

Seventh Annual



April 12, 2018



From the Provost, Lipscomb University

A university can be defined in many ways. Certainly, research is a vital component in any measure of a university's standing. For that reason Lipscomb is proud to have been designated recently by the Carnegie Foundation as a national doctoral level institution (R3). This classification places Lipscomb among some of the premier colleges and universities in America and is based upon the amount of research done by students at the various institutions. The Student Scholars Symposium reflects the quality, creativity, and range of research produced by students at Lipscomb. I am most proud of the fact that the Student Scholars Symposium is now not only a tradition at Lipscomb, but a growing one. This can be seen by looking over the current program. The papers presented increase both in number and quality each year, as does the range of the topics and ideas discussed. I am also delighted to see the diversity of talent and voices reflected in the growing number of presentations in the creative arts. This speaks to the vitality of our academic programming. I appreciate the work of the faculty committee and the leadership of Dr. Florah Mhlanga in putting together such a vibrant and inviting program.

Dr. W. Craig Bledsoe

Opening Session: *Allen Arena*

Chair: *Dr. Beth Conway, Associate Professor of Biology*

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

8:30 - 8:45 a.m. **Welcome**
Dr. Norma Burgess, Dean of the College of Liberal Arts
& Sciences

8:45 - 9 a.m. **Opening Remarks**
Dr. Craig Bledsoe, Provost

9:10-10:55 a.m. • Concurrent Sessions Undergraduate Student Paper Presentations

Paper Presentations IA: *Ezell 241*

Chair: *Dr. Ted Parks, Professor of Spanish*

- 9:10 a.m. ***The Power and The Glory: The Emerging Mexican National Identity of the 1930s***
Brooke Foster and Jan Harris, English and Modern Languages
- 9:25 a.m. ***The Whole Thing is So Damned Silly: World War II and the Collapse of the British Identity in Put Out More Flags***
Summer Starkie and Jan Harris, English and Modern Languages
- 9:40 a.m. ***The Others in E.M. Forster's A Room with a View***
Rachel Brooks and Jan Harris, English and Modern Languages
- 9:55 a.m. ***Subversion of Ideal Masculinity in Woolf's The Waves***
Amy Hall and Jan Harris, English and Modern Languages
- 10:10 a.m. ***"When I am among the Trees": Examining Septimus Smith's Vocalizations of PTSD in Woolf's Mrs. Dalloway***
Meg Provenzale and Jan Harris, English and Modern Languages
- 10:25 a.m. ***Unexpected Sainthood: Sarah Miles as the Sacramental Word in The End of the Affair***
Peggy Miller and Jan Harris, English and Modern Languages
- 10:40 a.m. ***The Pitfalls of Paul Pennyfeather***
Meredith Neilson and Jan Harris, English and Modern Languages

Paper Presentations IB: Ezell 301

Chair: *Dr. Kent Clinger, Professor and Chair of Chemistry and Biochemistry*

- 9:10 a.m. **Utilizing Methylation and Expression Signatures to Construct Predictive Models and Personalized Cancer Treatments**
Caleb Reagor and Beth Conway, Biology
- 9:25 a.m. **Evaluating Interactions Between *Helicobacter pylori* VacA Toxin and Anti-VacA Nanobodies**
Deion Sims and Florah Mhlanga, Biology
- 9:40 a.m. **Localization of MHC1 in Antigen Presenting Cells**
Brandon Cunningham and Amanda Williams, Biology
- 9:55 a.m. **Surface Free Energy Characterization of an Adhesin Protein**
Spencer Oskin, Verena Ghebranious, Jasmine Carlisle, and Brian Cavitt, Chemistry and Biochemistry
- 10:10 a.m. **Study of Ice Adhesion on Experimental Coatings**
Rachel Brooks and Brian Cavitt, Chemistry and Biochemistry
- 10:25 a.m. **Surface Free Energy Characterization of Biofilm Resistant Monomers**
Verena Ghebranious and Brian Cavitt, Chemistry and Biochemistry
- 10:40 a.m. **Effects of Long Term Exposure to Extraterrestrial Radiation**
Mike Piechocki and Alan Bradshaw, Physics

Paper Presentations IC: Ezell 363

Chair: *Dr. Autumn Marshall, Professor and Chair of Nutrition and Kinesiology*

- 9:10 a.m. **The Effects of Listening to Music on Performance During a 1.5 Mile Run Test in Non-Athlete College Students**
Samie Anderson, Lindsey Benson, Shayne Bourque, and Ruth Henry, Kinesiology
- 9:25 a.m. **Difference in Peak Power Output and Mean Power Output Between Female Cross-county Runners (Endurance Athletes) and Female Softball Players (Power Athletes)**
Abby Fenichel, Jake Poyner, and Ruth Henry, Kinesiology
- 9:40 a.m. **The Effects of Myofascial Release on Running Efficiency**
Avery Franklin, Kade Hinkle, Rebecca Robertson, and Ruth Henry, Kinesiology

