

First Annual
Student Scholars
Symposium

College of Arts and Sciences

April 13, 2012

Program

Opening Session: *The Paul Rogers Board Room, Ezell 147*

Chair: Dr. Florah N. Mhlanga, Professor of Biology

8:00 a.m.–9:00 a.m. **Registration and Coffee**

9:00 a.m. **Introduction**
Dr. Florah N. Mhlanga: Symposium Chair

9:15 a.m. **Opening Remarks: Student Scholars Symposium: Why?**
Dr. Norma Burgess: Dean, College of Arts and Sciences

From the Dean, College of Arts & Sciences

Greetings and welcome to our first 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. Thanks to our faculty committee for such a dynamic program and my sincere welcome to you.

Dr. Norma Burgess, Dean

Paper Presentations I: *The Paul Rogers Board Room, Ezell 147*

Chair: Dr. Sonya Borton, Associate Professor, English

9:30 a.m. **Beyond Plot-Spinning: The Role of Frederick Hale in North and South**
Sarah King and M. Hearn, English

9:45 a.m. **A Waste Reduction Project**
Soambolanoro Razafir and C. Shatzer, SALT

10:00 a.m. **Design to Write**
Anna Uselton and S. Watkins, English

10:15 a.m. **From Elvis to Barbra: A Feminist, Jewish, Lesbian Response to Andy Warhol's Work through Deborah Kass's *The Warhol Project***
Ale' Dalton and R. Horton, Art

10:30 a.m. **The Spirituality of Johannes Brahms and Eindeutches Requiem**
Kirk Averitt and G. Wilson, Music

10:45 a.m. **The Impact of Case Disposition on Domestic Violence Recidivism Rates**
Ricki Adkins and H. Arthur, Social Work

11:00 a.m.–12:30 p.m. **Lunch**

Lunch Session: *The Paul Rogers Board Room, Ezell 147*

Chair: Dr. John Smith, Assistant Professor of Chemistry

11:00 a.m.–12:30 p.m. **Lunch & Presentation**

Presenter: Dr. William L. Turner, the Betts Professor of Education and Human Development, Vanderbilt University

Poster Presentations I: *Swang Lobby*

Chair: Dr. Jon Lowrance, Professor of Biology

12:30 p.m.–1:00 p.m. **Posters**

1. ***C. elegans*: A Morphogenic Study**
Zen Niang and B. Millimaki, Biology
2. **Exon Expression of Brain-Derived Neurotrophic Factor in Cancer Cell Lines HB-8501 and PC-3**
Ann Hanna and J. Lowrance, Biology
3. **Genetic Diversity of *Dalea foliosa* Using ISSR Markers**
Botros Aiyad, Tien Ngo and M. Sledge, Biology
4. **Neprilysin Negatively Regulates Human Breast Cancer Cell Invasion**
Marina Salama and B. Conway, Biology
5. **Sustainable Model for Mobile Food Pantry – The Nashville Food Project**
Arielle Cutts and A. Marshall, Nutrition

Paper Presentations IIA: Graduate Students, *Ezell 207*

Chair: Dr. Tracey Hebert, Director, Doctor of Education Program

- 1:00 p.m. **Examining the Effectiveness of the Oasis College Connection**
Sherica Clark, Douglas Stewart, Ronald Woodard and R. Buckley, Education
- 1:15 p.m. **Conflict Resolution Strategies for Inmates**
Dawn B. Fears and P. Hildreth, ICM
- 1:30 p.m. **Mirroring Mirrors**
Jonathan Paul Gillette and D. Alden, Psychology

1:45 p.m.

The Relation of Personality, Bicultural Self-Efficacy and Acculturation among Chinese Americans
Peili Lu and S. Ray, Psychology

Paper Presentations IIB, *Ezell 234*

Chair: Dr. M. Sledge, Associate Professor of Biology

- 1:00 p.m. **A Water Quality Analysis of Radnor Lake State Natural Area**
Latoya Clark and K. Clinger, Chemistry and Biochemistry
- 1:15 p.m. **Computational Chemistry and UV/Vis Spectra of 2,2' Cyanines**
Jonathan Clinger, William Hedges and W. Tallon, Chemistry and Biochemistry
- 1:30 p.m. **Computational Chemistry and UV/Vis Spectra of 4,4' Cyanines**
Geoffrey Musick, Hong Tran and W. Tallon, Chemistry and Biochemistry
- 1:45 p.m. **The Development of an Enzymatic Assay for Tyrosine Decarboxylase by Electrophoresis**
Brendon Burke and K. Clinger, Chemistry and Biochemistry
- 2:00 p.m. **Synthesis of Sterically Hindered Meperidine Analogs: Continued Opioid SAR Development**
Rachel Saylor and S. Mercer, Pharmaceutical Sciences

