



Honors Day Symposium

NEVILLE HALL
EDMUNDS HALL
HARPER CENTER

APRIL 19, 2018



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

Learning Through Research

2018 Honors Day Symposium

8:40 – 8:55

Welcome Address

Neville Hall

Welcome Address by Robert E. Staton, J.D., D.P.S., President of Presbyterian College in the Cornelson Center of Neville Hall

Coffee and Donuts will be available in the Cornelson Center of Neville Hall

9:00-10:00

Posters

Neville Hall

“The Impact of Breast Cancer Awareness Education,” Hillary E. Stamps

“The Value of Wilderness Therapy,” Ashlee Caroline Anderson

“Survey of Stream Pollution from Roads along the Enoree River in Musgrove Mill Park,” Ryne Maness

“The Dendroclimatic Signal Found in Shortleaf Pine in the Piedmont of South Carolina,” Victoria Cannon

“The Paleopalynology of the Eocene/Oligocene Swan Lake Locality, Douglas Wyoming,”
Kassandra Glover

“Effects of Stimulants on Cardiovascular Activity Over Two Hours,” Amanda Smith, Kristin Miller,
Janetta Kitchko

“Estimating Heterosis of the Maize Phyllosphere Microbiome,” Kristin Miller

“The Epigenetic Role of Rrp1 in *Drosophila melanogaster*,” Justin Davidson

“Examining Bird Diversity at Musgrove Mill SC State Historic Site,” Tiffany Bogan

“Glenohumeral Joint Anatomy,” Ashton Stewart

“Skin Reactions with Antiepileptics, Mood-Stabilizers, and Psychotropics,” Anderson Isaac

“Analysis of Omega-3 Fatty Acid Content in Fish Oil Products,” Robin Fischer

“Whiskers and Acid,” Lee Johnson and Chase Marzullo

“Myoelectrically Controlled, 3D Printed Prosthetics,” Andrew Rhodes and Katherine Crosby

Local Economics and National Taxes
*Neville 105***Convener: Dr. Kate A. Godwin**

“An Analysis of the Economic Impact of Presbyterian College on Laurens County, SC,” Sela Claire Vaughan (30 mins)

“The IRS & Taxes: A System Americans Love to Hate,” Katherine Elizabeth Bishop (30 mins)

Data Collection in the Social Sciences I
*Neville 106***Convener: Dr. Sarah C. Burns**

“Comparing Regional State Government Funding for Public Libraries,” Kaysie Grace Tulanian (15 mins)

“Regional Rural Counties: Unequal Reporting of Rates of Rape and Sexual Assault,” Alexandria Victoria Cook (15 mins)

Conspiracy in American History I
*Neville 110***Convener: Dr. Michael A. Nelson**

“Beyond the Lone Gunman in the Assassination of President John F. Kennedy,” Madison Paige Reynolds (30 mins)

“From Human Rights to Civil Rights: An Examination of MLK Jr’s Evolution and the Response of the FBI,” Reese Fowler Bates (30 mins)

Religion, Politics, and National Identity
*Neville 121***Convener: Dr. Peter Müller**

“The Hussite Revolt,” Carl Austin Burnett (15 mins)

“To Be Illegal Like Me: Muslim Immigrants and Integration in Germany,” Lauren Brooke Carrizales (15 mins)

“Rediscovering the Heritage of the Methodist Class Meeting in the Twenty-first Century,” Joseph Daniel Kovas (15 mins)

Explorations in Graph Theory and Algebraic Number Theory
*Neville 122***Convener: Dr. Kara L. Shavo**

“Domination in Graphs,” Brandon Cook (15 mins)

“Unique Factorization: Bridging the Gap,” Robert McAbee (15 mins)

Physics I: Braids and Whiskers
Neville Auditorium

Convener: Dr. Chad L. Rodekohr

“Physics of Braiding,” Brandt Cameron and Zachary Darst (15 mins)

“Etchant Accelerated Sn Whisker Growth,” Jonathan Turnley (30 mins)

10:05 – 11:05

Panels

Neville Hall

Data Collection in the Social Sciences II
Neville 105

Convener: Dr. Sarah C. Burns

“Obtaining a Representative Sample to Access Campus Climate: Sexual Assault,” Margaret Bentley Childress and Gillie Rebekah Smith (30 mins)

“Obtaining a Representative Sample to Access Campus Climate: Diversity and Inclusion,” Tamia Hayes (30 mins)

Conspiracy in American History II
Neville 110

Convener: Dr. Michael A. Nelson

“Secrets Beyond the Gate? Commonalities between the Conspiracy Theories of Area 51,” Dalya Jamal Amer (30 mins)

“Suspicion Surrounding the Assassination of Martin Luther King, Jr.: Unforeseeable Tragedy or Conspiracy?,” Vidalo M. Kabiya (30 mins)

Women, Status, and Royal Rule
Neville 121

Convener: Dr. J. Justin Brent

“Isabella, She-Wolf of France: An Examination of Queenship and Power during the Middle Ages,” Brenna Bailey Ashe (15 mins)

“Scotland and France: A Modern Love Affair,” Madison Elisabeth Corthell (15 mins)

“La Place des écrivaines,” Elizabeth Ann Fowler (30 mins)

Physics II: Statistical Physics
Neville Auditorium

Convener: Dr. Eli T. Owens

“Measuring the Granular Density of Modes in 3D,” Sydney Blue and Brandon Morrow (15 mins)

“The Effect of Grain Shape on Confined Granular Flows,” Salem Wright and Ellen T. D'Amico (15 mins)

“Statistical Patterns of Ant Movements,” Brien Washington (15 mins)

Chemistry I: Nanomaterials
Neville 122

Convener: Dr. Latha A. Gearheart

“Monitoring DNA Unwinding with Quantum Dots,” Chasmyn Smith and Jonathan Gardner (30 mins)

