

CONFERENCE TEAM

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Dr. Tiberiu Popa

Physics

Dr. Xianming Han

Political Science

Dr. Robin Turner

Psychology

Dr. Joel Martin

Sociology

Dr. Antonio Menendez

Visual Art

Dr. Elizabeth Mix

URC CONFERENCE SCHEDULE

7:30 a.m.	Conference Check-in 2nd Floor Atherton Union
7:30 a.m. – 10:00 a.m.	Continental Breakfast, Reilly Room, Atherton Union
9:00 a.m. – 4:00 p.m.	Concurrent Oral Presentation Sessions (see pages 5 – 26) for specific session times)
9:30 a.m. – 10:30 a.m.	Poster Session 1
11:00 a.m. – 12:00 p.m.	Poster Session 2
12:30 p.m. – 1:30 p.m.	Poster Session 3
2:00 p.m. – 3:00 p.m.	Poster Session 4

All Posters Sessions are on the first floor of Irwin Library
See pages 26 – 33 for specific poster presentations

10:00 a.m. – 3:00 p.m.	Visual Art Display Irwin Library Atrium
10:30 a.m. – 12:00 p.m.	SCICentralPlains Session Jordan Hall 183
11:30 a.m. – 1:30 p.m.	Box Lunches Available in Reilly Room, Atherton Union
12:00 p.m. - 12:30 p.m.	Welcome to the Butler URC from Associate Provost Laura L. Behling Reilly Room, Atherton Union
1:00 p.m. – 3:00 p.m.	Lemonade & Cookies in Irwin Library
1:00 p.m. – 2:30 p.m.	SCICentralPlains Session Jordan Hall 183

This wonderful conference would not be possible without the superlative efforts of our colleagues and students from across the campus. We thank you for all you do to make this day a success.

Staff & Faculty From Academic Affairs: Melody Adkins, Amy Aldridge, Connie Anders, Teri Amberger, Julie Barrett, Laura Brandenburg, Pam Crea, Susan Greenfield, Anne Minnich-Beck, Carol Montgomery, Lori Moore, Karen Newberry, Jennifer Page, Chris Price, Mary Proffitt, Kate Taube-Osborn, Jo Wagoner, and Teresa Williams.

Student Workers: Carly Biddle, Jessica Blackport, Methawee Boriboune, Stephen DeBruyn, Sam Erdman, Demetrius Fassas, Kenneth Harding, Marcus Harvey, Kagdi Rameez, Lindsey VanWinkle, Jacob Wade, Peter Winter and Katie Youngen.

The staff members from Conferences & Special Events, Campus Impressions, Facilities, Print Marketing & Communications, Information Technology, and Web Marketing & Communications.

PRESENTATION SCHEDULE

ANTHROPOLOGY

SESSION ONE: Beauty, Authenticity and Identity: Cultural Constructions of Value

Moderator: Professor Sholeh Shahrokhi, Jordan Hall 276

09:30 AM – Cultural Biases within Art

Ginny Swale, Faculty Sponsor: Sholeh Shahrokhi, *Butler University*

09:45 AM – Conceptions of Identity in Teotitlán del Valle

Angela Miller, Faculty Sponsor: Ageeth Sluis, *Butler University*

10:00 AM – Reifying Beauty: Hair, Gender, & Power

Matthew Free, Faculty Sponsor: Sholeh Shahrokhi, *Butler University*

10:15 AM – Food Porn: the Art of Food Photography, Blogging, and Entering the "Foodie" Culture

Emilija Grinvalds, Faculty Sponsor: Troy Hill, *Butler University*

SESSION TWO: Overcoming "Othering": Engagements with Colonial and Post-Colonial Contexts

Moderator: Professor Sholeh Shahrokhi, Jordan Hall 276

10:45 AM – Harry Potter and the Manifestations of Colonialism

John Shaw, Faculty Sponsor: Sholeh Shahrokhi, *Butler University*

11:00 AM – The Curse of Being Iraqi: A Summer in Kurdistan

Patrick Thevenow, Faculty Sponsor: Elise Edwards, *Butler University*

11:15 AM – A Glimpse of Ghana

Kelly Hamman & Jenna Wheaton, Faculty Sponsor: Deborah Corpus *Butler University*

11:30 AM – Examining the Colonial Project: James Cameron's *Avatar* and the Conquest of Knowledge and Desire

Tia Osborne, Faculty Sponsor: Sholeh Shahrokhi, *Butler University*

SESSION THREE: The Ties that Bind: Rituals and Practices of Community-Making

Moderator: Professor Susan Hyatt, Jordan Hall 276

12:30 PM – The Catholic Church and Mexican Immigrants in Indianapolis: The Immigrant Experience in Indianapolis at St. Philip Neri

Ryan Logan, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

12:45 PM – Coffee and Dates: Perceptions of Life in the Modern Middle East

Patrick Thevenow, Faculty Sponsor: Elise Edwards, *Butler University*

01:00 PM – Death in the Neighborhood of Saturdays: An Ethnographic Portrait of Mortuary Practices from Indianapolis' Old Southside

Anne Waxingmoon, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

01:15 PM – New Brew: The Emergence of Microbrewing in the American Midwest

Dustin Klingler, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

SESSION FOUR: A Mega-Event with Super Effects?: Ethnographic Investigations of Indianapolis' 2012 Super Bowl

Moderator: Professor Elise Edwards, Jordan Hall 276

02:15 PM – Super Hoosier Hospitality

Oaksoon Callahan, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

02:30 PM – A Fatal Attraction: The Symbiotic Relationship Between Indianapolis and a Sports Strategy

Lian Thang, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

02:45 PM – The Near East Side Legacy: Revitalization or Gentrification?

Samantha Adamson, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

03:00 PM – While Neighborhoods Decline, Georgia Street Rises: An Analysis of Downtown Development and the Super Bowl in Indianapolis

Stephen Godanis, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

03:15 PM – Job Scrimmage: After the Game Is Over

Amanda Jolliffe, Faculty Sponsor: Susan Hyatt, *Indiana University/Purdue University at Indianapolis*

BIOLOGY

SESSION ONE: Ecology/Organismal Biology A

Moderator: Professor Philip Villani & Professor Rebecca Dolan, Gallahue Hall 105

09:00 AM – Understanding Invasion Patterns of Honeysuckle at Butler University via Genetic Structure

Ashley Neiweem, Faculty Sponsor: Nathanael Hauck, *Butler University*

09:15 AM – Do Butterfly Communities Change Over Time in Northern California?

Lucas Avery, Faculty Sponsor: Andrew McCall, *Denison University*

09:30 AM – Effects of Intraspecific Competition on Brood Ball Construction Time of East African Dung Beetles

Emma Grygotis & George Bouchard, Faculty Sponsor: Leslie Bishop, *Earlham College*

09:45 AM – Genetic Diversity in Genus *Myriophyllum*

Kelly Crider, Faculty Sponsor: Nathanael Hauck, *Butler University*

10:00 AM – Genetic Variation in the Globally Rare Charophyte *Chara Brittonii* (Characeae)

Ryan Scribalo, Faculty Sponsor: Robin Scribailo, *Purdue University North Central*

10:15 AM – Is Eurasian Water-Milfoil (*Myriophyllum spicatum*) an Introduced Invasive or Native Aquatic Plant Species in North America?

Helen Sookradge & Jennifer Topolski, Faculty Sponsor: Robin Scribailo, *Purdue University North Central*

10:30 AM – Natural Selection on Insect Resistance in Several Populations of Wild Radish

Clare Meernik, Faculty Sponsor: Andrew McCall, *Denison University*

10:45 AM – Periwinkle Eradication: Are Multiple Years of Herbicide Application Necessary?

Stacy Buschhaus, Faculty Sponsor: Darrin Rubino, *Hanover College*

11:00 AM – Patterns of Tree Seedling Invasion Over Time within Self-Thinning, Near Monocultures of *Prunus serotina*

Jonathan (Yoni) Glogower & Casey McCabe, Faculty Sponsor: Brent Smith, *Earlham College*

11:15 AM – Where do the Bugs Go? Pollination Networks in Alpine Meadows

Alina Kanaski, Faculty Sponsor: Chris Smith, *Earlham College*

11:30 AM – Queen, Worker, and Male Yellowjacket Wasps Receive Different Nutrition during Development

Kevin Schmidt, Faculty Sponsor: Chris Smith, *Earlham College*

11:45 AM – Thieves or Friends: Are Specialist Bees More Efficient at Removing Pollen than Generalists?

Kellen Paine, Faculty Sponsor: Brent Smith, *Earlham College*

SESSION TWO: Cell/Molecular Biology A

Moderator: Professor Nat Hauck & Professor Jim Shellhaas, Gallahue Hall 106

09:00 AM – Systemic Acquired Resistance in Moss: Further Evidence for Conserved Plant Defense Mechanisms

Peter Winter, Faculty Sponsor: Nathanael Hauck, *Butler University*

09:15 AM – A New Assay to Measure Uptake by S-Adenosyl-L-methionine (SAM) in *Escherichia Coli* Transformed with a Yeast SAM Permease Expression Vector

Kirsten Daykin, Faculty Sponsor: Jeffrey Hughes, *Millikin University*

09:30 AM – Analysis of Culture Media for Compounds Exported from *Escherichia Coli* with In Vivo S-adenosylmethionine Hydrolase Activity

Stephanie Gates, Faculty Sponsor: Jeffrey Hughes, *Millikin University*

09:45 AM – The Cloning and Analysis of the Spätzle Cytokine in Hermit Crabs (*Coenobita clypeatus*)

Brittany Sherron, Faculty Sponsor: Samuel Galewsky, Cynthia Handler, *Millikin University*

10:00 AM – Analysis of DNA Sequence and Enzyme Expression of Cloned Punitive T3 SAMase Homologs in *Escherichia Coli*

Ian Callahan, Faculty Sponsor: Jeffrey Hughes, *Millikin University*

10:15 AM – Developing a Temperature-Sensitive S-adenosyl-L-methionine (SAM) Hydrolase Expression Vector to Study SAM Metabolism in *E. Coli*

Matt Alward, Faculty Sponsor: Jeffrey Hughes, *Millikin University*

10:30 AM – Hypersensitivity Response and Systemic Acquired Resistance in *Mnium cuspidatum* upon Pathogenic Infection by *Pythium irregulare*

Rachel Heck, Faculty Sponsor: Philip Villani, *Butler University*

10:45 AM – Identification of Airborne Mold on the Campus of Bellarmine University

Samuel Harris, Faculty Sponsor: Joanne Dobbins, *Bellarmino University*

11:00 AM – Investigation of the Relationship Between the Anaphase Promoting Complex and the FSHR-1 Protein in Regulating Synaptic Transmission at the *C. elegans* Neuromuscular Junction

Amy Wasilk, Faculty Sponsor: Jennifer Kowalski, *Butler University*

11:15 AM – Possible Relationship between In Vivo S-adenosyl-L-methionine Hydrolase Activity and Quorum Sensing in *Escherichia coli*

Grace Walworth, Faculty Sponsor: Jeffrey Hughes, *Millikin University*

11:30 AM – The Characterization of the S1 transposon in Sweet and Sour Cherry Trees

Karissa Miller, Faculty Sponsor: Nathanael Hauck, *Butler University*

11:45 AM – Refining the Annotations of Malaria Genomes

Asaad Alkhouli, Faculty Sponsor: Peter Blair, *Earlham College*

SESSION THREE: Biochemistry/Cell/Molecular Biology B

Moderator: Professor Jeremy Johnson, Gallahue Hall 101

01:00 PM – Active Site Characterization of *Vibrio Cholerae* ybF

Liz Ellis, Faculty Sponsor: Jeremy Johnson, *Butler University*

01:15 PM – Comparison of the Substrate Specificity of Homologous Esterases from *Mycobacterium tuberculosis* and *Vibrio cholerae*

Alexandra Gehring, Faculty Sponsor: Jeremy Johnson, *Butler University*

01:30 PM – Synthesis and Characterization of Ester Derivatives of Chloramphenicol

Nathan Clarke, Faculty Sponsor: Jeremy Johnson, *Butler University*

01:45 PM – Analysis of Global Gene Expression in Bladder Cancer Cells

Vera Staley & Rachel Warwar, Faculty Sponsor: Lina Yoo, *Denison University*

02:00 PM – C-mpl is Expressed on Osteoblasts and Osteoclasts and is Important in Regulation of Skeletal Homeostasis

Tomas Meijome, Faculty Sponsor: Melissa Kacena, *Indiana University/Purdue University at Indianapolis*

02:15 PM – Embryonic Bone Development and Nfat Expression in the Ts65Dn Mouse Model for Down Syndrome

Ahmed Malik, Faculty Sponsor: Randall Roper, *Indiana University/Purdue University at Indianapolis*

02:30 PM – mTOR Signaling Mediates TBI-enhanced Neural Stem Cell Proliferation

Pich Seekaew, Faculty Sponsor: Jinhui Chen, *Indiana University/Purdue University at Indianapolis*

SESSION FOUR: Cell/Molecular Biology C

Moderator: Professor Jennifer Kowalski & Professor Randall Roper, Gallahue Hall 105

01:00 PM – Identification of Transcription Factors Associated with Down Syndrome Skeletal Abnormalities

Nicole Shepherd, Faculty Sponsor: Randall Roper, *Indiana University/Purdue University at Indianapolis*

01:15 PM – Treatment of Craniofacial Deficits in a Mouse Model of Down Syndrome

Alexis Chom, Faculty Sponsor: Randall Roper, *Indiana University/Purdue University at Indianapolis*

01:30 PM – Influence of Remineralization Time and Abrasivity of Dentrifices on Eroded Enamel and Dentin

Sarah Buedel, Faculty Sponsor: Philip Villani, *Butler University*

01:45 PM – Locating a SNP on a Particular Region of the HLA-C Gene in Psoriatic Individuals that will Indicate Susceptibility to Developing Psoriasis

Kristy Amores, Faculty Sponsor: Joann Lau, *Bellarmino University*

02:00 PM – The Effects of Mint-Derived Monoterpenes on Legume Growth and Nodulation

Kellen Paine, Ian Suzuki, Frances Hall & Anne Rohn, Faculty Sponsor: Brent Smith, *Earlham College*

02:15 PM – The Relationship between Soil pH, Depth Below Surface, and Buried Bone Preservation

