

*15<sup>th</sup> Annual*



STUDENT  
SCHOLARS  
SYMPOSIUM

April 15-16, 2026



## From the Provost of Lipscomb University

Dear Student Scholars,

Welcome to the 15th Annual Student Scholars Symposium at Lipscomb University! It is a true privilege to celebrate this milestone with each of you. This gathering honors the curiosity, creativity, and dedication you bring to your academic journey.

This symposium reflects the very heart of our learning community, one deeply committed to discovery, dialogue, and the meaningful pursuit of knowledge. What makes research so powerful is not only the findings we uncover, but the process itself. Through research, knowledge becomes woven into our understanding, yours as emerging scholars, ours as an institution, and ultimately the world's, as your insights extend beyond these walls.

Research also transforms the researcher. It reshapes the way you think, how you approach challenges, and how you engage with uncertainty. You learn to navigate complexity, embrace revision, and find meaning in unexpected outcomes. This transformation equips you to think more critically, question more deeply, and contribute more thoughtfully in every space you enter.

I want to express how proud I am of each of you. Watching you engage with complex ideas, persevere through challenges, and arrive at this moment is truly inspiring. You have balanced academic responsibilities, personal commitments, and the rigorous demands of original research. You represent the very best of Lipscomb University, and you inspire all of us who have the privilege of supporting you along the way.

Thank you to Drs. Jan Elaine Harris, Amanda Williams-Bleiler and Josh Owens for their co-leadership of this year's symposium, to the Student Scholars Symposium organizing committee for their dedicated work, and to Andrea Davis and Kristen Thompson for their invaluable support in bringing this event to life.

May this experience serve as a meaningful step in your journey as a scholar, creator, and contributor to the common good.



A handwritten signature in black ink that reads "Jennifer W. Shewmaker". The signature is fluid and cursive, with a long, sweeping underline.

*Dr. Jennifer Shewmaker*  
Lipscomb University Provost

**Wednesday, April 15**  
**FOCUS and Creative Arts**

11:15 a.m. - 12:15 p.m. **Registration for Wednesday Presenters, Swang Chapel Lobby**

12:30 - 12:35 p.m. **Welcome**  
Dr. Jan Elaine Harris, Professor of English, Undergraduate  
Research Coordinator for Humanities and the Arts

**12:35 - 2:35 p.m.**

**Freshmen Orientation to Collaborative Undergraduate  
Scholarship: FOCUS Student Presentations**

**FOCUS:** *Doris Swang Chapel, Ezell 241*

**Chair:** *Dr. Alan Bradshaw, Honors College Dean*

**Session I: FOCUS Oral Presentations**

- 12:35 p.m. **Self Fashioning: Humanism and Women's Fashion in the Italian Renaissance**  
Avery Yates and Howard Miller, History, Politics and Philosophy
- 12:45 p.m. **Managing Anaphylaxis on Child Social Development**  
Zulaikha Maqsood and Alan Bradshaw, Honors College
- 12:55 p.m. **PI3K Signaling & Cardiovascular Disease (Hypertrophic Cardiomyopathy)**  
Aurelia Cathey, Rachel Gordy, Zubaida Maqsood and Joshua Owens, Biology
- 1:05 p.m. **The Role of HER2 Expression Overexpression in Breast Cancer Progression and Prognosis**  
Emma Ford, Ava Fitzgerald, Cathy Youssed and Joshua Owens, Biology
- 1:15 p.m. **Short-Chain Fatty Acids and Their Potential Role in the Onset and Progression of ALS**  
Katherine McGinnis and Gracen Vinyard, Biology

1:25 p.m.      **The Impact of BCL-2 in Alzheimer's Disease**  
Sarah Myers, Nadine Albaugh, Lily Weimer and Joshua Owens,  
Biology

1:35 p.m.      **Break**

## **Session II: FOCUS Oral Presentations**

1:45 p.m.      **P53 Signaling Pathway in Cervical Cancer**  
Jennifer Primero-Izaguirre, Merolla Saeid, Carmen Mejia and Beth  
Conway, Biology

1:55 p.m.      **The Effects of RAS Signaling in Pancreatic Cancer**  
Macy Simon, Hermon Kesete, Amy Vieira, Zahraa Al Gburi and  
Joshua Owens, Biology

2:05 p.m.      **How Socioeconomic Factors Can Affect Brain Development**  
Camila Sequera and Michelle Hasty, Education

2:15 p.m.      **Artificial Intelligence and Modern Warfare: Lessons from the  
Russia-Ukraine Conflict**  
Henok Tilahun and Ken Mayer, Computing

## **Undergraduate Students Exhibits Beaman Library Atrium**

**Chair:** *Dr. Jan Elaine Harris, Professor of English*

### **Holocaust Quilt**

M.J. Williams and William Steele, English and Modern Languages

### **Imagine Other Worlds: What We Make of Books**

Hannah Fritsch and Jan Elaine Harris, English and Modern Languages

**2:45 - 4:30 p.m.**  
**Creative Writing Performances**

**Performances I:** *Poetry, Doris Swang Chapel, Ezell 241*

**Chair:** *Professor Leanne Smith, Associate Professor of Management, and Camille Floyd, alumnae*

- 2:45 p.m.      **They Called Us**  
Valeska Piedrasanta and Jan Elaine Harris, English and Modern Languages
- 2:55 p.m.      **Once Removed**  
Allison Aardsma and Jan Elaine Harris, English and Modern Languages
- 3:05 p.m.      **Gratia Plena**  
Emily Golembiewski and Jan Elaine Harris, English and Modern Languages
- 3:15 p.m.      **Auteur**  
Mac Chamberlain and Jan Elaine Harris, English and Modern Languages
- 3:25 p.m.      **Harvest - a poetry collection**  
Gwyneth Bakken and Jan Elaine Harris, English and Modern Languages
- 3:35 p.m.      **Break**
- 3:40 p.m.      **Reaping**  
Hannah Fritsch and Jan Elaine Harris, English and Modern Languages
- 3:50 p.m.      **The Partridge Sings**  
Layla Al Sadoon and Jan Elaine Harris, English and Modern Languages
- 4:00 p.m.      **On Heelgrabbing**  
Jacob Rutherford and Jan Elaine Harris, English and Modern Languages
- 4:10 p.m.      **Secret Seer**  
Diane Brown and Jan Elaine Harris, English and Modern Languages

4:20 p.m.      **Bones is He**  
Solomon Reynolds and Jan Elaine Harris, English and Modern  
Languages

**4:30 - 6:00 p.m.**  
**Musical and Theatrical Performances**

**Performances II: Musical & Theatrical:** *Collins Alumni Auditorium*  
**Chair:** *Dr. Matthew Taylor, Director of Choral Activities and Vocal Music*  
*Education*

