morgan Linzmeier</td>
<td>Lauren Tibbets</td>
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<td>Emily Drwiega</td>
<td>Rachel Metz</td>
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<td>Molly Edwards</td>
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<td>Emily Hasik</td>
<td>Shreya Patel</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.
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*

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*
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

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
DIRECTOR’S SESSION
Jordan Hall 242

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
12:00 PM – 1:15 PM

ART HISTORY

Lilly Hall 133

THE PURSUIT OF HAPPINESS: PERSONAL AND POLITICAL ARTISTIC EXPLORATION

Moderator: Gautam Rao

12:00 PM — Vision of Utopia: Albert Saverys’ Premier Neige

Asumi Oba Hanover College
Faculty Sponsor: Xiaolong Wu Hanover College

12:15 PM — Mixed.

Kaylin Greer Butler University
Faculty Sponsor: Gautam Rao Butler University

12:30 PM — There is No Ordinary Card

Brooke Benoit Butler University
Faculty Sponsor: Gautam Rao Butler University

12:45 PM — Uncapped

Margaret Citron Butler University
Faculty Sponsor: Gautam Rao Butler University

1:00 PM — Maganda

Alexandrea Sanders Butler University
Faculty Sponsor: Gautam Rao Butler University

10:30 AM – 11:45 AM

BIOCHEMISTRY & MOLECULAR BIOLOGY

Gallahue Hall 105

BIOCHEMICAL BASIS OF DISEASE

Moderator: Mark Macbeth

10:30 AM — Identification of M. tuberculosis Enzymes Expressed Under Dormant Growth Conditions

Brent Waibel Butler University
Faculty Sponsor: R. Jeremy Johnson Butler University

10:45 AM — TBCB1R and its Effects on Metabolic Homeostasis and Glucose Regulation

John Cupit Butler University
Faculty Sponsor: Mark Macbeth Butler University

11:00 AM — Determining the Effects of Methanol, Ethanol, Isopropanol, and Glycerol on the Thermal Stability and Catalytic Activity of Rv0045c

Katelyn Baumer Butler University
Faculty Sponsor: Geoffrey C. Hoops Butler University

11:15 AM — Effect of Metals on Catalytic Activity of Mutated Rv0045c Esterase from M. tuberculosis

Isobel Bowles Butler University
Faculty Sponsor: Geoffrey C. Hoops Butler University

11:30 AM — Substrate Specificity of the Novel Serine Hydrolase, LipN, Implicated in the Virulence of Mycobacterium tuberculosis

Daniel Schemenauer Butler University
Faculty Sponsor: R. Jeremy Johnson Butler University
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 (Blattella germanica)
   Eliza Balch Earlham College
   Laura Caldwell Earlham College
   Andrea Ball Earlham College
   Faculty Sponsor: Brent Smith Earlham College
10:30 AM – 11:45 AM

BIOLOGY 2

Gallahue Hall 102

CELL SIGNING 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
12:00 PM – 1:15 PM  BIOLOGY 3  Gallahue Hall 101

**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**

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12:00 PM – 1:15 PM  BIOLOGY 4  Gallahue Hall 102

**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 picketti* Copper Resistance with Soil Bacteria

*Edmond Talbott Bellarmine University*
Faculty Sponsor: **Joanne Dobbins Bellarmine University**
1:30 PM – 2:45 PM  BIOLOGY 5  Gallahue Hall 101

SUSTAINABILITY

Moderator: Julia Angstmann

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

  Liyuan Gao  Earham College  
  Emily Buttrum  Earham College  
  Cassie Olmsted  Earham College  
  Rachel Riggs  Earham College  
  Faculty Sponsor: Brent Smith  Earham 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

1:30 PM – 2:45 PM  BIOLOGY 6  Jordan Hall 172

EVOLUTION

Moderator: Andrew Stoehr

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

  Moataz Noureddine  Earham College  
  Swati Pant  Earham College  
  Faculty Sponsor: Chris Smith  Earham 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  Earham College  
  Maleeka Shrestha  Earham College  
  Faculty Sponsor: Peter Blair  Earham 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 Trispyrazolemethane 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
10:30 AM – 11:45 AM COMMUNICATION & MEDIA STUDIES 1 Jordan Hall 348

