Special Thanks to:
Robert Morris
Justin Miller
Stan Geidel
Susan McDowell
Linda Swartz
Jessie Roark
Abraham Schreier

and
Sponsored Projects Administration

2016
STUDENT SYMPOSIUM

at Ball State University

Friday, April 8, 2016
1:00 – 4:30 P.M.

2nd Floor,
L.A. Pittenger Student Center
Ball State University
The Student Symposium at Ball State University

Students at Ball State University are widely known for their ability to take disciplinary knowledge learned in the classroom and apply it to high-quality research projects and innovative creative endeavors. For twenty years the Student Symposium at Ball State University has provided students with the opportunity to showcase creative and scholarly projects, while gaining practical experience presenting their work in a conference setting right here on Ball State’s campus.

The Student Symposium encourages interdisciplinary discourse, allowing students to learn from each other about engaging topics from many disciplines around the university. The Student Symposium is open to the public, allowing student participants the opportunity to share their work with a wider audience. Poster presentations are eligible for one of six cash prizes and all paper presentations will receive feedback from a faculty moderator.

Special Thanks to our Judges and Moderators

Colleen Balukas
Adam M Berland
Douglas Bernstein
Bryan Byers
Lori Byers
Jackie Davis
John Emert
Stan Geidel
Jagdish Khubchandani
Kwang-Ho Lee
Sue McDowell
Rebecca Pappas
Erica Payton
Allison Rober
Rona Robinson-Hill
Jörn Seemann
Mahumud Subir
Henry Wang
Susan Wilczynski
Kevin Wyatt
Congratulations to all of our 2016 Student Symposium Participants!

See you next year!

2016 Student Symposium
Friday, April 8, 2016
2nd Floor, L.A. Pittenger Student Center

Moderated Paper Presentations

1:00 – 2:15

Session I
Music Lounge

Session II
Pineshelf Room

Session III
Cardinal Hall B

Session IV
Cardinal Hall C

2:25 – 3:40

Session V
Music Lounge

Session VI
Pineshelf Room

Session VII
Cardinal Hall B

Session VIII
Cardinal Hall C

Each presentation will last for
approximately 15 minutes
with time for questions following.

The Linda Keys, Jeffrey Litten and
Sandra L. Smith Awards

The Keys–Litten–Smith Awards were established in
memory of Linda Keys, Jeffrey Litten, and Sandra Smith,
who served in research administration at Ball State for a
combined total of thirty years. The awards recognize stu-
dents for their outstanding research or creative endeavors
presented during the poster session at the Student Sympo-
sium.

Anyone wishing to contribute to the Keys/Litten/Smith
Student Symposium Awards fund may do so by sending a
check made payable to Ball State University Foundation,
notating either Account #9652 or Keys/Litten/Smith
Symposium Award in the lower left hand corner.

Checks may be sent to the Ball State University
Foundation or Sponsored Projects Administration.
Sheldon Woods  
Educational Leadership  
*Should Fraternity Men be Mandated to Take a Sexual Assault Prevention Program?*

Faculty Mentor: Thalia Mulvihill  
Teachers College

---

Xinyue Yang  
Mathematical Sciences  
*Estimating Probabilities of Default for Bank Data*

Faculty Mentor: Munni Begum  
College of Sciences and Humanities

---

Scott Zello  
Biology  
*Multi-stressor effects of PPCPs on Daphnia magna mortality, reproductive activity, and growth*

Faculty Mentor: Melody Bernot  
College of Sciences and Humanities

---

Session I  

1:00—2:15 | Music Lounge  
Moderator: Stan Geidel  
Sponsored Projects Administration

---

Hailey Beard  
Journalism  
*Analyzing the Twitter usage of the Metropolitan Museum of Art, Tate Modern, and Musee d’Orsay: How Art Museums Connect with Users over Social Media to Increase Communication and Information Exchange*

Faculty Mentor: Michelle O’Malley  
College of Communication, Information, and Media

---

Pearl Mohankumar  
Journalism  
*Graduate International Student – Adviser Interactions: Research And Recommendations For Relationship Building Communications*