Sarah Berger, Faculty Sponsor: Stephen Nawrocki, *University of Indianapolis*

SESSION FIVE: Ecology/Organismal Biology B

Moderator: Professor Carmen Salsbury, Gallahue Hall 106

01:00 PM – African Elephant Locomotion

Elizabeth Jennings, Faculty Sponsor: Robert Dale, *Butler University*

01:15 PM – Unusual Gait Transitions in Elephant Calves

Megan Houchin, Faculty Sponsor: Robert Dale, *Butler University*

01:30 PM – Gaits Used by African Elephants Vary with Distance Travelled (Excursion Size)

Brock Ward, Faculty Sponsor: Robert Dale, *Butler University*

01:45 PM – Habitat Distributions of Four Life Stages of the Spotted Salamander (*Ambystoma maculatum*) in and around a Temporary Pond

Eric Stachura, Faculty Sponsor: Rebecca Homan, *Denison University*

02:00 PM – Small Mammal Biodiversity and Abundance at Big Oaks National Wildlife Refuge

Stephanie Bishir, Faculty Sponsor: Joseph Robb & Walter Bruyninckx, *Hanover College*

02:15 PM – Testing the Hotspot Hypothesis of Lek Evolution in the White-Crowned Manakin

Meghan Hennessey & Martin Ventura, Faculty Sponsor: Wendy Tori, *Earlham College*

02:30 PM – The Ultrastructure of Spermatogenesis in the High Elevation Lizard, *Sceloporus bicanthalis*

Katherine Touzinsky & Justin Rheubert, Faculty Sponsor: Kevin Gribbins, *Wittenberg University*

SESSION SIX: Ecology/Organismal Biology C

Moderator: Professor Marva Meadows, Gallahue Hall 108

01:00 PM – Teaching Old Buildings New Tricks: Benefits of Retrofitting Indianapolis Buildings with Green Roofs

Sarah Strobl, Faculty Sponsor: Travis Ryan, *Butler University*

01:15 PM – The Impact of a Water Treatment Plant on Small Freshwater Invertebrate Abundance and Diversity

Hilary Standish, Tessa Breedlove & Meara Bucklin, Faculty Sponsor: Brent Smith, *Earlham College*

01:30 PM – Comparative Conservation Efforts: Australia & the United States

Sarah Kuchinsky, Faculty Sponsor: Travis Ryan, *Butler University*

01:45 PM – Kosciusko County Water Quality Testing Factors

Ashlea Marshall, Faculty Sponsor: Paulette Sauders, *Grace College*

02:00 PM – The Diversity of Feeding Behaviors in Marine Olivid Snails

Molly Miller, Faculty Sponsor: Winfried Peters, *Indiana University/Purdue University at Fort Wayne*

BUSINESS AND ECONOMICS

Ethics, Quality, & Entrepreneurship

Moderator: Professor Anne Kelly, Holcomb 235

10:45 AM – Exception to the Rule: Facilitating Payments & Corporate Compliance Responses amid Expansive FCPA Enforcement

Nick Stock, Faculty Sponsor: Mike Koehler, *Butler University*

11:00 AM – Experiential Entrepreneurship: Psychological Capital and Generational Connection

Brian Kenny, Charlie Adams, James Dowell & Margo Graff, Faculty Sponsor: Denise E. Williams, *Butler University*

11:15 AM – Total Quality Management Implementation: Critical Factors Necessary to Put the Philosophy into Practice

Mathew Prest, Faculty Sponsor: Greg Rawski, *University of Evansville*

11:30 AM – Greed is Good? Analyzing Market Responses to the “New Era of FCPA Enforcement” in the Oil, Gas and Healthcare Sectors

Nick Stock, Faculty Sponsor: Mike Koehler, *Butler University*

CHEMISTRY

SESSION ONE: Chemistry I

Moderator: Professor Olujide Akinbo, Gallahue Hall 108

09:00 AM – Study of Chiral Recognition in Amino Acid Based Chiral Ionic Liquid Solvents

Daniel Kroupa, Faculty Sponsor: Todd Hopkins, *Butler University*

09:15 AM – Infrared Investigations of Solute-Solvent Interaction of Histidine, Tryptophan, and Tyrosine with Water and Ionic Liquid

Kelly Grott, Faculty Sponsor: Joe Kirsch, *Butler University*

09:30 AM – Investigating the Effect of Selenium Dioxide and Sodium Selenite on the Formation of 8-OH-dG via Oxidative DNA Damage and Developing a Liquid Chromatography- Mass Spectrum Method as a Means of Analysis

William Hart, Faculty Sponsor: Daniel Morris, *Rose-Hulman Institute of Technology*

09:45 AM – Spectroscopic Analysis of Chlorophyll a in a Polyethylene Glycol Solution

Chris Savas, Faculty Sponsor: Geoffrey Hoops, *Butler University*

SESSION TWO: Chemistry II

Moderator: Professor Todd Hopkins, Gallahue Hall 108

10:45 AM – Metal Dithenoylmethanates and Metal Tetrathenoylethanates as Microporous Metal-Organic Frameworks

Ryan Bowser & Kent Shilts, Faculty Sponsor: Chad Wallace, *Anderson University*

11:00 AM – Electrochemical Detection in Microfluidic Devices using Carbon Cryogel Electrodes

Michael Ehrstein, Faculty Sponsor: Daniel Morris, *Rose-Hulman Institute of Technology*

11:15 AM – Simultaneous Determination of Various Bisphenols via LC/MS

Ben Trefilek, Faculty Sponsor: Olujide Akinbo, *Butler University*

11:30 AM – Reproducibility of Gold Nanoparticle (AuNP) Syntheses

Qian He, Faculty Sponsor: Bridget Gourley, *DePauw University*

11:45 AM – Synthesis of Dihydropyrans by Tandem Reaction of Cyclic Boronic Half Acids

Erica Couch, Faculty Sponsor: LuAnne McNulty, *Butler University*

COMMUNICATION & MEDIA STUDIES

SESSION ONE: Communication & Technology

Moderator: Professor Kevin Wang, Fairbanks 246

09:00 AM – An Examination of the Impact of Technology on Maintaining Significant Long Distance Relationships

Nick Kight, Faculty Sponsor: Mike Rowley, *Huntington University*

09:15 AM – Curtain Call

Braden Worrell, Faculty Sponsor: Elizabeth Winters, *Hanover College*

09:30 AM – Does Playing Video Games Affect the Social Behavior and Time Management of the Students Playing Them?

Andrew Johnson, Faculty Sponsor: Mike Rowley, *Huntington University*

SESSION TWO: Communication on Campus

Moderator: Professor Mark Rademacher, Fairbanks 146

10:45 AM – An Examination of the Use of Expletives on College Campuses

- Sarah Messick, Faculty Sponsor: Mike Rowley, *Huntington University*
- 11:00 AM – The Effect of Class Time on Student Success**
Robert Bitting, Faculty Sponsor: Mike Rowley, *Huntington University*
- 11:15 AM – The Influence of Class Format on Message Effectiveness and Learning**
Ryan Schnurr, Faculty Sponsor: Mike Rowley, *Huntington University*
- 11:30 AM – An Examination of Adult Bullying Among College Students**
Emily Russell, Faculty Sponsor: Mike Rowley, *Huntington University*

SESSION THREE: Relational Communication

Moderator: Professor Kristin Swenson, Fairbanks 246

- 10:45 AM – How do Young People View Marriage?**
Alicia Stauffer, Faculty Sponsor: Mike Rowley, *Huntington University*
- 11:00 AM – Relational Dialectics and Gender**
William Stauffer, Faculty Sponsor: Mike Rowley, *Huntington University*
- 11:15 AM – Self-Confidence among Women**
Brittany Siemens, Faculty Sponsor: Mike Rowley, *Huntington University*
- 11:30 AM – Effects of Parental Divorce on Children and Sibling Relationships**
Hannah Coy, Faculty Sponsor: Valerie Young, *Hanover College*

SESSION FOUR: Communication & Society

Moderator: Professor Kristen Hoerl, Fairbanks 246

- 12:30 PM – Live, but at What Cost? An Analysis of Live News Reporting in the Indianapolis Television Market**
Robert Inskeep, Faculty Sponsor: Allison Harthcock, *Butler University*
- 12:45 PM – The Reinvention of General Motors: A Fantasy-Theme Analysis**
Nate Reiskytl, Faculty Sponsor: Jessica Rousselow-Winquist, *Taylor University*
- 01:00 PM – This is what Americans Actually Believe: South Park and the American Religious Minority**
Brenna Williams, Faculty Sponsor: Christine Becker, *University of Notre Dame*
- 01:15 PM – Through the Whispered Promises and the Changing Light: Loneliness in Taxi Driver**
Samantha Pursel, Faculty Sponsor: Dennis Bingham, *Indiana University/Purdue University at Indianapolis*
- 01:30 PM – Understanding Sustainability: An Examination of Encoding and Decoding of Promotion Materials for Green Consumers**
Muriel Cross, Faculty Sponsor: Mark Rademacher, *Butler University*

EDUCATION

SESSION ONE: Effective Practices for Enhanced Learning

Moderator: Professor Susan Adams, Jordan Hall 174

- 09:00 AM – Using Picture Books to Build Common Schema in the Middle School English Classroom**
Kristina Albarello, Faculty Sponsor: Shelly Furuness, *Butler University*
- 09:15 AM – Helping Students Enjoy Reading**
Noelle Haynie, Faculty Sponsor: Paulette Sauders, *Grace College*
- 09:30 AM – Using Novels and Writing to Teach Students Mathematical Concepts**
Amanda Huffman & Rachel Colby, Faculty Sponsor: Shelly Furuness, *Butler University*
- 09:45 AM – Using Brain Research to Aid Reading Comprehension**
Mia Claretto, Faculty Sponsor: Theresa Knipstein *Butler University*
- 10:00 AM – The Method Behind Games, Fun, & Learning**
Rebecca Austin, Diane Berg, Lauren Buroker, Travis Cawthorn, Lyle Franklin, Caitlyn Rickey, Jacque Schrag, Ashley Swartz, Ryan Thompson, Nick Walters, Joshua Hurst, Faculty Sponsor: Paul Gestwicki, *Ball State University*

SESSION TWO: Challenges and Opportunities in Education

Moderator: Professor Brandie Oliver, Jordan Hall 174

10:45 AM – Cultural Competency in High School Educators

Sidney Findley, Rachel Pollock & Jodie Buchanan, Faculty Sponsor: Matt Ringenberg, *Valparaiso University*

11:00 AM – Why Did I Ever Choose This Major?

Derek Linn, Faculty Sponsor: Justin Gash, *Franklin College*

11:15 AM – New Technology Education

Octavia Lehman, Faculty Sponsor: Paulette Sauders, *Grace College*

11:30 AM – The Allegory of the Cave and its Implications for Modern Education

Sarah Risley, Faculty Sponsor: Richard McGowan, *Butler University*

11:45 AM – Technology and Fieldwork: The Study of Biomes and Plant Classification Using the Digital Herbarium Library and Global Positioning Systems in the High School Environmental Science Classroom

Abby Soltis, Faculty Sponsor: Meredith McAllister, *Butler University*

12:00 PM – A Simple Understanding of Attention Deficit Disorders and Resources for the Afflicted and Their Support Group

Amber Hauser, Faculty Sponsor: Matt Ringenberg, *Valparaiso University*

ENGLISH (LITERATURE & CREATIVE WRITING)

SESSION ONE: Comic Complexities in Shakespeare's Plays

Moderator: Professor Bill Walsh, Jordan Hall 301

09:00 AM – Between Public and Private: Personal Autonomy in *The Merchant of Venice*

Olivia Yoch, Faculty Sponsor: William Walsh, *Butler University*

09:15 AM – The Things of the Flesh: The Battle between Hebrew and Christian Traditions in William Shakespeare's *The Merchant of Venice*

Jarred Turner, Faculty Sponsor: William Walsh, *Butler University*

09:30 AM – A Male Strength of Heart: Shakespeare's Strong-Willed Women and the Effect of Marriage upon their Wit

Katherine Sheridan, Faculty Sponsor: William Walsh, *Butler University*

09:45 AM – The Stage is the Court and All the Player Merely Copies: Shakespeare's *Antony and Cleopatra* as Propaganda

Ginnye Cubel, Faculty Sponsor: William Walsh, *Butler University*

SESSION TWO: The Legendary and the Fantastic

Moderator: Professor Rocky Colavito, Jordan Hall 303

09:00 AM – Arthur through the Ages

Emily Armstrong, Faculty Sponsor: Paulette Sauders, *Grace College*

09:15 AM – The Green Sun: Tolkien's Literary Philosophy of the Fantastic

Xander Marton, Faculty Sponsor: Paulette Sauders, *Grace College*

09:30 AM – Darth Hamlet: Elements of Shakespearean Tragedy in Star Wars

Andrea Skowronski, Faculty Sponsor: Paulette Sauders, *Grace College*

SESSION THREE: Literature and Philosophical Inquiry

Moderator: Professor Bill Watts, Jordan Hall 303

10:45 AM – The Role of Dogs in Iris Murdoch

Marc Keith, Faculty Sponsor: Joanne Edmonds, *Ball State University*

11:00 AM – Eat Your Heart Out: Consumption, Escape, and the Discourse of Desperation in Günter Grass's *The Tin Drum*

Emelia Abbe, Faculty Sponsor: Ania Spyra, *Butler University*

11:15 AM – Literature and the Creation of Great Thinkers

Jason Ropp, Faculty Sponsor: Paulette Sauders, *Grace College*

SESSION FOUR: Empire and its Discontents

Moderator: Professor Lee Garver, Jordan Hall 301

10:45 AM – The Epic Hero's Burden: Imperial Consciousness in Tennyson's *Ulysses*

Caitlin Willenbrink, Faculty Sponsor: Melissa Eden, *Hanover College*

11:00 AM – Reimagining the Bard: National Influences in the Anglo-Celtic Literature of Dylan Thomas and James Joyce

Olivia Yoch, Faculty Sponsor: Ania Spyra, *Butler University*

11:15 AM – Love-Making at the Piano

Jane Hurdish, Faculty Sponsor: Sara Danger, *Valparaiso University*

SESSION FIVE: Literature and its Times

Moderator: Professor Brynnar Swenson, Jordan Hall 301

12:30 PM – *To Kill a Mockingbird*: Yesterday, Today, and Tomorrow

Mark Schaefer, Faculty Sponsor: Deborah Howard, *University of Evansville*

12:45 PM – *Gatsby* Under the Influence: The Times That Created *The Great Gatsby*

