

RESEARCH & CREATIVE INQUIRY

TUESDAY · 23 APRIL 2019 · 8 A.M. — 6 P.M.



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Acknowledgements

Spring Symposium Organizing Committee:

Amorette Barber (Chair)
Sarah Porter (Co-chair)
Virginia Beard
Rhonda Brock-Servais
Stephanie Buchert
Mark Hamilton
Evan Long
Kat McCleskey
Mike Mergen
Jackie Secoy
Jessi Znosko
Crystal Anderson

The members of the Spring Symposium Organizing Committee would like to thank the following organizations on campus for support:

Academic Affairs
Office of Student Research
Cormier Honors College for Citizen Leaders
College of Graduate and Professional Studies
Cook-Cole College of Arts and Sciences
College of Education and Human Services
College of Business and Economics
Alumni and Career Services
Office of Admissions
Center for Faculty Enrichment (CAFÉ)

Opening Remarks - Dr. Larissa Smith Fergeson

8:15 – 8:45 A.M. Greenwood Library Atrium



Larissa Smith Fergeson is a Professor of American History and has been at Longwood for 19 years. Since January 2018, she has served as Provost and Vice President of Academic Affairs. In this role, she is chief academic officer and is responsible for Longwood's five colleges, the library, academic programs, and outreach centers.

Prior to becoming Provost, Dr. Smith Fergeson served as Associate Provost for Outreach and Initiatives, in which she worked closely with the Longwood Center for the Visual Arts, the Moton Museum, and Hull Springs Farm. From 2014-2016, she served as vice-chair of the Academic Core Curriculum Committee, which led the development of Longwood's new general education curriculum, called Civitae. She also chaired Longwood's Faculty Senate from 2010-2013.

Dr. Fergeson's research focuses on the civil rights movement in Virginia. She serves as university liaison to the Moton Museum, Virginia's only civil rights National Historical Landmark, located here in Farmville. She also was the lead historical consultant for the museum's award-winning exhibit "The Moton School Story: Children of Courage," which opened in April 2013, and author of the exhibit guide. She is currently co-director of a grant from the Institute of Museum and Library Services for the Moton Young Visitors Project, which will help to enhance the museum experience for visitors in grades 4-8.

Fergeson loves to teach. She continues to offer summer teacher workshops at the Moton Museum and at the Virginia Museum of History and Culture. When she gets to teach Longwood students, she teaches courses in United States, African American, and Virginia history.

Fergeson earned her MA and PhD in American History from Emory University in 2001 and her BA in Political and Social Thought from the University of Virginia in 1993. She is a native of Fairfax County, Virginia, and lives here in Farmville.

Opening Remarks - Sarah Karamarkovich

8:15 – 8:45 A.M. Greenwood Library Atrium



Sarah Karamarkovich (Kessler) graduated from Longwood University in 2015 with a BS in Psychology and BS in Mathematics. She earned her MS in Educational Psychology in 2017 from North Carolina State University. Sarah is still at NC State and is currently working on her PhD in Educational Psychology and Masters of Statistics. In 2017, Sarah received the National Science Foundation Graduate Student Fellowship.

Sarah's research focuses on mathematics cognition, development, and motivation in elementary students. It can be broken down into three main areas: fraction misunderstandings and how certain errors co-occur; patterns of mathematics motivation throughout the school year; and the role of emotions in mathematics. She is interested in studying how these phenomena change throughout the school year and develop over time to understand what influences mathematics achievement by looking at the multifaceted aspects of student characteristics.

Office of Alumni and Career Services 8:45 A.M. – 4:30 P.M.

Kyle Hodges, Assistant Director of Campus Career Engagement, will be at table in the Blackwell Ballroom and the Upchurch University Center to help with career and grad school related needs. Any questions regarding networking in your field, resumes, job/grad school application documents, or career opportunities can be discussed by visiting Kyle. Please consider stopping by to connect!

Kyle will be available for consultation in the Blackwell Foyer from 8:45 A.M. -2:00 P.M., and in the Upchurch University Center (at the Graduate Symposium Registration table) from 2:00-4:00 P.M.

Digital Commons Information Tables 7:30 A.M. - 6:00 P.M.

Once students present their research, they (along with faculty) can see a demo of Digital Commons, Longwood University's digital repository, and learn more about how to submit their research. Work included in the Digital Commons is accessible via Google and major search engines, and becomes findable through the Digital Commons Network.

Library Staff will be available for consultation in the Blackwell Foyer from 7:30 A.M. – 4:00 P.M., and in the Upchurch University Center (at the Graduate Symposium Registration table) from 1:00 - 6:00 P.M.

https://libguides.longwood.edu/home/digitalcommons

Awards Ceremony, 12:30 P.M. – 1:00 P.M., Bedford Atrium

Please join us as we acknowledge and celebrate our students who have gone above and beyond in their pursuit of research and creative inquiry! The awards ceremony will include the winners of the INCITE Journal of Undergraduate Scholarship awards, and students who are being recognized with the Longwood Excellence in Research and Inquiry Award.