9:55 a.m. **Effects of Acute Exercise on Cognitive Ability**
Spenser Carder, Meghan Jelonek, Johnathon Ramirez, and Ruth Henry, Kinesiology

10:10 a.m. **Consumer Perceptions of Ride Sharing Services: A Crisis Management Perspective**
Amy Hurd and Lindsay Dillingham, Business

10:25 a.m. **Active vs Passive Portfolio Management**
Natalie DuBoise and Jeff Jewell, Business

10:40 a.m. **Pitch At Me: The Story of a Startup**
Hannah Kraebel and Andy Borchers, Business

Paper Presentations ID: Ezell 147

Chair: *Dr. Fortune Mhlanga, Dean of the College of Computing & Technology*

9:10 a.m. **Evaluation of the Practicality of Fraud Prevention for Pharmaceutical Prescriptions using Blockchain Technology**
Andrew Kerley, Sinney Chan, Daniel Johnson, and Timothy Wallace, Computing & Technology

9:25 a.m. **Lipscomb Emergency Network System**
Justin Draughon, Mac Hall, Damian Grant, and Timothy Wallace, Computing & Technology

9:40 a.m. **Blockchain Technology in Online Voting**
Gregory Araujo, Abdulhafiz Alawi, Ben Alden, and Timothy Wallace, Computing & Technology

9:55 a.m. **Investigation Regarding Feasibility of Acceleration of Predictive Regression**
Sinney Chan, Will Richmond, and Timothy Wallace, Computing & Technology

10:10 a.m. **The Digital Divide in Cyber Security: A New Threat to National Security**
Zachariah Westover and Chris Simmons, Computing & Technology

10:25 a.m. **Modern Convolutional Neural Network Approaches**
Addison Bean and Eddy Borera, Computing & Technology

10:40 a.m. **Macryption 1.0**
Robert Hufham, James Pugh, John Slaven and Tim Wallace, Computing & Technology

9:10 – 10:30 a.m.
Performances I

Performance IA: Ward Hall

Chair: Prof. Caroline Williams, Department of English and Modern Languages

- 9:10 a.m. **Wilderness**
Kaylee Newland and Jan Harris, English and Modern Languages
- 9:20 a.m. **The Direction I Left In**
Sam Hearn and Jan Harris, English and Modern Languages
- 9:30 a.m. **Henceforth**
Ryan Wilson and Jan Harris, English and Modern Languages
- 9:40 a.m. **Races**
Leslie Garcia and Jan Harris, English and Modern Languages
- 9:50 a.m. **Forwards, Backwards, Up and Down**
Griffen Price and Jan Harris, English and Modern Languages
- 10:00 a.m. **Heart Spread Wide**
Morgan Beers and Jan Harris, English and Modern Languages
- 10:10 a.m. **Swallowing the Sun**
Allyson Collins and Jan Harris, English and Modern Languages
- 10:20 a.m. **Sodden Bricks and Star Stuff**
Ashley Burklin and Jan Harris, English and Modern Languages

10:55 a.m. - 12:20 p.m.
Lunch and Keynote: Allen Arena

Chair: Dr. Florah N. Mhlanga, Associate Dean of the College of Liberal Arts & Sciences

Keynote Presentation: Scholarship as Worship

Dr. Rick Ostrander, Vice President for Academic Affairs and Professional Programs,
Council for Christian Colleges & Universities, Washington, D.C.

Introduction of Speaker: Dr. Richard Goode, Professor of History

12:30 – 1:50 p.m.
Poster Session: Allen Arena

Chair: Dr. Shanna Ray, Chair and Professor of Psychology

Undergraduate Student Poster Presentations

Group I

Chair: Dr. Roletha Pillow, Assistant Professor of Nursing

1. **Therapies Used for Behavioral Outbursts in Autism Spectrum Disorders in Children**
Elyse Castleman, Blake Houston, Meredith Orr, Kelsey Woosley, and Mary Koziura, Nursing
2. **What is the Impact of Skin-to-Skin Contact Between Mothers and Babies Within the First Year of Life on Bonding, Trust, Emotional Stability, and Post-Partum Depression Compared to Mothers and Babies Who do not Use Skin-to-Skin Contact?**
Sarah Knox, Hannah Martin, Tania Romero, Emily Trovillion, and Jennifer Weber, Nursing
3. **In Preterm Infants, What are the Effects on Morbidity of Using Skin-to-Skin Contact with Their Mothers as Compared to Using Polyethene Wrap Within the First Week of Life.**
Collin Jenkins, Victoria Mckinny, Cassidy Cowan, Keisha Yotter, and Mary Koziura, Nursing
4. **What is the Risk of Autism in Children who Receive the MMR Vaccine Compared to Children who do not Receive the MMR Vaccine?**
Jessica Guirgis, Abigail McCormick, Jaala Smith, Skylar Victory, and Jennifer Weber, Nursing
5. **Non-Pharmacologic Treatment Methods for Attention Deficit Hyperactivity Disorder**
John Abel, Ashley Hammer, Nicole Miller, Kayla West, and Mary Koziura, Nursing