Mary Gensel, Faculty Sponsor: Paulette Sauders, *Grace College*

01:00 PM – The Art of Human Breathing: An Examination of Poetry's Potential in the 21st Century

Chelsea Noble, Faculty Sponsor: Paulette Sauders, *Grace College*

SESSION SIX: Gender, Language, Globalization: Transnational Women Writers

Moderator: Professor Ania Spyra, Jordan Hall 303

12:30 PM – Getting Lost in Her Translation: The Applied and Sociolinguistic Elements of Eva Hoffman's *Lost in Translation*

Margaret Cychosz, Faculty Sponsor: Ania Spyra, *Butler University*

12:45 PM – The Form of Fragmentation: Transnational Identity in Theresa Hak Kyung Cha's *Dictée* and Eva Hoffman's *Lost in Translation*

Allison Denton, Faculty Sponsor: Ania Spyra, *Butler University*

01:00 PM – The Relationship between Gender, Control and Nimi's Feminism in Kiran Desai's *The Inheritance of Loss*

Shannon Knall, Faculty Sponsor: Ania Spyra, *Butler University*

EXERCISE SCIENCE

SESSION ONE: Exercise Science Session I

Moderator: Professor Marilyn Strawbridge, Jordan Hall 172

10:00 AM – Load Carriage Efficiency during Moderate Exercise

Rachel Strang, Faculty Sponsor: Bryant Stamford, *Hanover College*

10:15 AM – The Effect of Auditory and Visual Stimuli on RPE, Affect, and HR during Exercise

Sarah Clapp, Faculty Sponsor: Bryant Stamford, *Hanover College*

10:30 AM – Strength and Flexibility Imbalance of Female College Athletes

Michaela Gray, Faculty Sponsor: Bryant Stamford, *Hanover College*

10:45 AM – The Impact of Flexibility on Sprint Performance

Derek Prifogle, Faculty Sponsor: Bryant Stamford, *Hanover College*

11:00 AM – The Impact of Cross Education in Dominant and Non-Dominant Fine Motor Training

Audrey Black, Faculty Sponsor: Bryant Stamford, *Hanover College*

11:15 AM – The Effect of Cross Education on Reactive Hyperemia

Molly Pierson, Faculty Sponsor: Bryant Stamford, *Hanover College*

11:30 AM – Cross Education: The Effect of Unilateral Strength Training

Chris Mosier, Faculty Sponsor: Bryant Stamford, *Hanover College*

11:45 AM – Cross Education Fatigue

Matt Sieg, Faculty Sponsor: Bryant Stamford, *Hanover College*

SESSION TWO: Exercise Science Session II

Moderator: Professor Marilyn Strawbridge, Jordan Hall 172

01:00 PM – Acute Effects of Moderate and Higher Intensity Exercise on Blood Lipids (A case study)

Heather Nichols, Faculty Sponsor: Bryant Stamford, *Hanover College*

01:15 PM – Effects of Caffeine and Heat Loss Inhibition on Metabolic Responses to Exercise

Amber Dever, Faculty Sponsor: Bryant Stamford, *Hanover College*

01:30 PM – Effects of Varying Exercise Intensities and Timing of Exercise on Insulin Sensitivity: A Case Study

Michael Case, Faculty Sponsor: Bryant Stamford, *Hanover College*

01:45 PM – The Effect of a Cognitive and Motor Task on Postural Stability

Kyle Bohnert, Faculty Sponsor: Bryant Stamford, *Hanover College*

02:00 PM – Efficacy of Active Recovery Interventions on Blood Lactate Clearance Rates

Keaton Worland, Faculty Sponsor: Bryant Stamford, *Hanover College*

02:15 PM – Impact of Heat or Cold Application on Acute Flexibility

Megan Priest, Faculty Sponsor: Bryant Stamford, *Hanover College*

02:30 PM – The Impact of Caffeine vs. a Placebo on Caloric Expenditure, Blood Pressure, Heart Rate, and Ratings of Perceived Exertion

Leslie Manuel, Faculty Sponsor: Bryant Stamford, *Hanover College*

02:45 PM – Physiologic Adaptations to Simulated Normobaric Hypoxia: A Case Study

Jeremy Cook, Faculty Sponsor: Bryant Stamford, *Hanover College*

GENDER, WOMEN & SEXUALITY STUDIES

Gender, Women, & Sexuality Studies

Moderator: Professor Vivian Deno, Jordan Hall 207

10:45 AM – Sometimes Ordinary Is All We Need

Camille Germain, Faculty Sponsor: Gerald Waite, *Ball State University*

11:00 AM – Leymah Gbowee: Nobel Peace Prize Recipient 2011

Sysilie Hill, Faculty Sponsor: Gerald Waite, *Ball State University*

11:15 AM – Michael Corleone: Traditional Masculinity as Puppeteer

Wyatt Lewis, Faculty Sponsor: Warren Rosenberg, *Wabash College*

11:30 AM – The Sorry Truth of Beauty

John Traylor, Faculty Sponsor: Paul Hanson, *Butler University*

11:45 AM – Yoko Ono: Sharing the Message of Peace through Art and Social Media

Nina Monstwillio, Faculty Sponsor: Gerald Waite, *Ball State University*

HISTORY

SESSION ONE: From Heroines to Highways, Quakers to Brother Bandits

Moderator: Professor Vivian Deno, Jordan Hall 205

09:00 AM – "Lips as Red as Parthian:" Irish Heroines & the Monks Who Preserved Them

Claire Rutledge, Faculty Sponsor: Jon Porter, *Butler University*

09:15 AM – Quakers, Proprietors, and Palatines: German Immigration in the Making of the Philadelphia Election Riot of 1742

Lynch Bennett, Faculty Sponsor: Melinda Zook, *Purdue University*

09:30 AM – Through the Eyes of Babe Denny: The Impact of Interstates on Urban Communities of Indianapolis from 1950-1980

Daniel Story, Faculty Sponsor: Steve Messer, *Taylor University*
09:45 AM – Brother Banditry and Midwest Railway Crime
Megan Cullen, Faculty Sponsor: Vivian Deno, *Butler University*

SESSION TWO: Building Identities: From the Imperial to the Personal

Moderator: Professor Ageeth Sluis, Jordan 205

10:45 AM – Faster, Higher, Stronger: U.S. Foreign Relations and the Olympics in the Early Twentieth Century

Jessica Bair, Faculty Sponsor: Michael Morrison, *Purdue University*

11:00 AM – Heroic Unification of the Public through Commonality

Bradley Martin, Faculty Sponsor: Tom Strunk, *Xavier University*

11:15 AM – Vestal Virgins: The Priestesses of Rome Who Help Define Roman Identity

Stephanie Chevront, Faculty Sponsor: Christopher Bungard, *Butler University*

11:30 AM – The Influence of Childhood on the Shaping of a Woman: The Case of Eva Peron

Jade Hill, Faculty Sponsor: Christine Nemicik, *Franklin College*

11:45 AM -- From Burden to Boxer: The Irish Man in America

Anna January, Faculty Sponsor: Elizabeth Mix, *Butler University*

INTERNATIONAL STUDIES

SESSION ONE: National Identity and Its Discontents

Moderator: Dr. Monte Broaded, Jordan Hall 336C

09:00 AM – “Crise d’Identité”: The Push to Preserve National Identity in France

Katie Hammitt, Faculty Sponsor: Paul Hanson, *Butler University*

09:15 AM – DREAMing Through a Clouded Lens

Edward Stein, Faculty Sponsor: Robert Oprisko, *Butler University*

09:30 AM – The American Dream vs. Revolution

Michael Burke, Faculty Sponsor: Robert Oprisko, *Butler University*

09:45 AM – The Woodstock Exchange

Leslie Cyranowski, Faculty Sponsor: Robert Oprisko, *Butler University*

10:00 AM – Post-9/11 Fashion Culture and Politics

Lindsey Weiss, Faculty Sponsor: Robert Oprisko, *Butler University*

SESSION TWO: The Middle East and North Africa

Moderator: Professor Robert Oprisko, Jordan Hall 336C

10:45 AM – MENA Revolutions and the Future of U.S Foreign Policy

Brittanie Redd, Faculty Sponsor: Robert Oprisko, *Butler University*

11:00 AM – The 2011 Egyptian Revolution: The Lasting Effects of U.S. Foreign Policy in Egypt

Ryan Frazier, Faculty Sponsor: Robert Oprisko, *Butler University*

11:15 AM – Fertile Deserts: Factors for Success in the 2011 Libyan Intervention

Nathaniel Vaught, Faculty Sponsor: Robert Oprisko, *Butler University*

11:30 AM – The United States, The Middle East and Youth Bulge Theory

Courtney Williams, Faculty Sponsor: Robert Oprisko, *Butler University*

11:45 AM – The Social Media Revolution

Needa Malik, Faculty Sponsor: Robert Oprisko, *Butler University*

SESSION THREE: The US and Others (Near and Far)

Moderator: Professor Robert Oprisko, Jordan Hall 336C

12:30 PM – Narco Paradise: Mexico, United States, and Drug Culture

Cameron Panther, Faculty Sponsor: Robert Oprisko, *Butler University*

12:45 PM – American and Chinese Exceptionalism in the Modern Day

- Brian Stanley, Faculty Sponsor: Robert Oprisko, *Butler University*
01:00 PM – United States and China: the Struggle for the African Oil
 Fabio Frettoli, Faculty Sponsor: Robert Oprisko, *Butler University*
01:15 PM – Falling Whistles: Sean Carasso
 Morgan Drago, Faculty Sponsor: Gerald Waite, *Ball State University*
01:30 PM – The Iconography and Symbolism of the Anonymous Movement
 Robert Sweeney, Faculty Sponsor: Robert Oprisko, *Butler University*

MATHEMATICS AND COMPUTER SCIENCE

Mathematics & Computer Science

Moderator: Professor Rebecca Wahl, Jordan Hall 207

- 09:00 AM – Homogeneous and Non-Homogeneous Markov Process Models for Melodic Sequences**
 Eric Buenger, Faculty Sponsor: Chris Wilson, *Butler University*
09:15 AM – Mancala, a Java Rendition
 Andre Harvey & Nathan Rutter, Faculty Sponsor: Steven Bogaerts, *Wittenberg University*
09:30 AM – Parallelizing Alpha-Beta Pruning in the Context of Connect-4
 Jordan Hildebrandt, Deanna Fink & Patrick Copeland, Faculty Sponsor: Steven Bogaerts,
Wittenberg University
09:45 AM – Permutation Pattern Avoidance and the Catalan Triangle
 Wesley Hough, Derek DeSantis, Rebecca Meissen & Jacob Ziefle, Faculty Sponsors: Brant Jones &
 Rebecca Field, *Hanover College*

MODERN FOREIGN LANGUAGES

SESSION ONE: Literature, Culture and Art

Moderator: Professor Alex Quintanilla, Jordan Hall 278

- 09:00 AM – “¿Doña Marina, traidora de la raza indigena o mediadora entre dos culturas?”**
 Abigail Merritt, Faculty Sponsor: Eduardo Santa Cruz, *Hanover College*
09:15 AM – Doña Perfecta: From Spanish Novel to Mexican Film
 Maria Moreno, Faculty Sponsor: Linda Willem, *Butler University*
09:30 AM – More than Meets the Eye: False Appearances in Pardo Bazán’s “Sud-Exprés”
 Hannah Downey, Faculty Sponsor: Linda Willem, *Butler University*
09:45 AM – The Unclassifiable Disease: The Medical History of Tuberculosis and its Portrayal in 19th-century Spanish Literature
 Lauren Gatchel, Faculty Sponsor: Linda Willem, *Butler University*
10:00 AM – Picture Theory as Applied to Art during the Spanish Civil War
 Jordan Kirkegaard, Faculty Sponsor: Irune del Rio Gabiola, *Butler University*

SESSION TWO: Language in Contact

Moderator: Professor Alex Quintanilla, Jordan Hall 278

- 10:45 AM – The Making and Breaking of a Language: The French and Spanish Effect upon the Catalan Regional Language**
 Margaret Cychosz, Faculty Sponsor: Eloise Sureau-Hale, *Butler University*
11:00 AM – Supporting Young Immigrants in the German School System
 Avery Stearman, Faculty Sponsor: Michelle Stigter, *Butler University*
11:15 AM – El Gallego: Idioma, Identidad y Cultura
 Katherine Louise Stegman-Frey, Faculty Sponsor: Lisa Kuriscak, *Ball State University*

11:30 AM – Observaciones del idioma, la identidad hispanoamericana y la brecha inter-generacional en las familias del Centro La Casita

Caitlin Willenbrink, Faculty Sponsor: Miryam Criado, *Hanover College*

MUSIC

SESSION ONE

Moderator: Professor James Briscoe, Lilly Hall 110

09:00 AM – “And Now for Something Completely Different!": British Comedy from *The Beggar's Opera* to Today

Brittany Archer, Faculty Sponsors: James Briscoe & Kurt Carlson, *Butler University*

09:15 AM – *La Serva Padrona* and Opera Buffa: A Manifestation of Shifting Class Structure

Kelly Cassady, Faculty Sponsor: James Briscoe, *Butler University*

09:30 AM – Alban Berg's *Lulu*: Pitch Organization in Relation to the Serialization of Character

Weston Bonczek, Faculty Sponsor: Rusty Jones, *Butler University*

09:45 AM – An Exploration of Modes in Polyphonic Compositions of the Sixteenth Century

Marcella Columbus, Faculty Sponsor: Rusty Jones, *Butler University*

SESSION TWO

Moderator: Professor James Briscoe, Lilly Hall 110

10:00 AM – The Rhetoric of Faith in J.S. Bach's Cantata 92

Timothy Mastic, Faculty Sponsors: James Briscoe & Kurt Carlson, *Butler University*

10:15 AM – Bach the Theologian

Michael Slack, Faculty Sponsor: James Briscoe, *Butler University*

10:30 AM – Bach's *Mass in B minor* and the use of Baroque Trumpet

Eric Hjellming, Faculty Sponsors: James Briscoe & Kurt Carlson, *Butler University*

SESSION THREE

Moderator: Professor James Briscoe, Lilly Hall 110

11:15 AM – Brahms's Third Symphony: A Prophecy Fulfilled

David Platt, Faculty Sponsor: James Briscoe, *Butler University*

11:30 AM – *Dido and Aeneas*: Nationalism and Chromaticism in Purcell's Great Opera

Carl Wiersum, Faculty Sponsors: James Briscoe & Kurt Carlson, *Butler University*

11:45 AM – Early Jewish Music and the Hebrew Melodies in Benedetto Marcello's *Estro Armonico-Poetico*

Brianna Nielsen, Faculty Sponsors: James Briscoe & Sarah Eyerly, *Butler University*

12:00 PM – Failed Attempts: Bassoon Development from 1831 to Present

Cassie DeFoe, Faculty Sponsor: Doug Spaniol, *Butler University*

SESSION FOUR

Moderator: Professor Sarah Eyerly, Lilly Hall 110

01:00 PM – Hitler's Propagandistic Wagner: Nazism, Bayreuth, and *Die Meistersinger von Nürnberg*

Rachel Anderson, Faculty Sponsor: Hilene Flanzbaum, *Butler University*

01:15 PM – The Castrato and the British Opera Seria Craze

Rafael Porto, Faculty Sponsor: James Briscoe, *Butler University*

01:30 PM – The Correlation between the Independent Lines in Easter Motets

Shireen Korkzan, Faculty Sponsor: Joseph Bognar, *Valparaiso University*

01:45 PM – The History and Development of the Keyed Trumpet

Paul Hunt, Faculty Sponsor: James Briscoe, *Butler University*

SESSION FIVE

Moderator: Professor Rusty Jones, Lilly Hall 110

02:00 PM – The Significance of the Influence on J.S. Bach's Violin Sonata I in G Minor BWV 1001

Carla Black, Faculty Sponsors: James Briscoe, Kurt Carlson & Wayne Wentzel, *Butler University*

02:15 PM – The Women of *Die Zauberflöte*: Futile Attempts at Self-Assertion

Katherine Bolinger, Faculty Sponsors: James Briscoe, Kurt Carlson & Wayne Wentzel, *Butler University*

02:30 PM – What Happened to the Fife? The Legacy of an American Icon

Samantha Schwartz, Faculty Sponsor: Linda Ferguson *Valparaiso University*

02:45 PM – Bach and Opera - Is it Possible?

