

*Third Annual*



STUDENT  
SCHOLARS  
SYMPOSIUM

April 3, 2014



LIPSCOMB  
UNIVERSITY

COLLEGE OF  
ARTS & SCIENCES

### From the Provost, Lipscomb University

A university can be defined in many ways. One of the most significant and true, however, is the measure of engagement reflected in the quality of student research and creative projects produced by its students. I am most proud of the fact that the Student Scholars Symposium is now a tradition at Lipscomb; but it is not only a tradition 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 Dean Norma Burgess and Dr. Florah Mhlanga in putting together such a vibrant and inviting program.

*Dr. Craig Bledsoe*

### From the Dean, College of Arts & Sciences

Greetings and welcome to the third Student Research Symposium. The creation and advancement of knowledge in academic fields is often the greatest excitement that we have as scholars and teachers. Today, we join together to hear and learn about new and continuing research by students and faculty. I believe you will be mightily impressed as we showcase their work, taking excellence to the next level. We gratefully acknowledge the support of the Office of the Provost and Dr. Jeff McCormack for their generous support. Appreciation also for our faculty committee for a dynamic program; my sincere welcome to you.

*Dr. Norma Burgess*

### Opening Session: *Ezell 301*

**Chair: Dr. Florah Mhlanga, Associate Dean of the College of Arts and Sciences**

7:30 - 8:30 a.m.

**Registration and Coffee**

8:30 - 8:45 a.m.

**Introduction**

Dr. Norma Burgess, Dean of the College of Arts and Sciences

8:45 - 9:00 a.m.

**Opening Remarks**

Dr. Craig Bledsoe, Provost

**9:10 - 10:55 a.m.**

### Graduate Students: Paper Presentations: *Ezell 301*

**Chair: Dr. Kimberly Reed, Professor and Chair of English & Modern Languages**

9:10 a.m.

**Homosexuality?**

Nathan Turner and L. Camp, Bible

9:25 a.m.

**Increasing the Duration of Play Behavior in Children with Autism**

Heidi Snow and A. Music, Education

9:40 a.m.

**How do you like to exercise?**

Elizabeth Hughes and R. Henry, Kinesiology

9:55 a.m.

**The effects of eight weeks of CrossFit training and consumption of an electrokinetically modified water on aerobic capacity, anaerobic power, and knee peak torque**

Hannah Dewalt, Erin Gainey and K. Johnson, Kinesiology

10:10 a.m.

**Effects of a Lifetime Wellness Course on Fitness Parameters in College Freshmen**

Jonathan Flinn, Kristen Oldham, Hannah DeWalt, Erin Gainey and K. Johnson, Kinesiology

10:25 a.m.

**Coping and Spiritual Response to Struggle**

Jennifer White and C. Gonzalez, Psychology & Counseling

10:40 a.m.

**Attachment to God in Gender and Church of Christ Affiliation**

Brooke McAllister and C. Gonzalez, Psychology & Counseling

9:25 - 10:40 a.m.

**Undergraduate Students Presentations**

**Paper Presentation IA: *Ezell 147***

**Chair: Dr. Roger Davis, Dean of the College of Pharmacy and Health Sciences**

- 9:25 a.m.            **Epigenetic Regulation of CD-10 in Breast Cancer and its role in Cell Invasion**  
Rammiz Khoury and B. Conway, Biology
- 9:40 a.m.            **Immunoproteasome Subunit Expression Levels in Response to IFN- $\gamma$**   
Kristin Ali Keith and A. Williams, Biology
- 9:55 a.m.            **Exon profile of Human Brain-Derived Neurotrophic Factor (BDNF) in breast epithelium using HMEC, MCF-7, MDA-MB-231 and MCF-10A cell lines**  
Joel Brennan McNeil & J. Lowrance, Biology
- 10:10 a.m.          **Water Quality Analysis of Montgomery Bell State Park**  
Brandon D. Beers, Patrick D. Parker, Ryan S. Bowen, M. Vergne, Chemistry and Biochemistry
- 10:25 a.m.          **Investigation of Endothelial Cell Activation by Synthetic Laminin And Collagen Peptides**  
Noah Richardson and B. Conway, Biology

**Paper Presentation IB: *Ezell 363***

**Chair: Caleb Clanton, Associate Professor of Philosophy**

- 9:25 a.m.            **Who Really Owns LU?**  
Rachel Newton and J. Smith, Chemistry and Biochemistry
- 9:40 a.m.            **Dashed Dreams**  
Alycia Gilbert and K. Reed, English & Modern Languages
- 9:55 a.m.            **A Forgotten History: The Background of the English Language**  
Allie Sockwell and J. Harris, English & Modern Languages
- 10:10 a.m.          **The Laws of Life: Victorian Societal Constructs and Elizabeth Gaskell's North and South**  
Jillianne Jerkins and J. Harris, English & Modern Languages
- 10:25 a.m.          **Meeting Islam**  
Neely Baugh and D. Carpenter, English & Modern Languages

10:55-11:55 a.m.