Group II

Chair: *Dr. Ruth Henry, Professor and Vice Chair of Nutrition and Kinesiology*

6. **How Much do Cell Phones Contribute to the Spread of Communicable Diseases in the College Setting?**
Rachel Hunter, Hadley Collins, Kathryn Pennington, Nardos Yalew, Hailey Hines, and Jennifer Weber, Nursing
7. **Does the Education of Concussions in Athletes Affect the Self-Reporting of Concussive Symptoms?**
Elsy Felix, Katriel Griesen, Mikaela K. Lewman, Rachael K. Sarrett, and Jennifer Weber, Nursing
8. **How Does Stem Cell Therapy Affect the Speed of Wound Healing and Resultant Tissue Functionality in Patients with Partial to Full-thickness Burns?**
Donovan Brackett, Kelsey Hedge, Lucas Moss, Jacqueline Wieneke, and Mary Koziura, Nursing
9. **What Interventions have been Implemented to Help Reduce Workplace Bullying Targeting New Graduate Nurses?**
Cassie E. Dresen, Summer N. Jenkins, Abigayle E. Rickman, Kalyn M. Young, and Mary Koziura, Nursing
10. **Influenza Vaccine in Asthmatic Children**
Hadassah Hampton, Shea Mincher, Jordan Altrock, William White, and Mary Koziura, Nursing

Group III

Chair: *Dr. Jill Kirby, Assistant Professor of Biology*

11. **Prenatal Cocaine Exposure: Effects on Childhood Development**
Jamie Evans, Jordan Faulkner, Megan Jones, Savannah Roberts-Louria, and Jennifer Weber, Nursing
12. **What is the Effect of a Vegan Diet on the Development of a Child Conception through Age 6 as Compared to an Omnivorous Diet?**
Madeline Gardner, Mary Michael Lillicrap, Ashton Martin, Forrest Sentell, and Jennifer Weber, Nursing
13. **What is the Effectiveness of Essential Oils on Sleep as Compared to Traditional Pharmacological Methods, such as Melatonin, in the Elderly Population?**
Alyssa Breedlove, Rabab Jambi, Kelsey Nussbaumer, Justis Wilkins, and Mary Koziura, Nursing

14. **What is the Effect of Essential Oils on the Amount of Pain Medication Consumed by Hospitalized Patients, Compared to a Patient not Using Essential Oils?**

Carley Gilson, Shannon Guthrie, Brittany Petry, Sydney Watson, and Jennifer Weber, Nursing

15. **Essential or Harmful?**

Graysen McConnell, Krishna Patel, and Bonny Millimaki, Biology

Group IV:

Chair: *Dr. Bonny Millimaki, Associate Professor of Biology*

16. **Effectiveness of Alternating Electric Fields in Interrupting Breast Cancer Cell Proliferation**
Naomi Derksen, Bethanne Venkatesan, Benton Warren, Morgan Stubblefield, Enobong Inam, Haley Scarborough, and Alan Bradshaw, Physics
17. **EDNRB 201 Isoform In Human Breast Cancer Cells**
Deidra Bedgood, Zuhaila Hired, Katherine Iglesias, Khadija Kirmani, Mirna Mina, Grace Rutledge, and Beth Conway, Biology
18. **Endothelin B Receptor Isoform 204: An Investigation into the Downstream Signaling Effects of EDNRB Upregulation in Breast Cancer**
Carly Hedgepath, Brent Horswell, Haley Scarbrough, Malinda Brooks, Owen Glogovsky, Zak Zeger, and Beth Conway, Biology
19. **Effect of Overexpressing EDNRB-202 in Breast Cancer Cells**
Brandon Cunningham, Stephen Hemmerly, Andrew Wigger, Regine Lane, Natasha Jones, Jonathan Carden, and Beth Conway, Biology
20. **The effect of Interferon Gamma on Immunoproteasome Expression Levels in HEPG2 Cells at Varying Time Points**
Abigail Holt and Amanda Williams, Biology
21. **TLR 4-Associated GPR41 Expression Due to SCFA Stimulation**
Collin Vasseur and Jon Lowrance, Biology