Hilary Clark, Faculty Sponsor: Linda Ferguson, *Valparaiso University*

PHARMACY AND HEALTH SCIENCES

Pharmacy & Health Sciences

Moderator: Professor Larry Kennedy & Professor Chad Knoderer, Pharmacy Building 156

02:15 PM – Adult Patient Evaluations of Indiana Pharmacists Administering Influenza Vaccinations

Lisa LeClerc, Faculty Sponsor: Laurence Kennedy, *Butler University*

02:30 PM – Neighborhood Correlates of Body Size in Adults in Marion County, IN

Cam Thompson, Faculty Sponsors: Marjorie Hennessy & Priscilla Ryder, *Butler University*

02:45 PM – Probing Speciation of Selenium Dioxide and Sodium Selenite as a Function of pH: Understanding Metal-Ion Binding by Selenium Compounds and its Role in Antioxidant Activity

Robert French, Faculty Sponsor: Daniel Morris *Rose-Hulman Institute of Technology*

03:00 PM – Safety of *Saccharomyces boulardii* (Florastor®) in Kidney and Pancreas Transplant Patients

Nicole Dores, Faculty Sponsors: Jeanne Chen & Jane Gervasio *Butler University*

03:15 PM – Vancomycin-Associated Acute Kidney Injury in a Pediatric Population

Kelsey Lyon & Megan Veverka, Faculty Sponsor: Chad Knoderer, *Butler University*

PHILOSOPHY AND RELIGION

SESSION ONE: Religion and Culture

Moderator: Professor Paul Valliere, Jordan Hall 201

09:00 AM – Latvian Folk Dance: Sustaining Cultural Identity through Christianity and Communism

Emilija Grinvalds, Faculty Sponsor: Paul Valliere & Susan McGuire, *Butler University*

09:15 AM – Hinduism and the Many Faces of Durga

Stephanie Chevront, *Butler University*, Faculty Sponsor: Aimee Hamilton, *DePauw University*

09:30 AM – Christian College Students' View of Homosexuality

Tyler Morgan, Faculty Sponsor: Mike Rowley, *Huntington University*

09:45 AM – Strategies for an Effective Youth Ministry

Sarah Kraus, Faculty Sponsor: Paulette Sauders, *Grace College*

SESSION TWO: Questions in Religion and Philosophy

Moderator: Professor Tiberiu Popa, Jordan Hall 201

10:45 AM – Reconciling Distributive Justice Theories

Jillian Edmonds, Faculty Sponsor: Michael Popich, *Westminster College*

11:00 AM – Islamophobia in Contemporary America

Matt Miller, Faculty Sponsor: Chad Bauman & Paul Valliere, *Butler University*

11:15 AM – Notions of Truth & Power in Theological Discourse

Kirsten Boles, Faculty Sponsor: Brent Hege, *Butler University*

11:30 AM – The Great Transcendentalist Revival: Retrieving Collective Consciousness and Conscientiousness from “God Discourse”

Emelia Abbe, Faculty Sponsor: Brent Hege, *Butler University*

SESSION THREE: Rights, Class, and the Other

Moderator: Professor Harry van der Linden, Jordan Hall 201

12:30 PM – The Foundations of Human Rights: Choosing a Natural Account

Dane Callstrom, Faculty Sponsor: David Western, *Valparaiso University*

12:45 PM – A Rehabilitation of the American Left: Class Struggle and the Ideology of the I.W.W.

Aaron Simmons, Faculty Sponsor: Ferit Guven, *Earlham College*

01:00 PM – The Existential Crisis and the Problem of the Other Writer

Jeff Schatz, Faculty Sponsor: Shodhin Geiman, *Valparaiso University*

PHYSICS

SESSION ONE: Astronomy & Astrophysics

Moderator: Professor Xianming Han, Gallahue Hall 348

09:00 AM – 27 New Variable Stars in NGC 6584

Elliott Johnson, Joe Toddy & Andrew Darragh, Faculty Sponsor: Brian Murphy, *Butler University*

09:15 AM – Worlds In Transit: Observations of Exoplanets using IRTF MORIS

Mackenzie Jones, Faculty Sponsor: Brian Murphy, *Butler University*

09:30 AM – Examining the Mass Ratio Dependence of Post-Newtonian Smoothed Particle Hydrodynamics (SPH) Simulations of Binary Neutron Star Coalescence

Jonathon Meyers, Richard Hallett, *Purdue University*, Margaret Michna & Yi Mei, Faculty Sponsor: Aaron Warren, *Purdue University North Central*

09:45 AM – Measurement of Asteroid Rotational Periods through Direct Observation and Light Calibration

Adam Kidd, Frederick Rastede, Bradley Magnetta & Orry Heffner, Faculty Sponsor: Xianming Han, *Butler University*

10:00 AM – Modular Black Holes as Probes of Spacetime

William Hammer, Faculty Sponsor: Rolf Schimmrigk, *Indiana University-South Bend*

SESSION TWO: Physics I

Moderator: Professor Xianming Han, Gallahue Hall 348

10:45 AM – An Accurate Determination of Binding Energy and Momentum Spectra for Carbon Dioxide gas using Computational Physics Methods and Quantum Analyses

Adam Kidd, Faculty Sponsor: Xianming Han, *Butler University*

11:00 AM – Black Box Module for Low-Level Light Detection in Optogenetic Studies

Elizabeth Maret, Faculty Sponsor: Mohamed Diagne, *Connecticut College*

11:15 AM – Acoustic Transducer Design for Dark Matter Detection and Radiation Acoustics

Thomas Nania, Faculty Sponsor: Ilan Levine, *Indiana University-South Bend*

11:30 AM – Construction and Commissioning of a Cryogenic Radon Assay System

Timothy Moan, Faculty Sponsor: Ilan Levine, *Indiana University-South Bend*

11:45 AM – Construction and Use of a Pressure Vessel Simulator for the COUPP Matter Search Experiment

Cale Harnish, Faculty Sponsor: Ilan Levine, *Indiana University-South Bend*

SESSION THREE: Physics II

Moderator: Professor Gonzalo Ordóñez, Gallahue Hall 348

01:30 PM – AC Faraday Rotation of Fe₃O₄ Nanoparticle Composites

John Moore, Faculty Sponsor: Maarij Syed, *Rose-Hulman Institute of Technology*

01:45 PM – Thermal Transport Properties of Carbon Nanotubes

- Jeremy Christman & Andy Moore, Faculty Sponsor: Mahfuza Khatun, *Ball State University*
- 02:00 PM – Alternating Current Faraday Rotation of Multiple Liquid Systems**
Thomas Foulkes & John Moore, Faculty Sponsor: Maarij Syed, *Rose-Hulman Institute of Technology*
- 02:15 PM – Ambient Temperature P-V Equation of State for Garnet Sand of Pfeiffer Beach**
Erica Cotter, Faculty Sponsor: Henry Scott, *Indiana University-South Bend*
- 02:30 PM – Measuring the Performance of Generalized Gradient Approximations in Solids**
Zachary Nault, Faculty Sponsor: Antonio Cancio, *Ball State University*

POLITICAL SCIENCE

SESSION ONE: Politics, Women & Feminism across the Globe

Moderator: Professor Robin Turner, Jordan Hall 348

- 09:00 AM – Conservative Feminism and its Potential to Interact with, Influence, and Transform Traditional Feminist Identity**
Aja Cacan, Faculty Sponsor: Margaret Brabant, *Butler University*
- 09:15 AM – Issues with Pakistani Women's Citizenship**
Megan Moles, Faculty Sponsor: Larry Williamson, *Butler University*
- 09:30 AM – The Experience of Women Leaders in Northern Ghana**
Kelly Hamman, Faculty Sponsor: Robin Turner, *Butler University*

SESSION TWO: Peace, Violence, & International Cooperation

Moderator: Professor Siobhan McEvoy-Levy, Jordan Hall 348

- 10:45 AM – Visiting the Promising Land: The Effects of Religious Pilgrimage on Peace Building in the Israeli-Palestinian Conflict**
Christopher Jozwiak, Faculty Sponsor: Paul Valliere & Siobhan McEvoy-Levy, *Butler University*
- 11:00 AM – Closer to Home: The Push towards Regionalization in Response to Globalization**
Josh Slusher, Faculty Sponsor: Paul Hanson, *Butler University*
- 11:15 AM – John F. Kennedy as an Innovator in the Peace Movement**
Kacie Newhouse, Faculty Sponsor: Gerald Waite, *Ball State University*
- 11:30 AM – The Influence of Nazism on the Development of Fascist Anti-Semitism in Italy**
Brittany Brake, Faculty Sponsor: Timothy Bennett & Dave Barry, *Wittenberg University*
- 11:45 AM – The Kurdish Question: Kurdish Identity in the Modern Turkish State**
Peter Kassig, Faculty Sponsor: Margaret Brabant, *Butler University*
- 12:00 PM -- The Comprehensive Nuclear Test Ban Treaty: A Policy Analysis**
Jillian Edmonds, Faculty Sponsor: Michael Zarkin, *Westminster College*

SESSION THREE: What Drives Politics? Courts, Media, the People

Moderator: Professor Craig Auchter, Jordan Hall 348

- 12:30 PM – Media Influence or Influential Media?**
Rachel Cheeseman, Faculty Sponsor: Brett O'Bannon, *DePauw University*
- 12:45 PM – Civic Engagement of Italian-Americans in Indianapolis**
Lauren Hodge, Faculty Sponsor: Elisa Lucchi-Riester & Robin Turner, *Butler University*
- 01:00 PM – Critiquing the Supreme Court's 1962 Decision in Engel v. Vitale**
Christopher Goff, Faculty Sponsor: Nancy Whitmore, *Butler University*
- 01:15 PM – Homeless and Low-Income Individuals Struggle to Find Access to Services in District of Columbia**
Zachary Davidson, Faculty Sponsor: Paulette Sauders, *Grace College*
- 01:30 PM – The Jurisprudence of Sonia Sotomayor: An Analysis of Her First Amendment Freedom of Speech Decisions**
Alexis Branham, Faculty Sponsor: Phil Loy, *Taylor University*

PSYCHOLOGY

SESSION ONE: Developmental and Sport

Moderator: Professor Robert Padgett, Jordan Hall 203

09:00 AM – A Developmental Approach: The Relationship between Self-Esteem and Friendship Quality Throughout College

Cam Thompson, Kendra Burnett, Katelyn Skinner & Jacqueline Kells, Faculty Sponsor: Robert Padgett, *Butler University*

09:15 AM – Mentoring and Its Effect on Emotional Intelligence

Meredith Tarplee, Faculty Sponsor: Linda Swindell, *Anderson University*

09:30 AM – Adult Sibling Relationships and Communications

Kayla Lighty, Faculty Sponsor: Linda Swindell, *Anderson University*

09:45 AM – The Dirt on Grit: Examining Relations with School Adjustment, School Performance, and Theories of Intelligence

Whitney Borton & Jaclyn Grelle, Faculty Sponsor: Ellen Altermatt, *Hanover College*

10:00 AM – The Effect of Familial versus Non-Familial Disruptions on Behavior of Patients in a Private Mental Health Facility

Meghan Mulvaney & Kari Brown, Faculty Sponsor: Alexis Green, *Hanover College*

10:15 AM – The Impact of Financial Issues on Care of Children with ASD: A Parental Perspective

Sharon Turnbow, Faculty Sponsor: Stephen Dine Young, *Hanover College*

10:30 AM -- BREAK

10:45 AM – Effects of Name Status on Attractiveness

Mandy Anderson, Rachel Bernhardt & J.J. Burns, Faculty Sponsor: Amy Bracken, *Franklin College*

11:00 AM – Experience in Sport Performance, the Practice of Imagery and the Effect of Both On Performance Anxiety

Sarah McGary, Faculty Sponsor: Jeff Kellogg, *Marian University*

11:15 AM – Prevalence of Eating Disorder Symptoms in Endurance Athletes and Non-Endurance Athletes

Allyson Higgenbottom, Faculty Sponsor: Jeff Kellogg, *Marian University*

SESSION TWO: Spirituality, Health, and Sexuality

Moderator: Professor R. Brian Giesler, Jordan Hall 236

09:00 AM – Temperature's Effects on View of Self and God

Rachel Sims & Jana Hunsley, Faculty Sponsor: Erin Devers, *Indiana Wesleyan University*