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 Franke Purdue University Northwest
Cain Buchmeier Purdue University Northwest
Michael Vela Purdue University Northwest
Kalyn Jenkins Purdue University Northwest
David Bork Purdue University Northwest
Faculty Sponsor: Deanna Francoeur-Schmidt Purdue University Northwest

12:00 PM – 1:15 PM COMMUNICATION & MEDIA STUDIES 2 Jordan Hall 348

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
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

12:00 PM – 1:15 PM   DANCE & THEATRE  Lilly Hall 145

SOCIAL CONTEXTS OF PERFORMANCE: SOCIETY & THE SELF

Moderator: Owen Schuab

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 Wolitinnek 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
10:30 AM – 11:45 AM  EDUCATION 1  Jordan Hall 174

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

12:00 PM – 1:15 PM  EDUCATION 2  Jordan Hall 174

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
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

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
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<th>Time</th>
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<th>Location</th>
<th>Moderator</th>
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<tr>
<td>12:00 PM – 1:15 PM</td>
<td>ENGLISH LITERATURE &amp; CREATIVE WRITING 3</td>
<td>Jordan Hall 305</td>
<td>Natalie Carter</td>
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<tr>
<td></td>
<td>WOMEN WRITING AND WOMEN WRITERS</td>
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<tr>
<td>12:00 PM</td>
<td>Monstrous Women: Exploring Historical Witchcraft and its Presence in <em>The Witch</em></td>
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<td>Noah Patterson <em>Ball State University</em></td>
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<tr>
<td>12:15 PM</td>
<td>From Girls’ Literature to New Women Texts: Scribbling Women for Girls to Read</td>
<td></td>
<td>Alexis Schmidt <em>Butler University</em></td>
</tr>
<tr>
<td>12:30 PM</td>
<td>The Cost of Cognitive Dissonance in <em>The Help</em> and <em>Go Set a Watchman</em></td>
<td></td>
<td>Hannah Hood <em>Taylor University</em></td>
</tr>
<tr>
<td>12:45 PM</td>
<td>“Docile Bodies,” Corrective Training, and Panopticism in Charlotte Perkins Gilman’s <em>The Yellow Wallpaper</em></td>
<td></td>
<td>Bridget Peden <em>Butler University</em></td>
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<tr>
<td>1:30 PM – 2:45 PM</td>
<td>ENGLISH LITERATURE &amp; CREATIVE WRITING 4</td>
<td>Jordan Hall 303</td>
<td>J. Rocky Colavito</td>
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<td></td>
<td>POETS AND POETRY</td>
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<tr>
<td>1:30 PM</td>
<td>Inside the Self: Exploring Memoir Writing through Poetry</td>
<td></td>
<td>Noel Ortega <em>Butler University</em></td>
</tr>
<tr>
<td>1:45 PM</td>
<td>When Poetry and Humor Get Hitched</td>
<td></td>
<td>Christian Hartselle <em>Butler University</em></td>
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<tr>
<td>3:00 PM – 4:15 PM</td>
<td>ENGLISH LITERATURE &amp; CREATIVE WRITING 5</td>
<td>Jordan Hall 303</td>
<td>J. Rocky Colavito</td>
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<tr>
<td></td>
<td>GRACE, MORALS, LOVE, AND HONOR</td>
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<tr>
<td>3:00 PM</td>
<td>“Things Never Happen the Same Way Twice”: A Comprehensive Look at Two of Christian Fantasy’s Most Influential Heroes</td>
<td></td>
<td>Rachael Elliott <em>Grace College</em></td>
</tr>
<tr>
<td>3:15 PM</td>
<td>Agape: The Unfathomable Love in C. S. Lewis and J. K. Rowling</td>
<td></td>
<td>Jennie Gold <em>Grace College</em></td>
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<tr>
<td>3:30 PM</td>
<td>Progressions of Grace in Saint Augustine’s <em>Confessions</em> and Marilynne Robinson’s <em>Lila</em></td>
<td></td>
<td>Kate Boxell <em>Taylor University</em></td>
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<tr>
<td>3:45 PM</td>
<td>The Immorality of Society’s Moral Code: A Rejection of Societal Norms in <em>The Criminal of Lost Honor</em> and <em>The Accountant</em></td>
<td></td>
<td>Jaclyn Boyer <em>Butler University</em></td>
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</table>
HISTORY 1