Students who have been recognized with an award are noted by the colored ribbons on their name badges. Projects that have been published in INCITE are noted in the program.

The different colors of the Award Recipient ribbons indicate the following achievements:

Light Blue- Participated in an intensive research program, such as Longwood's PRISM or CURIO program, or a Research Experience for Undergraduates outside of Longwood University

Dark Blue- Presented research at a scholarly conference or had a performance or exhibition of creative work outside of Longwood University

Red- Published an article in a peer-reviewed scholarly journal or received external funding to support an independent research and inquiry project

Green- Completed a Senior Honors Research Project at Longwood University

Yellow- Published in INCITE, the undergraduate research journal for the Cook-Cole College of Arts and Sciences at Longwood University



Oral Presentations: Senior Honors Research and Cormier Honors College Students, 9:00AM-10:30PM, Ruffner 115

Senior Honors Research Presentations

9:00AM – Mary Zell Galen (Faculty Mentor Dr. David Coles), "Response to the Great Vermont Flood of 1927"

9:20AM – Jessica Smith (Faculty Mentor Dr. Timothy Coffey), "Position and Time: Examination of LESS Scores for Division 1 Basketball Players"

9:40AM – Zachary Morgan (Faculty Mentor Dr. Andrew Yeagley), "Investigating the Binding Energies of Paraben and Paraben Derivatives with the Estrogen Receptor"

Cormier Honors College Presentations

10:00AM – Abigail Pack (Faculty Mentor Dr. Brandon Haffner, ENGL 165) "The Relationship between Rape Culture and Rap Music"



Oral Presentations: PRISM, 9:00AM-12:30PM, Ruffner 116 Perspectives on Research in Science and Mathematics

9:00AM – Brianna LaFratta (Faculty Mentor: Dr. Maxwell Hennings), "An Analysis of Neurogenesis in a Mouse Model of Chemotherapy-Related Cognitive Impairment"

9:15AM – Joshua Walker (Faculty Mentor: Dr. Benjamin Topham), "Chemical control of single molecule electronics"

9:30AM – Meghan Hall (Faculty Mentor: Dr. Erin Shanle), "Investigating the effects of cancer mutations on the activity of p300"

9:45AM – Caitlin Harris (Faculty Mentor: Dr. Erin Shanle), "Investigating the effects of cancer mutations on the MRN complex in yeast"

10:00AM –Catherine Swinsky (Faculty Mentor: Dr. Brandon Jackson), "Shake a tail feather: finding the function of bird tails in slow flight"

10:15AM – Justin Moore (Faculty Mentor: Dr. Julian Dymacek), "Extended Applications of Distributed Non-Negative Matrix Factorization"

10:30AM - Break

10:45AM – Corri Calandra (Faculty Mentor: Dr. Jonathan White), "Synthesis of a cancer-targeting, choline- appended Pt anticancer therapeutic and characterization of its DNA target binding"

11:00AM – Brady Knight (Faculty Mentor: Dr. Thomas Wears), "The Geometry of Curves in Surfaces in 3-dimensional Lie Groups"

11:15AM – Sarah Elsakr (Faculty Mentor: Dr. Sarah Porter), "Spectroscopic and Chemometric Analysis of Petroleum Products for Forensic, Environmental, and Industrial Applications"

11:30AM – Alexis Wayland (Faculty Mentor: Dr. Troy Purdom), "Hyaluronic Acid Expression and Overtraining"

11:45AM – Charlotte Pfamatter (Faculty Mentor: Dr. Kathy Gee), "Evaluating Control and Mitigation Techniques for Mosquitoes in Rainwater Harvesting Systems"

12:00PM – Curran Atkinson (Faculty Mentor: Dr. Kathy Gee), "Best Treatment for Mosquito Larvae in Rainwater Harvesting Systems"



Oral Presentations: GAND 105 Students, 9:00AM-12:00PM, Bedford 209

Faculty Mentors: Dr. Wade Lough and Dr. Keith Cummings

Project: The Story of an Everyday Object

9:00AM- Kaitlyn White, Sarah Via, Phoebe Bills, Ethan Solga, "Comics"

9:20AM- Jessica Barker, Ann Summers, Rajah Allen-Cooper, Tayla Breeden "Camera"

9:40AM- Sarah Scott, Kaila Owens, Jacob Wasson, Jerian Brooks, "Credit Card"

10:00AM- Sydney Taylor, Brittany Davis, Ella Goodman, Crimson Johnson, Emily Cutliff, "Dolls"