09:15 AM – Choosing the Wrong Snack: A Paradoxical Effect of Priming Healthy Eating Goals

Elizabeth Kaiser, Katherine Adams & Nate Moss, Faculty Sponsor: R. Brian Giesler, *Butler University*

09:30 AM – Episodic Salutary Experiences (ESE): An Active Ingredient in the Religiosity-Health Relationship

Elizabeth Erb & Elizabeth Kaiser, Faculty Sponsor: R. Brian Giesler, *Butler University*

09:45 AM – Evaluation of the C.A.R.E. Programs Effectiveness in Regards to Sexual Activity in Hancock County, Ohio

Joanna Dunten, Cassandra Wimer & Rachel Kochensparger, Faculty Sponsor: Carrie Lloyd, *Huntington University*

10:00 AM – High Faith and No Faith Predict Physical Well-Being: More Evidence for a Curvilinear Relationship between Religiosity and Health in Young Adults

Jenna Wheaton & Haley Cole, Faculty Sponsor: R. Brian Giesler, *Butler University*

10:15 AM -- BREAK

10:30 AM – Religiosity and Spirituality: Closeness in Relationships

Rachel Jacobs, Kathryn Eipl & Allison Cooke, Faculty Sponsor: John Krantz, *Hanover College*

10:45 AM – The Effects of Gender and Sociosexual Orientation on Perceptions of Casual Sex

Ashley Adams & Whitley Holt, Faculty Sponsor: Ellen Altermatt, *Hanover College*

11:00 AM – Talking About My Chronic Illness: Implications for Self Care and Post-Traumatic Growth

Jordan Thomas & Leah Walker, Faculty Sponsor: Heather Adams, *Ball State University*

11:15 AM – The Potential Role of Self-Disgust in Homophobia

Sarah Rodenkirch & Jennifer Kelleher, Faculty Sponsor: R. Brian Giesler, *Butler University*

SESSION THREE: Leadership, Employment, and Gender

Moderator: Professor Alison O'Malley, Jordan Hall 238

09:00 AM – The Effects of Technology Use in Job Position on Attributions and Self-Efficacy

Elizabeth Campbell, Faculty Sponsor: Faye Plascak-Craig, *Marian University*

09:15 AM – A Brief Mindfulness Intervention Mitigates Adverse Reactions to Negative Feedback

Xi Chen & Chris Thompson, Faculty Sponsor: Alison O'Malley, *Butler University*

09:30 AM – Behaviors among Mothers that May Serve as Risk Factors for Postpartum Depression

Audrey Winkle, Faculty Sponsor: Bruce MacMurray, *Anderson University*

09:45 AM – Chronic versus Primed Goal Orientation, Reactions to Negative Feedback, and Leadership Emergence

Cara Lucas, Faculty Sponsor: Alison O'Malley, *Butler University*

10:00 AM – Personality Differences between Nursing, Psychology, and Computer Science

Neil Eliason, Faculty Sponsor: Linda Swindell, *Anderson University*

10:15 AM – Representations of Gender in Disney Full-Length Animated Features Over Time

Ashley Sims, Faculty Sponsor: Stephen Dine Young, *Hanover College*

10:30 AM -- BREAK

10:45 AM – Student Perceptions of Motivation, Promise-fulfillment, Trust, and Engagement Broadens the Psychological Contract

Christina Davis, Faculty Sponsor: Alison O'Malley, *Butler University*

11:00 AM – The Discrepancy between Expectations and Reality: Satisfaction in Romantic Relationships

Brandi Tedder & Jessica Miller, Faculty Sponsor: Stephen Dine Young, *Hanover College*

11:15 AM – The Effects of Voice Tone on Perceived Masculinity

Levi Hamner & Richard McGee, Faculty Sponsor: Bill Altermatt, *Hanover College*

11:30 AM – The Effectiveness of Self-Defense Training

Emily Thompson, Amanda Shoup & Stephanie Oetman, Faculty Sponsor: Carrie Lloyd, *Huntington University*

SESSION FOUR: Perception and Prejudice

Moderator: Professor Robert Dale, Jordan Hall 242

09:00 AM – All in My Head?: How Does Mood Affect How We Interpret Facial Expressions?

Lillian Ashmore, Faculty Sponsor: Gregory Francis, *Purdue University*

09:15 AM – The Effect of Sensory Manipulation on Postural Sway

Kyle Bohnert & Rachael Moreland, Faculty Sponsor: John Krantz, *Hanover College*

09:30 AM – Confront or Not to Confront: How Self-Efficacy and Power Impact the Challenging of Prejudice

Christal English & Brandon Millspaugh, Faculty Sponsor: Leslie Ashburn-Nardo, *Indiana University/Purdue University at Indianapolis*

09:45 AM – The Effect of Speech Impediments on Perception

Lyndsey Holzinger & Sarah Helms, Faculty Sponsor: Alexis Green, *Hanover College*

10:00 AM BREAK

10:15 AM – Effects of Confrontation Self-Efficacy and Perceived Confrontation Outcomes on Prejudice Confrontation

Sarah Mohlke & Samantha McManus, Faculty Sponsor: Leslie Ashburn-Nardo, *Indiana University/Purdue University at Indianapolis*

10:30 AM – Implicit Association Test vs. Police Officer's Dilemma, Which is Better for Increased Prejudicial Awareness?

Alex Baer & Christian Entezari, Faculty Sponsor: Leslie Ashburn-Nardo, *Indiana University/Purdue University at Indianapolis*

10:45 AM – Linking Perceived Attractiveness and Relationship Status: Categorization in Mate Selection

Andrew Pennington & Nathaniel Hickman, Faculty Sponsor: John Krantz, *Hanover College*

11:00 AM – Multicultural Teaching Practices: Student Views about the Effect of Multicultural Teaching Practices on their Education and Learning Environment

Alexis Taylor & Janalee Redden, Faculty Sponsor: Leslie Ashburn-Nardo, *Indiana University/Purdue University at Indianapolis*

11:15 AM – Non-target and Target Observers Reactions to Confrontations of Racism: Investigating Who Does It, Who Sees It, and How It's Done

Aaron Moss, Faculty Sponsor: Leslie Ashburn-Nardo, *Indiana University/Purdue University at Indianapolis*

11:30 AM – The Effects of Stereotypes on Decision Making of Athletic Review Boards

Whitney Moore, Will Conoley & Georard Mitchell, Faculty Sponsor: Amy Bracken, *Franklin College*

SESSION FIVE: Memory and Clinical

Moderator: Professor Tara Lineweaver, Jordan Hall 203

01:00 PM – Growth from Pain: The Effects of Counseling, Spirituality, and Gender on Post-Traumatic Growth

Sarah Conway, Faculty Sponsor: Linda Swindell, *Anderson University*

01:15 PM – Predictors of Positive and Negative Outcomes within a Correctional Facility

Michelle Painter, Faculty Sponsor: Bill Altermatt, *Hanover College*

01:30 PM – Social Conformity in Physical vs. Virtual Environments

Rachel Brighton, Brooks Ayers, Eric Carmichael, Philip Hannum & Judie Keen, Faculty Sponsors: Tim Steenbergh & Christopher Devers, *Indiana Wesleyan University, Marion*

01:45 PM – The Effects of Timed Testing on Test Anxiety

Amanda Perkins, Keyonna Farris & Jenna Passerini, Faculty Sponsor: Amy Bracken, *Franklin College*

02:00 PM BREAK

02:15 PM – :) (and >:| Texts: An Examination of Linguistic Devices

Angela Mion & Amber Sapp, Faculty Sponsor: Tara Lineweaver, *Butler University*

02:30 PM – To Text or To Call, That Is the Question: How Texts and Voicemails Impact Emotion and Memory

Angela Mion & Amber Sapp, Faculty Sponsor: Tara Lineweaver, *Butler University*

02:45 PM – Come Out and Play: Participation in Team Sports Improves Working Memory and Reduces Distractibility

Elyse Morgan, Shelby True, & Dr. Suneeta Kercood, Faculty Sponsors: Tara Lineweaver & Suneeta Kercood, *Butler University*

03:00 PM – If You're Happy and You Know It, Concentrate!

Kristi Summers & Addie Allen, Faculty Sponsor: Tara Lineweaver, *Butler University*

03:15 PM – If You're Happy and You Know It, You May Be Old: The Positivity Effect of Aging

Alix McLaughlin & Michael Hernandez, Faculty Sponsor: Tara Lineweaver, *Butler University*

SESSION SIX: Memory

Moderator: Professor Andrew Butler, Jordan Hall 236

01:00 PM – Tylenol Enhances Memory During Social Rejection

Karina Hamamouche & Elizabeth Jennings, Faculty Sponsor: John Bohannon III, *Butler University*

01:15 PM – A Threat to Evolutionary Fitness: How much more do you remember?

Sarah Pajkos, Faculty Sponsor: John Bohannon III, *Butler University*

01:30 PM – Civic Engagement among University Students

Jessica Perry & Alexandra Strawhun, Faculty Sponsor: Carrie Lloyd, *Huntington University*

01:45 PM – Effect of Implicit Weight Cues on Moral Judgments

Katie Gustafson, Jenna Cooper & Lauren Cox, Faculty Sponsor: Erin Devers, *Indiana Wesleyan University, Marion*

02:00 PM – Emotion Yields Isolated Tunnel Memory, But Collaborative IMAX

Dominick Atkinson, Faculty Sponsor: John Bohannon III, *Butler University*

02:15 PM – Flashbulb Memories of Dr. Bobby Fong's Resignation

Jasmen Rice & Alex Lange, Faculty Sponsor: John Bohannon III, *Butler University*

02:30 PM -- BREAK

02:45 PM – Flashbulb Memories of Sexual versus Emotional Infidelity in Men and Women

Christine Fisher & Ryan Bable, Faculty Sponsor: John Bohannon III, *Butler University*

03:00 PM – Marriage Proposals: Happy Personal Memories- Do They Last?

Kendall Sauer & Danielle Vaclavik, Faculty Sponsor: John Bohannon III, *Butler University*

03:15 PM – Gaps in Memories: Evidence of a Hippocampal Refractory Period

Kendall Sauer & Mike Leider, Faculty Sponsor: John Bohannon III, *Butler University*

03:30 PM – The Effect of Birth Order on Preferred Study Environment

Abbie Mason, Faculty Sponsor: Linda Swindell, *Anderson University*

SESSION SEVEN: Memory & Music

Moderator: Professor Amanda Gingrich, Jordan Hall 238

01:00 PM – False Memory in the DRM Paradigm: A Comparison of Synesthetes and Non-Synesthetic Controls

Caitlin Anderson, Faculty Sponsor: Amanda Gingrich, *Butler University*

01:15 PM – The Implications of Divided Attention for Theories of False Memory

Matt Lindgren, Faculty Sponsor: Amanda Gingrich, *Butler University*

01:30 PM – Conversations with Couples: Source Memory and Confidence with Romantic Couples

Michelle Miller & Luke Waggenspack, Faculty Sponsor: Amanda Gingrich, *Butler University*

01:45 PM – Investigating the Effects of Environmental Stimuli on Affective Responses and Perceptions

Alisha Sink, Faculty Sponsor: Linda Swindell, *Anderson University*

02:00 PM – Music and Academics: How Music can Help or Hinder Performance

Kristine Lewis, Leanna Thompson & Karley Reid, Faculty Sponsor: Amy Bracken, *Franklin College*

02:15 PM – Relationship between Aggressive Driving and Various Types of Music

Ora Whitehead & Karen Davidson, Faculty Sponsor: Matt Ringenberg, *Valparaiso University*

02:30 PM – The Effects of Alcohol on Relationship Satisfaction

Kayla Green & Amanda Kellar, Faculty Sponsor: Bill Altermatt, *Hanover College*

2:45 PM -- BREAK

03:00 PM – The Relationship between Music and Mood: An Exploration of Music's Influence on Undergraduate Students' Emotions

Katherine Clark & Sarah Kuborn, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*

03:15 PM – The Effects of Listening to High Beat per Minute Music during a Cardio Workout on Body Satisfaction

Emily Williams & Shelby Henderzahs, Faculty Sponsor: Alexis Green, *Hanover College*

03:30 PM – The Effects of Music as a Mnemonic Device on Memory Recall

Rachaelen Wooddell, Anna Tuley & Josiah Wareham, Faculty Sponsor: Amy Bracken, *Franklin College*

SESSION EIGHT: Clinical

Moderator: Professor Joel Martin, Pharmacy 204

01:00 PM – Positive Reactivity to Using a New iPhone EMA/EMI “Apps”

Emily Ragsdale, Charles Bainbridge & Nick Howard, Faculty Sponsors: Tim Steenbergh, Doug Daugherty, Jason Runyan, Lorne Oke & Brian Fry, *Indiana Wesleyan University, Marion*

01:15 PM – College Females and Body Image: How They Perceive It and Why

Becca McIlwain, Faculty Sponsor: Carrie Lloyd, *Huntington University*

01:30 PM – Ecological Momentary (iPhone) Assessment: Sleep as a Predictor of Freshmen Outcomes

Necole Reno & Emily Price, Faculty Sponsor: Doug Daugherty, *Indiana Wesleyan University, Marion*

01:45 PM – Ecological Momentary Assessment of Academic Self-Efficacy: Implications for Theory and Research

Rebekah Bentle, Kate Denlinger & Tiffany LeFever, Faculty Sponsor: Tim Steenbergh, *Indiana Wesleyan University, Marion*

02:00 PM – The Effect of Age on Attitudes toward People with Disabilities

Lauron Haney & Carrie Burkhardt, Faculty Sponsor: Ellen Altermatt, *Hanover College*

02:15 PM -- BREAK

02:30 PM – Expressed Emotion and Attitudes toward Body Image and Food

Toni Maraldo, Faculty Sponsor: Joel Martin, *Butler University*

02:45 PM – Investigating the Relationship between Personality Traits and Desire for Social Distance from Individuals with Mental Illnesses

- Emily Lazar, Faculty Sponsor: Joel Martin, *Butler University*
- 03:00 PM – The Effects of Gender and Body Mass Index on Body Image**
Emily Thalls, Faculty Sponsor: Linda Swindell, *Anderson University*
- 03:15 PM – Sleep Deprivation and Delusion Proneness: Influence on Dream Bizarreness**
Anna Lezon, Faculty Sponsor: Joel Martin, *Butler University*
- 03:30 PM – The Effectiveness of a Two-Week Reflection-Intention Training Program on Lucid Dream Recall Frequency: A Replication**
Matthew Danskey, Faculty Sponsor: Linda Swindell, *Anderson University*