Faculty Mentor: Debbie Davis  
College of Communication, Information, and Media

---

Xiaorong Qian  
Journalism  

Faculty Mentor: Robin Blom  
College of Communication, Information, and Media
**Session II**

1:00—2:15  |  Pineshelf Room

**Moderator: Jörn Seemann**

*Department of Geography*

---

**Grace Cebalt**

Modern Languages and Classics

*Cervantes & Stockholm Syndrome*

Faculty Mentor: Stephen Hessel

College of Sciences and Humanities

---

**Daniel Hill**

History

*An Intellectual History of Dietrich Bonhoeffer: His Actions through Interpretations of the Protestant Bible, Theology, and Christian Experiences*

Faculty Mentor: Kevin Smith

College of Sciences and Humanities

---

**Richard Ward, Alex Di Iorio, Sylvia Leithner & Mason Radabaugh**

Psychology

*An Investigation of Metacognition, Academic Performance, and Note-Taking Strategies*

Faculty Mentor: Darrell Butler

College of Sciences and Humanities

---

**Matthew Watland**

Biology

*Determination of Personality in Freshwater Snail, Physa acuta*

Faculty Mentor: Randall Bernot

College of Sciences and Humanities

---

**Nicole Woodall**

Chemistry

*Comparative Study of Photocatalysis on Tungsten Sulfide and Titanium Dioxide: In Search of a Superior Photocatalyst*

Tyhkon Zubkov

College of Sciences and Humanities

(Session continued on next page.)
Christopher Thomas, Christopher Guion & Charlotte Condon
Educational Psychology

*Examining the Role Interhemispheric Communication in the Congeniality Bias*

Faculty Mentor: Michael Tagler
College of Sciences and Humanities

Elizabeth Tobin
Psychology

*Texting White Lies*

Faculty Mentor: Thomas Holtgraves
College of Sciences and Humanities

Hayden Shaw
History

*Elaborations, Exaggerations, and Outright Lies: The Complex Historiography of Saga Writer Snorri Sturluson*

Faculty Mentor: Douglas Seefeldt
College of Sciences and Humanities

Abigail Ivers
Communication Studies

*Pax Tecum: Following Blessed Frassati’s Life of Peace*

Faculty Mentor: Gerald Waite
College of Sciences and Humanities

Jeremy Walls
Biology

*Exploring Environmental Controls on Toxic Algal Blooms to Promote Problem Solving and Quantitative Reasoning Skills in STEM Courses*

Faculty Mentor: Allison Rober
College of Sciences and Humanities
**Session III**
1:00—2:15 | Cardinal Hall B
Moderator: Adam Berland
Department of Geography

---

**Chelce Carter**
Anthropology
*From Farm to Table: Women's Shifting Roles in Agriculture*
Faculty Mentor: Jennifer Erickson
College of Sciences and Humanities

**Bridget Stancombe**
Biology
*A Comparative Study of Herpetofaunal Diversity and Abundance Among Four Ball State University Owned Properties in Muncie, IN, USA*
Faculty Mentor: Timothy Carter
College of Sciences and Humanities

**Haley Crane**
English
*Interracial Relationships between Asian Men and Western Women: It is more than the Language Barrier*
Faculty Mentor: Laura O’Hara
College of Communication, Information, and Media

**Gilles Tagne**
Geological Sciences
*Anthropogenic Contamination of Cave Groundwater in Southeastern Kentucky*
Faculty Mentor: Lee Florea
College of Sciences and Humanities

**Jared Knotts**
Modern Languages and Classics
*Spanish Globalization: Spanish language and Cultural Expansion in the United States and Dissolving Negative Hispanic Stereotypes*
Faculty Mentor: Colleen Balukas
College of Sciences and Humanities

**Chelsie Taylor**
Natural Resources and Environmental Management
*Innovations in Wastewater*
Faculty Mentor: Steve Dickerson
College of Sciences and Humanities
Daniel Smith  
Chemistry  
The Role of Glycogen in Hypoglycemia-induced Memory Loss  
Faculty Mentor: Bartholomew Pederson  
College of Sciences and Humanities

Josh Smith  
Chemistry  
A Novel Approach to an Old Material: Photocatalytic Synthesis of Organic Compounds Commonly used in Medicinal Chemistry  
Faculty Mentor: Tykhon Zubkov  
College of Sciences and Humanities

