

PAIDEIA 2019

The Eighteenth Annual UNDERGRADUATE AND GRADUATE STUDENT RESEARCH CONFERENCE

CHRISTOPHER NEWPORT UNIVERSITY

Sponsored by the

Office of Undergraduate Research and Creative Activity

DR. DAVID A. SALOMON, DIRECTOR

DR. MICHAELA D. E. MEYER, ACADEMIC DIRECTOR

MS. MICHAELE SCHNEPF, ADMINISTRATIVE ASSISTANT

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Triday, April 5, 2019

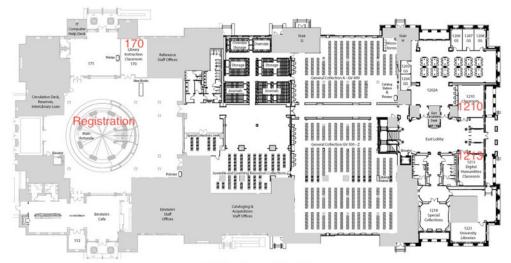
Thanks to Provost David Doughty; Vice Provost for Research, Graduate Studies and Assessment Geoffrey Klein; the Office of Catering; and the Office of Scheduling, Events and Conferences

PAIDEIA

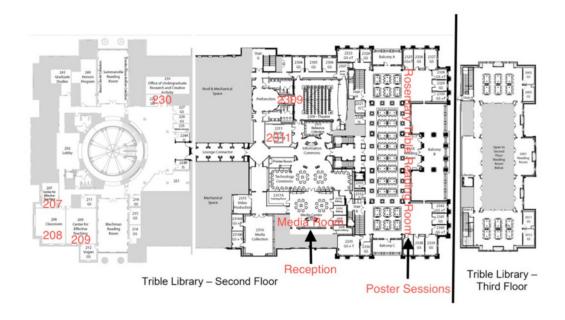
(paɪˈdeɪə)

The classical Greek concept of liberal learning. Through paideia, the culture and the youth were "molded" to the ideal of *kalos kagathos*, "the beautiful and good." Classical scholar Samuel Henry Butcher wrote in 1904 that paideia "in its full sense involves the union of intellectual and moral qualities. It is on the one hand mental illumination, an enlarged outlook on life; but it also implies a refinement and delicacy of feeling, a deepening of the sympathetic emotions, a scorn of what is self-seeking, ignoble, dishonourable — a scorn bred of loving familiarity with poets and philosophers, with all that is fortifying in thought or elevating in imagination."





Trible Library - First Floor



Sessions in DSU Washington, Jefferson, Monroe, Madison, Harrison and Ballroom are on the second floor of the David Student Union, across the plaza from the Trible Library.

Library 235 is the conference room in the OURCA (Library 230).

The Senior Art Show is in galleries in the Ferguson Center for the Arts.

SCHEDULE

Coffee and water are available throughout the conference near the registration table in the Library Rotunda Registration Trible Library Rotunda 11 a.m.-3 p.m. Please present your CNU ID for registration Trible Library and Session I 12-12:50 p.m. David Student Union Trible Library and Session II 1-1:50 p.m. **David Student Union** Trible Library and Session III 2-2:50 p.m. **David Student Union** Trible Library and **Session IV** 3-3:50 pm. **David Student Union** Media Collection Room Reception 4-5:50 p.m. (Trible 2316) Rosemary Trible Session V: Posters A 4-4:50 p.m. Reading Room Rosemary Trible Session VI: Posters B 5-5:50 p.m. Reading Room **Keynote Address** Dr. Brian Greene, Columbia University, "Einstein and the Dramatic Story of David Student Union the Universe: Exploring New Views of 6 p.m. Ballroom Space and Time" Book signing to follow address (outside Ballroom)

ART SENIOR THESIS EXHIBITION

Work on display in the Falk and Ferguson Hall Galleries in the Ferguson Center for the Arts

Prof. Kristin Skees (faculty sponsor)

April 1-May 10, 2019

Nellie Calkins
Jeremy Callahan
Emilee Davis
Alezabeth Dunn
Hannah Fowler
Logan Harrelson
Cheyanne Jamison
Matthew Mulvihill
Arleigh Murphy
Yaminah Paige
Noah Scher
Kayla Stith
Savannah Tilghman

CHEMISTRY AND DESIGN: Bridging the Arts and Sciences Through Student Collaboration

Work on display in the Trible Library First Floor Hall Prof. Alan Skees and Dr. Joshua Patterson (faculty sponsors)

Graphic Designer: Abigail Bruce

"The Application of NiO_x Nanoparticles on Lead-based Perovskite Solar Cells for the Purpose of Reduced Degradation"

Scientist: Christopher Tawes

"Synthesis of ZnO Nanorod Arrays for use in Toxic Gas Detectors"

Scientist: Erik Biehler

Graphic Designer: Jeremy Callahan

"Synthesis and Characterization of Temperature Sensitive Nanoparticles"

Scientist: Trevor Fletcher

"Synthesis of a Histamine H₃ Receptor"

Scientist: Haley Ransom

CHEMISTRY AND DESIGN: Bridging the Arts and Sciences Through Student Collaboration

Work on display in the Trible Library First Floor Hall

Prof. Alan Skees and Dr. Joshua Patterson (faculty sponsors)

Graphic Designer: Brooklyn Carroll

"Quantification of the Interfacial Affinity of Pyruvate in Aqueous Reverse Micelles"

Scientist: Jordan Wallace

"Degassing Effects on Beer Color Analysis"

Scientist: Skylar Reed

"Statistical Analysis on Water Sources for the Purpose of Craft Brewing"

Scientist: Daniel Moore

Graphic Designer: Samantha Hernandez

"Determination of Enzyme Activity Levels After Chromatography"

Scientist: Nicole Bolavage

"Characterization of Perovskite Degradation with Different Polymer Coatings for Air Stability"

Scientist: Brian Price

"Hypervalent Iodine and Cyclization of Alkenes"

Scientist: Connor Beveridge

Graphic Designer: Cee Reyes

"The Detrimental Effect of Shelf Life on Beer"