**Lunch and Keynote: Ezell 301**

**Chair: Dr. Jeff McCormack, Associate Provost**

**Keynote Presentation: How I figured out everything I knew was wrong.**  
Dr. Allison Burgess Duke, Associate Professor of Management and Director of Graduate Business Programs, Lipscomb University

12:05-1:35 p.m.

**Undergraduate Students Presentations**

**Paper Presentation IIA: *Ezell 147***

**Chair: Dr. Steve Nordstrom, Assistant Professor and Director of Undergraduate Programs in the School of Computing and Informatics**

- 12:05 p.m.          **Immunoproteasome subunit expression in response to TNF-alpha**  
Cameron MacQuarrie and A. Williams, Biology
- 12:20 p.m.          **Laminin Peptide QSLDL: A New Role in Tumor Angiogenesis**  
Daniel Hutchison and B. Conway, Biology
- 12:35 p.m.          **Melting/Freezing Points of High Concentrations of AlCl<sub>3</sub> in a Saturated Chloroaluminate Ionic Liquid**  
Richard Groves and M. Zhang. Sustainability, Lipscomb University, Chemical and Biomolecular Engineering, UT Knoxville
- 12:50 p.m.          **Creating an Inexpensive Raspberry Pi Computational Cluster for Small Schools**  
Charles Humphreys and K. Mayer Jr., School of Computing and Informatics
- 1:05 p.m.            **LSAMP Results Study: The Spiritual Role of the Mother and Father in the Lives of College Students**  
Rainey Lankford and C. Gonzales, Psychology and Counseling

**Paper Presentation IIB: *Ezell 301***

**Chair: Dr. Craig Bledsoe, Provost**

- 12:05 p.m.      **Expel the Wicked Person from among You: A Study of 1 Corinthians Chapter 5**  
John Paul Cooke & M. Williams, Bible
- 12:20 p.m.      **From Conspiracy to Party: The Anti-Masonic Party**  
Emily Haas and T. Johnson, History, Politics and Philosophy
- 12:35 p.m.      **Chiang Kai-shek's Dictatorship during the Nanking Decade: Reason to America's Non-Interference to the Chinese Civil War**  
Caesar Tang and T. Johnson, History, Politics and Philosophy
- 12:50 p.m.      **General Hood and the Effort to Retake Nashville**  
Scott Bledsoe and M. Schwerdt, History, Politics and Philosophy
- 1:05 p.m.      **Back to the Basics: Revisiting a Traditional Interpretation of the Parable of the Unjust Steward**  
Lauren Calvin and M. Williams, Bible

**Paper Presentation IIC: *Ezell 363***

**Chair: Dr. Carrie Abood, Assistant Professor of Education**

- 12:05 p.m.      **Promoting Cultural Diversity through Art**  
Minh Nghiem & L. Steel, Intercultural Development
- 12:20 p.m.      **Coming to America: Stories of refugee students**  
Emily Dunn & J. Conger, Family and Consumer Studies
- 12:35 p.m.      **Welcome to Our World**  
Minh Nghiem & L. Steel, Intercultural Development
- 12:50 p.m.      **Over-sexualizing Sex**  
Kelsey Jones and P. Prill, Honors College
- 1:05 p.m.      **Coexistence: why it is possible and how it can be reality**  
Samha, Siddiqui, Shilpa Naruka, Angad Madra and K. Abraham, Communication and Journalism
- 1:20 p.m.      **The Ethics Behind GMO Seed Patents**  
Zachary Warrick, Richard Hunnicutt, Kenneth Wilson and C. Clanton, History, Politics and Philosophy