10:20AM- Lauran Pitrone, Ran Tingen, Tillie Trudeau, Jaren Hollandsworth, "Cell Phones"

10:40AM- Jaelon Hairston, Zachary Westbrook, Sierra Walz, Kai Allen, Solian Stromberg-Brusco, "Alarm Clock"

11:00AM- Katherine Cameron, Stephen Bowen, Keelyn Haarhoff, Danielle Macvaugh, "Dishwashers"

11:20AM- Jordan Maes, Karina Montegross, Kristina Moralez, Christopher Hartley, "Dictionaries"



Oral Presentations: BIOL 455 Students, 9:00AM-10:00AM, Martinelli Board Room

Faculty Mentor: Dr. Sujan Henkanaththegedara

Project: Invasive Species Biology

9:00AM- Saveya Patterson, Sarah Kamen, Erica Harris, Hartley Thacker, "Invasive Species: The Cunning Killers"

9:20AM- Alex Anderson, Rana Haboush, Angelica Romero, "Behind the scenes; how invasive species impact native species, ecosystems, and us"

9:40AM- Taylor Clements, Aryana DiPippa, Sam Kane, Tiffany Yun, "The Future of Invasive Species"



Oral Presentations: BIOL 251 Students, 10:00AM-12:00PM, Martinelli Board Room

Faculty Mentor: Dr. Sujan Henkanaththegedara

10:00AM- Chriss Fish, Hunter Ratliff, Braxton Harrup, Troy Clift, "Utilizing Macroinvertebrate Assemblages as a Proxy for Water Quality"

10:25AM- Ian Castelow, Carrie Reaver, Ali Bello, "Effects of Physical and Chemical Parameters on Temporary Pool Communities in Lancer Park"

10:50AM- Natalie McNeal, Caroline Fornili, Jayla Beechaum, Isai Perez, "The Life-history and ecology of *Procambarus acutus* at Lancer Park in Farmville, Virginia"

11:15AM- Hunter Croom, Hunter Vaughan, Diego Sifuentes, Stuart Ehrlich, "Differences of community composition of small terrestrial organisms between grassland and forest in Lancer Park"

11:40AM- Thomas Hoke, Summer Kirby, Rian Blakesley, Elijah Maney, Antonio Robertson, "Daily Activity Patterns of Avian Communities in Lancer Park"



Research Presentations: Theatre 448, 9:00AM-11:00AM, CSTAC Lab Theatre

Faculty Mentor: Dr. Ronda Scarrow

9:00AM- Everett Carneal, Meg Coughlin Abigail Deguzman, Madison Harold, Brooke McGowan, Courtney Overton, Devon Tinius, Jenny Roegner, Payton Vernier "Facebook-Friend or Enemy" 9:45AM- Morgan Bunn, Mariem Bennerzouk, Kinley Johnson, Kaitlyn Watson, Danielle Moore, Camryn Carter, "Off of the Pages and Onto the Stage" 10:15AM- Taylor Smith Taylor Morgan, Samantha Parrish, Natalie Smith, Lindsey Belt, Kathryn King, Emily Dratzer, Emili Finn, Dequana Moore, Booke Harris, "Creativity in the Classroom" 10:45AM- Madelyn Lazorchak, Kelcy Chance, Brittaney Bonner, "The Arts and Learning"



Research Posters: English 165, 9:30AM-12:30PM, Greenwood Library 209 A/B

Faculty Mentor: Dr. Scott McDarmont Project: English 165 Research Projects

Britney Beverly, Phoebe Bills, Stephen Bowen, Tayla Breeden, Allison Brown, Austin Buisset, Jim Carroll, William Carter, Christian Conner, Danielle Eskow, Macy Franchebois, Aleeya Gibson, Tyler Glanzman, Haley Gordon, Kylie Green, Jaelon Hairston, Bethany Holzknecht, Bri Huff, Jeremy Jaquier, Victoria Kinker, Taylor Lazzeroni, Jonas Long, Leah Lowe, Abby Mills, Taylor Moffett, Stella Morris, Miranda Mozingo, Nick O'Keeffe, Kaila Owens, Samuel Perry, Mads Pfeiffer, Jessica Roop, Paxton Rountree, Abbyrose Schlotterer, Aubrie Shelton, Jacob Simon, Olivia Skinner, Christina Smith, Macesin Smith, Haley Stables, Matt Steel, Addison Steeley, Ryan Taylor, Alyssa Thomas, Danielle Thomas, Tyler Thomas, James Tierney, Zara Tirrell, Sierra Walz, Liam Wells, Ethan Wentze, Evan Whittey



Oral Presentations: Visual Arts Senior Students, 11:00AM-12:30PM, LCVA Longwood Center for the Visual Arts

11:00AM: Nicole E. Taylor, "Women's Health"