4:30 p.m.      **Beethoven Variations in C Minor**  
Ana Manning and Jerome Reed, School of Music

4:45 p.m.      **Irish Boy (original song)**  
Annika Ringnalda and Don Chaffer, School of Music

5:00 p.m.      **Selections from A Masked Ball by Giuseppe Verdi**  
Joshua Mellor and Susan Shirel, School of Music

5:15 p.m.      **Scene from Ladies Man**  
Jack Gialamas, Gracie Acht, Natalie Hough, Abe Arthur, and  
Barry Schwartz, School of Music

5:30 p.m.      **Performance and Analysis of Victor Ewald's Quintet No. 1 in B-flat  
Minor, Op. 5**  
Kate Marcino, Isabelle Motsenbocker, Emma Crunk, David Martinez,  
Reece Hoffman and Wendy Matthews, School of Music

5:45 p.m.      **The Ballad of Jane Doe from "Ride the Cyclone" composed by  
Richmond and Maxwell**  
Sophia Hassevoort and Shelley Schneider, School of Music

**Thursday, April 16**  
**Opening Plenary Session**  
**Shinn Center**

**Chair:** *Dr. Jan Elaine Harris, Professor of English*

7:30 - 8:30 a.m. **Registration and Coffee**

8:30 - 8:35 a.m. **Welcome**  
Dr. Florah N Mhlanga, Vice Provost

8:35 - 8:45 a.m. **Opening Remarks**  
Dr. Jennifer Shewmaker, Provost

8:45 a.m. **Schedule Overview and Opening Prayer**  
Dr. Jan Elaine Harris, Professor of English

**Undergraduate Students Exhibits**  
**Beaman Library Atrium**

**Chair:** *Dr. Jan Elaine Harris, Professor of English*

**Holocaust Quilt**  
M.J. Williams and William Steele, English and Modern Languages

**Imagine Other Worlds: What We Make of Books**  
Hannah Fritsch and Jan Elaine Harris, English and Modern Languages

**Undergraduate Students Exhibits**  
**Shinn Center Lobby**

**Chair:** *Dr. Jan Elaine Harris, Professor of English*

**How Much AI Art is Too Much?**  
Avry Earnshaw, Anna Stein, Emma Jenkins, Cathryn Parks and Melissa Forte, Film

9:15 - 10:45 a.m.

## Undergraduate Students Oral Presentations I

**Oral Presentation IA:** *Paul Rogers Board Room, Ezell 147*

**Chair:** *August Heckathorn and Alexis Armour, Adjunct Professors of English and alumni*

- 9:15 a.m.      **The Impact of Education on the Basque Language and Identity**  
Arlie Akers and Jan Elaine Harris, English and Modern Languages
- 9:30 a.m.      **How Register Informs Theology in the Catholic Faith**  
Emily Golembiewski and Jan Elaine Harris, English and Modern Languages
- 9:45 a.m.      **The Harrying of the North and How Violence Silenced the English Voice**  
Maxwell Kuecker and Jan Elaine Harris, English and Modern Languages
- 10:00 a.m.     **Gullah: The African American Language**  
Arianna Miller and Jan Elaine Harris, English and Modern Languages
- 10:15 a.m.     **French Language Usage in Imperial Russia**  
Diane Brown and Jan Elaine Harris, English and Modern Languages
- 10:30 a.m.     **Marginalized Linguistic History: Stonewall's Impact on the Evolution of Language**  
Jacob Rutherford and Jan Elaine Harris, English and Modern Languages

**Oral Presentation IB:** *Ezell 301*

**Chair:** *Dr. Elizabeth McMillan, Assistant Professor of Conflict Management, and Professor Abby Bell, Director of Academic Operations, Provost's Office*

- 9:15 a.m.      **Artificial Intelligence Persuasion in Real-Time Political Discussion**  
Gabriel Beasley and Scott Bledsoe, Law, Justice & Society
- 9:30 a.m.      **Systemic Pitfalls Lead to Multi-System Pathology**  
Bryson Lovorn and Amanda D. Williams, Biology

- 9:45 a.m.      **Defying Stereotypes through Fiction - James Fenimore Cooper's The Last of the Mohicans**  
Micah Barkley and Brandi Kellett, English and Modern Languages
- 10:00 a.m.      **We Shall, We Must, We Will: Language and the Justification of Violence in WWII**  
Savoie Bryce and Kelly Kidder, English and Modern Languages
- 10:15 a.m.      **Learning, Mourning, and Becoming: My Life in Two Languages**  
Maria Zarraga Perez and Kelly Kidder, English and Modern Languages
- 10:30 a.m.      **Pathways to Hope: Analyzing Goal-Directed Thinking in K-5 Picture Books**  
Allison Croft, Jillian Verver, Ruby Bills, Chandler Bell, Kayla Hill, Katerina Contreras, Sarah Duncan and Jeanne Fain, Education

**Oral Presentation IC: Ezell 363**

**Chair:** *Dr. Jill Kirby, Associate Professor of Biology and Senior Executive Director, Lipscomb Learning Commons, and Dr. Jaclyn Spivey, Professor of Psychology*

- 9:15 a.m.      **Investigating the Efficacy of Mebendazole on *C. elegans*: Implications for Anthelmintic Drug Development**  
Saja Al-shaweily and Brian Ellis, Biology
- 9:30 a.m.      **Investigating The Effects of Neprilysin on the Epithelial-to-Mesenchymal Transition in Triple-Negative Breast Cancer**  
Ben Bolz and Beth Conway, Biology
- 9:45 a.m.      **The Role of Neprilysin in Regulating Triple Negative Breast Cancer Invasion Through CK2-Mediated AKT1 Activation**  
Kai Lam, Elise Griner and Beth Conway, Biology
- 10:00 a.m.      **Exploring the role of CAIX in epithelial triple negative breast cancer cells**  
John Haralson and Amos Sakwe, Ward Research Fellow

**Oral Presentation ID:** *Doris Swang Chapel, Ezell 241*

**Chair:** *Jafer Aljorani, Adjunct Faculty, and Dr. Emily Adams, Assistant Professor of Biology*

- 9:15 a.m.      **Computational Investigation of Cisplatin Properties and Related Complexes**  
Elena Harvey, Morghan Morris and John Smith, Chemistry and Biochemistry
- 9:30 a.m.      **Thermodynamic Characterization of Two Adhesins Responsible for Most Catheter-Associated Urinary Tract Infections**  
Malak Hauter and Brian Cavitt, Chemistry and Biochemistry
- 9:45 a.m.      **HdcB, a mystery protein from probiotic bacteria**  
Riley Robertson and Kent Clinger, Chemistry and Biochemistry

**10:55 a.m. - 12:20 p.m. - Shinn Center  
Lunch and Keynote**

**Chair:** *Dr. Florah N Mhlanga, Vice Provost*

- 11:00 a.m.      **Lunch**  
**Prayer: Dr. J.P. Conway, Chair of Undergraduate Bible**
- 11:30 a.m.      **Keynote Presentation: Navigating a Path to Success – A Faith Journey**  
*Dr. Jeannette E. South-Paul, MD, DHL(Hon), FAAFP,  
Executive Vice President and Provost, Meharry Medical College*

Success is a commonly used term in education, business, and life but one that has intensely personal meaning. It is not one life event but rather a journey that is often navigated without a clear roadmap. It must be anchored by self-awareness, commitment, integrity, support, and faith. This presentation focuses on one person's journey from being raised in an immigrant family of limited means to accessing a public education, a career in the U.S. Army, a return to her medical school alma mater in a new role, subsequent selection as Provost at Meharry Medical College, and the privilege of leadership roles in each of those settings. Descriptions of the many steps along the path will spotlight how small things can energize you as much as bigger things on your road to success.