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

HISTORY 2

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

Collen 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
10:30 AM – 11:45 PM MODERN LANGUAGES, LITERATURES, & CULTURES 1 Jordan Hall 336C

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 McGheehey Butler University
   Faculty Sponsor: Linda Willem Butler University

10:30 AM – 11:45 PM MODERN LANGUAGES, LITERATURES, & CULTURES 2 Jordan Hall 340

LANGUAGE AND CULTURE

Moderator: Irune del Rio Gabiola

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
# Latin America I

**Moderator:** Gabriela Muniz

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<th>Faculty Sponsor</th>
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<td>10:30 AM</td>
<td>Los Dos Elementos de la Realidad</td>
<td>Maggie Brauch</td>
<td>Butler University</td>
<td>Gabriela Muniz</td>
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<tr>
<td>10:45 AM</td>
<td>Representations of Mental Illness in the Works of Horacio Quiroga</td>
<td>Bilal Jawed</td>
<td>Wabash College</td>
<td>Ivette Wilson</td>
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<tr>
<td>11:00 AM</td>
<td>Un Análisis breve del Suspenso de Crónica de una Muerte Anunciada</td>
<td>Emily Pool</td>
<td>Butler University</td>
<td>Gabriela Muniz</td>
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<tr>
<td>11:15 AM</td>
<td>La Mujer en el Policial: Transgrediendo las Normas Tradicionales</td>
<td>Noemi Ponzoni</td>
<td>Butler University</td>
<td>Gabriela Muniz</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>How Juan Padrón and Quino Utilize Humor to Talk About Issues that Are Not Funny</td>
<td>Austin Dukes</td>
<td>Wabash College</td>
<td>Ivette Wilson</td>
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### Mujer

**Moderator:** Liliana Goens

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<th>Institution</th>
<th>Faculty Sponsor</th>
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<tr>
<td>12:00 PM</td>
<td>Feminización del Nuevo Mundo y su influencia en el desarrollo de Hispanoamérica</td>
<td>Alexandra Weeden</td>
<td>Hanover College</td>
<td>Eduardo Santa Cruz</td>
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<tr>
<td>12:15 PM</td>
<td>El Poder Femenino</td>
<td>Jaqueline Rosales</td>
<td>Franklin College</td>
<td>Daniel Alsop</td>
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<tr>
<td>12:30 PM</td>
<td>A Literary Exploration of Feminist Theory of Intersectionality in Colonial Latin America</td>
<td>Heather Armor</td>
<td>Franklin College</td>
<td>Kathryn Johnston</td>
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<td>12:45 PM</td>
<td>Las Mujeres Espanolas Como la Otra Durante la Contra reforma en el Siglo XVII</td>
<td>Sarah Ramon</td>
<td>Franklin College</td>
<td>Sara Colburn-Alsop</td>
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<tr>
<td>1:00 PM</td>
<td>La Vida Criptográfica de Santa Teresa de Jesús</td>
<td>Jocelyne Rico Medina</td>
<td>Ball State University</td>
<td>Stephen Hessel</td>
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### 12:00 PM – 1:15 PM

**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 Maric 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**
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
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

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
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*

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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 Truboletti 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
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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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
### 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**