11:10AM: Jennifer Raven, "Pretty, Ugly" (*Published in INCITE: Journal of Undergraduate

Scholarship)

11:20AM: Hope Irvin, "The Old Sketchbook Project"



Posters: Athletic Training, Psychology, Sociology, Biology, Political Science, Prince Edward High School, 9:00-10:00 A.M., Blackwell Ballroom

Poster Numbers: 1 - 15: Biology 250 (Faculty mentors: Dr. Consuelo Alvarez and Dr. Erin Shanle)

- Jada Motta, Brian White, "A survey of yeasts in the exudates of Longwood trees"
- Kathryn Hedrick, Jessica Belcher, "The Presence of Different Species of Yeast on Raspberries"
- Hannah Dodson, Briana Scott "Isolation from a non-organic potato"
- Cullan Wadsworth, Alec Abdalah, "Identifying Species of Yeast in Plums"
- Alexis Kesterson, Julie Fahy, "Isolation of Yeast from Potatoes"
- Sophie Kidd, Alexis Nester, "Isolating Environmental Yeasts from Post-Rain Puddle Water"
- Ashley Coddington, Matthew Jones, Jacob Jennings, "Investigating microbial diversity at Lancer Park"
- Elizabeth Putzig, Morgan Lucas, "Comparing microbial diversity across Lancer Park"
- Rebecca Aylor, Ivy Shifflett, Brionna Woolridge, "Comparing microbial diversity across Lancer Park"
- Griffin Mayo, Charlotte Pfammatter, "Comparing microbial diversity across Lancer Park"
- Coleman Behne, Antonio Robertson, "Comparing microbial diversity across Lancer Park"
- Jessica Moore, Makayla Starman, "Comparing microbial diversity across Lancer Park"
- Chloe Finlay, "Comparing microbial diversity across Lancer Park"

Poster Numbers: 18 - 40: Prince Edward County High School Students (Faculty Mentors: Dr. Amorette Barber (Longwood University), Dr. Michael Wolyniak (Hampden-Sydney College), Mrs. Sarah Fulcher, Ms. Amber Collins, and Ms. Torian Jones (Prince Edward County High School))

- Matthew Bates, Ryan Garrett, Antonio Parran, Kennith Toney, "The effect that a drainage pipe has on water quality"
- Anasia Booker, Nakyla Davis, Amir Gordon, Brianna Perkins, "The effect of distance from the drainage pipe on water quality"
- Hunner Bosher, Jahiem Farrow, Cody Wooten, "Water quality improves farther away from the drainage pipe"
- Wyatt Edwards, Javin Ford, Jose Garcia, Deontray Woodson, "The effect of depth on water quality"
- Abbigail Moore, Lynae Pearl, Zanayiah Threatt, "The effect of depth on water quality"



- Allyson Lucas, Matthew Swanson, Breanna Verschaeve, Saad Khan, Charlie Swanson, Logan Tobias, "Identification of fecal coliform through indicator organisms in local waterways"
- Laniya Green, Chaniya Parker, Mattison Kinne, Jake Simon, Daven Langhorne, "Investigating Microbial Diversity in Prince Edward County Waterways"
- Viviana Rios, Emily Sansalone, Joseph Raymond, Tim Slater, "Identifying bacteria that correlate with fecal coliform in local waterways"
- Christopher Long, Nathan Hamilton, Meera Mishra, Caleb Camp, Mason Kinne, Alia Walker,
- "Identifying total coliform bacteria in Prince Edward High School waterways"
- Meghan Williams and Lacy Lopez, "The effect of climate on microbial diversity"
- Ellis Jones and Hannah Reamer, "The effect of sediment composition on a local waterway"
- Jalynn Hicks and Madison Lehman, "The effect of warmer temperature on microbial growth in water"
- Clare Callhoun and MacKenzie Morris, "Microbial testing reveals *Enterococcus* in Prince Edward Waterways"
- Ethan Tobias, Ryan Garrett, and Antonio Parran, "The effect of distance from the source on microbial growth"
- Nia Lee and Sabrina Davis, "Citrobacter vs. Klebsiella at different locations of local creek"
- TJ Williams, Travare Patterson, Breana Sealey, Jatiah Porter, "Water quality difference between locations in the Prince Edward water way stream"
- Jake Nix, Deovan Johnson, Demurie Banks, Ty'vontray Brooks, "What team CD found in Prince Edward waterway"
- Travon Johnson, Zaaheim Robinson, Jason Marsh, Da'shya Scott, Ke'Mya Rux, "Contrasting conductivity; Investigating water quality from different locations in the Prince Edward waterway"
- Bret Purser, Clay Stanley, Preston Sutton, Camryn Newcomb, "The TRUTH about our water: Examining the water quality of the Prince Edward County Waterways"
- Josh Huddleston, Austin Davis, Morgan Smith, Daiavon Richardson, "Analyzing the dissolved solids of the Prince Edward Waterways"