Scientist: Charles Pasold

"Implications of Polypyrrole Addition to Nail Lacquers"

Scientist: Christopher Shumpert

CHEMISTRY AND DESIGN: Bridging the Arts and Sciences Through Student Collaboration

Work on display in the Trible Library First Floor Hall

Prof. Alan Skees and Dr. Joshua Patterson (faculty sponsors)

Graphic Designer: Noah Scher

"Hydrogen Bonding in Non-aqueous Reverse Micelles"

Scientist: Mackenzie Lindholm

"Investigation of solvent effects on electrochemical quartz crystal microbalance (eQCM) studies of carbon nanomaterials"

Scientist: Alexandra Rosado

Graphic Designer: Hannah Spain

"Using 1D NOE for the Measurement of Surfactant Affinity to an Asphaltene Substitute"

Scientist: Mason Tucker

"Probing the Interfacial Concentration of Acid Within a Reverse Micelle"

Scientist: Meredith Varmecky

A. ENGLISH PANEL: Issues In Chekhov

Library 208

Zachary Outzen, "Proto-industrial Poetics: The Socioeconomics of 19th Century Russia in Anton Chekhov's 'On Official Duty'" (Dr. Margarita Marinova)

Adelaide Neville, "Chekhov and Daddy Issues: A Psychoanalytic Look into the Gender-Restrictive Society of 19th Century Russia" (Dr. Margarita Marinova)

Nicolette DeFrank, "Competing Power Inequalities: Exploring the Dynamics of Class and Gender in Chekhov's 'The Bride'" (Dr. Margarita Marinova)

B. PSYCHOLOGY PANEL: "Face It! Emotion Recognition and Memory for Faces"

Library 209

Ayesha Ferozpuri, "Emotion Recognition Down to a 'T'" (Dr. Laurie Hunter)

Aubrey Olsen, "ERP Study of the Own-Age Bias in Memory for Faces" (Dr. Leslie Rollins)

C. COMMUNICATION STUDIES

Library 170

Ashley Gesiewski, "Virtual Experiment: Initiating Romantic Interest on Tinder" (Dr. Brianna Lane)

Stephany Glenn, "One Expensive Ring: An Analysis of Eliot Spitzer's Image Repair" (Dr. James Smith)

Robert Tabackman, "Women of Westeros" (Dr. Michaela Meyer)

D. CHEMISTRY

Library 1210

Alexandra Rosado, "Investigation of solvent effects on electrochemical quartz crystal microbalance (eQCM) studies of carbon nanomaterials" (Dr. Ronald Quinlan)

Daniel Moore, "Statistical Analysis on Water Sources for the Purpose of Craft Brewing" (Dr. Ronald Quinlan)

Skylar Reed, "Efficiency of Degassing Methods on Beer Color" (Dr. Ronald Quinlan)

E. ECONOMICS AND BUSINESS

Library 1213

Zachary Timmerman, "A Vector Error Correction Model for Japanese Real Exports" (Dr. George Zestos)

Abigail Stocker, "Falling Female Labor Force Participation In Romania" (Dr. George Zestos)

Sierra Chen, "Trust in Leader: Finding the Balance Between Effective and Destructive Leadership" (Dr. Angela Spranger)

F. BUSINESS AND MANAGEMENT AND MARKETING

Library 2311

Canee Beauchamp, "Analyzing the Impact of #MeToo Movement on Gender Relate Policies within the Financial Services Industry (Dr. Angela Spranger)

Marissa Raiti, "The Impact of #MeToo and Other Social Media Movements on HR Policy" (Dr. Angela Spranger)

Nicole Pope, "East of Hollywood, South of NY: The Impact of Social Media Phenomena on Gender-Related HR Policy" (Dr. Angela Spranger)

G. ART HISTORY SENIOR SYMPOSIUM PART I

Library 2309

Emilee Davis, "The Hidden Code: Chronograms in the works of Jan van Eyck" (Dr. Michelle Erhardt)

Pat Gomuwka: "Is it the Art or the Artist that makes David Hockney the Greatest Living Artist?" (Dr. Michelle Erhardt)

Elissa Carpio, "Still Building Behind Barbed Wire: Artwork as a Response to Japanese American Internment" (Dr. Michelle Erhardt)

H. CULTURAL AWARENESS 1

DSU Jefferson

Carly Schwam, "Jewish Women's Roles in Society" (Dr. Patricia Siewe-Seuchie)

Claire Kearney, "Should There Be More Gun Control in the United States?" (Dr. Patricia Siewe-Seuchie)

Blake Bauserman, "Are Fables Only For Children? A History of Fables and Jean de la Fontaine" (Dr. Patricia Siewe-Seuchie)

Emma Seguin, "Every Man is an Island: Collectivist Immigrants in Individualistic America"

I. PHI BETA KAPPA PANEL DISCUSSION: The Liberal Arts and Humanities as a Guide to Life

DSU Washington • Sponsored by Phi Beta Kappa Faculty

Casey Hall, "Dialogue as True 'Logos' in Plato's Phaedrus" (Dr. Brent Cusher)

Francesca Iasci, "Goethe's cultural education through the Italian Journey" (Dr. Laura Delullio)

Jodie Koplaski, "Navigating Vulnerability: The Effect of Climate Change on Aboriginal Australians" (Dr. Christopher Loy)

J. PHILOSOPHY AND RELIGION

DSU Monroe

Matthew Dittmer, "Business as War: Just War Theory and Business Disruption" (Dr. Christopher Tweedt)

Jack Snowdon, "The Ikkō-ikki" (Dr. John Thompson)

Brady DeHoust, "Rhetoric and Virtue: Toward a Nuanced Ethics for the Symbol-Using Animal" (Dr. Joe Balay)

K. THEATER AND DANCE PANEL: Falling into Darkness: The Creative Exploration of the One-Act Play Festival's Production of "the Love Talker"

DSU Madison

Olivia Wilbur, "Creating Fairytales From Scratch" (Prof. Denise Gillman)

