2019 PRESENTATIONS

ORAL PRESENTATIONS
JULY 15, 12:30 - 3:30
JULY 17, 12:30 - 4:30
PHARMACY & HEALTH SCIENCES BUILDING 150

POSTER PRESENTATIONS
JULY 16, 1:00 - 2:30 PM
IRWIN LIBRARY, COLLABORATIVE SPACE
### SESSION I: 12:30 – 1:50 PM

**12:30 MAHMOOD KEDO, BIOLOGY**  
Prevalence of Aerial Microbiomes in Male, Female, and Gender-Neutral Restrooms  
**Faculty Mentor: DR. SEAN BERTHRONG**

**12:50 BENJAMIN NICK, BIOLOGY/CHEMISTRY**  
The Role of the Interdomain Loop (IDL) of Mouse Hepatitis Virus (MHV) Protease nsp5  
**Faculty Mentor: DR. CHRIS STOBART**

**1:10 ABBY SHORES, BIOLOGY**  
Exploring the Role of ACY and PKA Proteins in FSHR-1 as Regulated Control of Neuromuscula Signaling in *C. elegans*  
**Faculty Mentor: DR. JENNIFER KOWALSKI**

**1:30 UMAYR SHAIKH, SPANISH/CHEMISTRY**  
Exploring Size Scaling Relationships in the Developing Drosophila Egg Chamber  
**Faculty Mentor: DR. LINDSAY LEWELLYN**

### SESSION II: 2:00 – 3:30 PM

**2:00 CATHERINE BAIN, PSYCHOLOGY/CRIMINOLOGY**  
Evaluating the Stratification of Justice: The Relationships between Race, Gender, and Sentencing Length  
**Faculty Mentor: DR. KRISTA CLINE**

**2:20 BRITTANY HEAD, POLITICAL SCIENCE/RELIGION**  
Personal and Professional Connections are Premium: An Assessment of Mandatory Waiting Periods in American States  
**Faculty Mentor: DR. GREGORY SHUFELDT**

**2:40 ASHLEIGH DOUB, COMMUNICATION SCIENCES & DISORDER**  
Analysis of Language Coherence Measures in American Sign Language and English  
**Faculty Mentor: DR. MARY GOSPEL**

**3:00 SAM ROSS, BIOLOGY**  
An Urban Flora: Tree, Shrub, and Herbaceous Cover, Frequency and Density of Holcomb Wood  
**Faculty Mentor: DR. JULIA ANGSTMANN**
SESSION I: 1:00 – 1:45 PM

1. **Courtney Brown**, Chemistry  
   Comparison of Double-Stranded RNA Binding Motifs Between Different Organisms  
   **Faculty Mentor:** Dr. Mark Macbeth

3. **Andrew Hesterhagen**, Chemistry  
   Expanding the Use of Cyrene as a Sustainable Solvent for Industry  
   **Faculty Mentor:** Dr. Carl DeAmicis

5. **Sarah Knight**, Health Sciences  
   The Harm of JUULing  
   **Faculty Mentor:** Dr. Amy Peak

7. **Julia Pomeroy**, Chemistry  
   Reactivity of Tungsten and Molybdenum Tris(3, 5-dimethylpyrazolyl)methane Coordination Compound  
   **Faculty Mentor:** Dr. Stacy O’Reilly

9. **Viktor Stjepic**, Biology/Philosophy  
   Antimicrobial Defense Against Bacterial Pathogens within Bryophytes  
   **Faculty Mentor:** Dr. Phil Villani

11. **Alex Stark**, Chemistry  
    Electrochemical Synthesis of Novel Dyes  
    **Faculty Mentor:** Dr. Anne Wilson

13. **Reagan Wohlford**, Biology  
    Assessing the Role of Dock in Follicle Cells of *Drosophila melanogaster* Egg Chambers  
    **Faculty Mentor:** Dr. Lindsay Lewellyn