**12:30 p.m. - 2:00 p.m. - Allen Arena**  
**Undergraduate Students Poster Presentations**

**Chair:** *Dr. Amanda Williams-Bleiler, Assistant Professor of Biology*

**Group I**

**Chair:** *Dr. Randy Bouldin, Dean of the College of Liberal Arts and Sciences, and J.P. Conway, Professor and Chair of Undergraduate Bible*

1. **Extending Classical Calculus: Physical Applications of the Half-Derivative**  
Madouna Barsoum, Ryan Dunn and Randy Bybee, Physics
2. **Determination of Gyromagnetic Ratios in Organic and Inorganic Systems Using Continuous Wave NMR**  
Madouna Barsoum, Ryan Dunn, Lucy Hurst and Randy Bybee, Physics
3. **The Behavior of Hyperspheres: Volume Formulas and Dimensional Scaling**  
Deron Young and Randy Bybee, Physics
4. **Using Tumor-Treating Fields on Breast Cancer Cells to Slow Malignant Growth**  
Ryan Dunn, Braxton Ivie, Grace McGuckin, Saja Al-shaweily, Yossif Khalil and Alan Bradshaw, Physics
5. **Combined Effects of Acute Aerobic Exercise and Caffeine on Auditory and Visual Reaction Time: A Within-Subject Experimental Study**  
Gabriella Longoria, Jackson Head, Beaman Adel, Yousab Gad and Alan Bradshaw, Physics
6. **Fourier Analysis in Climate Research**  
Joanna Jernigan and Gary Hall, Mathematics

**Group II**

**Chair:** *Professor Morghan Morris, Instructor of Chemistry, and Alan Bradshaw, Honors College Dean*

7. **ICP-OES: Measurement of Lead and Heavy Metals in Various Protein Powders and Shakes**  
Clinton Hutchins, Caroline King, and Matthew J. Vergne, Chemistry and Biochemistry

8. **I Shot the Sheriff, But I Did Not Shoot the Adulterant: Cannabinoid Profiling and Pharmaceutical Adulterant: Screening of a Rebranded Hemp Supplement by LC-MS/MS**  
Deron Young, Andrew Todd, Alex Barieter, Allison Perez Agosto, and Matthew J. Vergne, Chemistry and Biochemistry
9. **Breaking Bad for Good: LC-MS/MS Dried Blood Spot Analysis for Drug Testing**  
Leah Ankihah, Audrey Cox, Maria Galue, and Matthew J. Vergne, Chemistry and Biochemistry
10. **From Pill to Plasma: Measuring Cetirizine from Dry Blood Spots**  
Riley Robertson, Kiomi Tanakura, Elena Harvey, and Matthew J. Vergne, Chemistry and Biochemistry
11. **Computational Investigation of Platinum-Based Anticancer Drugs and the Design of Less Toxic Metal-Based Alternatives**  
Isabelle Riera, Elena Harvey, Morghan Morris and John Smith, Chemistry and Biochemistry

### **Group III**

**Chair:** *Dr. John Smith, Professor & Department Chair of Chemistry and Biochemistry, and Matt Vergne, Associate Professor of Pharmaceutical Sciences*

12. **Crystal structure of the nucleoside triphosphate pyrophosphohydrolase (NTPH) from *Klebsiella pneumoniae***  
Vina Nguyen and Jamaine Davis, Ward Research Fellow
13. **Synthetic and Structural Studies of Tricyclic Systems**  
Amy Ramzy, Joy Opsichuk, Robert King and Kent Clinger, Chemistry and Biochemistry
14. **Mass appeal: Quantifying Exogenous Ketones with LC-MS/MS**  
Rachel Annas, Caroline King, Jiedan Hu, Anna Losher, and Matthew J. Vergne, Chemistry and Biochemistry and Autumn Marshall, Nutrition
15. **Multimodal Chemical Detection of Victorian Era Books Using a Tri-Substrate Framework**  
Mario Faragalla, Abigail Hoermann, Leila Ais, Makenzie Brinkoeter, Kayla Rutledge, Beaman Library, Jan Cohu, Beaman Library, and Joseph Weinstein-Webb, Chemistry and Biochemistry
16. **“Titration of Truth: An Overdose Murder Mystery.” An artificial intelligence-designed escape room, created by undergraduate students for undergraduate students.**  
Andrew Todd, Alexander Bareiter, Allison Perez Agosto, Ellis Moudy, and Matthew J. Vergne, Chemistry and Biochemistry

## **Group IV**

**Chair:** *Dr. Joseph Weinstein-Webb, Associate Professor of Chemistry, and Daniela Menijvar, Biology Research Laboratory Manager*

17. **The Role of HD5 in IFN- $\gamma$  Expression in Colonic Epithelial Cells**  
John Haralson, Ellie Griner, Abbie Marshall, Jackson Head, Mason Lewis, Sophia Sharp, Allie Thompson and Amanda D. Williams, Biology
18. **Dose-Dependent Effects of Human Alpha Defensin 5 on TGF- $\beta$  Expression and Wound Healing in Colonic Epithelial Cells**  
Gabriella Longoria, Savoie Bryce, Kyle Meadows, Mariam Basta, Kerolos Ghobrial, Trevor Keele and Amanda D. Williams, Biology
19. **Investigating the role of HD5 in Regulating EGF Expression in an Intestinal Epithelial Wound-Healing Model**  
Diyar Fadhil, Emerson Kremer, Lavine Radiro, Lauren Potteiger, Brynne Saxon, Emma Sorenson and Amanda D. Williams, Biology
20. **The Dose-Dependent Effects of Caffeine on the Embryonic Development of Zebrafish using SV2 Antibodies**  
Makayla Fisher, Megan Brown, Maggie Haskell and Bonny Millimaki, Biology

## **Group V**

**Chair:** *Dr. Amanda D. Williams-Bleiler, Assistant Professor of Biology, and Dr. Jan Elaine Harris, Professor of English*