### 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**
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<th>Time</th>
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<tbody>
<tr>
<td>10:30 AM</td>
<td>Evaluation of the Influence of Education on the Attitudes of Butler University Pharmacy Students towards Mental Illness</td>
<td>Courtney Schindler Butler University</td>
<td>Laura Ruekert Butler University and Priscilla Ryder Butler University</td>
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<tr>
<td>10:45 AM</td>
<td>Persistence in Addiction Recovery: Pharmacist Role in Transition of Care to Outpatient Rehab</td>
<td>Taylor Harlow Butler University</td>
<td>Laura Ruekert Butler University</td>
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<tr>
<td>11:00 AM</td>
<td>Exploring Air Medical Transport in Rural Environments</td>
<td>Colton Junod Butler University</td>
<td>Catherine Pangan Butler University</td>
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<tr>
<td>11:15 AM</td>
<td>Fosfomycin Versus Ertapenem for the Treatment of Extended-Spectrum β-Lactamase Urinary Tract Infections in the Outpatient Settings: A Retrospective Chart Review</td>
<td>Andrew Pak Butler University</td>
<td>Jarrett Amsden Butler University</td>
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<tr>
<td>11:30 AM</td>
<td>Evaluation of Pharmacy Student Opinions of an Interactive Trivia Game Based on OTC Special Population Topics</td>
<td>Brittany Wells Butler University</td>
<td>Sheel M. Patel Butler University</td>
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<td>10:30 AM</td>
<td>Adult Antimicrobial Renal Dosing Policy Evaluation: A Retrospective Chart Review</td>
<td>Sarah Lowry Butler University, Kelly Davidson Butler University</td>
<td>Alison Walton Butler University</td>
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<tr>
<td>10:45 AM</td>
<td>Assessing Proper Over-the-counter Medication Selection Before and After Implementation of a Treatment Guide</td>
<td>Lauren Palmer Butler University, Sonya Aghili Butler University, Nicole Jackson Butler University, Krista Policchio Butler University</td>
<td>Alison Walton Butler University</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>“Lucas the Lion Fights Leukemia”: An Educational Coloring Book for Children</td>
<td>Alexandra Mauer Butler University, Kelsey Lucas Butler University</td>
<td>Alison Walton Butler University</td>
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<tr>
<td>11:15 AM</td>
<td>The Effectiveness of a Hyperglycemic Action Plan in Diabetic Patients: A Retrospective Study</td>
<td>Brittany Urbaniak Butler University</td>
<td>Deborah Zeitlin Butler University</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Assessing Engagement and Knowledge Regarding Advanced Care Directives</td>
<td>Jacob Bradshaw University of Indianapolis, Cheyenne Kern University of Indianapolis, Ariel Galliher University of Indianapolis</td>
<td>Amie Wojtyna University of Indianapolis</td>
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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

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
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<td>12:00 PM</td>
<td>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</td>
<td>Timothy Davis Butler University</td>
<td>Laurence Kennedy Butler University</td>
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<td>12:15 PM</td>
<td>Characterization of Vitamin D Deficiency among Trauma Patients with Fractures</td>
<td>Ternell Anderson IV Butler University</td>
<td>Carolyn Jung Butler University</td>
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<tr>
<td>12:30 PM</td>
<td>Pharmacy Practice and Health Administration: A Case-Based Approach to Navigating the Healthcare Environment</td>
<td>Paulina Phan Butler University, Daniel Cutter Butler University</td>
<td>Jessica Wilhoite Butler University</td>
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<tr>
<td>12:45 PM</td>
<td>Pharmacy 2.0: An Analysis of Labs in Pharmacies Thus Far, and a Proposed Business Plan for Adding Laboratory Services Inside Community Pharmacies</td>
<td>Emily Bailey Butler University</td>
<td>Joe Jordan Butler University</td>
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<td>1:00 PM</td>
<td>Pharmacy Interventions in Transitions of Care from Hospital Discharge (PITCH) Pilot Program for Medicare Part D Patients at High-Risk for Readmission</td>
<td>Muirisha N. Lavender Butler University</td>
<td>Carolyn M. Jung Butler University</td>
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<td>A Novel Formulation for Overcoming P-glycoprotein Induced Docetaxel Resistance in MCF-7 Breast Cancer Cells</td>
<td>Ryan Dimmitt Butler University</td>
<td>Sudip Das Butler University</td>
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<td>12:15 PM</td>
<td>Assessment of Drug Take-Back Utilization Based on Medication Cost</td>
<td>Sienna Reuter Butler University, Steven Meuleman Butler University</td>
<td>Angela Ockerman Butler University</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>A Readability Assessment on the Health Information Available when searching for Zika Virus on the Top Three Search Engines</td>
<td>Christian Schall Butler University, Jacob Ready Butler University</td>
<td>Jeanne VanTyle Butler University</td>
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<td>12:45 PM</td>
<td>Assessment of Butler University Pharmacy Students’ and Physician Assistant Students’ Knowledge and Confidence on Proper Medication Disposal</td>
<td>Joseph Kahles Butler University, Mike Park Butler University, Kyle Saunders Butler University</td>
<td>Tracy Sprunger Butler University</td>
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<tr>
<td>1:00 PM</td>
<td>A Qualitative Assessment of Attitudes and Behaviors Surrounding Bottled Water Consumption Among Students at Butler University</td>
<td>J. Logan Goff Butler University, Eric Black Butler University</td>
<td>Priscilla Ryder Butler University</td>
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Moderator: Brenda Caudill