Paper Presentations IIC: *Swang 234*

Chair: Dr. Stacia Watkins, Assistant Professor of English

- 1:00 p.m. **Theoretical Studies of Classification and Regression Problem**
Andrianarimanana Harinando and G. Hall, Math
- 1:15 p.m. **The Hardest Pitch to Hit**
Hunter Bates, Lauren Morris and G. Hall, Math
- 1:30 p.m. **Correlation of Noninvasive Magnetic and Electric Measurement of The Gastric Slow Wave**
Nicole Muszynski and A. Bradshaw, Physics
- 1:45 p.m. **Stock Market Trading System Using Reinforcement Learning**
Andrianarimanana Harinando Toninirina, Mendrika Ramarlina and A. Randrianasolo, School of Computing and Informatics

Poster Presentations II: *Swang Lobby*

Chair: Mr. Cliff Tierney, Associate Professor of Art

2:30 p.m.–3:00 p.m. Posters

6. **Diversity**
Monique P. Maokhamphiew and T. Buchanan, Intercultural Development
7. **Empathy in Siblings of Children with Developmental Disabilities**
Tracel Lockhart and S. Ray, Psychology
8. **Generation and Characterization of Etoposide-Resistant Mutants of Topoisomerase II α**
Elizabeth Gibson and J. Deweese, Pharmaceutical Sciences
9. **In Silico Analysis and Synthesis of Anticancer Metal-Based Drug-Linker Building Blocks**
Brittany Duerk and J. Smith, Chemistry and Biochemistry
10. **Micronutrient Content of Herbal Teas**
Annie Benatrehina and K. Clinger, Chemistry and Biochemistry

Paper Presentations III, *Ezell 234*

Chair: Dr. Bonny Millimaki, Assistant Professor of Biology

- 3:00 p.m. **Endothelin Converting Enzyme-1 Expression is Up-Regulated in Invasive Human Breast Cancer**
Reem Sidani and B. Conway, Biology
- 3:15 p.m. **Expression of Brain Derived Neurotrophic Factor and BDNF Receptors in T Cells Indicates the presence of an Autocrine Loop**
Chelsi Cassilly and J. Lowrance, Biology
- 3:30 p.m. **Prostate-Specific Membrane Antigen and its Role in Angiogenesis**
David Bourgeois and B. Conway, Biology
- 3:45 p.m. **Use of the Norovirus P Particle as a Novel Vaccine Platform**
Kyle Brawner and B. Conway, Biology

- 4:00 p.m. **Expression Patterns of Renal Rhabdoid Tumor Cells Suggest Existence of Neurotrophin Signaling Pathways**
Austin Ray and J. Lowrance, Biology
- 4:15 p.m. **N-acylphosphatidylethanolamine Phospholipase D (NAPE-PLD) Hydrolyzes Isolevuglandin-modified Phosphatidylethanolamines (IsoLG-PE) to the Inactive Ethanolamine Product.**
Stephen Gragg, and Sean Davies, Vanderbilt Pharmacology

Student Performances: *Ward Hall*

Chair: Donna King, Assistant Professor of Music

- 3:00 p.m. **Molliphony**
Christon Carney, Latoya Clark, Adam Booher and S. Reid, Music
- 3:20 p.m. **Gunpowder and Candy**
Lindsey Durham and K. Reed, English
- 3:40 p.m. **Dance for Two Flutes with Banjo Continuo**
Zac Swann, Mackenzie Carter, Carly Bergthold, Bailey Werner and S. Reid, Music
- 4:00 p.m. **A Cleaving Open**
Daniella Burke and M. Hearn, English
- 4:30-5:30 p.m. **Break**
- 5:30-7:30 p.m. **Dinner, Keynote Presentation and Awards Ceremony, Ezell 147**
Chair: Dr. Shanna Ray, Associate Professor of Psychology

Keynote Presentation
Research: The Art of Discovery
Dr. Tim Johnson
Chair and Professor of History, Lipscomb University