Meaghan Yesford, "The Calm Before the Fire Alarm: Stage Managing TheaterCNU's One-Act Play Festival" (Prof. Denise Gillman)

Mackensie Ward, "Portraying a Character: More than 'Tricks and Glamor'" (Prof. Denise Gillman)

A. THEATER PERFORMANCE:

"Captains Cabaret Series, Female Musical Theatre Composers"

Library Rotunda

Matt Stevenson Charlie Grass Sarah Allbrandt Amelia Burkley Adam LeKang

- 1. We Got the Beat From Head Over Heels, by The Go-Gos
- 2. Alto's Lament by Zina Goldrich
- 3. Yesterday I Loved You From Once Upon A Mattress by Mary Rogers
- 4. I Am Adolpho From Drowsy Chaperone by Lisa Lambert
- 5. This Ordinary Thursday Georgia Stitt
- 6. Opening Up From Waitress by Sarah Bareilles
- 7. The Sidestep From Best Little Whorehouse in Texas by Carol Hill
- 8. Falling Slowly From Once by Glen Hansard and Markéta Irglová
- 9. Ironic From Jagged Little Pill by Alanis Morissette
- 10. I Just Might From 9 to 5 by Dolly Parton
- 11. Step One From Kinky Boots by Cyndi Lauper
- 12. Hold On From Secret Garden by Marsha Norman and Lucy Simon
- 13. Love is an Open Door From Frozen by Kristen Anderson-Lopez
- 14. Astonishing From Little Women by Mindi Dickstein
- 15. On My Way From Violet by Jeanine Tesori

B. ENGLISH PANEL

Library 235 — inside Library 230 (OURCA)

Tanita Santiago, "How Prescriptive Views on Language in America are Suppressing the Very Diversity We Claim to Embody" (Dr. Rebecca Wheeler)

Anna Bowers, "Linguistics in Education" (Dr. Rebecca Wheeler)

C. COMMUNICATIONS ROUNDTABLE: The Effect of Exposure on the Perceptions of Autism Spectrum Disorder

Library 2309

Adam Spencer, Hayley Clawson, Candace Mellett, and Alexa Levis (Dr. Alice Veksler)

D. ORGANISMAL AND ENVIRONMENTAL BIOLOGY

Library 1213

Jenna Miladin, "Tracking the Evolutionary Transitions in Ecophysiology in the *Silene* Genus" (Dr. Janet Steven)

Jane Oswalt, "Evaluating Atlantic White Cedar (Chamaecyparis thyoides) Tree Rings between Non-tidal and Storm-Driven Tidal Wetlands" (Dr. Robert Atkinson)

Anthony DiPippa, "Geographical Information Systems (GIS) for Oyster Reef Restoration" (Dr. Russell Burke)

E. HONORS PANEL:

Hamlet in Hyperspace: Writing, Technology and the Future of Ideas

Library 1210

Quinn Smith-Perry, "Spiritual Reading in *If on a Winter's Night a Traveler*" (Dr. David Salomon)

Lillian Holley, "Hypertext and Hypotheticals" (Dr. David Salomon)

Nicholas DeHoust, "Hypertext, Reading, and Italo Calvino" (Dr. David Salomon)

Catherine Hall, "A Reader in the Text: An Analysis of Italo Calvino's If on a Winter's Night a Traveler" (Dr. David Salomon)

F. ENGLISH ROUNDTABLE: Power and Politics in Shakespeare

Library 2311

Blair Johnson, "Power and the Monarchy Through Shakespeare's Eyes" (Dr. Jessica Apolloni)

Jenna Lowrance, "A Religious Experience: Reshaping the View of *The Merchant of Venice*" (Dr. Jessica Apolloni)

Cassidy Hill, "Questioning Shakespeare: The Benefits of Criticizing Shakespeare's Works" (Dr. Jessica Apolloni)

G. ART HISTORY SENIOR SYMPOSIUM PART II

Library 2309

Elizabeth Chung, "Power to the People: The Legacy of Photography from the Civil Rights Movement to Black Lives Matter" (Dr. Michelle Erhardt)

Ariel Russell, "Resplendent Light: Kehinde Wiley and the Fusion of Traditional Conventions and Modern Modes in Stained Glass" (Dr. Michelle Erhardt)

H. CROSS CULTURAL AWARENESS 2

DSU Monroe

Isabella Terrono, "The California Genocide: America's Own Genocide of the Native Americans" (Dr. Patricia Siewe-Seuchie)

Emma Marston and Emmy Dunnavant, "Exploring the Different Societies of the United States, Spain, and the Dominican Republic" (Dr. Patricia Siewe-Seuchie)

Nicholas McCormick, "Traditional Masculinity and Femininity: Confirmation of a **New Scale Evaluating Gender Roles**" (Dr. Patricia Siewe-Seuchie)

I. THEATER AND DANCE AND ART HISTORY

Library 170

Karese Kaw-uh, "Creative Justice: The Power of Administration and Theatre in Communities" (Dr. David Shuhy)

Krystal Hurr, "Indigenous representation" (Dr. Laura Godwin)

Kayelon Dean, "The Sphinx's Enigma: From Egyptian to Greek" (Dr. Rosa Motta)

J. COMMUNICATIONS STUDIES PANEL: Intersectionality and Communication in Family and Legal Institutions

DSU Madison

Kilie Rosson, "Intersections of Identity and Wrongful Conviction: How the San Antonio Four Personify Biases in the American Judicial System" (Dr. Danielle Stern)

Ashley Lawrence, "Intersectionality and Children of Divorce" (Dr. Danielle Stern)

Kelsey Meador, "Attachment Styles of Individuals Raised by Non-Biological Caregivers" (Dr. Danielle Stern)

K. SOCIOLOGY, AND WOMEN'S AND GENDER STUDIES

DSU Jefferson

Emily Hewett, "The Risk of Masculinity Regarding School Shootings" (Dr. Linda Waldron)

Kaija Craft and Elizabeth Swetz, "'Thoughts and prayers won't stop a speeding bullet': Parkland Survivors and the Shifting Narrative of School Shootings" (Dr. Linda Waldron)