SESSION II: 1:45 – 2:30 PM

2. **Meg Caesar**, Communication Sciences & Disorders  
   Language-Deprived Environments: Neonatal Intensive Care Units and Hearing Loss  
   **Faculty Mentor:** Dr. Tonya Bergeson

4. **Abigail Hopkins**, Violin Performance  
   Early-Career Teachers’ Perceptions of Music Teacher Education Programs in Indiana  
   **Faculty Mentor:** Dr. Becky Marsh

6. **Spencer Lybrook**, Biology  
   Determination of Net Nitrogen Mineralization Rates of Urban Farm Soils in Indianapolis  
   **Faculty Mentor:** Dr. Sean Berthrong

8. **Umayr Shaikh**, Spanish/Chemistry  
   Exploring Size Scaling Relationships in the Developing Drosophila Egg Chamber  
   **Faculty Mentor:** Dr. Lindsay Lewellyn

10. **Samantha Stanley**, Biomedical Engineering/Biology  
    Development of a Paper Oddy Test  
    **Faculty Mentor:** Dr. Mike Samide

12. **Madeleine Wilson**, Chemistry  
    Synthesis of Fluorescein Derivatives for Bacterial Esterase Characterization  
    **Faculty Mentor:** Dr. John Esteb

14. **Chris Zeheralis**, Pharmacy  
    Direct Observation of Acyl Protein Thioesterase Protein Dynamics Using Tryptophan Fluorescence  
    **Faculty Mentor:** Dr. Jeremy Johnson
SESSION I: 12:30 – 1:30 PM

12:30  **ESHAAN LOTHE, HEALTHCARE & BUSINESS**  
Antibiotic Prophylaxis in Pediatric Surgical Patients with Beta-Lactam Allergies  
**FACULTY MENTOR: DR. KRISTEN NICHOLS**

12:50  **SARAH KNIGHT, HEALTH SCIENCES**  
Health Effects, Generational Differences, and Social Determinants of JUULing  
**FACULTY MENTOR: DR. AMY PEAK**

1:10  **MORGAN BUCKLEY, HEALTH SCIENCES**  
Investigation of the Role of the FSHR-1 protein in Regulating Neuromuscular Synapse Structure in *C. elegans*  
**FACULTY MENTOR: DR. JENNIFER KOWALSKI**

SESSION II: 1:45 – 2:45

1:45  **PAUL W. MERKAMP, COMPUTER SCIENCE/MUSIC PERF.**  
Work Smarter, Not Harder: Creating a Musician’s Companion Application  
**FACULTY MENTOR: DR. JON SORENSON**

2:05  **ALEX MCGRATH, MUSIC COMPOSITION/COMPUTER SCI.**  
Investigating and Applying the Techniques Used in Composing Tone Poems  
**FACULTY MENTOR: DR. FRANK FELICE**

2:25  **TOM PIECIK, JAZZ STUDIES**  
Songs of the Sinners: Exploring Dimensions of Spirituality Through Jazz Music  
**FACULTY MENTOR: DR. MATT PIVEC**

SESSION III: 3:00 – 4:30 PM

3:00  **MELISSA EVANS, PSYCHOLOGY/CRITICAL COMMUNICATION**  
Anxiety Inducing Effects of Alcohol and Caffeine in C57BL/6J Mice  
**FACULTY MENTOR: DR. JENNIFER BERRY**

3:20  **ELISE MERCHAK, ASTROPHYSICS & ASTRONOMY**  
A Detailed Analysis of the Variable Stars in Globular Cluster NGC 6402 (M14)  
**FACULTY MENTOR: DR. BRIAN MURPHY**

3:40  **NATHAN JUNOD, BIOLOGY**  
Identifying the Susceptibility of Respiratory Syncytial Virus (RSV) Strains to Inactivation by Human beta-Defensins  
**FACULTY MENTOR: DR. CHRIS STOBART**

4:00  **KYLA MALONEY, PHARMACY/MBA**  
Patient Harm Associated with Illegal Online Drug Sellers: A Systematic Review  
**FACULTY MENTOR: DR. JOHN HERTIG**