Poster Numbers: 41 - 50: Psychology 461 (Faculty Mentors: Dr. Sarai Blincoe and Dr. Stephanie Buchert)

- Ashley Johnson, Connor Munn, "Changing Attitudes towards Sexual Minorities"
- Sydney-Ann Cash, Alyssa Fitzwater, Sara Stephens "Hire or No Hire? The Effect of Name Presentation on the Likelihood of Hiring"
- Taylor Titi, Brandy Tharpe, "The Effect of Sugar on Taste Preference"
- Kennedy Mihailoff, Samantha Solomon, Michael Swiney, "To Catch a Cyberbully
- Clayton Hoffmeister, Ryan Johnson, Haley Tucker, "The Effects of Smell on Math Achievement"
- Teagan Cassity, Leah Howard, "The effect of interacting with different types of animals on stress levels"
- Amelia Czopek, Jessica Guevara, Cassidy Rollins, "Celebrity Brands: Do People Really Buy Them?"
- Victoria Higginbottom, Allison Marrin, "The effect of relationship type on perceived seriousness of violence"

Poster Numbers: 51-74: Sociology 461 (Faculty Mentor: Dr. Jake Milne)

- Samantha Heaney, Abby Lichty "Policy Analysis of Title IX"
- Sophie Zarski, "Affordable Housing in the United States"
- Tyler Chadduck, Courtney White, "Rapid and Extensive Response to September 11, 2001: A Review of the USA Patriot Act"
- Rosemary Ilang, "Role Conflict and the elite Student-Athletes"
- James Robertson, "Can Bullying Predict Substance Abuse"
- Helena Carter, Berkeley Elliot, "Age and Attitudes towards Corporal Punishment"
- Autumn Hollingsworth, Emily Roach, "Separation of Church and State in Public Schools"
- Kathryn Miller, Annie Boros, "Policy Analysis: Title IX"
- Tamera Edley, "Much Ado about the Family Violence Prevention and Services Act"
- Vanozzieo Phillips, "The Employment Non-Discrimination Act"
- Amanda Griffiths, "The Family and Medical Leave Act of 1993: Impacts and Analysis"
- Eli Mercado, Christopher Boydstun, "Perception of cheating in sports"



- Jamesha Watson, Kayla Barner, "The Fair Housing Act: A Policy Analysis"
- Jordan Clark, Sydney Gay, "Is Social Disorganization Still Applicable in Today's Society"
- Tracy Davis, Kira Rivers, "FERPA"
- Jada Clark, Dorinda Fields, "State Sex Education Policies: Comprehensive and Abstinence Education"
- Sarah Kaufman, "A Change for the National Drug Control Policy"
- Haven Hogan, "The Effects of Relocation on Relationships, Adjustment, and Coping"
- Lauren Atkins, "The Health Insurance Portability and Accountability Act"
- Victoria LeFevre, "Correlations between socio demographics and the usage of prescribed anti- anxiety and anti- depressant medications among college students"
- William Shiels, "Campus Involvement and Campus Retention: Does it Correlate?"
- Caitlin Rife, Catherine Elfers, "Medicaid Policy Analysis"
- Megan Hurley, Meghan Simmons, "Comparative Policy Analysis"

Poster Numbers: 75: Sociology Independent Research (Dr. Virginia Beard)

- Courtney White, "Rising Reason to Concern or Rising Just Concerns: An Analysis of Cults in the 1970s"

Poster Numbers: 76-78: Political Science 461 and 305 (Faculty Mentor: Dr. Scott Cole)

- Kaieshia Cole, "Why Millennial College Students Support Title IX"
- Joseph Hyman, "Why Foreign Aid Doesn't Work"
- Megan Garret, "An Overview of the Determinants of Decreased Voter Participation in College Students"

Poster Numbers: 79-81: Athletic Training 470 (Faculty mentor: Dr. Meg Thompson)

- Samantha Wangner, "Phys Ed Perceived Importance of Concussion Ed/Training & RTL"
- Tara Tate, "Physical Educators Comfort of Concussion Education Training"
- Jenna Pierson, Lindsey Stokes, "Physical Educators' Knowledge on Concussion Training, Education, and Return to Learn Policies"



Posters: Biology, Art, History, Psychology, Criminology, Nursing, Therapeutic Recreation, 10:15-11:15 A.M., Blackwell Ballroom

Poster Numbers: 1- 3: Art/Biology 395 (Faculty mentor: Dr. Mark Fink)

- Morgan Pearce, Nicole Copenhaver, "The Dangers of Balloons"
- Rana Haboush, Angelica Romero, Taylor Mattison, "Climate Change Impacts"
- Jessica Newcomb, Derek Jones, "The Evaluation of Single Use Plastics"