Ashleigh South & Sarah Engle  
Biology  
Development of Tools to Study the Degradation of Translocon-Associated Proteins  
Faculty Mentor: Eric Rubenstein  
College of Sciences and Humanities

Seth Abel  
Chemistry  
In-silico Design and Experimental Validation of Boolean Logic Gates Based on Fluorogenic RNA Aptamers  
Faculty Mentor: Emil Khisamutdinov  
College of Sciences and Humanities

My Bui  
Chemistry  
Construction of Nucleic Acid Nanoarchitectures Based on Flexible tetra-U Linking Module  
Faculty Mentor: Emil Khisamutdinov  
College of Sciences and Humanities

(Session continued on next page.)
Session IV (cont.)
1:00—2:15 | Cardinal Hall C
Moderator: Mahumud Subir
Department of Chemistry

Courtney Oakes & My Bui
Chemistry
Overexpression of T7 RNA polymerase
Faculty Mentor: Emil Khisamutdinov
College of Sciences and Humanities

Tyler Williams
Chemistry
Investigation of the Binding Affinity of Malachite Green on Magnetic Colloids Using Surface Selective Spectroscopy
Faculty Mentor: Mahamud Subir
College of Sciences and Humanities

Macon Shroyer
Natural Resources and Environmental Management
E. Coli Testing of Stormwater
Faculty Mentor: Juan Ramirez-Dorronsoro
College of Sciences and Humanities

Amanda Shurzinske
Biology
Algal Exudates Promote the Breakdown of Dissolved Organic Matter in a Northern Peatland
Faculty Mentor: Kevin Wyatt
College of Sciences and Humanities

Casey Smith & Ryan Shank
Journalism
"Everyday Life in Middletown"
Faculty Mentor: Patrick Collier
College of Sciences and Humanities
Dan Royer  
Educational Studies  
*Phenomenological Interviews at a Distance: Reflexivity and Rapport Building*  
Faculty Mentor: Amanda Latz  
Teachers College

Avery Sampson  
Biology  
*Molecular Analysis of the Bacterial Community in Boreal Peatlands*  
Faculty Mentor: Kevin Wyatt  
College of Sciences and Humanities

Andrew Schmidt, Logan Remenar, Albraa Jan & Johnny Brazas  
Information Systems and Operations Management  
*Promotional Pricing Project*  
Faculty Mentor: Fred Kitchens  
Miller College of Business

Cameron Melangton & Colin Steitz  
Economics  
*Public Goods Analysis*  
Faculty Mentor: Cecil Bohanon  
Miller College of Business

Katie Norman  
English  
*Video Games, Music, and Narrative: Storytelling without Words*  
Faculty Mentor: Jennifer Grouling Snider  
College of Sciences and Humanities

Carrie Reisner  
Educational Studies  
*Triplets in College: An Intersection of Identity Development*  
Faculty Mentor: Elena Polush  
Teachers College
Session VI
2:25—3:40 | Pineshelf Room
Moderator: Colleen Balukas
Department of Modern Languages and Classics

Amanda Balough
Anthropology
Application of GPR Survey to Investigate Ambiguity at Fort Ward, VA
Faculty Mentor: Mark Groover
College of Sciences and Humanities

Sneha Chavali
Anthropology
Cabokia's Boom and Bust in the Context of Climate Change
Faculty Mentor: Mark Groover
College of Sciences and Humanities

Jessica Clark
Anthropology
An Exploration into the Historic Context and Relevance of the Clemens Farm Site
Faculty Mentor: Mark Groover
College of Sciences and Humanities

Andrew Riley & Amirhossein Hosseini
Chemistry
Solar Cell Fabrication with Copper and Silver Doped NiWO4
Faculty Mentor: Zhihai Li
College of Sciences and Humanities

Ben Rodenas
Natural Resources and Environmental Management
Chemical Warfare Stockpiles
Faculty Mentor: Amy Gregg
College of Sciences and Humanities

Natasha Rollings
Biology
Fine Focus: a new international journal for undergraduate microbiology research
Faculty Mentor: John McKillip
College of Sciences and Humanities
Milina Quiroz
Chemistry
The Visual and Spectroscopic Analysis of Paint Layers from a Medieval Sculpture
Faculty Mentor: Patricia Lang
College of Sciences and Humanities