**Paper Presentation IID: *Ezell 241***

**Chair: Dr. Stacia Watkins, Assistant Professor of English**

- 12:05 p.m.      **Bright Young Things or Vile Bodies?**  
Geneva Waynick and J. Harris, English & Modern Languages
- 12:20 p.m.      **The Dictionaries of Samuel Johnson and James Murray**  
Clair Flynn and J. Harris, English & Modern Languages
- 12:35 p.m.      **“Prudence in Youth and Romance when Older”: Anne Elliot’s Education in Jane Austen’s Persuasion**  
Dominique Postma and J. Harris, English & Modern Languages
- 12:50 p.m.      **Johann Sebastian Bach: The Evolution of an Encyclopedic Composer**  
Zander Faidley, D. King, Music
- 1:05 p.m.      **Translation or Original**  
Jennifer Greene and V. Prill, English & Modern Languages
- 1:20 p.m.      **Chaotic Camera, Chaotic World: Style as Metaphor in Deus e o diablo na terra do sol**  
Madison Wray and T. Parks, English & Modern Languages

**Performances I: *Shamblin Theater***

**Chair: Dr. Sally Reid, Professor and Chair of Music**

- 12:05 p.m.      **Dinner with Mary May**  
**Crowds**  
**Worlds Dry Up**  
Rainey Lankford and J. Harris, English & Modern Languages
- 12:20 p.m.      **Genesis**  
Julia Rox and J. Harris, English & Modern Languages
- 12:20 p.m.      **Popcorn Heart**  
Katie Sealy and J. Harris, English & Modern Languages
- 12:35 p.m.      **River Summer**  
Moriah Cloud and J. Harris, English & Modern Languages
- 12:50 p.m.      **Little Davis**  
Emily Holly Davis and J. Harris, English & Modern Languages
- 1:05 p.m.      **Misha**  
Emily Holly Davis and J. Harris, English & Modern Languages
- 1:20 p.m.      **“Dr. Robert Goodman, Professor of English”**  
Lindsey Brake and J. Harris, English & Modern Languages

### Graduate Students Posters

Chair: Dr. Shanna Ray, Associate Professor of Psychology

1. **A Thematic Analysis of Student Veterans on a Small Liberal Arts College.**  
Rachael Marshall and C. Gonzalez, Psychology and Counseling
2. **Characterization of microsatellite markers in Tennessee feral pig population**  
Kate Breidenstein, Rachel Chamberlin and M. Sledge, Biology
3. **Using Microsatellites to Determine Genetic Population Structure of Feral Pigs in Tennessee**  
Becca Noel, Maddison Stanley, and J. Lewis, Biology
4. **Mortal Conflict: A Case Study of the Mortal Instruments Series**  
Megan Wooldridge and P. Hildreth, Institute of Conflict Management
5. **Fueling The Fight: Nutrition And Local Jiu Jitsu Competitors**  
Chuck Baldinger and A. Lowery, Nutrition
6. **The Availability Of Halal Supplements In The United States**  
Eram Albajri & A. Lowery, Nutrition
7. **Beliefs And Acceptance Of Sugar Versus Sugar Substitutes In Southerners**  
Beth Hendrixson and A. Lowery, Nutrition
8. **Raised-Bed Gardens As Sustainable Solutions For Nutritional Deficiencies In Africa**  
Kristi Caldwell and A. Lowery, Nutrition
9. **Perceptions And Use Of Dietitian Services By Gastrointestinal Disease Patients**  
Amanda Adcox and A. Lowery, Nutrition
10. **Analysis of Etoposide Resistant Topoisomerase II Mutants**  
Elizabeth G. Gibson, Lisa Y. Straughn and J. Deweese, Pharmaceutical Sciences
11. **The Emotional Effects of Reality Television Content on Psychophysiological Activity**  
Benjamin DeVore and D. Alden, Psychology and Counseling
12. **Semi-Quantitative Analysis & Localization of TDP2-Beta in Danio rerio Development**  
Sean Salonga and B. Millimaki, Biology