Jillian Morrison, "Women's Perceptions of Women in Leadership" (Dr. Angela Spranger)

Angelica Wood, "A Bay Divided: Perceptions of Industrial Aquaculture from Virginia and Maryland Independent Watermen" (Dr. Christopher Loy)

L. MODERN AND CLASSICAL LANGUAGES AND LITERATURE, AND COMMUNICATION STUDIES

DSU Washington

Mackenzie Thorne, "Ancient Greek Music: An Artistic Analysis of the Aulos" (Dr. Rosa Motta)

Benjamin Ertel, "Don't Shut Up and Keep Dribbling: How LeBron James Impacts Black Lives Matter through Discussion and Representation of Race" (Dr. Michaela Meyer)

Samantha Brown, "The King's War Horse" (Dr. Rosa Motta)

M. PHI BETA KAPPA PANEL: Scientific Research and the Love of Wisdom

Library 208 • Sponsored by Phi Beta Kappa Faculty

Alexis Khuu, "Eye-tracking study suggests memory encoding influences false recognition on the forced-choice Mnemonic Similarity Task" (Dr. Leslie Rollins)

Caitlyn McCormack, "How anxious is too anxious? Electrodermal activity during exposures predicts anxious youth's treatment response to brief cognitive behavioral therapy" (Dr. Lindsey Stone)

John Christman, "The Genetic Diversity of the Domestic Apple" (Dr. Janet Steven)

N. ENVIRONMENTAL STUDIES PANEL: Practical Applications of Environmental Studies

DSU Harrison

Cynthia Davis, "University Campus Gardening" (Dr. Andrew Kirkpatrick)

Philip Pericak, "Reducing to-go box waste from university cafeterias" (Dr. Andrew Kirkpatrick)

Nina Swanson, "Conceptualizing Nature: Getting the youth outdoors through corporate partnerships" (Dr. Andrew Kirkpatrick)

SESSION III 2-2:50 P.M.

A. PSYCHOLOGY

Library 209

Stephanie LeRoy, "The Effect of Priming and Source on Recognition and Believability of News Headlines" (Dr. Jeffrey Gibbons)

Maria Dayton, "A Diary Study of the Fading Affect Bias for Social Media and Non-Social Media Events" (Dr. Jeffrey Gibbons)

Luke Fernandez and Lillian Holley, "Fading Affect Bias Across Marijuana and Non-Marijuana Events" (Dr. Jeffrey Gibbons)

B. COMMUNICATIONS STUDIES PANEL:

Intersections of Gender, Race and Class in Visual Culture

Library 235 — inside Library 230 (OURCA)

Lauren Radcliff, "No, You Cannot Touch My Hair: The Cultural Appropriation of Traditionally Black Hairstyles by White Media Influencers" (Dr. Danielle Stern)

Jordan Hicks-Grant, "How does Fenty Beauty work to produce discursive truths about what authentic Black identity looks like in American beauty advertisements?" (Dr. Danielle Stern)

Madeleine Ettrich, "The Analysis of Influential Instagram Artist and their work, as it Pertains to the Theoretical Framework of Marxism and Intersectionality of Gender and Class" (Dr. Danielle Stern)

C. MODERN AND CLASSICAL LANGUAGES AND LITERATURE PANEL: An Excursion into Middle Eastern Politics (طسو أل ا قرشل ا قسائيس عف قل حر)

Library 2309

(papers delivered in Arabic with English PowerPoint)

بابساً) "Christian Urch, "Why Egypt switched their alliance from the USSR to the USA" (أويكير مأل اقدحتمل تايالول العالم لوي يتايفوسل داحتال ان مفل احتل يف رصم لوحت (Dr. Diana Obeid)

Rakan Alzarqa, "The relationship between the GCC and the United States" (اقيك قوال على المرابع قوال على المرابع قوال على المرابع قوال على المرابع الم

Katie Hall, "An Excursion into Middle Eastern Politics" (قصوس الله المعلى (Dr. Diana Obeid)

SESSION III 2-2:50 P.M.

D. THEATER AND DANCE

Library 170

Lauren McCaffrey, "Theater as Communication: The Art of Interaction" (Dr. Laura Godwin)

Sydney Jones, "The Recruitment and Transportation of Women to Colonial Virginia" (Dr. Laura Godwin)

Graciele Perez, "The General Assembly From Jamestown to Williamsburg" (Dr. Laura Godwin)

E. CREATIVE WRITING PANEL AS PRESENTED BY CURRENTS LITERARY MAGAZINE

Library 1213

Selection of Students Published in Currents 2019 (Dr. Ivan Rodden)

F. EARLY MODERN SPANISH LITERATURE PANEL

Library 1210 (papers delivered in Spanish)

Madalynn Amos, "Poder Colectivo en Fuenteovejuna" (Dr. Alonso Varo Varo)

Emma Seguin, "La Celestina como advertencia contra los deseos lujuriosos en los albores del Renacimiento" (Dr. Alonso Varo Varo)

Rachel Johnson, "Cambio identitario en *La española inglesa* de Miguel de Cervantes" (Dr. Alonso Varo Varo)

G. PSYCHOLOGY

DSU Washington

Madison McCormick, "The Struggle is Real" (Dr. Michelle Lange)

Cali Burke, "Gender Identity: Shortcomings in Understanding and Its Mental Health Treatment Ramifications" (Dr. Michelle Lange)

SESSION III 2-2:50 P.M.