Heather Ramey
Chemistry
Characterizations of NiWO4 doped TiO2
Faculty Mentor: Zhihai Li
College of Sciences and Humanities

Jacob Rendall & Brandon Patterson
Computer Science
MIDAS — Metrics IDentification of Attack Surfaces
Faculty Mentor: Dolores Zage
College of Sciences and Humanities

Raghad Mubarak Alali
Family and Consumer Sciences
Saudi' Traditional Dress in a Modern Way
Faculty Mentor: Jinhee Nam
College of Applied Sciences and Technology

Fatima Alshhree
Family and Consumer Sciences
Traditional Clothes in New Design
Faculty Mentor: Jinhee Nam
College of Applied Sciences and Technology

Khawlah Otayf
Family and Consumer Sciences
Butterfly Dress Development
Faculty Mentor: Jinhee Nam
College of Applied Sciences and Technology
Paromita Nitu
Mathematical Sciences

*A Generalized Poisson Model for Gene Expression Profiling Using RNA Sequence Data*

Faculty Mentor: Munni Begum
College of Sciences and Humanities

Robert Shields
Biology

*Silver Carp (Hypophthalmichthys molitrix) and Fishes of the Wabash River*

Faculty Mentor: Mark Pyron
College of Sciences and Humanities

Erin Phelps
Sociology

*A Brief Frame Analysis of Transgender Advocacy Media*

Faculty Mentor: Ro Anne Royer-Engle
College of Sciences and Humanities

Kayla Phillips
Modern Languages and Classics

*Code-Switching in Bilingual Television Series*

Faculty Mentor: Colleen Balukas
College of Sciences and Humanities

Zach Prause
Biology

*Alewife Age, Growth and Fecundity in Lake Michigan*

Faculty Mentor: Thomas Lauer
College of Sciences and Humanities
Eric Olson & Felicia Konrad  
Anthropology  
*Rehydroxylation Dating*  
Faculty Mentor: Mark Hill  
College of Sciences and Humanities

Ashleigh Owens  
Journalism  
*Improving the Reporting Structure of CSR Practices for Lodging in Hospitality, Travel and Tourism*  
Faculty Mentor: Robin Blom  
College of Communication, Information, and Media

Jelena Petricevic & Maren Orchard  
Biology  
*Work-Family Conflict in American Women: Association with Health Risk Behaviors and Health Outcomes*  
Faculty Mentor: Jagdish Khubchandani & Joann Kleinfelder  
College of Sciences and Humanities
Sudad Abed
Computer Science
User Activity and Preference Based Smart HVAC
Faculty Mentor: Shaoen Wu
College of Sciences and Humanities

LeAnne Myers
Educational Studies
Should Ball State University Police Officers be Required to Wear Body-Worn Cameras?
Faculty Mentor: Thalia Mulvihill
Teachers College

Leslie Adriance, Nick Entrekin & Lidia A-wan
Architecture
Art in a Different light: A Study of Museum Lighting Levels
Faculty Mentor: Tom Collins
College of Architecture and Planning

Todd Myers
Biology
Role of Glycogen in Preventing Deleterious Motor Memory Effects Caused by Insulin Induced Hypoglycemia
Faculty Mentor: Bartholomew Pederson
College of Sciences and Humanities

Reagan Airey
Biology
Cytotoxicity of Small Molecule Inhibitors of Bacterial Invasion
Faculty Mentor: Susan McDowell
College of Sciences and Humanities

Claire Nemes & Clay Delancey
Biology
Cerulean Warbler (Setophaga cerulea) Microhabitat Use and Its Influence on Nest Success in Southern Indiana
Faculty Mentor: Kamal Islam
College of Sciences and Humanities
Ashley Miller
Natural Resources and Environmental Management

*CEC Internship as a Bat Field Biologist*

Faculty Mentor: Amy Gregg
College of Sciences and Humanities

Abdulmajeed Alomayri
Journalism

*Comparing Twitter Messages between New York City and Al Riyadh Municipality in Saudi Arabia*