Group V

Chair: *Dr. John Smith, Associate Professor of Chemistry*

22. **Impact of Fructose on Mouse and Human Stellate Cell Activation and Proliferation**
Kallan Hoover and Autumn Marshall, Nutrition and Kinesiology

23. **Optimizing the Synthesis of 2,6-Bridged Loperamide Analogs**
Mallory Burns, Nathan Fields, and Susan Mercer, Pharmaceutical Sciences
24. **Characterization of Individual Differences in CYP3A5 Activity In Vitro**
Arsany Abouda, Kahari Wines, and Klarissa Jackson, Pharmaceutical Sciences
25. **The Microwave Synthesis of Phenylalanine: A Two-step Synthesis in the Organic Teaching Laboratory Using Methyl Ethyl Ketone as Solvent**
Elizabeth Behrens, Amy Nguyen, and Kent Clinger, Chemistry and Biochemistry
26. **Testing Explosion Residues in an Undergraduate, Non-Majors Laboratory Experiment**
Grace Rutledge and Linda Phipps, Chemistry and Biochemistry
27. **Hazardous Waste Leaching Analysis on Electronic Waste Materials**
Rachel Brooks and Linda Phipps, Chemistry and Biochemistry

Group VI

Chair: *Dr. Jon Lowrance, Professor of Biology*

28. **Impact of Traffic Noise on Birds in Warner Park**
Haley Powell and John Lewis, Biology
29. **Germinating *Magnolia grandifloras* in the Lab**
Kelsea Hadley and Kent Gallaher, Biology
30. **Does a Healthy Rhizosphere Hold the Key to Sustainable Agricultural Practices?**
Laura Hunt and Emily Stutzman, Institute for Sustainable Practice
31. **Can Bamboo Change the Western Mindset and Serve a Larger Purpose Beyond Carbon Sequestration and Flooring?**
Bret Walters and Emily Stutzman, Institute for Sustainable Practice
32. **How Do Green Roofs Contribute to the Urban Heat Island Effect?**
Kaitlyn Jordan and Emily Stutzman, Institute for Sustainable Practice

Group VII

Chair: *Dr. John Lewis, Associate Professor of Biology*

33. **How do Indigenous Rights Affect Deforestation in the Amazon Rainforest?**
Megan Bourland and Emily Stutzman, Institute for Sustainable Practice

34. **What are the Economic Benefits for Farmers in Developing Countries Who Implement Agroforestry Practices?**
Kelsi Lewis and Emily Stutzman, Institute for Sustainable Practice
35. **What Impacts will Making Family Planning Accessible to Third World Countries Have?**
Leslie King and Emily Stutzman, Institute for Sustainable Practice
36. **How to Integrate Sustainable Heating and Energy Technologies into Low Income Ger District**
Biligt Tsogsaikhann and Emily Stutzman, Institute of Sustainable Practice
37. **Village of Hope Sanitation System**
McKenzie Lawry, Samuel Webb, Joe Kerridge, Bryant Loesch, Carson Chaffin, and John Hutson, Electrical Engineering
38. **Costuming Hedda Gabler**
Morgan Bowling and June Kingsbury, Theatre

Group VIII

Chair: *Dr. Joseph Tipton, Associate Professor of Mechanical Engineering*

39. **Lipscomb North Campus Expansion**
Caroline Davis, Lily Moritz, Taylor Sanders, Greg VanMaaren, and Chris Gwaltney, Civil Engineering
40. **Steel Bridge Senior Design Project**
Ruth Steele, Vidal Odigie, Luis Vargas, Matthew Terry, and Mark McDonald, Civil Engineering
41. **IEEE Robotics**
Cailey Cline, Caleb Bergthold, Adam Neal, Riley Northway, Reid Weber, Garrett Wood, and Greg Nordstrom, Electrical Engineering
42. **Lipscomb Motorsports 2017-2018**
Zach Potts, Eric D'Ambro, Lucas Bromenschenkel, Connor Goodwin, Austin Tabulog, and Fort Gwinn, Mechanical Engineering
43. **Installation and Testing of a Trane Water Source Heat Pump for a Lipscomb Engineering Lab**
McKenzie Lawry and Kirsten Dodson, Mechanical Engineering
44. **Bison Ballistics Student Launch Project**
Caleb Davenport, Jeffrey Gage, Austin Brown, Caleb Stubbs, Ryan Seal, and Joseph Tipton, Mechanical Engineering