H. HISTORY, AND SOCIOLOGY, SOCIAL WORK, AND ANTHROPOLOGY

DSU Jefferson

Camille Gross, "Women Seeking Support in Alcoholics Anonymous" (Dr. Andria Timmer)

Olivia Dickens-Bowman, "Intergenerational Occupation Transmission: How One's Family Influences Their Decision to Become a Waterman" (Dr. Christopher Loy)

Noah Crawford, "Our Most Hallowed Ground: The Importance of Battlefield Preservation for the Historian" (Dr. Andrew Falk)

I. CHEMISTRY

DSU Madison

Trevor Fletcher, "Synthesis and Characterization of an Array of Temperature Sensitive Nanoparticles" (Dr. Joshua Patterson)

Jordan Wallace, "Quantification of the Interfacial Affinity of Pyruvate in Aqueous Reverse Micelles" (Dr. Joshua Patterson)

Mason Tucker, "Using 1D NOE for the Measurement of Surfactant Affinity to Asphaltene Substitute" (Dr. Joshua Patterson)

J. BIOLOGY

Library 2311

Sienna Mai, "Body elongation in the fish family *Blenniidae*" (Dr. David Collar)

Katrina Napora, "Peatland Soil Respiration In Relation to Soil Type and Wetness Conditions - Implications for Restoration" (Dr. Robert Atkinson)

Andrew Feldman, "GIS and Tree Data: Using GIS to assess restoration success at Cavalier Wildlife Management Area" (Dr. Robert Atkinson)

K. MODERN AND CLASSICAL LANGUAGES AND LITERATURES PANEL: "Baroque Bodies: Medicine, Death and Sexuality"

DSU Monroe

Madison Owens, "Music Iconography in 17th-Century Baroque Literature" (Dr. Sarah Finley)

Claire Flores, "The Supernatural and Health in Gryphius and Arzans" (Dr. Sarah Finley)

Elizabeth Hodges, "Honor and Control in 'Traitor to his Own Blood'" (Dr. Sarah Finley)

Dominique Boch, "Optimism in the Baroque: Two Poems by a Protestant Poet" (Dr. Sarah Finley)

SESSION IV 3-3:50 P.M.

A. CHEMISTRY

Library 209

Jacob Sivak, "Molecular Modeling of Histone Deacetylase Complexes" (Dr. Kathryn Cole)

Brian Price, "Characterization of Perovskite Degradation with Different Polymer Coatings for Improved Air Stability" (Dr. Tarek Abdel-Fattah)

Charles Pasold, "The Detrimental Effect of Shelf Storage on Beer" (Dr. Joshua Patterson)

B. BIOLOGY AND CHEMISTRY

Library 209

Emmylou Kidder, "Use of Thermal Imaging for the Study of Seabirds in the Gulf of Alaska: Implications for Management and Conservation" (Dr. Rick Sherwin)

Mackenzie Lindholm, "Determining the effects of Hydrogen Bonding on Asphaltene-Inhibitor Interactions using Non-aqueous Reverse Micelles" (Dr. Joshua Patterson)

Christopher Shumpert, "Implication of Polypyrrole in Nail Polish" (Dr. Tarek Abdel-Fattah)

C. ENVIRONMENTAL STUDIES PANEL: Environmental Studies Capstone Projects

DSU Jefferson

Forrest Mann, "Impacts and Solutions to Invasive Species in Virginia" (Dr. Andrew Kirkpatrick)

Mason Colley, "Big Game Preservation in Africa" (Dr. Andrew Kirkpatrick)

Joshua Law, "Green Housing in Low-Income Communities" (Dr. Andrew Kirkpatrick)

D. MOLECULAR BIOLOGY AND CHEMISTRY, AND PHYSICS, COMPUTER SCIENCE AND ENGINEERING

Library 170

Meredith Varmecky, "Probing the Interfacial Concentration of Acid within a Reverse Micelle" (Dr. Joshua Patterson)

Connor Beveridge, "Diamination of alkenes using in situ generated hypervalent iodine" (Dr. Dmitry Liskin)

Ralph Marinaro, "Commissioning of a Coordinate Detector for the Hall A Super BigBite Spectrometer" (Dr. Peter Monaghan)

SESSION IV 3-3:50 P.M.

E. CHEMISTRY

Library 1213

Benjamin Kennell, "Optimization of Mutant BA0150, a Derivative of a Known Polysaccharide Deacetylase from Bacillus Anthracis" (Dr. Kathryn Cole)

Amber Amaral, "Potential Crystallization of Histone Deacetylase 8 Inhibitors Using S39D" (Dr. Kathryn Cole)

Haley Ransom, "Four Step Synthesis of an H3 Receptor Antagonist" (Dr. Jeffrey Carney)

F. HONORS ROUNDTABLE: JUNG AT HEART: Archetypal Structures in Storytelling and Our Collective Unconscious

Library 235 — inside Library 230 (OURCA)

Clara Page, Autumn Anthony, Kailee Lesko, Rachel Locke, Lillian Holley (Dr. David Salomon)

G. PSYCHOLOGY

Library 1210

Kristin Holland, "Leading a Life of Meaning- What It Is And Why It Matters" (Dr. Jeffrey Gibbons)

Ashley McHenry, "To Stay or Not to Stay: The Struggle of Inclusion in Higher Education" (Dr. David Salomon)

John McCormick and Natalie Grimm, "Do Interviewer Demographics Impact Responses to Public Policy Questions?" (Dr. Diane Catanzaro)

H. INTERDISCIPLINARY STUDIES PANEL: Crossing Borders: Papers from CNU in Scotland Fall 2018

DSU Monroe

Kelley Calvin, "What Motivates People to Cross Borders?" (Dr. Anna Teekell)

Jessica Roberson, "The Border Conundrum of Brexit" (Dr. Anna Teekell)

Sarah Casey, "I Am More Than a Passport" (Dr. Anna Teekell)

Julianna Gonzalez, "Complete Perfection in Intentional Imperfection: Alasdair Gray's *Lanark*" (Dr. Anna Teekell)

SESSION IV 3-3:50 P.M.