Faculty Mentor: Michelle O’Malley
College of Communication, Information, and Media

Mario Minder
Biology

*Silver Carp Diets and Algae Selectivity in the Wabash River*

Faculty Mentor: Mark Pyron
College of Sciences and Humanities

Saud Alzahrani
Communication Studies

*The Arab Spring*

Faculty Mentor: Gerald Waite
College of Sciences and Humanities

Kayla Mughmaw
Biology

*Assessment of DPH Effects on Sperm-Egg Zona Pellucida Binding and Protein Expression of β-1, 4-Galactosyltransferase and Proacrosin*

Faculty Mentor: Clare Chatot
College of Sciences and Humanities

Ran An
Computer Science

*User Behavior Based Mobile Device Authentication*

Faculty Mentor: Shaoen Wu
College of Sciences and Humanities
Adam Ares
Biology
Degradation Patterns of Dissolved Organic Matter from two Common Invasive Wetland Plants
Faculty Mentor: Kevin Wyatt
College of Sciences and Humanities

Jessica Maule
Biology
Eisenia Fetida in Changing Agricultural Trends
Faculty Mentor: Melody Bernot
College of Sciences and Humanities

Aaron Bahney, Connor Wenzel, Lauren Gerulski & Zach Tate
Information Systems and Operations Management
IS Consulting Solution for an Employee Training System
Faculty Mentor: Fred Kitchens
Miller College of Business

Brittany Maule
Biology
From Science to Science Communication: Understanding Effects and Human Perceptions of Pharmaceuticals in the Environment
Faculty Mentor: Melody Bernot
College of Sciences and Humanities

Amanda Baskfield
Biology
Assessment of Protein Expression Patterns in T-Cell Acute Lymphoblastic Leukemia
Faculty Mentor: James Olesen
College of Sciences and Humanities

Benjamin Melbert
Natural Resources and Environmental Management
Red-Tail Land Conservancy Internship Experience
Faculty Mentor: Joshua Gruver
College of Sciences and Humanities
Sabrina Mangapora & Taylor Gardner
Physiology and Health Science

*Health and Wellness Objectives of U.S. higher Education Institutions: Content Analysis of Statements of University Mission, Vision, and Strategic Plan*

Faculty Mentor: Martin Wood
College of Sciences and Humanities

Cassandra Marschall
Educational Psychology

*Creating Task Analyses for the Development of Self-Prompting Vocational Assistive Technology to Enhance Employment Opportunities for Individuals with ASD*

Faculty Mentor: Jennifer Cullen
Teachers College

Erick Martinez
Modern Languages and Classics

*Reading Level Standards: Its Negative Effects on Bilingual Students*

Faculty Mentor: Colleen Balukas
College of Sciences and Humanities

Cameron Behringer, Natalya Mezenina & Kalpana Kodi
Biology

*Age Related Changes in Nuclear, Mitochondrial, and Cytosolic Malondialdehyde (MDA) Levels in the Rat Kidney*

Faculty Mentor: Marianna Zamlauski-Tucker
College of Sciences and Humanities

Samantha Bell
Biology

*Small Molecule Inhibitors of the RSM Series and ML141 Are Not Bactericidal to Streptococcus Pyogenes and May Serve as Adjunctive Therapies*

Faculty Mentor: Susan McDowell
College of Sciences and Humanities

Rachel Bennett
Natural Resources and Environmental Management

*Nature and Culture Connect Us All: Connecting the Past, Present, and Future of East Central Indiana*

Faculty Mentor: Amy Gregg
College of Sciences and Humanities
Cody Bennett
Biology

*Glycogen Metabolism in Mice Generated by the Cre-Lox System*

Faculty Mentor: Bartholomew Pederson
College of Sciences and Humanities

Jee Hwan Lee
Biology

*Affordable Methodology for Carbamazepine Analysis in Fish Tissues by GC/MS*

Faculty Mentor: Melody Bernot
College of Sciences and Humanities

D.J. Bernat
Educational Psychology

*Improving Post-secondary Outcomes for Adults with Disabilities*

Faculty Mentor: Evette Simmons-Reed
Teachers College

Isabella Litwack & Lydia Summers
Physiology and Health Science

*Is Infertility Visible as a Women’s Health issue? Results from a Systematic Review*