21. **Role of Topoisomerase II-Beta in Craniofacial Cartilage Development**  
Trevor Keele and Bonny Millimaki, Biology
22. **Early Intervention in Helminth Infections: Investigating the Effect of albendazole on *C. elegans* Egg Hatch Rate and Health**  
Jennifer Domingo Diaz, Brooke Brewer, Robinson Sabir and Brian Ellis, Biology
23. **The Effects of Mebendazole on the Hatching, Mobility, and Health of *C. elegans***  
Emely Sorto-Garcia, Omar Mohamed, Mehreal Louza, Sarah Yousef and Brian Ellis, Biology
24. **Early-Stage Development of a Mosaic Nanoparticle Platform Targeting RSV and hMPV**  
Katherine Kidd, Alexis Sher and Jon Lowrance, Biology

## Group VI

**Chair:** *Dr. Bonny Milimaki, Professor of Biology and Director of the Biomolecular Sciences Master's Program, and Dr. Monica Sartain, Professor of Engineering*

25.  **$\delta$ -valerobetaine as a Novel Inhibitor of  $\beta$ -oxidation in Mimicked Lipid-Rich Tumor Microenvironments**  
Bryson Lovorn, Lydia Waldrop and Joshua Owens, Biology
26. **Identifying Microbiota-Derived Metabolites that Regulate Host Fatty Acid Metabolism**  
Jackson Head, Whitley Whitehead and Joshua Owens, Biology
27. **Elucidating the Effects of *F. prausnitzii* on Fatty-acid Metabolism in Relation to Obesity**  
Emerald Cole, Cathrine Youssef, Catherine Brown and Joshua Owens, Biology
28.  **$\delta$ -Valerobetaine as a Novel Inhibitor of Breast Cancer Cell Migration: Hinders Cellular Migration of MCF-7 Cells Through Reducing ATP Concentrations and FAK Activation**  
Braxton Ivie, Isabella English and Joshua Owens, Biology
29. **The Role of Advanced CAR-T in Leukemia: Potential and Pharmacotherapeutic Perspectives**  
Hanna Bui, Wajiha Nayab, David Boushra and Scott Akers, Pharmacy

## Group VII

**Chair:** *Jafer Aljorani, Adjunct Professor of Chemistry, and Dr. John Lewis, Associate Professor of Biology*

30. **Elucidating the role of HD5 on Colonic Wound Healing**  
Parmida Fard and Amanda D. Williams, Biology
31. **Human Defensin-5 (HD5) and its Effect on MYL9 Expression in Human Colon Cells During Epithelial Wound Healing**  
Diana Bekhtyar and Amanda D. Williams, Biology
32. **HD5 Regulation of HOOK1 and E-Cadherin During Colonic Wound Healing**  
Lavin Radiro and Amanda D. Williams, Biology
33. **Investigating the Role of HD5 in Cytoskeletal Regulation During Colonic Epithelial Wound Healing**  
Sandra Masad and Amanda D. Williams, Biology
34. **The Effect of Indole on Epithelial Repair Following *Cronobacter sakazakii*-Induced Injury**  
Rezheen Taher and Kyle Brawner, Biology

## **Group VIII**

**Chair:** *Dr. Juan Rojas Suarez del Real, Assistant Professor of Electrical and Computer Engineering, and Dr. Michael Watson, Professor of Physics*

35. **Low-Cost Emergency Search and Rescue Drone for Hurricane and Flooding Scenarios**  
Rebecca Brazeal, Ava Barrett, Gabriel Placer, Laurence Miranda, Benjamin Roeder, Clever Ruiz-Martinez and Kirsten Dodson, Engineering
36. **Designing for Resilience: Engineering an Accessible Wash-and-Pack Station to Support Urban Agriculture and Food Equity**  
Kasen Holt and Kirsten Dodson, Engineering
37. **Accessibility in One's Own Space: An Accessibility Lock made for Disability Friendly Bathroom Stalls**  
Audrey Curtis and Kirsten Dodson, Engineering
38. **Design and Integration of a Custom 4WD Transaxle for a Baja SAE Off-Road Vehicle**  
Justin Rosser, Gabriel King, Parker Goodson, Henrick Hassell, Andrew Ledford and Richard Pearce, Engineering
39. **Integrated Engineering Design Study for a LEED Gold Athletic Facility**  
Grace Cassarello, James Portwood, Iaya Kamber, Aiden Mueller, Josh Lugo, Alexa Cady and Monica Sartain, Engineering
40. **Quantum's Impact on Encryption**  
Alazar Setarge, Bethany Rose and Kenneth Mayer, Computing

## **Group IX**

**Chair:** *Dr. Todd Lynn, Associate Professor and Chair of Civil Engineering, and Dr. Gary Hall, Professor and Chair of Mathematics*

41. **Engineering Sustainable Water Access for Rural Guatemala**  
Kasen Holt, Alex Aylor-Ibarra, Reece Boyd, Kevin Mendez, Van Naynlin, Sawyer Shepherd and Kevin Colvett, Engineering
42. **Landslide Susceptibility Map**  
Molly Heard and Monica Sartain, Engineering
43. **ADICAY & Peugeot Center Solar Power Project**  
Yoshiro Saito, Matt Holdren, Eduardo Jimenez, Micah Nelson, Petsimnan Dayit, Caleb Demas, and Jacob Dyer, Engineering
44. **Wind Tunnel Summer Research**  
Erik Moehs and David Collao, Engineering
45. **PFAS in Drinking Water: Treatment Technologies and Implications for Municipal System in Nashville**  
Van Naynlin and Monica Sartain, Engineering
46. **Lead and Copper Rule Case Study**  
James Portwood and Monica Sartain, Engineering

## **Group X**

**Chair:** *Dr. Jordan Wilson, Assistant Professor of Civil Engineering, and Dr. William Turner, Distinguished Professor*

47. **Beyond Condition Ratings: A Multi-Factor Approach to Bridge Rehabilitation Prioritization in Nashville, Tennessee**  
Joshua Lugo, Allie Thompson and Monica Sartain, Engineering
48. **Development and Structural Evaluation of High Strength Lightweight Concrete for Prestressed Double Tee Bridge Applications in Tennessee**  
Alex Aylor-Ibarra and Todd Lynn, Engineering
49. **Evaluation of Safety Performance at Hamilton Church Road and Murfreesboro Pike, Intersection**  
Koral Quezada-Mendoza and Monica Sartain, Engineering
50. **Evaluation of Hydraulic Drainage Infrastructure on Briley Parkway (TN-155): A Case Study of Recurring Stormwater Ponding in Nashville, Tennessee**  
Britney Sosa and Monica Sartain, Engineering