I. ENGLISH PANEL: STUDIES IN SHAKESPEARE

Library 208

Madalynn Amos, "Lady Macbeth, Character Traits, and Leadership" (Dr. Jessica Apolloni)

Jordan Beamer, "Clowning and Metafiction" (Dr. Jessica Apolloni)

Veronica Edwards, "Gender and Identity in Shakespeare" (Dr. Jessica Apolloni)

J. ENGLISH

Library 2311

Nicolette DeFrank, "Faust, Lolita, and Pride's role in Salvation" (Dr. David Salomon)

Regan Flieg, "The Role of the Translator in Constrained Prose" (Dr. David Salomon)

Rachel Applebach, "What Nepali secondary teachers do and don't know about teaching writing: Exploring implications for international education" (Dr. Rebecca Wheeler)

K. MODERN AND CLASSICAL LANGUAGES AND LITERATURE

DSU Madison

Victoria Martin, "Has Immigration Changed the American Workforce for the Better?" (Dr. Lauren Reynolds)

Gillian Hardy, "Chaos in Ovid's "Metamorphoses" Exemplified Through Three Myths" (Dr. Jana Adamitis)

Brianna Baldwin, "Latin American Immigrants: The Recent Scapegoats of the American Political World" (Dr. Lauren Reynolds)

L. POLITICAL SCIENCE, MANAGEMENT AND MARKETING, AND ENGLISH

DSU Washington

Amanda Davis, "An Analysis of Environmental Justice in Leslie Silko's *Ceremony*" (Dr. Andrew Rose)

Samantha Untiedt, "The European Migration Crisis: Asylum Applications and Rates of Acceptance" (Dr. Suparna Chaudhry)

Thomas Courtney, "Virtual Reality: The Future of Emergency Training" (Dr. Lisa Spiller)

SESSION V 4-4:50 P.M.

POSTERS A

All Posters in the Rosemary Trible Reading Room

Amber Adams, "Detector Characterization" (Dr. Ryan Fisher)

Abigail Agi, "Does L-Dopa Increase Impulsive Responding in Male *Betta splendens*?" (Dr. Dimitry Liskin)

Anne Baer, "iDQ: Automatic Data Quality Information Using Machine Learning" (Dr. Ryan Fisher)

Alexander Balsamo, "The Search for an Optimal Glitch Classifier using Supervised Learning Techniques" (Dr. Ryan Fisher)

Taylor Betts, "Sexually Dimorphic Responding to Social Stimuli in Zebrafish (danio renio)" (Dr. Andrew Velkey)

Erik Biehler, "Synthesis of ZnO Nanorod Arrays for use in Toxic Gas Detectors" (Dr. Tarek Abdel-Fattah)

Nicole Bolavage, "Determination of Enzyme Activity Levels After Chromatography" (Dr. Denise Tombolato-Terzic)

Eucolona Bonett, "Molecular docking and lead optimization of torreyunlignans, phosphodiesterase 9A inhibitors" (Dr. Jeffrey Carney)

Lynley Burton, "The Sadistic Impulse: Psychopathic Behavior and Schadenfreude Among Everyday Sadists" (Dr. Gayle Dow)

Emily Carrancho, "Comparative Analysis of Using A Sequential Titration with EDTA and ICP-OES in Determining the Mineral Profile of Beer" (Dr. Ronald Quinlan)

Bryanna Carter, "Variations in Coping Skills Across Demographic Variables" (Dr. Susan Antaramian)

Caroline Daniels, "The Relationship Between Achievement Goals and Personality Traits In College Students" (Dr. Susan Antaramian)

Ahmed Elzamzami, "Hydrogen Generation in Mesoporous Carbon Coupled with Platinum Nanoparticle Catalysts" (Dr. Tarek Abdel-Fattah)

Summer Fitzpatrick, "Tuning Out Trump; The Use of Digital Media as a Means of Coping With 'Trump Fatigue'" (Dr. Jennifer Billinson)

Nicole Garcia, Katie Hall, and Katie Kozlowski, "Developing Education in a Violent Generation" (Dr. Brent Cusher)

Katie Glemzu, "Induction of MutBA0150" (Dr. Kathryn Cole)

Alexandra Green and Nicole Muilenburg, "Eye-movement studies of memory during early childhood" (Dr. Leslie Rollins)

SESSION V 4-4:50 P.M.

POSTERS A

All Posters in the Rosemary Trible Reading Room

Debra Henegar, "Props to the Theater" (Dr. Tanya Sweet)

Amanda Heyman, "The Effect of the Big Five Personality Traits on Aggression" (Dr. Susan Antaramian)

Jordan Hines and Tatiana Elizarova, "Mathematical Modeling of Cancer Tumor Growth" (Dr. Iordanka Panayotova)

Sabrina Ho, "Acquisition of visual discriminatory eyeblink conditioning in rats" (Dr. Matthew Campolattaro)

Madison Hoecker, "Cobalt Nanoparticles Supported on Multiwalled Carbon Nanotubes for Catalysts in Hydrogen Generation" (Dr. Tarek Abdel-Fattah)

Margaret Hughes, "App-Based Chronic Pain Journaling: A Modern Way to Track Pain" (Dr. Thomas Berry)

Kathryn Ingalls, "Molecular Modeling of HDAC-Depsipeptide Complexes" (Dr. Kathryn Cole)

Grace Johns, "Analyzing Gravitational Wave Detections" (Dr. Ryan Fisher)

Kaylee Johnson, "Investigating Juvenile Recidivism: Identifying Who Reoffends, When Reoffence Occurs, and Why" (Dr. Steven Keener)

Braden Johnson, "A Catholic Cover Up: An Analysis of the Catholic Church's Response After Widespread Sexual Abuse Scandals" (Dr. James Smith)

Emmylou Kidder, "Use of Thermal Imaging for the Study of Arctic and Subarctic Seabirds in the Gulf of Alaska: Implications for Management and Conservation" (Dr. Rick Sherwin)

Genevieve Lewis, "Co-rumination in adolescent girls: examining measures and determining focus" (Dr. Lindsey Stone)

Blakely Lockhart, "The effect of stress on learning in the open-field tower maze throughout the estrous cycle in the rat" (Dr. Olga Lipatova)

Hannah Lovato, "Pollution Trackers and the Implications of Widespread Pollution on the Environment" (Dr. Thomas Berry)

Caitlyn McCormack, "Don't stress me out! Examining the effect of maternal magnification on youth response to stress" (Dr. Lindsey Stone)

Cedar Moore, "Alcohol in Colonial Virginia" (Dr. Laura Godwin)

SESSION V 4-4:50 P.M.