12:00 PM — Prescribing Behaviors of Family Medicine Residents for the Treatment of Urinary Tract Infections and Pyelonephritis

Danielle Thomas Butler University
Brandon Elpers Butler University
Bradley Carqueville Butler University
Faculty Sponsor: Tracy Costello Butler University

12:15 PM — Quantitative Research: Student Perspectives on Pharmaceutical Industry in Professional Curriculum

Ellen Clauss Butler University
Faculty Sponsor: Chad Knoderer Butler University

12:30 PM — Rate of Evidence-based Treatment for Native Valve Infective Endocarditis Caused by Viridans Group Streptococci, Staphylococcus aureus, and Enterococcus spp: A Retrospective Review

Conor Pardo Butler University
Mitchell Lees Butler University
Faculty Sponsor: Kevin Tuohy Butler University

12:45 PM — Assessment of Drug Take-Back Utilization Based on Medication Cost

Sarah Levenson Butler University
Kameron Baker Butler University
Faculty Sponsor: Angela Ockerman Butler University

1:00 PM — Safe Sexual Behavior on Public and Private Campuses

Autumn McCormick Valparaiso University
James Meyer Valparaiso University
Marcy Kiger Valparaiso University
Faculty Sponsor: Matthew Ringenberg Valparaiso University

Moderator: Laura Ruckert

12:00 PM — Evaluation of a Business Plan Assignment in an Ambulatory Care Pharmacy Elective

Kristina Traxler Butler University
Andrea Baker Butler University
Faculty Sponsor: Jessica Wilhoite Butler University

12:15 PM — Impact of Interprofessional Education in Geriatric Medicine among Pharmacy and Physician Assistant Students at Butler University as Evaluated by RIPLS

Paige Detzler Butler University
Nicole Coglianese Butler University
Lindsey Sopetti Butler University
Faculty Sponsors: Cathy Ramey Butler University and Sheel Patel Butler University

12:30 PM — Stress and Coping Mechanisms Utilized by Pharmacy Students

Zoe Castellano Butler University
Macy Plummer Butler University
Faculty Sponsor: Jane Gervasio Butler University

12:45 PM — The Association of Specific Factors and Medication Adherence for Diabetic Patients in a Self-Insured Employer Health Plan

Ryan Rust Butler University
Faculty Sponsors: Jason Range Butler University and Priscilla Ryder Butler University

1:00 PM — The Causes of Crohn’s Disease

Destiny Blake Grace College
Faculty Sponsor: Paulette Saunders Grace College
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

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 VanWymsberghe 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 Tzanetakos 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 Vadhri** 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
12:00 PM – 1:15 PM  PHILOSOPHY & RELIGION 2  Jordan Hall 207

RELIGION AND PHILOSOPHY IN MIND AND BODY

Moderator: Tiberiu Popa

12:00 PM — Christian Liberation Theology and Disability  
Charis Webb  Butler University  
Faculty Sponsor: Brent Hege  Butler University