51. **Intelligent Transportation Systems: Proof of Concept for the Truck Parking Availability System (TPAS)**  
Anthony Buckland, Britney Sosa, Mark Smith, Koral Quezada-Mendoza, Bryan Beasley, Javier Gutierrez, and Todd Lynn, Engineering
52. **Thermal Cured Sodium Carbonate-Activated Geopolymer Concrete (TSCAC)**  
Anthony Buckland and Todd Lynn, Engineering
53. **Comparison of Textbook Methods for Estimating Ultimate Axial Capacity of Pile Foundations**  
Reece Boyd and Rick Heckel, Engineering

## **Group XI**

**Chair:** *Dr. Libby McCurley, Associate Professor of Kinesiology, and Dr. Emily Mofield, Associate Professor of Education*

54. **Acceptability of Apples with Various Anti-browning Agents**  
Brianna Lam, Vannessa Fuentes-Pineda, Tanner Lyne and Autumn Marshall, Nutrition
55. **Effects of flour types on texture and sensory characteristics of blueberry muffins**  
Bella Burdette, Audrey Jackson, Abigail Thornburg and Autumn Marshall, Nutrition
56. **Sensory Characteristics and Acceptability of Brownies with Alternative Fats**  
Kayla Crawley, Alyssa Lange, Alexandria Walls and Autumn Marshall, Nutrition
57. **The Effects of Replacing Refined Sugars with Tuber Vegetables in Brownies**  
Ella Simmons, Neeley Giessinger, Delaney Dumm and Autumn Marshall, Nutrition
58. **Flour Power: A Structural Showdown of Gluten-Free Flours**  
Rachel Annas, Charlotte Ran, Mia Gables and Autumn Marshall, Nutrition
59. **Difference in Taste and Texture of Dairy-Free Milk vs Regular Milk in Banana Bread**  
Ashley Hallock, Lucy Renaud, David Boushra and Autumn Marshall, Nutrition

## **Group XII**

**Chair:** *Dr. Shanna Ray, Executive Associate Dean of the College of Liberal Arts and Sciences, and Dr. Brandon Banes, Associate Professor of Mathematics*

60. **Comparing the Effects of Beet Juice and Honey Water as a Pre-Workout Substitute on Exercise Performance in Upper Body Muscular Endurance**  
Isabella Gilbert, Maggie Payne, Sarah Froemming, Macey Ogle, Elle Smith and Libby McCurley, Kinesiology
61. **The Effects of Acute Caffeine Deficiency on Performance in Habitual Caffeine-Consuming Physically Active Individuals**  
Mason Reynolds, Will Trussell and Libby McCurley, Kinesiology
62. **Influence of Training Status on Sprint Speed, Vertical Jump Height, and Fatigue Index Following Repeated Sprint and Jump Exercise**  
Lawren Hight, Makayla Watson and Libby McCurley, Kinesiology
63. **Mobile Phone Usage and Its Association with Neck and Shoulder Pain In College Students**  
Lily Richardson and Libby McCurley, Kinesiology

## **Group XIII**

**Chair:** *Dr. Megan Parker Peters, Professor of Education and Associate Dean, and Dr. Trace Hebert, Associate Provost for Research and Graduate Studies*

64. **Educators' Perceptions of Students' Funds of Identity within Scripted Curricula Context**  
Rachael Ferguson, Michelle Hasty and Kristen Baese, Education
65. **A Mathematical Story: Using Children's Literature to Impact Student Mathematical Proficiency**  
Samantha Sanders, Victoria Mondani, Amada Lashmit-Peña, Emily Bass and Emily Medlock, Education
66. **Resilience and Representation: A Qualitative Study of Student Perspectives in IPSE Programs**  
Phillip Borgman, Ryan Thornton and Halle King, Office of Accessibility and Learning Supports
67. **Growth, Gesture, and Gloucester: A Conductor's Development and Ensemble Success**  
Kate Marcino and Wendy Matthews, Music

**2:00 - 5:00 p.m. - Allen Arena**  
**Undergraduate Students Oral Presentations II**

**Oral Presentation IIA:** *Paul Rogers Board Room, Ezell 147*

**Chair:** *Dr. Samira Grayson, Director of the Center for Speaking and Writing, and Professor Jaimie Beth Colvin, Assistant Professor of Library Sciences*

- 2:00 p.m.      **The Marginalisation of Religion in International Relations: A Content Analysis of International Organization (2000-2024)**  
Oreoluwa Ajiboye and Susan Haynes, History, Politics and Philosophy
- 2:15 p.m.      **Abstract - The Problem of Petitionary Prayer**  
Lawrence Webber and Caleb Clanton, History, Politics and Philosophy
- 2:30 p.m.      **One Body of Many Parts: Working to Unify the Church for the Glory of Christ**  
Samantha Hampton and Lauren Smelser White, Bible and Ministry
- 2:45 p.m.      **The Argument from Desire: An Exploration of C. S. Lewis' Joy**  
Arianna Miller and Caleb Clanton, History, Politics and Philosophy
- 3:00 p.m.      **Theological Perspectives on Faith and Science: Insights from Protestant Ministers in the Southeastern U.S.**  
Emmalyn Browns and Joshua Owens, Biology
- 3:15 p.m.      **A Deconstructive Journey**  
Cason Procter and George Goldman, Bible and Ministry

**Oral Presentation IIB:** *Ezell 363*

**Chair:** *Dr. Brandi Kellett, Associate Professor and Chair of English and Modern Languages, and Professor Bethy Butler, Instructor of English*

- 2:00 p.m.      **Brutus Americanus: Family, Fate, and Fame in the Life of John Wilkes Booth**  
Ezra Lashlee and Richard Goode, History, Politics and Philosophy
- 2:15 p.m.      **Not Fit for Society: Anne Hutchinson and the Fear of Independent Thought**  
Emily Johnson and Richard Goode, History, Politics and Philosophy

- 2:30 p.m.      **What is Political Anti-Incumbency**  
Alexander Mazareanu and Scott Bledsoe, Law, Justice and Society
- 2:45 p.m.      **The Contagion Effect: Democratic Outliers in Authoritarian Areas**  
Kynneddy Gilbert, Susan Haynes, History, Politics and Philosophy and  
Scott Bledsoe, Law, Justice and Society
- 3:00 p.m.      **Defense Sector Lobbying Impact**  
Matthew Tanner and Scott Bledsoe, Law, Justice and Society
- 3:15 p.m.      **Measuring Implicit Associations involved with militarized and  
non-militarized law enforcement equipment**  
Cambryn Crumpler, Katherine Haralson and Susan Haynes, History,  
Politics and Philosophy