Group IX

Chair: *Dr. Denis Thomas, Associate Professor of Psychology*

45. **The Relationship Between Psychosocial Well-being and Empathy**
Hunter Maerz, Matthew Naverias, Bess Ross, Dalton Rawls, and Paul Turner, Psychology, Counseling, and Family Science
46. **Welfare Myths: Women, Poverty, and Policy**
Rachel Adams and Cayce Watson, Social Work
47. **The Implications of Shame: A Look Through the Lens of Social Work Practice**
Daniel Schwanke and Amy Crossland, Social Work
48. **“Saturday Night Live” - Statistical Analysis**
John Ayala, Megan Torp-Pederson, Alli Brown, Gary Hall, and Katie Link, Mathematics
49. **Mindful Consumption of Clothes in Modern America**
Peyton Bottoms and Emily Stutzman, Institute for Sustainable Practice
50. **What Do American Shopping Habits Mean for the Environment, and How Can We Develop More Mindful Patterns of Consumption?**
Peyton Bottoms and Emily Stutzman, Institute for Sustainable Practice

Group X

Chair: *Dr. Alfa Nyandoro, Associate Professor of Computer Science and Information Technology*

51. **Predicting NCAA Soccer Games Using a Similarity Metric and Genetic Algorithm**
Jonathan Hughes and Arisoa Randrianasolo, Computing & Technology
52. **Applications of RTL-SDR Technology to Aid in Cell Phone Detection**
Jesse Lippincott and Kenneth Mayer, Computing & Technology
53. **Application of Deep Learning to Batch Effect Correction in RNA Sequencing Data**
Thais Minet and Qingguo Wang, Computing & Technology
54. **NashBot**
Bryce Wieman, Matt Roland, Dallas Barlettano, and Timothy Wallace, Computing & Technology

55. **GSTAL Virtual Machine**
Bethany Cadena and Bryan Crawley, Computing & Technology
56. **Company Response to Data Breach Crisis: Consumer Perspectives**
Shelby Woods, Zach Livengood, and Lindsay Dillingham, Business

Graduate Student Poster Presentations: Allen Arena

Group XI

Chair: *Dr. Christin Schatzer, Director of SALT and Associate Director of General Education*

57. **Leadership Perceptions and School Climate**
Nicole Pierce, Jean Kleine-Kracht, and Keith Nikolaus, College of Education
58. **Accountable Talk Increases ELL GRL**
Haley Henson and Reva Chatman-Buckley, College of Education
59. **True Cost of Vanlife**
Anna McClure and Emily Stutzman, Institute for Sustainable Practice
60. **Detecting Hemispatial Neglect**
Jen Stewart and Dale Alden, Psychology, Counseling and Family Science

Group XII

Chair: *Dr. Mary Sledge, Professor of Biology*

61. **The Localization of the TLR 4/MD 2 Complex in Colonic Epithelial Cells after Stimulation with Short-Chain Fatty Acids**
Katherine E. Ankenbauer, Kacey J. Kemper, Taylor Wright, and Jon Lowrance, Biology
62. **Administration of JAK2 Chemical Inhibitor AG490 Prevents Formation of the Immunoproteasome in HepG2 Cells**
Lindsay Davison and Amanda Williams, Biology
63. **CYP1A2 Activity Impacts Sunitinib Reactive Metabolite Formation**
Rebecca Durandis and Klarissa Jackson, Pharmaceutical Sciences
64. **The Effect of UV-C Irradiation of Coconut Water on Amino Acid Concentration**
Kevin Flatt and Matthew Vergne, Pharmaceutical Sciences

Group XIII

Chair: *Dr. Linda Phipps, Professor of Chemistry*

65. **Implementation of Ambulatory Care Pharmacy Services within a Multispecialty Medical Group**
Haley Willett and Ben Gross, Pharmacy Practice
66. **Clinician Perceptions of External Medication History Data in the Emergency Department Following New Electronic Health Record Implementation**
Mimi Baker and Elizabeth Breeden, Pharmacy Practice
67. **Retrospective Analysis of Oxcarbazepine in Pregnant Females with Substance Use Disorders: Focus on Safety**
Kayla Johnson and Lindsey Miller, Pharmacy Practice
68. **Evaluation of Complications Associated with Ketorolac Following Off-Pump Coronary Artery Bypass Graft Surgery**
Lindsey Safley, Jakob Phann, Cassandra Bengel, Zak Zeger, and Jonathan Pouliot and Abigail Burka, Pharmacy Practice

2 – 4 p.m. Concurrent Sessions Undergraduate Student Paper Presentations II

Paper Presentations IIA: Ezell 147

Chair: *Dr. Norma Burgess, Dean of the College of Liberal Arts & Sciences*

- 2 p.m. **Discovering the Incomplete Narrative of David Lipscomb and Slavery**
Jacob Malmstrom and Richard Goode, History, Politics and Philosophy
- 2:15 p.m. **Understanding Our Founder's Views on Race**
Gabriella Cannone and Richard Goode, History, Politics and Philosophy
- 2:30 p.m. **"It Looks Pretty White in Here to Me": Lipscomb University's History of Race Relations, 1950s to Present**
Jesse Lippincott and Richard Goode, History, Politics and Philosophy
- 2:45 p.m. **Racial Relations at Lipscomb: Then and Now**
Deion T. Sims and Richard Goode, History, Politics and Philosophy