POSTERS A

All Posters in the Rosemary Trible Reading Room

Patrick Pearce, "Zebrafish (danio rerio) Prefer Social Reward Over Food Reward" (Dr. Andrew Velkey)

Brian Price, "Manganese Nanoparticles Supported on Carbon Nanotubes as a Catalyst in Hydrogen Generation" (Dr. Tarek Abdel-Fattah)

Kyle Ronyecs, "The Collective Works of a Stage Manager" (Dr. Tanya Sweet)

Rachel Shulmister, "Genetic Engineering Illuminating Gene Expression" (Dr. Denise Tombolato-Terzic)

Christopher Tawes, "The Application of NiOx Nanoparticles on Lead-based Perovskite Solar Cells for the Purpose of Reduced Degradation" (Dr. Tarek Abdel-Fattah)

Emily Thaw, "Thermal Performance of Virus Dependent on Host" (Dr. Jennifer Knies)

Kathryn Thome, "Gender differences in dark triad personality traits" (Dr. Gayle Dow)

Sophia Wakilpoor, "Reading Anxiety as a Predictor of Future Reading Comprehension" (Dr. Kelly Cartwright)

Katie Whitcomb, "Photosynthetic Absorption Spectra and Tomato Plant Growth Rates" (Dr. David Gore)

SESSION VI 5-5:50 P.M.

POSTERS B

All Posters in the Rosemary Trible Reading Room

Willow Abshiresims, "Analysis and Identification of Fragrant Compounds in *M. cerifera*, the Southern Wax Myrtle" (Dr. Dmitry Liskin)

Natalie Azzam, "The Role of Reading in the Development of Executive Functions" (Dr. Kelly Cartwright)

Michael Bradley, "Who Will Win the 2018 Midterm Elections According to Analysis of Past Elections, Current Polling, Campaign Finance, and Professional Analysis" (Dr. Crystal Shelton)

Dawson Brown and Peter Miller, "The Cost of Living: Adolescent Strain and Gang Membership in New York City" (Dr. Linda Waldron)

Michael Buontempo, "Evidence for intraspecific ecogeographic divergence linked to dorsal coloration in the eastern hognose snake, *Heterodon platirhinos*" (Dr. Matthew Lattanzio)

Reagan Carey, "Lung Cancer Theory: Addressing Lung Cancer Mortality, Causes, Treatments and Prevention" (Dr. Thomas Berry)

Lauren Chadwick, Carleigh Rollings, Grace Wilson, Leah Glicker, and Marguerite Haas, "Literary review of adverse childhood experiences correlated with sleeping habits" (Dr. Sherman Lee)

Taylor Cheski, "A Review of Web-Based, Computer-Desktop and Mobile-Device Cognitive Behavioral Therapy programs used to treat Social Anxiety Disorder" (Dr. Timothy Marshall)

Ajmain Chowdhury, "The Impact of Fornix Lesions on Trace and Delay Eyeblink Conditioning" (Dr. Matthew Campolattaro)

Lindsay Cross, "Gun Violence in Our Nation's Schools" (Dr. Gayle Dow)

Kyle Darmstead, "It's Not All About the Money: Profoundness of Intrinsic Motivation" (Dr. Thomas Berry)

Lauren Davis, "Growth Mindset: The Relationship of Motivation and Intelligence" (Dr. Gayle Dow)

Matthew Ellis, "Bacon's Rebellion" (Dr. Laura Godwin)

Cari Evick, "How to Take the DIE out of Heart Disease: Addressing Heart Disease from a medical theory approach" (Dr. Thomas Berry)

SESSION VI 5-5:50 P.M.

POSTERS B

All Posters in the Rosemary Trible Reading Room

Ayesha Ferozpuri, Caitlyn Sullivan, Brittany Rininger, Laralin Roland, Rimsha Talibi Alexandra Reed, Erin Mills, Kali DeBorde, Karen Salazar, "Dwell Time Distinguishes Individual Differences in Autistic Symptomatology in Emotion Recognition" (Dr. Laurie Hunter)

Melvin Gordon, "Mindset: The Ability to Alter Experience" (Dr. Thomas Berry)

Lee Grinnan, "Water Quality Analysis of Urban Streams" (Dr. Gary Whiting)

Chalon Johnson, "The Development of Becoming a Highly Effective Teacher" (Dr. Timothy Pressley)

Christiane Kayal and Josh Kolba, "Potential Crystallization of Histone Deacetlyase 8 Inhibitors" (Dr. Kathryn Cole)

Danielle Layne, "Examining the circuitry of dopamine neurons of the ventral periaqueductal gray area" (Dr. Darlene Mitrano)

Matthew Lomicka, "Modeling Motion of the Lissajous Pendulum" (Dr. David Heddle)

Andres Maeso and Parker Hall, "Parametric study of synthesis conditions for model positive electrode films" (Dr. Ronald Quinlan)

Mariah Michael, "Divisibility Properties of Sequences of Lucas Numbers" (Dr. Jessica Kelly)

Alexa Mishra, "Our Nightmare of Annihilation: Obliterating the Impossible" (Dr. Crystal Shelton)

Jennifer Newton, "The Relation Between Self-Efficacy and Life Satisfaction in College Students" (Dr. Susan Antaramian)

Caroline Nice and Camille Bumbera, "Coding Earliest Autobiographical Memory Narratives for Contextual Details" (Dr. Leslie Rollins)

Rachael Petersen, "Transmasculine Gender Expression: How Gender Roles and Type of Transition Effect the Gender Expression of Transmasculine Individuals" (Dr. Jason Hart)

SESSION VI 5-5:50 P.M.