Faculty Mentor: Jean Marie Place
College of Sciences and Humanities

Kelly Blair
Computer Science

*Real Time Video Stitching*

Faculty Mentor: Shaoen Wu
College of Sciences and Humanities

Marissa Luft
Biology

*Targeting CDC42 in the Invasive Pathway of Salmonella Typhimurium*

Faculty Mentor: Susan McDowell
College of Sciences and Humanities
Olyvia Kuchta, Kendal Franz & Savannah Guimond
Psychology

Mechanisms Underlying the Intergenerational Transmission of Mother-Daughter Occupations Among Women Pursing Male-Dominated Majors

Faculty Mentor: Katie Lawson
College of Sciences and Humanities

Dan Lange
Geography

Google Street View as a Tool for Urban Street Tree Data Collection and Benefits Analysis

Faculty Mentor: Adam Berland
College of Sciences and Humanities

Josh Bock
Kinesiology

Establishing the Reliability of Several Consumer-Based Physical Activity Monitors

Faculty Mentor: Alex Montoye
College of Applied Sciences and Technology

Samuel Lawson, Sarah Birkhead & Alexis Hamilton
Psychology

Using Twitter to Examine Male Aggression in Culture of Honor States

Faculty Mentor: Thomas Holtgraves
College of Sciences and Humanities

Mason Boles
Physics and Astronomy

Complex Functions and Vector Fields: Application to the Electric Field

Faculty Mentor: Ranjith Wijesinghe
College of Sciences and Humanities

Sara Brandau
Natural Resources and Environmental Management

Simple Wastewater

Faculty Mentor: Steve Dickerson
College of Sciences and Humanities
Hannah Braun, Stephanie Helmer & Kenzie Gustin
Psychology

Physical Activity Tracking: Today and Tomorrow
Faculty Mentor: Darrell Butler
College of Sciences and Humanities

Sam Bruns & Bugra Cinbat
Computer Science

Project JARVIS
Faculty Mentor: David Largent
College of Sciences and Humanities

Lindsey Bryie, Kisii Hosack & Stephanie Meyer
Physiology and Health Science

Extending the Mission of Health: Accessibility of University Health Education Materials, Programs, and Services for Online Students
Faculty Mentor: Martin Wood
College of Sciences and Humanities

Anthony Knepp
Psychology

Security and Privacy Perceptions When Using Internet of Things Devices
Faculty Mentor: David Hua
College of Applied Sciences and Technology

Justin Knox & Jacob Price
Biology

The Role of Alpha-Gustducin in Salty Taste in Mice
Faculty Mentor: Stuart McCaughey
College of Sciences and Humanities

Benjamin Kreitner
Biology

Factors Influencing the Abundance of Sucralose in the Ohio River and Potential for Microbial Degradation
Faculty Mentor: Melody Bernot
College of Sciences and Humanities
Andrew Kelly  
Natural Resources and Environmental Management  
*A Summer With the National Park Service*  
Amy Gregg  
College of Sciences and Humanities

Bryce Buchanan  
Biology  
*The Effects of ER Stress on Protein Quality Control Degradation Pathways*  
Faculty Mentor: Eric Rubenstein  
College of Sciences and Humanities

Belkasim Khameiss  
Geological Sciences  
*Using Fossil Exploration to Actively Engage Undergraduate Students in Scientific Discovery*  
Faculty Mentor: Allison Rober  
College of Sciences and Humanities

Patrick Buczek  
Physics and Astronomy  
*Quantum Interference Effects in Nano-Electronic Devices*  
Faculty Mentor: Eric Hedin  
College of Sciences and Humanities

Jackline Kingori  
Political Science  
*Immigration and Issues with Foreign Policies*  
Faculty Mentor: Gerald Waite  
College of Sciences and Humanities

Nicole Chodkowski  
Biology  
*Parasite Effects on Freshwater Snail, Elimia Livescens Elemental Content and Metabolism*  
Faculty Mentor: Randall Bernot  
College of Sciences and Humanities
Jacquelyn Christopher
Biology