Poster Numbers: 4- 8: Biology 360 (Faculty mentor: Dr. Adam Frannsen)

- James Gallagher, Jessica Mick, Adrianna Dogget, "Critical period of asymmetrical wing development in overcrowded populations of *Drosophilia*"
- Kathryn Bates, Abigail Harris, Tabitha Lenhart, "Behavioral Responses of *Drosophila melanogaster* Reared in Varying Crowding and Sucrose Levels"
- Caroline Carter, Shanyia Chandler, Talbot Thames, "Using *Drosophila melanogaster* fluctuating asymmetry to identify the effect of excessive sucrose intake"
- Makayla Davis, Oyindamola Olayinka, Brianna LaFratta, "The relationship between Sucrose levels and Fruit fly symmetry"
- Michael Anderson, Debbie Pitt, Earl Long, "The effects of varying sucrose levels on fluctuating asymmetry of crowded *D.melanogaster* population"

Poster Numbers: 9- 10: Biology 473 (Faculty mentor: Dr. Brandon Jackson)

- Oyindamola Olayinka, Brandon Hastings, Madison Rea, Samuel Kane "Testing the escape performance of zebrafish in various age groups"
- Catherine Swinsky, Kayla Cooksey, Uzma Gunter, Zachary Sergi "Biomechanics of Bird Tails in Flight"



Poster Numbers: 18 - 25: Criminology 461 (Faculty Mentor: Dr. Virginia Beard)

- Alyssa Buffington, Joseph Robertson, Taylor Evans, "Impact of Race, Income, & Sex on the Frequency of Police Stops in a Public Area"
- Brianda Chavis, Melanie Smith, "Street Stops in a 12 Month Period as a Function of Race and Sex Factors"
- Abigail Vaugh, Suban Farah, Benjamin Lambert, "Views Toward Police Response: Age, Race, and Geographical Location"
- Ryan Spivey, Tyler Williams, Brianna Booker, "The Impact of Sociodemographics On Views Towards Police Stops"
- William Russell, Brandon Whitmire, Denzel Speed, "The controversy behind motor vehicle police stops and sociodemographic characteristics in the United States"
- Gregory Ramsey, Heidi Karweik, Molly Craig, "The Impact of Race, Sex, and Urban/Non-Urban Residency on Perceptions on Excessive Actions During Police Stop"
- Brett Sablack, Nicholas Hylton, Zoe Frank, "The Effects of Population Density, Race, and Sex on Perception of Police Behavior During Contact"

Poster Numbers: 26 - 50: History 461 (Faculty mentors: Dr. David Coles and Dr. Steven Isaac)

- Savannah Dyer, "The Significance of the Defense of Bastogne"
- Amanda Topping, "The Influence of Jacksonian Democracy on the Art of Lilly Martin Spencer"
- Sydney Hughes, "Differences in Policies Surrounding World War II and Vietnam War"
- Jennifer Melton, "The Origins of the Cold War"
- Tyler Culbertson, "British-Confederate Diplomacy"
- Catharine Billings, "Witchcraft in Scotland During the Renaissance"
- Matthew Roos, "The French-Israeli Alliance in the 1950s"
- Katherine Loden, "Allies in a Revolution"
- Eliza Glancy, "The Regressive Reign of Mary Tudor"
- Gregory Buckner, "Britain's Role in the Falklands War"
- Celia Kennesy, "American Indian Boarding Schools"



- James Cristoph, "Nazi Germany's Approach to Air Warfare and the Battle of Britain"
- John Garrett, "Discourse on the Ukrainian Famine"
- Rachel Hazelwood, "The Triangle Shirtwaist Factory Fire"
- Sara Reese, "Battle of Saratoga"
- Alan Creager, "Our Turn to Strike: Fleet Admiral Ernest J. King and his influence on Allied strategy in the Pacific"
- Tim Stein, "Nat Turner's Rebellion"
- William White, "East Coastal Pirates in the North America and the Caribbean"
- Brielle Hargrove, "The Riddah Wars"
- William DeBoeser, "Catalan Independence for Regional Autonomy"
- Ian Mansfield, "Concerning the French Directory and the Passive Citizen"
- Zach York, "Cuban missile crisis"
- Cheyanne Woodard, "The Survival of the Enslaved Black Woman"
- Louis C. Gould III, "Prince Edward County decision to close their schools"

<u>Poster Numbers: 51- 58</u>: Psychology 461 (Faculty Mentors: Dr. Sarai Blincoe and Dr. Stephanie Buchert)