SOCIOLOGY

SESSION ONE: Ethnic Relations and Difference

Moderator: Professor Marvin Scott, Jordan Hall 340

- 09:00 AM – College Prerequisites: Racial Sentiment?**
J.R. Bullard, Faculty Sponsor: Krista Cline, *Butler University*
- 09:15 AM – The Effects of Race and Gender on the Viewing of Stereotypes in Film**
Adithya Jayakar, Faculty Sponsor: Krista Cline, *Butler University*
- 09:30 AM – Arab-American Opinions of the Arab Spring**
Hannah Wysong, Faculty Sponsor: Krista Cline, *Butler University*
- 09:45 AM – The Profile of an Anti-Muslim Hate Crime Offender**
Amanda Skeate, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*
- 10:00 AM – Racial Discrepancies in Sentencing in Relation to Crack and Powder Cocaine**
Kendra Dye, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*
- 10:15 AM – What Did You Do?!: Family and Friends Reactions to College Students' Tattoos**
Benjamin Brodie & Kara Taylor, Faculty Sponsor: Elizabeth Whitaker, *Central Michigan University*

SESSION TWO: Student Life

Moderator: Professor Kate Novak, Jordan Hall 344

- 09:00 AM – What Motivates College Women to Run?**
Virginia Christ, Faculty Sponsor: Krista Cline, *Butler University*
- 09:15 AM – Butler Student-Athletes and Experiences with Alienation**
Grant Hunter, Faculty Sponsor: Krista Cline, *Butler University*
- 09:30 AM – College Athletes Feelings Towards Abusing NCAA Banned Substances (Alcohol, Marijuana, Spit Tobacco, and Steroids)- Does Playing Time and Season Make a Difference in Substance Abuse?**
Nathan Driggers, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*
- 09:45 AM – Does Membership in a Social Greek Organization Increase Feelings of Division and Stratification Between Members?**
Katelin Clark, Faculty Sponsor: Krista Cline, *Butler University*
- 10:00 AM – ROTC Cadet Social Lives: Who do Cadets Associate With?**
Cory Seaton, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*
- 10:15 AM – The Relationship between Physical Exercise and Academic Success in College Students**
Rachel Brummer, Faculty Sponsor: Krista Cline, *Butler University*
- 10:30 AM – Valparaiso University Campus Climate Survey: “How Chilly is it in Valpo?”**
Erica Wickstrom & Nicole Hudson, Faculty Sponsor: Matt Ringenberg, *Valparaiso University*

SESSION THREE: Social Issues I

Moderator: Professor Kenneth Colburn, Jordan Hall 344

- 10:45 AM – The Effect of Anonymity on Anti-social Responses**
Kendall Dillard, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*
- 11:00 AM – The Failure of the Current "War on Drugs"**
Braydon Hobbs, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*

11:15 AM – Filling in the Cracks: Measuring the Effectiveness of First Light Child Advocacy Center
Justin Bradford, Natalie Schmidt, Renee Weisenbeck & Rebecca Fleischer, Faculty Sponsor: Katti Sneed,
Indiana Wesleyan University, Marion

11:30 AM – Impacting At-risk Youth through Mentoring Relationships
Lauren Hettinger, Faculty Sponsor: Krista Cline, *Butler University*

SESSION FOUR: Crime and Society

Moderator: Professor Marvin Scott, Jordan Hall 340

10:45 AM – Recidivism Rate of Probation
Larisha Reed, Faculty Sponsor: Krista Cline, *Butler University*

11:00 AM – Youth Sports and Their Effects on Status Offenses and Crime
Craig Carson, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*

11:15 AM – Correlations Between Juvenile Recidivism and their Living Status in Grant County
Kayla Moore, Jade Tarr, Brittany Webber & Paul Taylor, Faculty Sponsor: Katti Sneed, *Indiana Wesleyan University, Marion*

SESSION FIVE: Social Interaction

Moderator: Professor Krista Cline, Jordan Hall 340

12:30 PM – Living Homeless: The Interactions between Homeless Individuals and the Community in Which They Reside
Lena Walsh & Rachel Okerstrom, Faculty Sponsor: Matt Ringenberg, *Valparaiso University*

12:45 PM – To What Extent is there a Correlation between Career Choice and the Degree of Life Satisfaction?
Erin Shannon, Andrea Miller, Leslie Whonsetler & Patricia Hoffman, Faculty Sponsor: Katti Sneed, *Indiana Wesleyan University, Marion*

01:00 PM – Love and Family
Paisley Benberry, Faculty Sponsor: Krista Cline, *Butler University*

01:15 PM – The Effects of the Authoritative Parenting Style: Measuring Academic Success and Self-Efficacy
Ashley McGrath, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*

01:30 PM – High School GPA in Students Living in One-Parent or Two-Parent Homes
Elizabeth Curry, Ashley Welch & Jessica Stump, Faculty Sponsor: Katti Sneed, *Indiana Wesleyan University, Marion*

SESSION SIX: Social Issues II

Moderator: Professor Kenneth Colburn, Jordan Hall 344

12:30 PM – Satisfaction Levels within Nursing Homes: Females and Males
Jessica Miller, Lauren Harris, Sheryl ODonnell & Michael Baldrige, Faculty Sponsor: Katti Sneed, *Indiana Wesleyan University, Marion*

12:45 PM – Use of Food Pantries for Low-income Families
Whitney Merrin, Rebecca Kineman & Stephenie Dorsey, Faculty Sponsor: Katti Sneed, *Indiana Wesleyan University, Marion*

01:00 PM – Language and "Fact-Based" Obstetrical Practices: Exploring Societal Pressures on Childbirth in a Technocratic System
Emily Bohall, Faculty Sponsor: JoAnn Martin, *Earlham College*

01:15 PM – Strippers' Rights and Safety in the United States
Emily Beatty, Amanda Rychtanek & Madeline Schuttey, Faculty Sponsor: Matt Ringenberg, *Valparaiso University*

SESSION SEVEN: Social Interaction and Media

Moderator: Professor Krista Cline Jordan Hall 340

02:15 PM – Gender Roles in Popular Adolescent Television Shows
Margaret Hamilton, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*

02:30 PM – Commonality in the Perquisition of Casual Sex Partners

Cody Sanders, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*

02:45 PM – Television Violence and Its Connection to Violent Behaviors in Elementary and Middle School Aged Children

Dennis Kight, Faculty Sponsor: Krista Cline, *Butler University*

03:00 PM – Media Representations of the Female Body and its Effects on Female Teenagers

Yunet Calderon, Faculty Sponsor: Curtis Bergstrand, *Bellarmino University*

VISUAL ART
IRWIN LIBRARY ATRIUM
10:00 AM-3:00 PM

Art as Propaganda: WPA Posters in Ten Styles

Rachel Anderson, Faculty Sponsor: Elizabeth Mix, *Butler University*

Trees

Kaylin Beckwith, Faculty Sponsor: Elizabeth Mix, *Butler University*

Heart, Volume 1: An Exercise in Color

Julie Bickel, Faculty Sponsor: Elizabeth Mix, *Butler University*

Pembertons

Haley Deiser, Faculty Sponsor: Elizabeth Mix, *Butler University*

How You See ME.

Lindsey Drake, Faculty Sponsor: Elizabeth Mix, *Butler University*

Movie Posters as Art

Eric Ellis, Faculty Sponsor, Elizabeth Mix, *Butler University*

Doodles on Canvas

Nicholas Smith, Faculty Sponsors: Margaret Brabant & Elizabeth Mix, *Butler University*

Art History in a Nutshell

Carly Sobolewski, Faculty Sponsor: Elizabeth Mix, *Butler University*

POSTER SESSION 1
IRWIN LIBRARY
9:30 AM-10:30 AM

BIOLOGY

1. Digestive Flexibility in Variable Kingsnake Hatchlings and its Ecological Implication

Benjamin Rausch & Lindsey Korfel, Faculty Sponsors: Kevin Gribbins & Richard Phillips, *Wittenberg University*

2. Resetting the Aging Clock of Neural Stem Cells

Jennifer Romine, Faculty Sponsor: Jinhui Chen, *Indiana University/Purdue University-Indianapolis*

3. Screening the Second Chromosome for Dominant Enhancers of the Trio and Abl Mutant Phenotypes in *Drosophila*

Eric King, Faculty Sponsor: Eric Liebl, *Denison University*

4. Physiological Effects of Red Bull and Sugar-Free Red Bull on Female Sprague-Dawley Rats

Catherine Batz, Faculty Sponsor: Ryan Dombkowski, *St. Mary's University*

5. Investigation of SUMO Enzymes at the Neuromuscular Junction in *C. elegans*

Kristen Rush, Faculty Sponsor: Jennifer Kowalski, *Butler University*

- 6. Copperhead Snakes as a Host and the Identification of Host Cues (Kairomones) for Larvae of Ticks that Transmit Lyme Disease**
Benjamin Rausch, Patrick Tomko & Andrew Jajack, Faculty Sponsors: Kevin Gribbins & Jay Yoder, *Wittenberg University*
- 7. Vine Distribution in a Temperate Forest: Patterns of Virginia Creeper and Wild Grape**
Danny Wetli & Scott Meyer, Faculty Sponsors: Vanessa Fox & Bruce Serlin, *DePauw University*
- 8. Water Balance Characteristics Reflect Microhabitat Differences between Two Closely Related Sand Fiddler Crabs**
Sarah Funderburg & Kimberly Lykens, Faculty Sponsors: Matthew Collier & Jay Yoder, *Wittenberg University*
- 9. When Does a Queen Become a Queen During Development? Insights from Gene Expression in a Harvester Ant**
Ben Smith & Natsumi Fearnside, Faculty Sponsor: Chris Smith, *Earlham College*
- 10. Multiple Inseminations of Female Bed Bugs Adversely Affect Water Balance Maintenance Capability**
Derrick Heydinger, Andrew Jajack & Brian Hedges, Faculty Sponsor: Jay Yoder, *Wittenberg University*
- 11. Identifying the Role of Drosophila Gene Sequoia on Larval Behavior Changes**
Yan Zhang, Faculty Sponsor: Eric Liebl, *Denison University*
- 12. Influence of Season and Temperature on Capture Rate of Field Mice (*Peromyscus spp.*) in Retired Ohio Farmland**
Benjamin Hagen & Alec Van Dyke, Faculty Sponsor: Richard Phillips, *Wittenberg University*
- 13. Investigating the Factors Influencing Migration Orientations of the Wood Frog (*Lithobates sylvaticus*)**
Mark Magnus, Faculty Sponsor: Rebecca Homan, *Denison University*
- 14. Investigation of the Role of the Anaphase Promoting Complex in Regulating Inhibitory Synaptic Transmission at the *C. elegans* Neuromuscular Junction**
Hitesh Dube, Faculty Sponsor: Jennifer Kowalski, *Butler University*

PSYCHOLOGY

- 15. Group Satisfaction Scale Development and Correlations to Perfectionism**
Amy Luthanen, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*
- 16. The Effect Religion Has On Athletes versus Non-Athletes Regarding Alcohol Consumption on A Christian College Campus**
Stephanie Skiver, Faculty Sponsor: Carrie Lloyd, *Huntington University*
- 17. Everyday Activities versus Vestibular Activities and Their Effects on Everyday Functioning**
Addy King, Faculty Sponsor: Ashleigh Maxcey, *Manchester College*
- 18. Misattribution of Arousal and Perceptions of Faces**
Tiffany LeFever, Sarah Limberger, Hannah Daugherty & Natasha Greenwood, Faculty Sponsor: Erin Devers, *Indiana Wesleyan University*
- 19. The Effect Accelerated Reader Participation Has on Students' Recreational Reading**
Dylan Hiner & Emily Goins, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*
- 20. The Correlation between a Person's Level of Life Satisfaction and Amount of Time Spent on Facebook**
Jordan Garber, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*
- 21. The Relationship between Mood, Sport Performance, and Athletes' Attributions**
Emily Dean, Alex Judge, Rachel Collier & Heather Cassill, Faculty Sponsor: Timothy Steenbergh, *Indiana Wesleyan University*
- 22. The Effects of a Learning Community on Classroom Participation and Self-Confidence**
Kaitlyn DeWitt, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*
- 23. Who Drinks More: Fraternity or Sorority Members?**
Abby Dierks, Faculty Sponsor: Rose Marie Ward, *Miami University*
- 24. The Relationship between Sexual Values of College Students on a Christian Campus and Willingness to See an On-Campus Counselor**
Jillian Heidelmeier & Tianna Clark, Faculty Sponsor: Carrie Lloyd, *Huntington University*
- 25. Predictors of Students' Myths in Psychology and Criminal Justice**

- Jaclyn Swhear & J. M. Brown, D. L. Butler, & N. Ring, Faculty Sponsors: Michael Brown, Darrell Butler & Nate Ring, *Ball State University*
- 26. Correlations between Self-Esteem and Willingness to Trust**
Elizabeth Smith & Ashlee Weining, Faculty Sponsor: Carrie Lloyd, *Huntington University*
- 27. Reducing Stress through Laughter**
Eloise Fulmer, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*
- 28. An Examination of the Difference between Division I and Division III Schools and its Impact on Behavioral Drinking between Athletes and Non-athletes**
Waldema Maldonado, Faculty Sponsor: Rose Marie Ward, *Miami University*
- 29. Validating Learning Styles through Visual Performance Tests**
Zabrian Mills & Kevin Reeves, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*
- 30. College Students' Sleep Patterns and Influencing Factors**
Jessica Musselman, Faculty Sponsor: Carrie Lloyd, *Huntington University*
- 31. Exploring the Reasons why People Watch Scary Movies**
Kayla Miller, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*