*Survey of Orthoptera in East-Central Indiana*

Faculty Mentor: Randall Bernot
College of Sciences and Humanities

Zachary Cole
Psychology

*Exploring the Confounding Effects of Study Time and Study Method on Test Performance in Undergraduate Students*

Faculty Mentor: Darrell Butler
College of Sciences and Humanities

Kristi Confortin
Biology

*Roosting Habits of the Eastern Small-footed Bat in the Shawnee National Forest in Southern Illinois*

Faculty Mentor: Timothy Carter
College of Sciences and Humanities

Kyle Jones & Brady Martin
Technology

*Assessment of Internet of Things Device Security*

Faculty Mentor: David Hua
College of Applied Sciences and Technology

Zack Kassner
Telecommunications

*Seeds of Peace*

Faculty Mentor: Gerald Waite
College of Sciences and Humanities

Chris Keaton
Telecommunications

*Pronto Me Muero (Soon I Die)*

Faculty Mentor: Elizabeth Bell
College of Sciences and Humanities
Christopher Indovina, Sarah Engle, Ashleigh South & Jacob Davis
Biology

Determining Genes Required for Degradation of Translocon-Clogging Proteins
Faculty Mentor: Eric Rubenstein
College of Sciences and Humanities

Alyssa Jackson
Psychology

Self-Harming Behaviors in American Adults
Faculty Mentor: David Perkins
College of Sciences and Humanities

Ashley Johnson
Modern Languages and Classics

Hispanic, Latino, or other: Researching Identity
Faculty Mentor: Colleen Balukas
College of Sciences and Humanities

Stephen Davies
Biology

Pharmaceutical and Personal Care Product Loss in Two Indiana Wetlands
Faculty Mentor: Melody Bernot
College of Sciences and Humanities

Albert DiBenedetto
Physics and Astronomy

Electronic Properties of Hexagonal Boron Nitride Nanoribbons
Faculty Mentor: Mahfuza Khatun
College of Sciences and Humanities

Nick Dowell, Dylan Friddle, Sida You & Alex Plesovs
Information Systems and Operations Management

Raw Materials Tracking Project
Faculty Mentor: Fred Kitchens
Miller College of Business
Olivia Downham
Biology

*Simvastatin and ML141 Inhibit Streptococcus Pyogenes Invasion of Endothelial Cells*

Faculty Mentor: Susan McDowell
College of Sciences and Humanities

Megan Hubbard
Biology

*Male Infertility Due to Dilantin: Examining Potential Decrease in Sperm Motility and CatSper Calcium Channel Abundance in Mouse Sperm Cells*

Faculty Mentor: Clare Chatot
College of Sciences and Humanities

Shamus Driver
Chemistry

*Orbiting Active Learning: Teaching Atomic Model History Using a Scientific Teaching Approach*

Faculty Mentor: Allison Rober
College of Sciences and Humanities

Michael Huffer
Mathematical Sciences

*Data visualization and Analysis using Shiny Package in R*

Faculty Mentor: Munni Begum
College of Sciences and Humanities

Brandon Dykstra
Kinesiology

*Anthropometric and Physiological Correlates of Maximal Fat Oxidation in Children and Adolescents*

Faculty Mentor: Anthony Mahon
College of Applied Sciences and Technology

David Huston
Biology

*Protein Quality Control Enzymes Sensitize Cells to Proposed Chemotherapeutic Agent*

Faculty Mentor: Eric Rubenstein
College of Sciences and Humanities
Jamie Hom
Educational Studies

*How Honors students are Constructing Well-Being within their Higher Education Experience at a Public Midwest University*

Faculty Mentor: Thalia Mulvihill
Teachers College

Sarah Eagan, Kierra Bronson, Sydney Harris & Hannah Horning
Psychology

*The Blame Game: Masculinity Threat's Role in Rape Blame*

Faculty Mentor: George Gaither
College of Sciences and Humanities

M. D. Fitrat Hossain
Mathematical Sciences

*Developing Testing Procedure the Parameters of Bivariate Geometric Models with Covariate Dependence*

Faculty Mentor: Munni Begum
College of Sciences and Humanities

Heather Easley, Kyle Smith, Trevor Bly & Chris Engel
Information Systems and Operations Management