- Deja Harrison, Deja Mitchell, "Technology Use and its Influence on Conformity"
- Austin Funk, Samara Gall, Megan Hlavaty, "The Effects of Cell Phones on Gameplay Enjoyment and Frustration"
- Sarah Hughes, Cameron Pelletier, Taylor Carrington, "The Effects of Gender and Facial Expression on the Perception of Personality Traits"
- Madison Hill, Leonie Verstraete, "The effects of perception of "breathable air" on stress"
- Asia Christmas, LeAnne Harris, Erica Lampe, "The Effect of Note Taking Strategies and Gender on Word Recognition"
- Ciarra Joyner, Hailey Richter, "Disgust and its Effects on Anticipation"
- Brittney Branch, Javier Syndor, "Do Aversive Stimuli Influence Consumer Behavior"



Poster Numbers: 59 - 74: Nursing 230 (Faculty Mentors: Prof. Theresa Kennon and Dr. Pamela Crowder)

- Cameron Mann, Cheyenne Brown, Lauren Richardson, Kalie Creasy, Taylor Keeler, "The benefits of Hand Washing Over Using Foam Sanitizer"
- Megan Tate, Tiffany Carter, Ashton Seifert, "Medical errors related to sleep deprivation and longer shift lengths"
- Jimmy McDonnell, Kelly Jeter, Courtney Frazier, "Pressure Ulcers"
- Logan Callahan, Sarah Saunders, Karissa Bright, "Evaluating Patient Mobility"
- Maureen Dalton, Kasey Brill, Carolina Leone, Hannah Van Hoose, "Depression Screening in Adolescents"
- Hannah-Grace Hickman, Brianna Webb, Jill Martin, Lindsey Walker, "Effects of Non-Pharmacological Interventions on Migraines"
- Emma Sanford, Cailynn Anderson, Emily Roberts, Kaitlyn Yasnowsky, "Nursing Discrepancies in Cultural Care"
- Sara Jane Anderson, Molly Mancini, Shannon Lyons, Landen Horton, "Best Wound Care Practices"
- Hannah Arnold, Amanda King, Sarah Spencer, Taylor Tyree, "Impacts of Copper Linens on Infection Control"
- Crystal Rosenbaum, Cameron Roblewsky, Mary Waldrop, Taylor-Erin Evitts, "A complementary medical approach to treating chronic pain"
- Ashley Webb, Jessica Overby, Karlie Walter, Ashlyn Hall, Meghan Griffin, "The Effect of TED Stockings on Circulation and Blood Clotting"
- Kaitlin Harris, Kaitlyn Huff, Katie Loomis, Madelyn Descutner, "Check for Latex"
- Lauren Williams, Savannah Johnson, Lauren Beaudoin, Carrie Sutliff, "The Effects of Music on Dementia Patients"
- Bailey Dallas, Searra Richardson, Emily Arrington, Sydney Mitchell, "Best Preventive Care for Pressure Wounds"



<u>Poster Numbers: 75 - 84</u>: Therapeutic Recreation/HARK (Faculty Mentors: Dr. Susan Lynch and Dr. Kristen Whitely)

- Samantha Routzahn, "Effects of Adventure Therapy versus Support Groups on Emotional Stability for Veterans with PTSD Transitioning into civilian Life"
- Ashton Bishop, Casey LeMaster, "Individuals in adult day services with chronic pain who attend a yoga program, will experience increased leisure participation when compared to those who use medication alone to manage pain"
- Miki Martin, "Building Social Skills and Slaying Dragons: A Study of the Effects of Tabletop RPG Therapy on Adolescents with Autism Spectrum Disorder"
- Maya El-Jor, Alexis Pullin, "Leisure Education and Psychoeducational Interventions used for adolescents with Self-harm Behaviors and Suicidal Ideations"
- Morgan Scearce, "Effects of Horticultural Therapy in Long Term Care Facilities on Behavioral and Psychological Symptoms of Dementia"
- Joanna Dafin, Claire Venn, "Humor Therapy to Alleviate Depression"
- Haley Seefeldt, Cheyenne Bryant, "Aquatic Intervention for Children with Cerebral Palsy: The overlooked domain"
- Scott Simmons, Emily Fischer, "An Evidence Based Protocol for the Use of Mindfulness for Young Adults with Eating Disorders"
- Kasey Laign, Mariah Ingegni, "Improving Quality of Life for Older Adults with Arthritis"



Posters: Cormier Honors College for Citizen Scholars and Independent Research Students, 11:30-12:30 P.M., Blackwell Ballroom

Poster Number: 16 - 17 (Electronic): Independent Research and Cormier Honors College

- Savannah Dyer (Faculty Mentor: Dr. Elif Guler), "Women Police Officer's Rhetorical Strategies to Establish Authority in Law Enforcement"
- Elizabeth Bradley (Faculty Mentor: Dr. Barbara Newton, HIST 370), "IAN for My Future Classroom"