- 3:00 p.m. **The Position of Women in SNCC: Prone or Progressive?**
Lauren Anderson and Richard Goode, History, Politics and Philosophy
- 3:15 p.m. **The Relevance of Double-Consciousness in Today's Black America**
Lesley Walker and Caleb Clanton, History, Politics and Philosophy
- 3:30 p.m. **Doubting Logic**
Christopher Hebert and Caleb Clanton, History, Politics and Philosophy
- 3:45 p.m. **International Human Trafficking and Its Root Causes**
Lynn Gurskey and Susan Haynes, History, Politics and Philosophy

Paper Presentations IIB: Ezell 363

Chair: *Dr. Chris Gonzalez, Associate Professor of Psychology*

- 2 p.m. **An Armed and Dangerous Mind**
Zachary Fasig and Paul Turner, Psychology
- 2:15 p.m. **Addressing Mental Health Topics at Youth Encouragement Services Through Faith-Based Teaching and Conversation**
Carly Stamey and Paul Turner, Psychology
- 2:30 p.m. **How Does the Availability of Community Resources to an Identified Low-Socioeconomic Community Affect Patient Care Compared to the Availability of Community Resources in other Socioeconomic Communities?**
Ayesha Harris and Christin Shatzer, SALT
- 2:45 p.m. **Principles of Adult Learning and its Impact on Understanding Disease States in Healthcare Ecosystems**
Sena Seged and Christin Shatzer, SALT
- 3 p.m. **Ready or Not: Redefining College Readiness for Kentucky Students**
Meredith Crockett and Randy Spivey, Law, Justice, and Society
- 3:15 p.m. **Do Post-Lecture Quizzes Act as a Motivating Factor for Student Success?**
Joshua Howell, Joseph Tipton and Richard Gregory, Mechanical Engineering
- 3:30 p.m. **Modeling Non-Standard Roasting Profiles of Coffee**
Matthew Comp and Brandon Banes, Mathematics

Paper Presentations IIC: Ezell 241

Chair: *Dr. Cori Mathis, Assistant LiGHT Director*

- 2 p.m. **Pedagogy with a Purpose: Using Dialects to Prepare Students for Diverse Futures**
Mary Welch and Jan Harris, English and Modern Languages
- 2:15 p.m. **Methods of Combatting Dialect Suppression**
Karin Denney and Stacia Watkins, English and Modern Languages
- 2:30 p.m. **Neologism: Word Compounding and Word Formation to Add to a Language**
Ashley Burklin and Jan Harris, English and Modern Languages
- 2:45 p.m. **The One with all the Slang: An Analysis of *Friends*' Role in Popularizing Slang**
Kira Dunton and Jan Harris, English and Modern Languages
- 3 p.m. **Sad! The Language of Social Media and Fake News in the 2016 Election**
Rebekah Stogner and Jan Harris, English and Modern Languages

Paper Presentations IID: Swang 232

Chair: *Dr. Lin Garner, Professor of English*

- 2 p.m. **At the Edge of the Woods**
Sarah Rodden and Dana Carpenter, English and Modern Languages
- 2:15 p.m. **"Pretend"**
Amy Peabody and Dana Carpenter, English and Modern Languages
- 2:30 p.m. **Therapy**
Ellison Gossett and Jan Harris, English and Modern Languages
- 2:45 p.m. **Miyagi and the Fly**
Nazar Haji and Matthew Hearn, English and Modern Languages
- 3 p.m. **"The Kids Come Out at Night"**
Amy Peabody and Dana Carpenter, English and Modern Languages
- 3:15 p.m. **A House Undivided**
Rachel Kirsch and Jan Harris, English and Modern Languages
- 3:30 p.m. **Can We Reach Nirvana?**
Kimberley Klein and Kimberly Reed, English and Modern Languages

Paper Presentations IIE: Ezell 263

Chair: *Dr. Sonya Green, Associate Professor of English*

- 2 p.m. **War: What is it Good for? Examining Pre- and Post-war Gender through James Thurber and *The Secret Life of Walter Mitty***
Hannah Robertson and Dana Carpenter, English and Modern Languages
- 2:15 p.m. **The Weight of a Story in Tim O'Brien's *The Things They Carried***
Ryan Wilson and William Steele, English and Modern Languages
- 2:30 p.m. **The American Love/Hate Affair with Nabokov's *Lolita***
Laura Jernigan and William Steele, English and Modern Languages
- 2:45 p.m. **Agrarian Social Structure: Flannery O'Connor's "Greenleaf"**
Kate Proffitt and Jan Harris, English and Modern Languages
- 3 p.m. **A History of Enmity: Exploring Irish/English Conflict Through *The Short Stories of William Trevor***
William Mathis and Steve Prewitt, English and Modern Languages
- 3:15 p.m. **The Humor and Political Turmoil of Charles Chaplin**
Makayla McClanahan and William Steele, English and Modern Languages