POSTER SESSION 2

IRWIN LIBRARY

11AM -12 PM

BIOLOGY

- 1. Madagascar Hissing cockroach Mites Prevents Growth of Entomopathogenic, Allergenic, and Asthma-inducing Fungi: Evidence for a Cleaning Symbiosis**
Patrick Tomko, Faculty Sponsor: Jay Yoder, *Wittenberg University*
- 2. Evidence for the Impact of Reactive Oxygen Species on Branch Density Homeostasis in *Neurospora Crassa***
Alex Zapata, Tayler Grashel, & Jacob Yablonowski Faculty Sponsor: Michael Watters, *Valparaiso University*
- 3. A Baseline Study of Population Levels of Red Lionfish (*Pterois volitans*) at Selected Patch Reefs of the Androsian (Bahamas) Barrier Reef Complex**
Lauren Oberley & Aaron Brattain, Faculty Sponsor: Larry Wiedman, *University of St. Francis*
- 4. A Comparison of the Microhabitat Associations of the Meadow Vole (*Microtus pennsylvanicus*) and *Peromyscus spp.* in Prairie and Forest Environments in Muncie, IN**
Kathryn Ruhrold, Faculty Sponsor: Timothy Carter, *Ball State University*
- 5. A Preliminary Study of the Secretory Mechanism of the Venus Flytrap (*Dionaea muscipula*): Do Carnivorous Plants Have Apocrine or Merocrine Glands?**
Caroline Matchett, Faculty Sponsors: Matthew Collier & Kevin Gribbins, *Wittenberg University*
- 6. An Analysis of White-Crowned Manakin Home Ranges in the Ecuadorian Amazon**
Meghan Hennessey & Martin Ventura, Faculty Sponsor: Wendy Tori, *Earlham College*
- 7. Analysis of Transcriptional Job-Sharing between Two RNA Polymerases of *Pelargonium X hortorum***
Thomas Bilbo, Faculty Sponsor: Peter Kuhlman, *Denison University*
- 8. Blood Contamination of Used Dental Anesthetic Cartridges**
Emily Svetanoff, Faculty Sponsor: Carmen Salisbury, *Butler University*
- 9. Temperature's Effect on Growth Rate in Hatchling Variable Kingsnakes (*Lampropeltis Mexicana*)**
Benjamin Rausch, Gracie Winzeler & Stephanie Hurst, Faculty Sponsor: Richard Phillips, *Wittenberg University*
- 10. Hormonal Consequences of Eavesdropping in the Crayfish *Procambarus clarkia***
Brandon Quinby, Melody Palmer, Olivia Rivera, & Jose Haro, Faculty Sponsor: Vanessa Quinn, *Purdue North Central*

11. Comparative Analysis of Late Regulatory Genes (Dri, Erg, and Tel) Required for Skeleton Formation in Sea Urchins

Saira Tekelenburg, Kayla Ako-Asare & Emily Miller, Faculty Sponsor: Laura Romano, *Denison University*

12. Comparative Analysis of Late Regulatory Genes (FoxN2/3, FoxO and Tgif) Required for Skeleton Formation in Sea Urchins

Emily Miller, Kayla Ako-Asare & Saira Tekelenburg, Faculty Sponsor: Laura Romano, *Denison University*

13. Comparative Analysis of the Late Regulatory Genes (FoxB and Hex) Required for Skeleton Formation in Sea Urchins

Kayla Ako-Asare, Emily Miller & Saira Tekelenburg, Faculty Sponsor: Laura Romano, *Denison University*

ENVIRONMENTAL STUDIES/SCIENCES

14. Sequence Stratigraphy of Latest Ordovician-Earliest Silurian Sediments near Madison, IN

Rachael Moreland, Tyler Henning, Brad Fox & Zachary Razor, Faculty Sponsor: Ken Bevis, *Hanover College*

15. Removal of Heavy Metals from Aqueous Solutions

Catherine Kramer, Faculty Sponsor: Craig Philipp, *Hanover College*

16. Comparative Analysis of Soil pH and Soil Texture in Three Prairie Reconstruction Sites

Veronica Ibarra & Varanya Chaiyaperm & Sviatlana Krainikava, Faculty Sponsors: Joseph Oyugi & Helen Rarick, *City Colleges of Chicago-Wright College*

17. Variations in Soil Nutrient Properties of Three Prairie Reconstruction Sites

Veronica Ibarra, Varanya Chaiyaperm & Sviatlana Krainikava, Faculty Sponsors: Joseph Oyugi & Helen Rarick, *City Colleges of Chicago-Wright College*

18. How Much Asbestos is in Indiana Structures?

Andrea Rode, Faculty Sponsor: Jarmila Popovicova, *Ball State University*

19. Occurrence of Black Spot Disease in Delaware County Streams

Brandon Holsinger, Faculty Sponsor: Jarmila Popovicova, *Ball State University*

20. Safety Problems in Environmental Drilling Activities: Witnessed in My Internship Summer 2011

David Molin, Faculty Sponsor: Jarmila Popovicova, *Ball State University*

PSYCHOLOGY

21. Reasons for Infidelity Disclosure within Romantic Relationships: A Qualitative Analysis

Kelsey Bonfils & Courtney Johnson, Faculty Sponsor: Kevin Rand, *Indiana University/Purdue University, Indianapolis*

22. The Effects of Physical Exhaustion on Cognitive Functioning

Joseph Hunter, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*

23. Dating Confidence in College Students among Different Socioeconomic Statuses

Meredith Cors, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*

24. The Effects of Religiosity on Test Anxiety

Claude Nave, Faculty Sponsor: Carrie Lloyd, *Huntington University*

25. PTSD in Military Veterans: History, Evolution, and Policy Implications

Christine Albain, Faculty Sponsor: Amanda Zelechowski, *Valparaiso University*

26. Self-Regulation: An 'Active Ingredient' in the Spirituality-Health Relationship

Claire Brownson, Faculty Sponsor: R. Brian Giesler, *Butler University*

27. The Effects of Texting on College Students

Zack Yarde, Faculty Sponsor: Carrie Lloyd, *Huntington University*

28. Image of Higher Power among Midwestern AA Members

Alexis Moxley, Faculty Sponsor: Jason Runyan, *Indiana Wesleyan University*

29. 'Bullying' vs. 'Prejudice': How Framing a Prejudice Incident Affects Confrontation

Sara Kern & Brittany Sullivan, Faculty Sponsor: Kathryn Morris, *Butler University*

30. The Effects of Happiness on Employee Productivity in the Workplace

Whitney Ohmer, Faculty Sponsor: Marcie Coulter-Kern, *Manchester College*

31. Sexual Assumptions and Actuality on Secular and Christian Campuses

Brooke Groves, Samantha Brown & John Krabbe, Faculty Sponsor: Carrie Lloyd, *Huntington University*

- 32. An Examination of Alcohol Consumption Patterns across Academic Year in School**
Marissa Nocera, Faculty Sponsor: Rose Marie Ward, *Miami University*

SESSION 3
IRWIN LIBRARY
12:30 PM – 1:30 PM

CHEMISTRY

- 1. Synthesis of Fluorogenic Substrates for the Enzymatic Characterization of RV0045c from *M. Tuberculosis***
Kelly McKenna, Faculty Sponsor: Jeremy Johnson, *Butler University*
- 2. Synthesis of Novel SCS and PCP Pincer Compounds as Potential Catalysts for Transfer Hydrogenation Reactions of Biomass Substrates**
Christopher Matlak, Faculty Sponsor: Todsapon Thananattanachon, *University of Evansville*
- 3. Rediscovering the Past through Modern Chemistry: The Relationship between Analytical Chemistry and Archaeology**
Jacqueline Arroyo, Faculty Sponsor: Christine Shea, *Ball State University*
- 4. Polymers from Renewable Resources**
Stephanie Moore, Faculty Sponsor: Amelia Anderson-Wile, *Ohio Northern University*
- 5. Waste Cooking Oil for Biodiesel**
Amber Mahan & Joseph Hall, Faculty Sponsor: Shannon Teeters, *Kennedy Franklin College*
- 6. New Neutral Ligands for Transition Metal Catalysis in Aqueous Media**
Haley Armstrong & Lindsay Wiener, Faculty Sponsor: Bradley Wile, *Ohio Northern University*
- 7. Biosynthesis of the Amide and Acyl Moities of Alkamides in *Echinacea purpurea***
Harry Scott, Faculty Sponsor: Robert Minto, *Indiana University/Purdue University, Indianapolis*
- 8. Characterizing the Effects of SeO₂ and Na₂-SeO₃ on the Interactions between Metal Ions and DNA using Electronic Absorption Spectroscopy**
Steve Marczak, Faculty Sponsor: Daniel Morris, *Rose-Hulman Institute of Technology*
- 9. Energy Transfer in Iodine**
Nicholas Takebayashi & Paige Shevlin, Faculty Sponsor: Bryan Lynch, *University of Evansville*
- 10. FSH1 Enzyme Characterization**
Michael Slack, Faculty Sponsor: Jeremy Johnson, *Butler University*
- 11. Laser Spectroscopy of Lignin Monomer Analogs**
Polina Navotnaya, Alexander Parobek & Rachel Clayton, Faculty Sponsor: Timothy Zwier, *Purdue University*
- 12. Wittig Reactions in Water and Removal of By-product using Merrifield Resin**
Riya Patel & Elizabeth Shores, Faculty Sponsor: Nazir Khatri, *Franklin College*

PHARMACY, HEALTH SCIENCES AND EXERCISE SCIENCE

- 13. Associations between Depression and Tinnitus in a Nationally Representative Sample of Older Adults**
Shawn Maskalick, Faculty Sponsors: Kent Brown & Paul Loprinzi, *Bellarmino University*
- 14. Adenosine Receptor, Epac1 and Small GTPase Signaling in Human Endothelial Cell**
Juliana Zschoche, Heather Helsel & Thomas Otroba, Faculty Sponsor: Mark Olah, *Ohio Northern University*
- 15. Antidepressant and Antipsychostimulant Properties of a Novel Triple Reuptake Inhibitor Lead Compound Identified via Virtual Screening**
Elizabeth Dallman, Cait Munro, G. Tanda, M. Indarte, J. D. Madura, C. K. Surratt & Dr. Jeffrey Talbot, Faculty Sponsor: Jeffrey Talbot, *Ohio Northern University*

16. Regulation of the Antidepressant Effects of SSRIs by RGS4

Nicholas Wolters, Caitlin Ratliff, B. R. Rorabaugh, R. R. Neubig, J. R. Traynor & Dr. Jeffrey Talbot,
Faculty Sponsor: Jeffrey Talbot, *Ohio Northern University*

17. The Relationship between GPA and Peak Drinking among College Women across all Four Academic Years

Gregory Bourn, Faculty Sponsor: Rose Marie Ward, *Miami University*

18. Evidenced-Based Practices for Training Adolescent Distance Runners

Timothy Greenwood, Faculty Sponsor: Paul Loprinzi, *Bellarmino University*

19. Impact of Acute Arginine Alphaketoglutarate (AAKG) Supplementation on Muscle Endurance in Trained Men

Luke Douglas Sprague, Faculty Sponsor: Mark Kaelin, *Bellarmino University*

MATHEMATICS AND COMPUTER SCIENCE

20. A Modern Approach to Software Rasterization

Zach Bethel, Faculty Sponsor: Bill Toll, *Taylor University*

21. An Immersive Learning Project: Games, Fun, and Learning

Jacque Schrag, Ashley Swartz, Rebecca Austin, Diane Berg, Lauren Buroker, Travis Cawthorn, Ryan Thompson, Lyle Franklin, Joshua Hurst & Nick Walters, Faculty Sponsor: Paul Gestwicki,
Ball State University

EDUCATION

22. Southern Indiana Teachers' Perceptions on Middle and Elementary School Science Education

Josh Long & Chelsy Calhoun, Faculty Sponsor: Jeff Thomas, *University of Southern Indiana*

23. Study Habits of College Females: The Effect They Affect GPA

Alyssa Veers, Faculty Sponsor: Carrie Lloyd, *Huntington University*

24. The Draw an Engineer Test: Establishing Reliability Evidence for a Coding System

Oksana Kharchenko, Benjamin Horstman, Miles Evans, Lynch Bennett, Daphne Duncan-Wiles, Nicole Weber & Heidi Diefes-Dux, Faculty Sponsor: Johannes Strobel, *Purdue University*

25. Content-Based Instruction in the English as a Foreign Language Classroom

Kathy Woods, Faculty Sponsor: Sumer Seiki, *Illinois Wesleyan University*

26. Elementary Classroom Practices that Improve Vision-Related Learning Problems

Erin McClellan, Faculty Sponsor: Sumer Seiki, *Illinois Wesleyan University*

27. K-12 Student Attitudes towards Engineering: A Pre/Post Assessment

Aaron Lemcherfi, Brett Kult, Daphne Duncan-Wiles & Dr. Johannes Stroble, Faculty Sponsor: Johannes Strobel, *Purdue University*

28. Keeping Interactive Whiteboards Interactive to Motivate Students in Secondary Social Studies Classrooms

Sylvia Zukowski, Faculty Sponsor: Sumer Seiki, *Illinois Wesleyan University*

SESSION 4

IRWIN LIBRARY

2:00 PM-3:00 PM

PHYSICS

1. Atomic Force Microscopy of Spacesuit Fabric Exposure Experiment on MISSE-7

Brittany Batman, Faculty Sponsor: Gregory Clark, *Manchester College*

2. Classifying Red Subdwarf Stars

Sarah Thompson, Faculty Sponsor: Thomas Robertson, *Ball State University*

3. Design and Construction of Acoustic Transducers for Dark Matter Detection

Tonya Benjamin, Faculty Sponsor: Ilan Levine, *Indiana University, South Bend*

4. Modeling Elementary Gyroscopic Motion

Harvey Kaplan, Faculty Sponsor: Andrew Hirsch, *Purdue University*

5. Modeling the Exit Velocity of a Compressed Air Cannon

Tyler Buresh & Zachary Rohrbach, Faculty Sponsors: James Brown & Martin Madsen, *Wabash College*

6. Optimizing Position Sensitivity of the Detection System for the St. George Recoil Mass Separator

Luis Morales, Faculty Sponsor: Jerry Hinnefeld, *Indiana University, South Bend*

7. Visualizing Valence Electron Structure

Aeryk Kuna, Faculty Sponsor: Antonio Cancio, *Ball State University*

ANTHROPOLOGY

8. Oscar Romero

Kevin Williams II, Faculty Sponsor: Gerald Waite, *Ball State University*

ENGLISH (LITERATURE & CREATIVE WRITING)

