



Honors Day Symposium

**JAMES H. THOMASON LIBRARY
EDMUNDS HALL
HARPER CENTER
HARRINGTON-PEACHTREE**

APRIL 16, 2015



PRESBYTERIAN COLLEGE
IS AN INSTITUTIONAL MEMBER OF THE
COUNCIL ON UNDERGRADUATE RESEARCH

Learning Through Research

Honors Day Symposium

8:45-9:00 a.m.

Library Reading Room

Welcome
Claude C. Lilly, Ph.D.
President, Presbyterian College

9:00-10:00 a.m.

Library 39

Golden Research*
Presider: Claude C. Lilly, Ph.D.

- Paul J. McGannon “Attaching Gold Nanoparticles to Silica Substrates Through Organosilane Linkers”
- Maria E. Whitaker “Synthesis of Biocompatible Gold Nanorods”

Library 54

Changing Conditions*
Presider: Elizabeth Lilly, Ph.D.

- Britnee K. Goldman & Jonathan T. Mitchell “Four Years of CHAMPS Data: How Has the First Cohort Changed over Time?”
- Harrison R. Hopkins “Factors Influencing Racial Bias”

Library Reading Room

Literature and Cultural Studies
Presider: Jerry J. Alexander, Ph.D.

- Abbie E. Bagwell “Repackaging Mammy: The Evolution of Aunt Jemima and the Mammy Figure in Popular Culture”
- Danielle F. Jolly “Robert Browning’s Exploration of Truth in ‘The Ring and the Book’”
- Cameron R. Brock “Exploring the Chasm: The Dysfunctional Family in Southern Literature”
- Helen J. Dennis “Themes Across American Food Literature: A Cultural Consciousness”

Library 214

Cultural Issues
Presider: Karen W. Buckland, D.M.A.

- Austin D. Allen “The Effects of Religion on Parenting Style”
- Hannah D. Fulenwider “La inestabilidad estética, filosófica y emocional en “Nocturno” de José Asunción Silva” (“Aesthetic, Philosophical, and Emotional Instability in José Asunción Silva’s ‘Nocturno’”)
- Anessa M. Pettis & Lal K. Tan “The Invisible World: One Nature Observed Through Different Eyes”
- Graham A. Hope “Prestige and Participation in the Environmental Movement”

*30 minute presentations

Honors Day Symposium

9:00-10:00 a.m.

HP 207

Sand, Silos, and Greedy Math **Presider: James Wanliss, Ph.D.**

- Ignacio Monchetti “Granular Physics Simulations”
- Denzel R. Brown “Acoustic Pulse Transmission through Granular Materials”
- Andrew D. Hane & Bryan C. Hopper “Greedy Algorithms: An Analysis of Their Effectiveness”
- James E. Satterfield “Granular Flow into Model Silos”

HP 214

Colonial and Revolutionary America I* **Presider: Anita O. Gustafson, Ph.D.**

- Stephen Scaife “The Party that Led to a War: How the British Response to the Boston Tea Party Caused the American Revolution”
- Allston Tillman Warren “Inflammatory Leadership: The Sons of Liberty Prior to the American Revolution”

HP 209

The Continental Reformation I* **Presider: Richard R. Heiser, Ph.D.**

- Abbey Blackwell “Serfdom’s Role in the German Peasants’ Revolt of 1525”
- Justin Campbell “The German Peasants’ War of 1525: Causes and Results”

10:05-11:05 a.m.

Library 39

Political Issues* **Presider: Erin S. McAdams, Ph.D.**

- Mary Kate Bartlett “To Vote or Not to Vote: That is the Question: Comparing Political Engagement Levels and Voter Registration and Turnout Rates by Generation”
- Abigail E. Pearman “The Funding and Objectives of Terrorist Activity”

Library 54

Growth and Transport Processes* **Presider: Evelyn Swain, Ph.D.**

- Christopher R. Downey “Determining Behavior of Hxt Glucose Transport Proteins in *Saccharomyces cerevisiae* Using Modern Cloning Techniques and Bioinformatics Methods”
- Miranda K. McCoy “Effects of Water and Nutrients on Maize Phyllosphere Microbiome Composition”

*30 minute presentations

Honors Day Symposium

10:05-11:05 a.m.

Library Reading Room

Cultural Explorations*

Presider: Clinia Saffi, Ph.D.

Rachel E. Miles

“Sor Juana y Guadalupe: Colaboradoras en la creación de la identidad Mexicana” (“Juana and Guadalupe: Collaborators in the Creation of the Mexican Identity”)

Leah C. Mayo

“The Scene of Our Girlhood Dreams”

Library 214

Making Life Better

Presider: James T. Wetzel, Ph.D.