**Oral Presentation IIC: Ezell 301**

**Chair:** *Dr. Lauren White, Assistant Professor of Bible, and Dr. Mark Janzen, Professor of Archaeology*

- 2:00 p.m.      **How the Local Church is Addressing Family Trauma: Foundations**  
Peyton Qualls and J.P. Conway, Bible and Ministry
- 2:15 p.m.      **Garden Fellowship: An Introduction to Starting a Church Garden**  
Caitlin Vanderkamp and J.P. Conway, Bible and Ministry
- 2:30 p.m.      **Women, Voice, and Vocation in the Church: A Multi-Generational  
Study**  
Isaiah Davis and J.P. Conway, Bible and Ministry
- 2:45 p.m.      **Restoring Balance to Discipleship in the Large Church Setting**  
Lucas Collins and J.P. Conway, Bible and Ministry
- 3:00 p.m.      **Practising Spiritual Disciplines with Adults and Children Together**  
Hannah Drake and J.P. Conway, Bible and Ministry

**Oral Presentation IID: Doris Swang Chapel, Ezell 241**

**Chair:** *Professor Jan Cobu, Assistant Professor of Library Sciences, and Professor Ellen Marshall, Assistant Professor of Library Sciences*

- 3:15 p.m.      **Resistance: Mrs. Ramsay, Lily Briscoe, and the Modern Woman**  
Allison Aardsma and Jan Elaine Harris, English and Modern  
Languages
- 3:30 p.m.      **Underbelly of Utopia: Nathaniel Hawthorne, Henry James, and  
Human Morality**  
Allison Croft and Jan Elaine Harris, English and Modern Languages

- 3:45 p.m.      **Post-Colonialism in Isaac Asimov's Foundation**  
Solomon Reynolds and Jan Elaine Harris, English and Modern Languages
- 4:00 p.m.      **Leaving the Tower: Gender Performativity and Resistance in Tangled**  
Ellie Heslon and Brandi Kellett, English and Modern Languages
- 4:15 p.m.      **Examining Death's Narrative Role in The Book Thief**  
Haley Delaplain and Brandi Kellett, English and Modern Languages
- 4:30 p.m.      **Cultural Identity and Objects: Exploring Cultural Identity and Fragmentation in Tommy Orange's Books**  
Ella Jane Harrell and Brandi Kellett, English and Modern Languages
- 4:45 p.m.      **Rotting from Within: Toni Morrison's The Bluest Eye**  
Lawrence Webber and Brandi Kellett, English and Modern Languages

**2:00 - 5:00 p.m.**

**Graduate Students Oral Presentations**

**Graduate Oral Presentation I: *Ward Hall***

**Chair:** *Professor Holly Spencer, Instructor of Biology, and Dr. Jon Lowrance, Professor and Chair of Biology*

- 2:00 p.m.      **The Marginalisation of Religion in International Relations: A Content Analysis of International Organization (2000-2024)**  
Oreoluwa Ajiboye and Susan Haynes, History, Politics and Philosophy
- 2:20 p.m.      **Molecular Mechanisms of Metabolic Adaptations and Pyroptosis in Diabetic Cardiomyopathy Pathophysiology**  
Joshua Harrell and Bonny Millimaki, Biology
- 2:40 p.m.      **AMPK-mTOR-ULK1 Regulation of Autophagy in Retinal Pigment Epithelium During Age-Related Macular Degeneration**  
Madeline Kiani and Bonny Millimaki, Biology
- 3:00 p.m.      **Rett Syndrome: From Transcriptional Instability to Precision and Circuit-Level Therapeutics**  
Trisha Patel and Bonny Millimaki, Biology

- 3:20 p.m.      **Beyond Hyperglycemia: Molecular and Placental Mechanisms in Gestational Diabetes Mellitus**  
Jailan Magee and Bonny Millimaki, Biology
- 3:40 p.m.      **Pharmacokinetic-guided optimization of weight-based, high-dose oral montelukast in children with acute asthma exacerbations**  
Dana Dishman and Scott Akers, Pharmacy
- 4:00 p.m.      **Have you had your vitamins today? An Improved LC-MS/MS method to simultaneously measure B vitamins in plasma from study participants in a “greens” nutritional supplement clinical trial**  
Yusra Ahmed and Matthew J. Vergne, Pharmacy

**Graduate Oral Presentation II: *Burton 214***

**Chair:** *Dr. David Holmes, Professor of Liberal Arts, and Dr. Howard Miller, Professor of History*

- 2:00 p.m.      **The State of the Egyptian Empire in the Levant During the Reign of Akhenaten**  
Andrew Cahill and Mark Janzen, Archaeology
- 2:20 p.m.      **Negotiating Identity in the New Kingdom Nubian Fortresses: Daily Life and Cultural Entanglements**  
Christopher Jenkins and Mark Janzen, Archaeology
- 2:40 p.m.      **Identification and Archaeology of the Priestly Courses Towns**  
Faizan Khan and Chris McKinny, Archaeology
- 3:00 p.m.      **The Ark in Absence: Sacred Memory and the Top Panel of the Magdala Stone**  
Samuel Becker and Chris McKinny, Archaeology

**Graduate Oral Presentation III: *Burton 214***

**Chair:** *Dr. Marc Schwerdt, Associate Professor of Political Science and Department Chair, and Professor Abby Bell, Director of Academic Operations, Provost's Office*

- 3:45 p.m.      **What hath Caphtorim to do with Mizraim? Analyzing Genesis 10:13–14 in Light of the Keftiu**  
Joshua Hunter and Chris McKinny, Archaeology
- 4:05 p.m.      **From the Ashes of Change: Who Rule Philistia's Port Cities in the Wake of the Late Bronze/Iron Age Transition**  
Evie Robinson and Steve Ortiz, Archaeology

4:25 p.m.      **The Collision of Israel and Judah: the Region of Benjamin as a Borderzone in the Divided Kingdom**  
Gabrielle Graber and Steve Ortiz, Archaeology

**Graduate Oral Presentation IV: Ezell 363**

**Chair:** *Dr. Meagan Spencer, Associate Professor and Chair of Communication Sciences and Disorders, and Dr. Erica Vasquez, Assistant Professor of Social Work*

3:15 p.m.      **Creative Arts in Peacebuilding: Practices from Dance, Theatre, and Storytelling**  
Lily Corley and Elizabeth McMillan, Conflict Management

3:35 p.m.      **Stuck on the Sticky Floor: How Structural Barriers Limit Women's Career Growth**  
Madelaine Rhodes and Donita Brown, Management

3:55 p.m.      **A Social-Ecological Approach Alleviating Burnout and Musculoskeletal Disorders in Cardiac Sonography**  
Ashley Small and Donita Brown, Management

**3:30 - 5:00 p.m.**

**Undergraduate Students Poster Presentations**  
**Graduate Students Poster Presentations**

**Chair:** *Dr. Amanda D. Williams-Bleiler, Assistant Professor of Biology*

**Undergrad XIV**

**Chair:** *Dr. Lynette Austin, Dean of the College of Health Sciences, and Dr. Wendy Matthews, Director of the School of Music*