### Undergraduate Students Posters

Chair: Dr. Chuck Capps, Associate Professor of Management

13. **Progress Towards the Synthesis of Podophyllotoxin Analogs**  
Sean Salonga, J. Deweese and S. Mercer, Pharmaceutical Sciences
14. **The Search for Multiple Spliced Isoforms of Topoisomerase in C. elegans**  
Jacob Akers and B. Millimaki, Biology
15. **Multiple objects tracking with Camshift and Kalman Filter to count number of parking spaces available on campus.**  
Nicholas Varnado and E. Borera, School of Computing and Informatics
16. **Burundi and Rwanda: Economy and Freedom**  
Christopher Shay and R. Grant, Finance and Economics
17. **Why businesses give back & how we're giving back**  
Audrey Boyd, Hunter Mayberry, Ciera Lescure, Jacob Rudolph, Aaron Cluck, Jenny Borck, Melissa Kromer and L. Smith, Management
18. **Global Warming**  
Meghan Anglim, Clint Bandy and G. Hall, Mathematics
19. **Lipscomb University School of Nursing Health and Service Day**  
Chelsea Jarmoluk, Ashley Reid, Emily Sanford and M. Hesselrode, Nursing
20. **Characterization of HU-331 as a topoisomerase II ATPase inhibitor**  
Kellie Regal and J. Deweese, Pharmaceutical Sciences
21. **Novel GlyT1 inhibitor chemotypes by scaffold hopping. Development of a [3.3.0]-based series and other piperidine bioisoteres**  
Stephen Turner and N. Daniels, Pharmaceutical Sciences
22. **Mobile Applications with a Purpose: Towards an Environment to Support Socially Responsible Mobile Application Development**  
Samuel Owoyemi and S. Nordstrom, School of Computing and Informatics

**2:45-4:00 p.m.**  
**Undergraduate Presentations**

**Paper Presentations IIIA: Ezell 147:**

**Chair: Jan Harris, Assistant Professor of English & Modern Languages**

- 2:45 p.m.      **A Shift in Community Dynamic**  
Leeanna Case, Katie Sealy and S. Watkins, English & Modern Languages
- 3:00 p.m.      **The Time I Got Stabbed By a Pirate**  
Melissa Davis and J. Harris, English & Modern Languages
- 3:15 p.m.      **How King Alfred Preserved the West Saxon Dialect**  
Will Chessor and J. Harris, English & Modern Languages
- 3:30 p.m.      **Revisiting Romanticism: Knowledge and Morality in Developing Societies**  
Tessa Hoefle and J. Harris, English & Modern Languages
- 3:45 p.m.      **Jamaica Kincaid: Personal Identity in Another's Autobiographical Narrative**  
Leeanna Case and B. Kellett, English & Modern Languages
- 4:00 p.m.      **Phonetics and Second-Language Acquisition: A Poetic Presentation**  
Brendan Showen and K. Kidder, English & Modern Languages

**Paper Presentations IIIB: Ezell 301**

**Chair: Dr. George Goldman, Associate Professor of Bible**

- 2:45 p.m.      **Short Fiction: Charcoal Portrait**  
Grace Bennett and J. Harris, English & Modern Languages
- 3:00 p.m.      **Creative Non-Fiction: "Tradition"**  
Grace Bennett and J. Harris, English & Modern Languages
- 3:15 p.m.      **Belief in Miracles**  
Emily Haas and C. Clanton, History, Politics and Philosophy
- 3:30 p.m.      **Forensic and Recondite: History and Myth in C.S. Lewis's Life**  
Cecelia Ramsey and J. Harris, English & Modern Languages
- 3:45 p.m.      **Evil Incarnate, or, the Modern Witch: Witchcraft Trials in Seventeenth Century Germany and England**  
Katie Sealy and H. Miller, History, Politics and Philosophy

**Performances IIB: Ward Hall:**

**Chair: Warren Green, Assistant Professor and Chair of Art**

- 2:45 p.m.      **I don't know this man**  
John Paul Cook and M. Williams, Bible
- 3:05 p.m.      **Paganini: Pioneer of the Violin Virtuoso**  
Grace Kimbrough and D. King, Music
- 3:25 p.m.      **A Set of Nature Songs**  
Zander Faidley, Ethan Bennett, Justin Bowen and S. Reid, Music
- 3:45 p.m.      **A second Touch**  
Lauren Calvin, M Williams, Bible
- 4:05 p.m.      **Natchez, Like Matches**  
Nathan Buttrey and S. Prewitt, English & Modern Languages

**4:45-5:30 p.m.**

**Break**

**5:30-7:00 p.m.**

**Dinner, Musical Performance, Awards: Ezell 301**

**Chair: Dr. Norma Burgess, Dean of the College of Arts and Sciences**  
**Presentation of Awards and Closing Remarks: Dr. Jeff McCormack,**  
**Associate Provost**