12:15 PM — Determinism & Ancient Greek Psychological Theory  
James Weislogel  Butler University  
Faculty Sponsor: Tiberiu Popa  Butler University

12:30 PM — A Psychological and Philosophical Understanding of Death: An Analysis of Platonic and Epicurean Philosophy in Modern America  
Alexina-Marie Hupp  Xavier University  
Faculty Sponsor: Thomas Strunk  Xavier University

12:45 PM — Grieve the Possum: Re-examining the Human/Animal Distinction and Recognizable Grief  
Kaela Bonaguro  Indiana University Bloomington  
Faculty Sponsor: Rebekah Sheldon  Indiana University Bloomington

1:00 PM — The Ethics Behind the Affordable Care Act  
Nathan Kesling  Butler University  
Faculty Sponsor: Richard McGowan  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
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

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 — 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

2:00 PM — What is the Two-Party System doing to America’s Democracy?

   James Cecil Butler University
   Faculty Sponsor: Greg Shufeldt Butler University
**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

**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 Highborg 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 Mikaloski  Butler University
  Paige Pourre  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
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

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

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 Mikalouski** 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
### 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*

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### 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*
RESEARCH ROUNDTABLE  
Jordan Hall 174

Moderator: **Dacia Charlesworth**

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

*Caleb Wakefield* Butler 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  
SOCIOLOGY 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?  
**Kaitlynne 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 Buttermen  *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 Stalter  *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*
1:30 PM – 2:45 PM

**SOCIOLOGY 6**

*Jordan Hall 203*

**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*

3:00 PM – 4:15 PM

**SOCIOLOGY 7**

*Jordan Hall 201*

**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.

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<td>2:30 PM – 3:30 PM</td>
<td>BIOCHEMISTRY &amp; MOLECULAR BIOLOGY</td>
<td>Irwin Library, 3rd Floor</td>
<td>Teresa Williams</td>
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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 Newly Established 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*
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<td>Identification of Functions of Pseudouridine Synthase 7 in <em>Candida albicans</em></td>
<td>Ethan Pickerill</td>
<td>Ball State University</td>
<td>Doug Bernstein</td>
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<td>2</td>
<td>Identification of Pseudomonas species in Leaf Litter, Soil, and Water</td>
<td>Monze Silva</td>
<td>Midway University</td>
<td>Cynthia Ryder</td>
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<td>3</td>
<td>Investigation of the FSHR-1 Receptor as a Potential Substrate of the Anaphase Promoting Complex at the <em>C. elegans</em> Neuromuscular Junction</td>
<td>David Emch, Kyle Cherry, Amy Godfrey</td>
<td>Butler University</td>
<td>Jennifer Kowalski</td>
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<td>4</td>
<td>Nociception via Class IV da Sensory Neurons in Drosophila larvae</td>
<td>Allison Murphy</td>
<td>Denison University</td>
<td>Eric Liebl</td>
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<td>5</td>
<td>Patterns and Impacts of Vine Infestation on Trees in a Lowland Old Growth Forest</td>
<td>Chania Whitaker</td>
<td>Earlham College</td>
<td>Brent Smith</td>
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<td>6</td>
<td>Placement of Bee Colonies in Trees Enhances Beneficial Colony Fungi for Disease Prevention</td>
<td>Andre Lorenz, Anthony LeBarge</td>
<td>Wittenberg University</td>
<td>Jay Yoder</td>
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<td>7</td>
<td>Possibility for Entomopathogenic Fungus Biocontrol of Winter Tick Infestations on Moose</td>
<td>Christian Randazzo, Cameron Dobrotka, Brett Siemon</td>
<td>Wittenberg University</td>
<td>Jay Yoder</td>
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<td>8</td>
<td>Student Involvement in a Small Liberal Arts College: How Does Social Engagement Relate to Indicators of Stress &amp; Success?</td>
<td>Archit Agarwal</td>
<td>Denison University</td>
<td>Jessica Rettig</td>
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<td>Testing Anthelmintics on <em>C. elegans</em> at the First Larval Stage (L1)</td>
<td>Kyle Busse</td>
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<td>The Developmental Mechanisms of Phenotypic Plasticity in Butterfly Wing Patterns</td>
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<td>Using <em>C. elegans</em> to Evaluate Ivermectin Toxicity over Time</td>
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### BUSINESS & ECONOMICS