*Indianapolis International Airport Mobile Application Development Project*

Faculty Mentor: Fred Kitchens
Miller College of Business

Sarah Hovey
Kinesiology

*The Effect of Landing Type on Kinematics, Kinetics, and Muscle Activity during Landing*

Faculty Mentor: Clark Dickin
College of Applied Sciences and Technology

Christian Eastman
Natural Resources and Environmental Management

*White River Greenway Creel Survey 2015*

Faculty Mentor: Joshua Gruver
College of Sciences and Humanities
Daniel Elias  
Biology  
*Effects of Individual and Combined Pesticide Exposure to Egestion and Movement of Common Freshwater Snails, Physa Acuta, and Helisoma Anceps*  
Faculty Mentor: Melody Bernot  
College of Sciences and Humanities  

Caleb Embree  
Biology  
*Do Allele differences between Pseudouridine Synthase 4 of Candida Albicans Lead to Distinct Functions*  
Faculty Mentor: Douglas Bernstein  
College of Sciences and Humanities  

Jennifer Erichsen  
Kinesiology  
*Ratings of Perceived Exertion and Physiological Responses in Boys and Girls during Exercise*  
Faculty Mentor: Anthony Mahon  
College of Applied Sciences and Technology  

Nathan Hahn  
Biology  
*Inhibition of Invasion by Streptococcus Pyogenes*  
Faculty Mentor: Susan McDowell  
College of Sciences and Humanities  

Mary Hidde  
Physiology and Health Science  
*Metabolic Flexibility in Lean Children: The Effect of Parental BMI*  
Faculty Mentor: Anthony Mahon  
College of Sciences and Humanities  

Seth Higgins  
Kinesiology  
*The Influence of Incline Walking and Stair Ascending on Lower Extremity Mechanics in Older Adults*  
Faculty Mentor: Henry Wang  
College of Applied Sciences and Technology
Kris Green
Natural Resources and Environmental Management

*The Effects of Annual Ryegrass and Gated Tile Drainage on Subsurface Nutrient Movement*

Faculty Mentor: Jessi Ghezzi
College of Sciences and Humanities

---

Travis Everhart
Physics and Astronomy

*Electronic Structure of Graphene and Beyond*

Faculty Mentor: Mahfuza Khatun
College of Sciences and Humanities

---

Josie Griffis
Anthropology

*Hindu and Muslim Conflict in India*

Faculty Mentor: Gerald Waite
College of Sciences and Humanities

---

Sarah Fischer
Biology

*Bird-Window Collisions on a University Campus: Comparison of Migration Phenology and Collision Rates*

Faculty Mentor: Kamal Islam
College of Sciences and Humanities

---

Lily Gu
Biology

*Development and Implementation of an Active-Learning Teaching Module in Environmental Microbiology: Using Data Exploration to Decipher Ecological Interactions in Aquatic Ecosystems*

Faculty Mentor: Kevin Wyatt
College of Sciences and Humanities

---

Titiana Flax
Communication Studies

*Race and Communication*

Faculty Mentor: Marcy Meyer
College of Communication, Information, and Media
Alyssa Flores
Speech Pathology and Audiology

A Review of the Literature on Deaf Children with Autism
Faculty Mentor: Jennifer Cullen
Teachers College

Kenna Gibson
Architecture

Conflict and Architecture
Faculty Mentor: Gerald Waite
College of Sciences and Humanities

Matthew Flori
Physics and Astronomy

Electron Transmission through Nanoscale Circuits
Faculty Mentor: Eric Hedin
College of Sciences and Humanities

Tracy Graves
Information and Communication Sciences

A Qualitative Sampling of Feminist Leanings in the IT Workforce
Faculty Mentor: David Hua
College of Applied Sciences and Technology

Jonathan Foster
Kinesiology

Prolonged Cycling’s Effect on Subsequent Running Mechanics in Recreation Triathletes
Faculty Mentor: Henry Wang
College of Applied Sciences and Technology

Erin Greeley, Megan Chaney, Ashton Scherrer & Abbey Beville
Psychology

Income, Crime Rate and Temperature as Predictors of Positive Emotion
Faculty Mentor: Thomas Holtgraves
College of Sciences and Humanities