2 – 3:30 p.m. Concurrent Sessions Graduate Student Paper Presentations I

Graduate Paper Presentations IA: Ezell 301

Chair: *Dr. Beth Conway, Associate Professor of Biology*

- 2 p.m. **Maximal Strength Correlation, Muscle Activation, and Bar Velocity Comparisons between Back Squats and Safety Squat Bar Squats**
William Vantrease and Jeremy Townsend, Kinesiology
- 2:15 p.m. **Examination of the Effect of Copper (II) α -(N)-Heterocyclic Thiosemicarbazone Complexes on DNA Topoisomerase II**
J. Myles Keck and Joe Deweese, Pharmaceutical Sciences
- 2:30 p.m. **HU-331 and Oxidized Cannabidiol Act as Inhibitors of Human Topoisomerase II α and β**
Tom Wilson and Joe Deweese, Pharmaceutical Sciences
- 3:00 p.m. **Resilience, Crises, and Trauma**
Brianna Bloom and Denis Thomas, Psychology, Counseling, and Family Science
- 3:15 p.m. **The Effect of Podcasts on the Public Education of Local Communities on the Importance of Food Sovereignty**
Addie Hayes and Emily Stutzman, Institute of Sustainable Practice

Graduate Paper Presentations IB: Swang 108

Chair: *Dr. Randy Bouldin, Vice Provost, Academic Programs*

- 2 p.m. **Toward A Redemptive Missional Theology of Disability**
Grant Azbell and Lauren White, Theology
- 2:15 p.m. **The Fight against Childhood Traumas Creating ACES Informed Curriculums in Faith Based Organizations**
Morgan Turner and Michelle Steele,
College of Leadership & Public Service
- 2:30 p.m. **Impact of Host Family Engagement on International Students Success**
Elizabeth Williams and Reva Chatman-Buckley,
College of Education

2:45 p.m. **The Effects of Marijuana Use on Academic Outcomes on Tennessee College and University Campuses**
Verontae Deams and Trace Hebert, College of Education

3 p.m. **Impact of Sheltered Instruction on Vocabulary Acquisition in ELL Students**
Lauren Coleman and Reva Chatman-Buckley, College of Education

3:15 p.m. **The Impacts of Conferring with Student Readers**
Brandy James and Jeanne Fain, College of Education

Graduate Paper Presentations IC: Swang 118

Chair: *Dr. Eddy Borera, Assistant Professor of Computer Science*

- 2 p.m. **Optimizing Quality of Life During Hospice Care**
Erle Mulligan, Angela Gaetano, Gnani Beldhari, and Todd Gary,
Computing & Technology
- 2:15 p.m. **BOS Framework for Data Science**
Shree Mijarguttu and Todd Gary, Computing & Technology
- 2:30 p.m. **How Hiring Foreign Workers in Silicon Valley Helps Rural Americans get Hired?**
Sinney Chan, Lisu Mullen and Todd Gary,
Computing & Technology
- 2:45 p.m. **Using Machine Learning and K-Means Clustering to Predict Inventory**
Andrew Abell, Urvish Bhagat and Todd Gary,
Computing & Technology
- 3 p.m. **Detecting Anomalous Lateral Movement with Deep Autoencoder Neural Networks: A Data Science Approach**
Ron Holt, Alex Simonian, Alex Aubrey, Stoney DeVille, Will Haight,
and Todd Gary, Computing & Technology
- 3:15 p.m. **A Review of Virtual Reality Simulation for the Training of Robotics Control Policies**
Brandon Harden and Todd Gary, Computing & Technology

**2 – 3:30 p.m.
Performances II**

Performances IIA: Collins Auditorium

Chair: *Prof. Daniella Chappell, Department of English and Modern Languages*

- 2 p.m. **Saba: A Documentary Series**
Katelyn Bianchini and Sarah Gibson, Communications
- 2:20 p.m. **Almost Adulging**
Meredith Neilson and Jan Harris, English and Modern Languages
- 2:30 p.m. **Why Aren't We Equipped with a Manual?**
Taylor Shannon and Jan Harris, English and Modern Languages
- 2:40 p.m. **This is Not Romantic**
Jenna Phipps and Jan Harris, English and Modern Languages
- 2:50 p.m. **Half Water**
Amy Hall and Jan Harris, English and Modern Languages
- 3 p.m. **The Art of Shrinking**
Peggy Miller and Jan Harris, English and Modern Languages
- 3:10 p.m. **Simulations**
Meg Provenzale and Jan Harris, English and Modern Languages
- 3:20 p.m. **Hive Mind**
Kira Dunton and Jan Harris, English and Modern Languages