Hannah D. Fulenwider &
Bailey M. Hill

“Submissive Behavior and Learned Avoidance in Male Syrian Hamsters”

Kristopher Hurley

“Workplace Violence and Aggression: Glorified Bullying for Adults”

Taylor N. Patti

“Knee Reconstruction”

Cristina Ulecia-Moron

“Nanotechnology: A Novel Cell-Directed Gene Therapy to Reduce Inflammation”

HP 214

Colonial and Revolutionary America II*

Presider: Anita O. Gustafson, Ph.D.

Jeffrey Dean Strickland

“The Old Northwest Revival: Native Americans and the Struggle for Independence in the Northwest Indian War”

Aubrey B. Smith

“Causes of the Yamasee War and Relations between the Native Americans Following the Conflict”

HP 209

The Continental Reformation II*

Presider: Richard R. Heiser, Ph.D.

Christopher Byrd

“Stately Scriptures: Luther’s Bible and Its Impact on German National Development”

Mary Catherine Heard

“How I Dread Preaching on the Estate of Marriage: Martin Luther’s Impact on Marriage and Society”

Honors Day Symposium

11:10 a.m.-12:10 p.m.

Library 39

Practices and Behaviors in Organizations*

Presider: Suzanne J. Smith, Ph.D.

Madison A. Smith “Diminishing Differences: The Impact of Gender on Judicial Behavior in Family Court Decisions”

Hendrik S. Hagedorn “The Impact of Human Resource Practices on Innovation”

Library 54

Developing Better Treatment Methods*

Presider: Julia Wilkins, Ph.D.

Jaron L. Pettis & Jeremy D. Mitchum “Development of a Siderophore-Conjugated Pantothenamide Antimicrobial Drug”

Jada A. Suber “Isolation and Characterization of the Glycated HDL subfraction in Type 2 Diabetes Patients”

Library Reading Room

Interactive Theater

Presider: Lesley Preston, MFA

MaryBeth C. Schaffner “Brecht, Boal, and Beyond: An Interactive Presentation”

Library 214

Political and Social Issues

Presider: Brian Reese, M.S.

Laura A. Nix “The Psychology of Politics: Dynamics of Ideological Self-Identification”

Emory E. Ward “Social Class Influences Parenting Style”

Jill N. McLean “The Media and Political Participation”

Hannah D. Fulenwider & Destiny Willis “Defeat Frequency and Learned Avoidance in Male Syrian Hamsters”

HP 214

Colonial and Revolutionary America III*

Presider: Anita O. Gustafson, Ph.D.

Rachel Jane Gundaker “Witchy Women: The Salem Witch Trials and the Influence of Colonial Society”

LaQua Mayes “The Columbian Exchange: A New Tasteful Cuisine”

HP 209

The Continental Reformation III*

Presider: Richard R. Heiser, Ph.D.

James D. George “The Impact of Calvin’s Theology on Capitalism”

12:10-1:10 p.m.

Lunch

*30 minute presentations

Honors Day Symposium

1:15-1:45 p.m.

Keynote Address

Edmunds Hall

1:15-1:45 p.m.

Introduction

Donald R. Raber II, Ph.D.
Provost

“Why Do Research”
Stuart Gordon, Ph.D.
Associate Professor of Biology
2015 Faculty Scholarship Award Winner

1:50-2:50 p.m.

POSTERS

Library Reading Room

Lauren E. Berkey	“A Tooth Microwear Analysis of Fossil and Recent Herbivores”
Denzel R. Brown	“Satellite Remote Analysis of Fractal Patterns”
John Mark Dias, II	“Drug Diversion in the Operating Room: Exploring Novel Techniques of Diversion Detection”
Pravin Gurung	“Exploring the Complexity of Space Weather Using 210 mm Data”
Bailey M. Hill	“Cytokine mRNA Levels in Macrophages Over Expressing CD163”

*30 minute presentations

POSTERS (continued)