POSTERS B

All Posters in the Rosemary Trible Reading Room

Erin Phillips, "Synthesis of Cobalt Metal Organic Frameworks (MOFs) supported on Graphene like Materials as a Novel Catalysts" (Dr. Tarek Abdel-Fattah)

Joshua Phillips, "Attachment History and Features of Borderline Personality" (Dr. Earl Riggins)

Thomas Pollack, "The Relation of Dark Triad of Personality Traits In Violent Sexual Behaviors and Crimes" (Dr. Sherman Lee)

Brittany Rininger, Caitlyn Sullivan, Ayesha Ferozpuri, Laralin Roland, Rimsha Talibi, Alexandra Reed, Erin Mills, Kali DeBorde, Elizabeth Fabiano, "Dwell Time Differs as a Function of Facial Features and Generalized Anxiety Levels" (Dr. Laurie Hunter)

Laralin Roland, Ayesha Ferozpuri, Caitlyn Sullivan, Brittany Rininger, Rimsha Talibi, Alexandra Reed, Erin Mills, Kali DeBorde, Katie Kozlowski, "Depressive Symptoms in College Students Influences Dwell Time on Emotion Recognition Task" (Dr. Laurie Hunter)

Christopher Spar, "Attachment Modalities and Psychopathological Development" (Dr. Earl Riggins)

Carli Strandberg, "Mask Making for Mr. Burns" (Dr. Kathleen Jaremski)

Caitlyn Sullivan, Brittany Rininger, Ayesha Ferozpuri, Laralin Roland, Rimsha Talibi, Alexandra Reed, Erin Mills, Kali DeBorde, "Dwell Time Differs as a Function of Emotion and Social Anxiety Levels" (Dr. Laurie Hunter)

Zachary Swanson, "The Influences of Intelligence on Religiosity and Spirituality: The Logic of Disbelief" (Dr. Thomas Berry)

Zachary Swanson and Kristen Springer, "Religious Attitudes on Suicide: Dying to Meet My Maker" (Dr. Sherman Lee)

Christopher Tawes, "Application of Silver Nanoparticles Embedded in Mesoporous Carbon for the Catalysis of a Hydrogen Evolution Reaction" (Dr. Tarek Abdel-Fattah)

Catherine Wells, "Robert Munford and Early American Political Plays" (Dr. Laura Godwin)

Bobi White, "Art Inspired by the Unveiling of the Human Body's Hidden Beauty" (Dr. Keith Lustig)



EINSTEIN AND THE DRAMATIC STORY OF THE UNIVERSE:

Exploring New Views of Space and Time



DR. BRIAN GREENE



Paleading theoretical physicists and a on The New York Times bestseller list. His brilliant, entertaining communicator books are also the basis of two Emmy and of cutting-edge scientific concepts. A Peabody Award-winning NOVA miniseries, professor of physics and of mathematics at both of which Greene hosted. He is the co-Columbia University, Greene is the author founder of the World Science Festival and has of three acclaimed books — The Elegant frequently appeared on films and television, Universe, The Fabric of the Cosmos and The including "The Big Bang Theory." Greene is Hidden Reality — which have collectively sold currently director of Columbia University's over two million copies, been translated into Center for Theoretical Physics.

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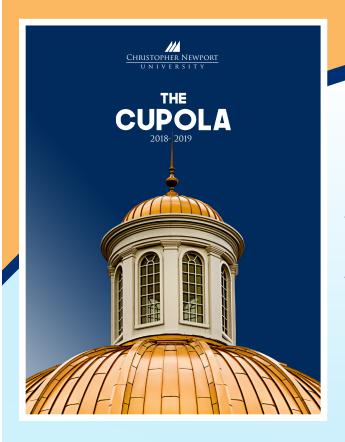
Dr. Douglas K. Gordon

The Office of Undergraduate Research and Creative Activity would like to especially acknowledge and honor Dr. Douglas K. Gordon's support of, dedication and commitment to undergraduate research and creative activity at Christopher Newport University.

Dr. Gordon taught at Christopher Newport College and then University for nearly thirty years. He arrived at Christopher Newport College in 1980 as Assistant Professor of Basic Studies. In 1982 he was promoted to Associate Professor of English and in 1988 to Professor of English. He became Dean of the College of Liberal Arts and Sciences in 2002 after serving a year as Associate Dean. Dr. Gordon retired in 2009 and has been a generous champion for the research and creative activity initiatives at Christopher Newport. Known as "Dr. Dog" for his essays on dogs in literature, Dr. Gordon has lectured and written on bluegrass and country music, and has performed in at least three stage productions at CNU. We sincerely thank him for his encouragement and support of the Office of Undergraduate Research and Creative Activity.



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A Concert of Previously Unedited Music for Sor Juana Inés de la Cruz's *Loa 380*

Featuring:

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Abby Outlaw Soprano



Joel Shapiro *Tenor*



Helena von Rueden *Conductor*



Pam McDermott Soprano



Sarah Frook Gallo *Alto*



The Piedmont Singers
of Central VA

Jenny Edenborn, *Violin* Susannah Livingston, *Violin* Brady Lanier, *Cello* Valentina Sorbera, *Harþsichord*

Sor Juana, by Juan de Miranda

Presentation by Dr. Sarah Finley, Christopher Newport University Responses by Christopher Newport University Spanish majors with the guidance of Dr. Elaine Miller

ome experience music from an 18th-century Spanish play! This event is the first performance in over 200 years of a manuscript theater score that Dr. Sarah Finley discovered in a Spanish library. The find is a rare one, for the featured piece includes fragments from a poem by Mexican nun Sor Juana Inés de la Cruz. Sor Juana is one of the most important writers of the Hispanic Baroque, and she is celebrated today for her stalwart defense of women's intellectual rights. A musician herself, Sor Juana wrote numerous lyrics to set to music. Nonetheless, scholars

have only recovered nine scores for her musicopoetic works.

In 18th-century Spain, attending a play was like going to the movies. It was a colorful and elaborate event that attracted folks from all walks of life. With this in mind, the concert reenacts the environment and practices of a Madrid playhouse. Expect to be entertained as an 18th-century theatergoer would have been, and be prepared ... you just might find yourself taking part in the performance!

CHRISTOPHER NEWPORT UNIVERSITY

Saturday, April 6, 2019

7:30 p.m. | Pope Chapel, Newport News, Virginia