“How gold nanoparticles affect the catalytic ability of TOPO I to relax DNA,” Bardin Davis (30 mins)

11:10 – 12:10

Panels

Neville Hall

CHAMPS Program Longitudinal Studies
Neville 105

Convener: Dr. Brooke C. Spatta

“Three Consecutive Years of Data: A Longitudinal Analysis of Self-Concept and Global Self-Worth in CHAMPS Students,” Ashley Elizabeth Wren (30 mins)

“Internalizing, Externalizing, Communal and Protective Behaviors in Champs Students,” Stephanie Amanda Wilson (30 mins)

Conspiracy in American History III
Neville 110

Convener: Dr. Michael A. Nelson

“The Mafia’s Involvement in the Assassination of John F. Kennedy,” Jon Curtis Forbes (30 mins)

“Join the Conspiracy: Illuminati in American Culture,” Andre De’Von Jeter (30 mins)

Social Engineering and Christian Faith
Neville 106

Convener: Dr. Craig A. Vondergeest

“Sabbath as Civil Disobedience,” Jacob Dail Kennedy (30 mins)

“Rediscovering the Heritage of the Methodist Class Meetings in African Methodism,” Joseph Kovas (30 mins)

Biology I: Breast Cancer Biology
Neville Auditorium

Convener: Dr. Austin Y. Shull

“Multivariate comparison of DNA methylation events in breast cancer stem cells,” Caroline Dyar (30 mins)

“Differential DNA Promoter methylation of the Mitochondrial Glycerol-3-Phosphate Dehydrogenase Gene GDP2 in Breast Cancer Stem Cells,” Nicole Hudson (30 mins)

Chemistry II: Biochemistry of Autism
Neville 122

Convener: Dr. Evelyn J. Swain

“The role of SCFAs of the Gut Microbiota in Autism Spectrum Disorders,” Kelty Fletcher (30 mins)

“Yeast as a Model System for Mitochondrial Dysfunction and Mitochondrial Dysfunction as Possible Causes for Autism Symptoms,” Kendall McDill (30 mins)

12:15 –1:10

Lunch Break

1:15 – 2:15

Panels

Neville Hall

Puns and Narcissism
Neville 105

Convener: Dr. Stephanie D. Freis

“Hemispheric Lateralization of Pun Processing,” Abigail Crisp and Sarah Grier Thompson (30 mins)

“Motivations Behind Two Narcissistic Subtypes: Grandiose and Vulnerable Narcissism,” Alexander Sebastian Lykou (30 mins)

Unexpected Consequences in History
Neville 106

Convener: Dr. Richard R. Heiser

“William the Conqueror’s Impact and Legacy,” Matthew Bruce Abney (15 mins)

“Lincoln’s Proclamation and the Military Intent,” Mikaela Rae Springer (15 mins)

“Central Economic Planning, Trade, and the Adjustment from a Planned to a Market Economy: A Look at East Germany,” Alina Jasmin Weismann (30 mins)

Conspiracy in American History IV
Neville 110

Convener: Dr. Michael A. Nelson

“The Death of General Patton: The Conspiracy Ignored by History,” Brandon Lee Morrow (30 mins)

“The Media’s Flawed Coverage of the 2000 Election: The Validity of Conspirators’ Arguments,” by Paul Mack Mauer (30 mins)

Literature and Culture

Convener: Dr. Kendra Hamilton

Neville 121

“Victorian Britain and the North,” Madison Elisabeth Corthell (30 mins)

“Born This Way in the USA: A Playwright’s Discovery of College LGBTQ+ Students,” Bryce G. Karlek (30 mins)

Biology II: Preventing Infection

Convener: Dr. James Wetzel

Neville Auditorium

“The Production of a Synthetic, Bacteria Resistant Surface Material Based on Shark Skin Morphology,” Kenneth Kern (30 mins)

“Quantifying Cytokines of Human Cervical Mucus Using IL-17 Proteins and Proximity Ligation Assay,” Trevor Dendy (30 mins)

Chemistry III: Choline and Supercapacitors

Convener: Dr. Wally R. Ott

Neville 122

“Analysis of Choline and its Up-regulation in the Plasma of ASD Patients: Literature Review Report and Yeast Model of Choline,” Ashley Roberts (30 mins)

“Transition Metal Dichalcogenides for Application in Supercapacitors,” Jonathan Turnley (30 mins)

2:30 – 4:00

Art Exhibition

Harper Center

Senior Art Exhibit – Ruth Elizabeth Boggs

Senior Art Exhibit – Kaitlynn Elizabeth Campbell

2:30 – 4:00

Music Recital

Edmunds Hall

Harris Banks
Brook Huggins
Padgett (Trey) Johnson
Collin McKinnon
Paul Peart
Emlynn Shoemaker

Keynote address by H. Ralph Pàquin, M.F.A., Professor of Art
2017 Robert H. Freymeyer Award for Meritorious Scholarship Winner

The Robert H. Freymeyer Award for Meritorious Scholarship is given annually to a full-time faculty member for distinguished work in research, scholarship or artistic creation. It may be awarded either for a single accomplishment or for a body of work.

Honors Day Symposium Organizers

Stefan W. Wiecki, Ph.D., Organizer and Program Chair
Robert H. Freymeyer, Ph.D., Mentor and Adviser
Latha A. Gearheart, Ph.D., Editor, Abstract Book
Robert A. Bryant, Ph.D., Division Coordinator (Humanities)
Sarah C. Burns, Ph.D., Division Coordinator (Social Sciences)
Katherine E. Hanlon, Ph.D., Division Coordinator (Pharmacy)
Ron J.C. Zimmerman, Ph.D., Division Coordinator (Natural Sciences)