**Floor Manager:** Courtney Rousseau

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*

### CHEMISTRY

**Floor Manager:** Teresa Williams

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
   **Anae 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 Szczerba** *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

2:30 PM – 3:30 PM     CLASSICAL STUDIES     Irwin Library, 2nd Floor

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

2:30 PM – 3:30 PM     COMMUNICATION SCIENCES & DISORDERS     Irwin Library, 1st Floor

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
2:30 PM – 3:30 PM  EDUCATION  Irwin Library, 1st Floor

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

2:30 PM – 3:30 PM  MATHEMATICS & COMPUTER SCIENCE  Irwin Library, 2nd Floor

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
   Stephanie Schneck Butler University
   Jack Trittito Butler University
   Rishi Das
   Faculty Sponsor: Conrad Hong Butler University

15. Moxifloxacin versus Levofoxacin or Ciprofloxacin prophylaxis in Acute Myeloid Leukemia Patients Receiving Chemotherapy
   Daniel Przybylski 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
   Caroline Yank Butler University
   Elly Mawi Butler University
   Faculty Sponsor: 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. Cromeans 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
    Larraine 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  
   Adrianna Caballero  
   Julia Bollwitt  
   Becky Ash  
   Chad Reynolds  
   Faculty Sponsors: Johnathan D. Forbey  
   Tayla T. C. Lee  

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

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

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

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

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

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

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

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

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

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

25. What Millennials Want Most from the Work Itself  
   Leah Smith  
   Katy Asphole  
   Kaitlin Powers  
   Faculty Sponsor: Jack Wiley
### SOCIOLOGY 1
Irwin Library, 3rd Floor

Floor Manager: **Teresa Williams**

26. *Recidivism Rates Among Veterans*
   - Megan Lalioff *Franklin College*
   - Elijah Kellem *Franklin College*
   - Kenneth Federmann *Franklin College*
   - Faculty Sponsor: Cheryl Crane *Franklin College*

27. *Social Rejection and Ostracism in the Gay and Bisexual Male Community*
   - Brandon Million *Indiana University-Purdue University Columbus*
   - Faculty Sponsor: Joan Poulsen *Indiana University-Purdue University Columbus*

### SOCIOLOGY 2
Irwin Library, 2nd Floor

Floor Manager: **Elesia Yoon**

10. *The Media and Teenage Violence: How Much Is Too Much When It Comes to Adolescent Aggression?*
   - Taylor Pearson *Butler University*
   - Faculty Sponsor: Krista Cline *Butler University*

### SUSTAINABILITY, URBAN ECOLOGY, & ENVIRONMENTAL STUDIES
Irwin Library, 3rd Floor

Floor Manager: **Teresa Williams**

28. *A Combined Sedimentological and Multi-Proxy Geochemical Analysis of Southern Indiana Phosphate Rock*
   - Daniel Orazi *Indiana University-Purdue University Indianapolis*
   - Julian May *Indiana University-Purdue University Fort Wayne*
   - Faculty Sponsors: William Gilhooly *Indiana University-Purdue University Indianapolis* and Benjamin Dattilo *Indiana University-Purdue University Fort Wayne*

29. *A Promotional Package for Cloth Diapers*
   - Kayla D’Alessandro *Ball State University*
   - Faculty Sponsor: Paige Waters *Ball State University*

30. *Assessment of the Parameters and Techniques of the Hoosier Riverwatch Water Quality Monitoring System for Chemical Analysis*
   - Angela Bittner *Taylor University*
   - Faculty Sponsor: Daniel King *Taylor University*

31. *How Consistent is Volunteer Water Monitoring Data? - From Elementary School Students to Professional Technicians*
   - Jaylin Gadel *Taylor University*
   - Faculty Sponsor: Daniel King *Taylor University*
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URC KEYNOTE SPEAKER

STEPHEN HUNT, PH.D.

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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