**68. In-Person vs Digital Interpreters: An Integrative Review of Parental Stress and Satisfaction in the NICU**

Alexis Bost, Brady McGowan, Jenna Yeager, Victoria Rusley, Jennifer Detrick and Jennifer Hicks, Nursing

**69. Artificial Intelligence Charting and its Effect on Nursing Burnout: An Integrative Review**

Ellie Moen, Abigail Fisk, Lacy Kaufman and Jennifer Hicks, Nursing

**70. Prognostic Communication in Pediatric Oncology: An Integrative Review**

Betsy Pack, Kothar Hayer, Moyo Afolayan and Jennifer Hicks, Nursing

**71. Factors Influencing Physical Activity Participation After Cardiac Surgery: An Integrative Review**

Ava-Wren Holliday, Kaitlyn Kelly, Precious Onyegwara, Jennifer Detrick and Jennifer Hicks, Nursing

**72. Clinical Predictors for a Safe Return to Driving in Adolescents After Concussion: An Integrative Review**

Amelia King, Thalia Swager, Tara Chisman, Isabella Cerquera, Jennifer Hicks, Nursing and Jennifer Detrick, Nursing

**Undergrad XV**

**Chair:** *Dr. Rolettha Pillow, Associate Professor of Nursing, and Dr. Beth Breeden, Professor of Pharmacy*

**73. Therapeutic Nursing Relationships Improve Maternal Experiences: An Integrative Review**

Marxie Myers, Isabella Gautsche, Nolan Hall, Grace Earnhart, Jennifer Hicks, Nursing and Jennifer Detrick, Nursing

**74. Structured Breathing Techniques To Lower Maternal Pain And Anxiety During Labor: An Integrative Review**

Mary Jobe, Lily Armstrong, Taylee Mullins, Haylie Greer and Jennifer Hicks, Nursing

**75. Maternal Infant Feeding Preference and Success Impact on Maternal Mental Health: An Integrative Review**

Elyssa Venard, Olivia Rhoda, Aala Marfing, Chloe Besler, Jennifer Hicks, Nursing, and Jennifer Detrick, Nursing

**76. Preimplantation Genetic Testing in IVF and Its Impact on Genetic Disorders and Neonatal Outcomes Among Fertile Women: An Integrative Review**

Julia Loscalzo, Annalise Cannada, Catherine Brown, Jayda McClain, Jennifer Hicks, Nursing, and Jennifer Detrick, Nursing

**77. Risk Factors Contributing to Anterior Cruciate Ligament Tears in the Female Population: An Integrative Review**

Delaney Hawthorne, Courtney Sauer, Finley Elder, Alexis Sher, Jennifer Hicks, Nursing, and Jennifer Detrick, Nursing

**78. Trust in Healthcare Providers Who Use Trauma-Informed Care Among Adolescents After Sexual Assault: An Integrative Review**

Carissa Bestwick, Erick Garcia, Aala Marfing, Nadia Osman and Jennifer Hicks, Nursing

## **Undergrad XVI**

**Chair:** *Dr. Bryan Thomas, Senior Director of Academic Success and Retention, and Professor Autumn Maxwell, Assistant Professor of Social Work*

### **79. Immigrant Family Health Access Program for Uninsured Immigrant Families: A Case Study**

Jennifer Ibarra-Diaz and Erica Vasquez, Social Work

### **80. Evaluating Shame-Related Language in Contemporary Christian Worship Music**

Emma Moore and A.J. Heritage, Psychology

### **81. Education and Homeless Youth Policy**

Isabella Saphorghan, Taylee Mullins and Scott Bledsoe, Law, Justice and Society

### **82. Religious Prosociality**

Monica Cook and Scott Bledsoe, Law, Justice and Society

### **83. Prosperity Beliefs Under Stress: Relations with Religious Doubt and Well-Being**

Claire Simmons, Shiann Roker, McKenna Buz'Zard, Mary Evans Cooper, Grace Henry, Aaron Barnes, Douglas Krull, Joseph Horton and Jonathan Miller, Psychology

## **Undergrad XVII**

**Chair:** *Dr. Misty Parsley, Executive Director of the Office of Accessibility and Learning Supports, and Dr. Monica Wentworth, Director of Career Development*

### **84. IRL (“In Real Life”) Campaign**

Maggie Burke, Kailyn Mason, Lila Skidmore and Lois Jones, Communication

### **85. One City Many Paths: Nashville Public Transportation Solutions**

Tessa Mullinix, Sophia Shear, Amy Vieira, Emma DeVries, Kylie Kissler and Lois Jones, Communication

### **86. Voices for the Vancouver Marmots**

Madelyn Paul, Lorelai Kline, Teah Vloedman and Lois Jones, Communication

### **87. The Curated Self: Navigating Social Comparison, Body Image, and Digital Resilience in Gen Z**

Katlin Thorpe, Jacy Stricker, Chloe Frensley and Lois Jones, Communication

### **88. Reducing Food Waste and Expanding Healthy Food Access**

Hayden Cassetto, Christopher Ferguson, Gabriela Barreto and Lois Jones, Communication

### **89. A Comparative Analysis of Global Smart Manufacturing Initiatives**

Luke Nichols and Ashley Yarbrough, Operations Management

## **Undergrad XVIII**

**Chair:** *Dr. Lois Jones, Assistant Professor of Communication and Public Relations, and Dr. Trace Hebert, Associate Provost for Research and Graduate Studies*

### **90. Chilling Dissent: Executive Power and the First Amendment**

Ameila Babb, Emy Fawzy, Hannah Owensby, Madelyn Newsom, Gabriela Pinheiro Barreto, Andrew Forney, and Sarah Gibson, Communication

### **91. Artificial Doctors, Real Rights!**

Marqu'is Walls, Brandon Valverde and Sarah Gibson, Communication

### **92. Regulating Screens: Do State Laws Limiting Minors' Social Media Access Violate the First Amendment?**

Ross Candelino, Gabriel Espinosa, Emma Sheppard and Sarah Gibson, Communication

### **93. Media Access vs. Athlete Privacy: Where Should the Line Be?**

Mariia Dolzhenko, Harold Espinoza Lopez, Hallie Ihfe, Ben Peterson and Sarah Gibson, Communication

## **Undergrad XIX**

**Chair:** *Dr. Adam Wilson, Director of the Center for Teaching and Learning, and Dr. Donna King, Professor of Music*

### **94. The Climate Of Expression: A Comparative Analysis Of In-Person, Virtual, And AI-Driven Interview Methods In Political Free Speech Research**