9. The Effects of the Writing Center Tutor Program on Written Communications 2 and 3 Student

Joshua Wyman, Faculty Sponsor: Joel Boehner, *Bethel College*

GENDER, WOMEN AND SEXUALITY STUDIES

10. Women, War and Peace

Heather Watts, Faculty Sponsor: Gerald Waite, *Ball State University*

11. Perceived Health and Wellness Benefits of Claiming a Feminist Label: A Study of Perception and Reality

Tory Ervin, Faculty Sponsor: Jeffrey Wherry, *Texas Tech University*

12. GLBT Identity Crisis: Real or Social Construction?

Robin Armstrong, Faculty Sponsor: Carol Brooks Gardner, *Indiana University/Purdue University, Indianapolis*

HISTORY

13. The Life of Bayard Rustin - A Behind the Scenes Peacemaker

Angelina Zulas, Faculty Sponsor: Gerald Waite, *Ball State University*

14. "As Soon as a Coin in the Coffers Rings/ the Soul from Purgatory Springs": Economic Challenges to Black Plague Desolation of London 1348-1650

John Evans, Faculty Sponsor: Vivian Deno, *Butler University*

15. Learning from Sesame Street

Jessica Bair, Faculty Sponsor: David Atkinson, *Purdue University*

16. "You Made Me Black": Mulattos, Miscegenation, and the Struggle for Identity in American Culture

Erica Sgroi, Faculty Sponsor: Vivian Deno, *Butler University*

INTERNATIONAL STUDIES

17. Liu Xiaobo: Human Rights Activism in China

Robert Moran, Faculty Sponsor: Gerald Waite, *Ball State University*

18. Economic Consequences of Recent Conflict in Liberia

Ryan Petter, Faculty Sponsor: Barry Ritchey, *Anderson University*

MUSIC

19. Will Music Help You in Biology?

Cameron Carey, Faculty Sponsor: Melba Horton, *North Georgia College & State University*

BUSINESS AND ECONOMICS

20. Anderson University Alumni Association Member Study

Andrew Harper & Brett Hollenbeck, Faculty Sponsor: Larry Seibert, *Anderson University*

SOCIOLOGY

21. Body Art among College Students

Megan Altemus & John Haller, Faculty Sponsor: Elizabeth Whitaker, *Central Michigan University*

22. Clark County Juvenile Drug Court: A Sociological Program Evaluation

Alexandra Bickel, Faculty Sponsor: Keith Doubt, *Wittenberg University*

23. Discourse in the Education System

Megan Altemus, Faculty Sponsor: Amanda Garrison, *Central Michigan University*

24. Hukou and the Migrant Workers in China

Yasas Wickramasinghe, Faculty Sponsor: Marya Bower, *Earlham College*

BIOLOGY

25. Behavioral Consequences of Eavesdropping in Crayfish

Brandon Quinby, Melody Palmer, Olivia Rivera, Jose Haro, & Cody Anspach, Faculty Sponsor: Vanessa Quinn, *Purdue North Central*

26. Investigation into the Difference in Gender Habitat Selection by *Setophaga caerulea* on Andros Island, Bahamas

Owain Jones, Faculty Sponsor: Larry Wiedman, *University of St. Francis*

27. Energy Efficient Hydroponic Production

Corbett Miller, Faculty Sponsor: Sandra Davis, *University of Indianapolis*

28. Does Leaf and Flower Damage Induce Anti-Herbivore Defenses in *Raphanus sativus* Petals and Have an Effect on Female Fitness?

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29. Beneficial Fungal Associates of Bee (*Apis mellifera*) Hives Exhibit Varied Response to Fungicide Treatment: Implications for Increased Occurrence of Chalkbrood and Stonebrood Infestation

Patrick Tomko, Andrew Jajack & Brian Hedges, Faculty Sponsor: Jay Yoder, *Wittenberg University*

30. Suitability for Release and Establishment of the Red Velvet Mite to Control Aphids and Scale Insects in a New Geographic Application Based on Short-term Heat Shock Response

Patrick Tomko, Brian Hedges, & Andrew Rosselot Faculty Sponsor: Jay Yoder, *Wittenberg University*

31. The Use of Filamentous Fungi to Convert Human Waste into Consumable Products

Elizabeth Phillippi, Alex Zapata & Blair Mitchell, Faculty Sponsor: Michael Watters, *Valparaiso University*

32. Fluctuating Asymmetry's Effect on Fitness Indicators at Varying Incubation Temperatures in the Variable Kingsnake (*Lampropeltis mexicana*)

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Platt, David.....	Music Session 3
Pollock, Rachel	Education Session 2
Popa, Tiberiu.....	Philosophy & Religion Session 2
Porto, Rafael.....	Music Session 4
Prest, Mathew	Business & Economics
Price, Emily	Psychology Session 8
Priest, Megan	Exercise Science Session 2
Prifogle, Derek	Exercise Science Session 1
Pursel, Samantha	Communication & Media Studies Session 4

Q

Quinby, Brandon.....	Poster Session 2; Poster Session 4
Quintanilla, Alex.....	Modern Foreign Language Sessions 1 & 2

R

Rademacher, Mark	Communication & Media Studies Session 2
Ragsdale, Emily	Psychology Session 8
Rastede, Frederick	Physics Session 1
Ratliff, Caitlin	Poster Session 3
Rausch, Benjamin.....	Poster Session 1; Poster Session 2; Poster Session 3
Razor, Zachary	Poster Session 2
Redd, Brittanie	International Studies Session 2
Redden, Janalee	Psychology Session 4
Reed, Larisha	Sociology Session 4
Reeves, Kevin	Poster Session 1
Reid, Karley	Psychology Session 7
Reiskytl, Nate	Communication & Media Studies Session 4
Reno, Necole	Psychology Session 8
Rheubert, Justin	Biology Session 5
Rice, Jasmen	Psychology Session 6
Rickey, Caitlyn	Education Session 1

Risley, Sarah	Education Session 2
Rivera, Olivia	Poster Session 2; Poster Session 4
Rode, Andrea	Poster Session 2
Rodenkirch, Sarah	Psychology Session 2
Rohn, Anne	Biology Session 3
Rohrbach, Zachary	Poster Session 4
Romine, Jennifer	Poster Session 1
Ropp, Jason	English Session 3
Rosselot, Andrew	Poster Session 4
Ruhrold, Kathryn	Poster Session 2
Rush, Kristen	Poster Session 1
Russell, Emily	Communication & Media Studies Session 2
Rutledge, Claire	History Session 1
Rutter, Nathaniel	Mathematics & Computer Science
Rychtanek, Amanda	Sociology Session 6

S

Sanders, Cody	Sociology Session 7
Sapp, Amber	Psychology Session 5
Sauer, Kendall	Psychology Session 6
Savas, Chris	Chemistry Session 1
Schaefer, Mark	English Session 5
Schatz, Jeff	Philosophy & Religion Session 3
Schmidt, Kevin	Biology Session 1
Schmidt, Natalie	Sociology Session 3
Schnurr, Ryan	Communication & Media Studies Session 2
Schrag, Jacque	Education Session 1; Poster Session 3
Schuttey, Madeline	Sociology Session 6
Schwartz, Samatha.....	Music Session 5
Scott, Harry	Poster Session 3
Scott, Marvin	Sociology Session 1; Sociology Session 4
Scribalo, Ryan	Biology Session 1
Seaton, Cory	Sociology Session 2
Seekaew, Pich	Biology Session 3
Sgroi, Erica	Poster Session 4
Shahrokhi, Sholeh	Anthropology Session 1; Anthropology Session 2
Shannon, Erin	Sociology Session 5
Shaw, John	Anthropology Session 2
Shepherd, Nicole	Biology Session 4
Sheridan, Katherine	English Session 1
Sherron, Brittany	Biology Session 2
Shevlin, Paige	Poster Session 3
Shilts, Kent	Chemistry Session 2
Shoup, Amanda	Psychology Session 3
Shores, Elizabeth.....	Poster Session 3
Sieg, Matt	Exercise Science Session 1
Siemens, Brittany	Communication & Media Studies Session 3
Simmons, Aaron	Philosophy & Religion Session 3
Sims, Ashley	Psychology Session 3
Sims, Rachel	Psychology Session 2
Sink, Alisha	Psychology Session 7
Skeate, Amanda	Sociology Session 1
Skinner, Katelyn	Psychology Session 1
Skiver, Stephanie	Poster Session 1
Skowronski, Andrea	English Session 2
Slack, Michael	Poster Session 3, Music Session 2
Sluis, Ageeth	History Session 2

Slusher, Josh	Political Science Session 2
Smith, Ben.....	Poster Session 1
Smith, Elizabeth	Poster Session 1
Smith, Nicholas	Visual Arts
Sobolewski, Carly	Visual Arts
Sookradge, Helen	Biology Session 1
Sprague, Luke.....	Poster Session 3
Spyra, Ania	English Session 6
Stachura, Eric	Biology Session 5
Staley, Vera	Biology Session 3
Standish, Hilary	Biology Session 6
Stanley, Brian	International Studies Session 3
Stauffer, Alicia	Communication & Media Studies Session 3
Stauffer, William	Communication & Media Studies Session 3
Stearman, Avery	Modern Foreign Language Session 2
Stegman-Frey, Katherine Louise	Modern Foreign Language Session 2
Stein, Edward	International Studies Session 1
Stock, Nick	Business & Economics
Story, Daniel	History Session 1
Strang, Rachel	Exercise Science Session 1
Strawbridge, Marilyn	Exercise Science Sessions 1 & 2
Strawhun, Alexandra	Psychology Session 6
Strobl, Sarah	Biology Session 6
Stump, Jessica	Sociology Session 5
Sullivan, Brittany	Poster Session 2
Summers, Kristi	Psychology Session 5
Suzuki, Ian	Biology Session 3
Svetanoff, Emily	Poster Session 2
Swale, Ginny	Anthropology Session 1
Swartz, Ashley	Education Session 1; Poster Session 3
Sweeney, Robert	International Studies Session 3
Swenson, Brynnar	English Session 5
Swenson, Kristin.....	Communications & Media Studies Session 3
Swhear, Jaclyn.....	Poster Session 1

T

Takebayashi, Nicholas.....	Poster Session 3
Tarplee, Meredith	Psychology Session 1
Tarr, Jade	Sociology Session 4
Taylor, Alexis	Psychology Session 4
Taylor, Kara	Sociology Session 1
Taylor, Paul	Sociology Session 4
Tedder, Brandi	Psychology Session 3
Tekelenburg, Saira	Poster Session 2
Thalls, Emily	Psychology Session 8
Thang, Lian	Anthropology Session 4
Thevenow, Patrick	Anthropology Session 2; Anthropology Session 3
Thomas, Jordan	Psychology Session 2
Thompson, Cam	Psychology Session 1; Pharmacy & Health Sciences
Thompson, Chris	Psychology Session 3
Thompson, Emily	Psychology Session 3
Thompson, Leanna	Psychology Session 7
Thompson, Ryan	Education Session 1; Poster Session 3
Thompson, Sarah.....	Poster Session 4
Toddy, Joe	Physics Session 1
Tomko, Patrick.....	Poster Session 1; Poster Session 2; Poster Session 3
Topolski, Jennifer	Biology Session 1

Touzinsky, Katherine	Biology Session 5
Traylor, John	Gender, Women, & Sexuality Studies
Trefilek, Ben	Chemistry Session 2
True, Shelby	Psychology Session 5
Tuley, Anna	Psychology Session 7
Turnbow, Sharon	Psychology Session 1
Turner, Jarred	English Session 1
Turner, Robin	Political Science Session 1

V

Vaclavik, Danielle	Psychology Session 6
Valliere, Paul	Philosophy & Religion Session 1
van der Linden, Harry	Philosophy & Religion Session 3
Van Dyke, Alec	Poster Session 1
Vaught, Nathaniel	International Studies Session 2
Veers, Alyssa	Poster Session 3
Ventura, Martin	Biology Session 5; Poster Session 2
Veverka, Megan	Pharmacy & Health Sciences

W

Waggenspack, Luke	Psychology Session 7
Wahl, Rebecca	Mathematics & Computer Science
Walker, Leah	Psychology Session 2
Walsh, Bill	English Session 1
Walsh, Lena	Sociology Session 5
Walters, Nick	Education Session 1; Poster Session 3
Walworth, Grace	Biology Session 2
Wang, Kevin	Communication & Media Studies Session 1
Ward, Brock	Biology Session 5
Wareham, Josiah	Psychology Session 7
Warwar, Rachel	Biology Session 3
Wasilk, Amy	Biology Session 2
Watts, Bill	English Session 3
Watts, Heather	Poster Session 4
Waxingmoon, Anne	Anthropology Session 3
Weber, Nicole	Poster Session 3
Webber, Brittany	Sociology Session 4
Weining, Ashlee	Poster Session 1
Weisenbeck, Renee	Sociology Session 3
Weiss, Lindsey	International Studies Session 1
Welch, Ashley	Sociology Session 5
Wetli, Danny	Poster Session 1
Wheaton, Jenna	Psychology Session 2; Anthropology Session 2
Whitehead, Ora	Psychology Session 7
Whonsetler, Leslie	Sociology Session 5
Wickramasinghe, Yaras	Poster Session 4
Wickstrom, Erica	Sociology Session 2
Wiener, Lindsay	Poster Session 3
Wiersum, Carl	Music Session 3
Willenbrink, Caitlin	English Session 4; Modern Foreign Language Session 2
Williams, Brenna	Communication & Media Studies Session 4
Williams, Courtney	International Studies Session 2
Williams, Emily	Psychology Session 7
Williams II, Kevin	Poster Session 4
Wimer, Cassandra	Psychology Session 2

Winkle, Audrey	Psychology Session 3
Winter, Peter	Biology Session 2
Winzeler, Gracie.....	Poster Session 2
Wolters, Nicholas.....	Poster Session 3
Wooddell, Rachaelen	Psychology Session 7
Woods, Kathy.....	Poster Session 3
Worland, Keaton	Exercise Science Session 2
Worrell, Braden	Communication & Media Studies Session 1
Wyman, Joshua.....	Poster Session
Wysong, Hannah	Sociology Session 1

Y

Yablonowski, Jacob.....	Poster Session 1
Yarde, Zack.....	Poster Session 2
Yoch, Olivia	English Session 1; English Session 4

Z

Zapata, Alex	Poster Session 1; Poster Session 4
Zhang, Yan	Poster Session 1
Ziefle, Jacob	Mathematics & Computer Science
Zschoche, Juliana	Poster Session 3
Zukowski, Sylvia	Poster Session 3
Zulas, Angelina	Poster Session 4