**3:45 – 5:30 p.m. Concurrent Sessions
Undergraduate Student Paper Presentations III**

Paper Presentations IIIA: Ezell 107

Chair: *Dr. Kelly Kidder, Associate Professor of French*

- 3:45 p.m. **The Sacramental Utterance: Speech Act Theory in Charles Williams's *Descent into Hell***
Lila Banach and Jan Harris, English and Modern Languages

- 4 p.m. **Nachfolge: Following a New Translation of Bonhoeffer's Critical Work on Discipleship**
Jonathan Geeslin and Cecelia Ramsey, English and Modern Languages
- 4:15 p.m. **Translating Imperfection**
Jordan Cumberledge and Jan Harris, English and Modern Languages
- 4:30 p.m. **The Historical Significance and Transformation of Idioms**
Savannah Summers and Jan Harris, English and Modern Languages
- 4:45 p.m. **Decay of Inflections from the Norman Conquest**
Rachel Maroon and Jan Harris, English and Modern Languages
- 5 p.m. **Resistance in Oppressive Societies in *The Crucible* and *The Hate U Give***
Taylor Shannon and Stacia Watkins, English and Modern Languages
- 5:15 p.m. **Psalm 23: A Common Misunderstanding Questioned by the Spanish Bible**
Sarah Rosin and Ted Parks, English and Modern Languages

Paper Presentations IIIB: Ezell 241

Chair: *Dr. Phillip Camp, Professor of Bible*

- 3:45 p.m. **Jesus' Encounter with the Rich Ruler in Luke 18:18-30**
Noah Merritt and Mike Williams, Bible
- 4 p.m. **Culture in Conflict: An Exegesis of 1 Corinthians 11:17-34**
Lisa Moser and Mike Williams, Bible
- 4:15 p.m. **The Image of God: Both Male and Female?**
Lauren Anderson and Lauren White, Bible
- 4:30 p.m. **The Relationship Between Love and Hate**
Hunter Maerz and John Mark Hicks, Bible
- 4:45 p.m. **The Role of Spirituality in Resilience among Refugee Children I**
Olivia Malham, Kaylee Frank, and Holly Allen, Family Science
- 5 p.m. **The Role of Spirituality in Resilience among Refugee Children II**
Olivia Malham, Kaylee Frank, and Holly Allen, Family Science

Paper Presentations IIIC: Swang 232

Chair: *Prof. Brandi Kellet, Department of English and Modern Languages*

- 3:45 p.m. **I Have Had My Vision: Transcendence and Androgyny in *To the Lighthouse***
Morgan Beers and Jan Harris, English and Modern Languages
- 4 p.m. **Colonialism's Effects on Being in Touch with Nature, Oneself, and Others within *A Passage to India***
Leslie Garcia and Jan Harris, English and Modern Languages
- 4:15 p.m. **Thomas Fowler's Existential Theology in *The Quiet American***
Kaylee Newland and Jan Harris, English and Modern Languages
- 4:30 p.m. **Virginia Woolf's *The Waves*: The Process of Individuation in Moments of Being**
Carson Ford and Jan Harris, English and Modern Languages
- 4:45 p.m. **When Greenland Comes to Haiti**
Sam Hearn and Jan Harris, English and Modern Languages
- 5 p.m. **Poor Little Boy: Emotionless Tragedies in Evelyn Waugh's *A Handful of Dust***
Julie Sarvak and Jan Harris, English and Modern Languages

3:45 - 5:00 p.m.

Graduate Student Paper Presentations II

Graduate Paper Presentations II: Ezell 301

Chair: *Dr. Jon Lowrance, Professor of Biology*

- 3:45 p.m. **Respiratory Syncytial Virus Uses Pattern Recognition Receptors to Activate Downstream Inflammatory Pathways**
Caitlin Perry and Florah Mhlanga, Biology
- 4:05 p.m. **The Functional Role of Tight Junctions and the Blood-Brain Barrier in Multiple Sclerosis**
Chelsea Dunaway and Florah Mhlanga, Biology
- 4:25 p.m. **Rhabdomyolysis: Molecular Mechanisms and Pathophysiology**
Jordan Tharp and Florah Mhlanga, Biology
- 4:45 p.m. **Hemolytic Disease of the Newborn**
Sarah Ladd and Bonny Millimaki, Biology

5:30 - 6:15 p.m.

Reception and Awards: Allen Arena

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

Presentation of Awards and Closing Remarks

Dr. Craig Bledsoe, Provost

Acknowledgements

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