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| Harrison R. Hopkins | “Racial Bias in the Context of Natural Disaster Among Paid Participants” |
| Mary Kathryn Johns | “Do Plant Stem Heights Influence Pollinator Foraging Behavior” |
| Nadia I. Jubran | “Economic Impact of Pharmacist Services in the Community Setting” |
| Joshua K. McCormick | “Using Artificial Neural Networks to Rate Disease Severity in Maize Infected with Artificial Neural Networks to Rate Disease Severity in <i>Acidovorax avenae</i> sub-species <i>avenae</i> ” |
| Jonathan T. Mitchell & Britnee K. Goldman | “A Longitudinal Study of Self-Concept in CHAMPS Students” |
| Mallory L. Moore & Tara Tootle | “MTM Hybrid Course Improves Student Self-Efficacy in Performing Medication Therapy Management Services (MTMS)” |
| Billy Joe Mullinax | “Brazilian Flora of Santa Catarina from the Upper Carboniferous Early Permian Time Period” |
| Lynne J. O’Donoghue | “Upregulation of Cancer Genes in Breast Tumors with FGD1 Expression” |
| Rachel Fu-Min Sealover | “Brain Science, Statistical Physics, and English: Assessing the Language of Complexity” |
| Katlyn E. Sepsey | “Tree Characteristics that Affect the Distribution of Mistletoe on Presbyterian College’s Campus” |
| Cassandra M. Walker | “The Effect of Drought Conditions on Complex Information Exchange in Soil Medium of <i>Phaseolus lunatus</i> ” |
| Alexandria V. Yarborough | “Emerging Telepharmacy Practices: Guidance from the Past and Opportunities for the Future” |

Honors Day Symposium

1:50-2:50 p.m.

Library 39

Developmental Issues* **Presider: Suann Yang, Ph.D.**

- Billy Joe Mullinax “dFOXO Overexpression Can Ameliorate Age-Related Degeneration of Heart Performance in *Drosophila*”
- Emily M. May “A Microscopic Study of the Gonad Development within Viviparous Fish, *Poecilia latipinna* and *Xiphophorus maculatus*, when Exposed to Triclosan”

Library 54

Modern Genres and Interpretations in Literature* **Presider: J. Justin Brent, Ph.D.**

- J. Christopher Byrd “‘Now begin the terrors: now begin the marvels’: The Sacred and Secular Grail in the Twentieth Century”
- Paul B. Rice “A Legend of the New Frontier: The Transformed Figure of the American Hero in Douglas Fairbanks’ Silent Films”

Library 214

Gender, Race, and Ideology **Presider: Jay L. Michaels, Ph.D.**

- Laura A. Nix “Dynamics of Political Attitudes”
- Lesley A. Nelson “Impacts Regarding Family Structure and Function Changes”
- Demarcus A. Rouse “Impact of Race and Gender on Education”
- Donelle L. Williams “Impact of Race and Gender on Socioeconomic Status”

HP 214

Colonial and Revolutionary America IV* **Presider: Anita O. Gustafson, Ph.D.**

- Lovey Sheppard “The Separation of Religion and Democracy”
- William Hawkins Sohm “Adaptation Over Survival: South Carolinian Leaders’ Contributions”

*30 minute presentations

Honors Day Symposium

2:00-4:00 p.m.

SENIOR ART PROJECT

Harper Center Gallery

Erin Connolly

“Barriers”

2:30-3:30 p.m.

MUSIC HONORS RECITALS

Edmunds Hall

Seth Matthew Brown *Double Bass*

Lindsey Elizabeth Gardner *Soprano*

Joshua Richard Harrington *Organ*

Cassidy Michaelle Jarrett *Percussion*

Gabriela Josephine Lewis *Violoncello*

Tianna Marin Smith *Soprano*

Hannah Marie Taylor *Soprano*

2:55-3:55 p.m.

Library 39

Women’s Rights*

Presider: G. Terry Barr, Ph.D.

Meredith O. Morgan

“Politics of the Veil in Turkey”

Tianna M. Smith

“Advantages and Disadvantages of the Use of Cipher Notational Systems in Selected Asian Musical Traditions”

Library 54

Improving Health*

Latha A. Gearheart, Ph.D.

Joshua A. Carter

“Synthesis of 3’-C-Puromycin Analogs as Novel Non-Nephrotoxic Antitumor Antibiotics”

*30 minute presentations

Honors Day Symposium

4:15

Belk Auditorium

Honors Convocation

7:30

Harper Center Theater *Intersections*

Tobi Antigha,
Kelly Cichon
Garret Conover
Phoebe Jones
Youngkyung Sohn
Acey Palmer
Devron Glenn
Zander Anderson
Taylor Stacy
Maddison Hogan
Olivia Aldridge
Harrison Hopkins

Honors Day Symposium

Robert H. Freymeyer, Ph.D., Organizer and Program Chair
C. Clinton Harshaw, Ph.D., Editor, Abstract Book