Hannah Fritsch and Sarah Gibson, Communication

### **95. The Significance Of Symmetry: Understanding Chiasms in Ancient Near Eastern Literature**

Hannah Fritsch and Alan Bradshaw, Physics

### **96. From Analysis to Concert: A Comprehensive Study of "Brook Green Suite"**

Taylor Reed and Wendy Matthews, Music

### **97. Benefits of Art Therapy Practice for Prison Inmates and Their Families**

Eliana Bowman, Emily Derrick, and Elizabeth Clement, Visual Arts

## Graduate Posters I

**Chair:** *Dr. Sarah Graff, Assistant Professor of Pharmacy, and Dr. Emily Smith, Assistant Provost for Online Learning*

98. **Uncovering Hidden Risks: Developing Comprehensive Screening Criteria for Bone Stress Injuries in NCAA Division I Athletes**  
Haley Forret, Clara Root, and Ann Toy, Dietetics
99. **Polycystic Ovary Syndrome vs. Non-Classical Congenital Adrenal Hyperplasia: Diagnostic and Nutritional Considerations for Dietitians**  
Emma Stopka, Noelle Mauro and Ann Toy, Dietetics
100. **Position-Specific Body Image Dissatisfaction and Body Composition in NCAA Division I Football Players**  
Madison Stanzell, Mikayla Vacek and Ann Toy, Dietetics
101. **Malnutrition Screening Tools for Athletes**  
Madison Swartzmiller and Ann Toy, Dietetics
102. **Effects of Fitlight Training on Cognitive-motor Performance and Reaction Time in General Healthy Adults**  
Allyson Stallworth and Libby McCurley, Kinesiology
103. **Addressing Gaps in Follow-Up Care for Special Olympics Athletes: An Interprofessional Approach to Health Literacy and Care Navigation**  
Catherine Garces and Angie Maynard, Pharmacy

## Graduate Poster II

**Chair:** *Dr. Megan Leeds, Professor of Pharmacy and Director of Curricular Innovation, and Dr. Chris Gonzalez, Professor of Marriage and Family Therapy*

104. **Development of an Analytical Method to Measure Doxorubicin Levels in Human Plasma**  
Leslie Williams and Scott Akers, Pharmacy
105. **Dupilumab for Eosinophilic Esophagitis: Characterizing Symptoms and Clinical Outcomes in a Real-World Pediatric Population**  
Charlotte Haskell and Katie Cruchelow, Pharmacy
106. **Evaluation of 5-HT<sub>3</sub> Antagonists as Substrates and Inhibitors of Aldehyde Oxidase**  
Hilina Woldeamanuel, Merna Kamal and Rachel Crouch, Pharmacy

107. **Developing an AI-Based Clinical Decision Support Model to Improve Guideline-Directed Medical Therapy Optimization in Heart Failure**  
Andrew Ethridge and Jay Dorris, Pharmacy
108. **Cognitive Flexibility and Stereotypes Among Health Professions Students**  
Marina Isaac and Abbie Burka, Pharmacy

### **Graduate Poster III**

**Chair:** *Dr. Autumn Marshall, Professor and Chair of Nutrition, and Dr. A.J. Heritage, Director of Graduate Psychology*

109. **Exploring Coffee Silverskin as a Functional Ingredient in Granola: Consumer Acceptability and Sensory Evaluation**  
Abigail Alvarado, Samuel Harrell, and Tracy Noerper, Dietetics
110. **Weight Maintenance in Dialysis Patients: A Comparison of Modalities**  
Addison Lake, Emily Hogan, and Tracy Noerper, Dietetics
111. **Ketogenic Nutrition Interventions in Depression: Considerations for Dietetic Practice**  
Clara Groves and Tracy Noerper, Dietetics
112. **The Impact of Diabetes Day Attendance on Glycemic Control: A Study of Patient HbA1c Level Changes**  
Shannon Rourke, Caroline Cox and Tracy Noerper, Dietetics
113. **Environmental Factors in Toddler Eating Behaviors: A Video-Based Observational Study**  
Mary Watkins, Julia Chandler and Tracy Noerper, Dietetics
114. **Dietary Vitamin Supplement Intake Frequency on Self-Reported Cognitive Function in Adults aged 25-65**  
Sarah Khan and Tracy Noerper, Dietetics

## **Graduate Poster IV**

**Chair:** *Dr. Kirsten Dodson, Associate Professor and Chair of Mechanical Engineering*

115. **The Alternative Examiner: AI-Assisted Socratic Assessment for Personalized Learning at Scale**  
Joy Osipchuk, John Smith and Steve Nordstrom, Computing
116. **Expanding Point of Care Testing as an Active Learning Intervention with First-Year Student Pharmacists**  
Seth Meyer, Jessica Rezk and Sarah Collier, Pharmacy
117. **Servant Leadership, Political Ideology, and Trust**  
Dylan Taylor and Donita Brown, Management
118. **SupplyScript: An AI-Powered Supply Chain Support Bot for Clinical Practice**  
Jackson Gaston, Ivan Kauffman and Jay Dorris, Pharmacy
119. **Conflict Escalation, Legitimacy, and Honor-Based Violence: A Conflict Management Analysis of the Hatfield–McCoy Feud**  
Nicholas Ingold and Elizabeth McMillan, Conflict Management

**5:15 – 6:15 p.m. • Shinn Center  
Reception and Awards Ceremony**

**Chair:** *Dr. Amanda D. Williams–Blelier, Assistant Professor of Biology*

**Presentation of Awards:** *Dr. Jennifer Shewmaker, Provost*

**Closing Remarks:** *Dr. Florah N Mhlanga, Vice Provost*

**Announcement of Outstanding Student Presenters**

**FOCUS and Creative Arts:** *Dr. Jan Elaine Harris, Professor of English*

**Undergraduate Oral Presenters:** *Dr. Alan Bradshaw, Honors College Dean  
and Professor of Physics*

**Undergraduate Poster Presenters:** *Dr. Amanda D. Williams–Bleiler, Assistant  
Professor of Biology*

**Graduate Oral Presenters:** *Dr. Kirsten Dodson, Associate Professor and Chair  
of Mechanical Engineering*

**Graduate Poster Presenters:** *Dr. Kirsten Dodson, Associate Professor and Chair  
of Mechanical Engineering*

## Acknowledgments

### Organizing Faculty and Staff

Dr. Jan Harris • Dr. Amanda D. Williams-Bleiler

Dr. Josh Owens • Dr. Kristin Baese • Dr. Brandon Banes • Dr. Alan Bradshaw  
Dr. Kirsten Dodson • Dr. Carolina Santiago-Stranahan • Professor Leanne Smith  
Dr. Jaclyn Spivey • Dr. Florah Mhlanga • Andrea Davis • Kristen Thompson

Faculty Mentors • Student Presenters

Symposium Chairs and Co-Judges • Sodexo and Lipscomb Dining Services

Lipscomb University Entertainment and Technical Services

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