Poster Numbers: 18 - 58: Cormier Honors for College Citizen Scholars

Strawberries and Raspberries"

- Elizabeth Bradley (Faculty Mentor: Dr. Ronda Scarrow, THEA 448), "Multiple Intelligences, Multiple Methods, Multiple Arts"
- Brianna Cervante, Erin Axeman (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250), "Comparison of Yeast Grow
- Nicole Barclay, Stephanie Willis (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250), "The Morphological and Biochemical Characterization of Yeast Growth on Berries"
- Carrie Reaver, Joshua Walker (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250), "Comparing Yeast Occurrence and Diversity in Prince Edward County Public Waters"
- Angelina Sherba, Layne Fadely, Cameron Toddy (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250),
- "Yeast Isolation and DNA Extraction from Soil Samples in Farmville, Virginia"
- Kirsten Bauer, Sage Church (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250), "Yeast Presence in Farmville Waterways"
- Arjhane White, Jevaun Thaxton (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250), "Yeast Growth on a Longwood University Tree"
- Cecily Hayek, Abagail Pack (Faculty Mentor: Dr. Consuelo Alvarez, BIOL 250), "The Analysis of Yeast in Soil of the High Bridge Trail"
- Kelsey Thornton (Faculty Mentor: Dr. Wade Znosko, BIOL 303) "A Direct Comparison between the Morphology of Organisms to Illustrate Evolutionary Trends"



- Kathyrn Kosiorek, Cecilie Elliott, Megan Bland (Faculty Mentor: Dr. Amorette Barber, BIOL 404),
- "Ability of Flavonoids to Mimic the Estrogen Receptor to Drive Myeloid Derived Suppressor Cell Differentiation"
- Alyssa Oppedisano (Faculty Mentor: Dr. Jonathan White, BIOL 412), "RNA World Hypothesis"
- Ciara Houli (Faculty Mentor: Dr. Ann Cralidis, CSDS 460), "A Look into the Research of Chronic Traumatic Encephalopathy"
- Sarah Saunders (Faculty Mentor: Dr. Adam Blincoe, CURIO), "The Philosophical Argument of Physician-assisted Suicide"
- Megan Garrett (Faculty Mentor: Dr. Tom Plahovinsak, ECON 411), "The Hidden Unemployed: A Study of Discouraged Workers in the United States"
- Danyelle Henderson (Faculty Mentor: Dr. Dorothy Suskind, EDUC 487), "Lessons in Critical Pedagogy"
- Emma Carroll (Faculty Mentor: Dr. David Magill, ENGL 215), "Overcoming Sonny's Blues"
- Alaina Bierman, Gavin Edwards, Sofia Perez (Faculty Mentor: Dr. Chris McGee, ENGL 380), "Reading Like A Kid"
- Shalise Meadows (Faculty Mentor: Dr. Gena Southall, ENGL 483), "Missed Opportunities in Kindergarten Writing Instruction"
- Arleigh Wood (Faculty Mentor: Dr. David Magill, ENGL 490), "The Bluest Eye: How Racism Led to Insecurity a Inadequacy"
- Samuel Morgan (Faculty Mentor: Dr. Kathy Gee, ENSC 380 "Cod Fishing in the Atlantic"
- Jesse Plichta Kellar (Faculty Mentor: Dr. Sarah Varela, GERM 330) "The impact of castles in Germany from medieval times to the present day"
- Pamela Ridpath (Faculty Mentor: Dr. David Geraghty, HIST 300), "Integrating Technology into the History Classroom"
- Hannah Moonis (Faculty Mentor: Dr. David Geraghty, HIST 300), "Challenges Facing Social Science Teachers in Middle and Secondary Schools"
- Danyelle Henderson (Faculty Mentor: Dr. Larissa Fergeson, HIST 320), "Teaching Hard History"



- Tanna Turner (Faculty Mentor: Dr. Amanda Blaisdell, HLTH 314), "Perception of Love and Beauty: A Case Study on College Students with Exceptionalities"
- Alexis Tisdale (Faculty Mentor: Dr. Linda Lau, ISCS 373), "OpenSAP: Managing Business Enterprise Systems Intelligently"
- Madison Cutten (Faculty Mentor: Dr. Nikki Hall-Atkinson, KINS 412), "Examining the Cost Effectiveness of Faculty and Staff Wellness Programs on Health Expenditure"
- Victoria Allen (Faculty Mentor: Dr. Linda Wright, MARK 480), "Honda and Ford in the Media"
- Kelly Almeida (Faculty Mentor: Dr. Hua Meng, MARK 481), "Emerging into a Global Market: Costco in Ireland"
- Hannah Prem (Faculty Mentor: Dr. Linda Wright, MARK 482), "Marketing to Millennials"
- Madison Hommey (Faculty Mentor: Dr. Virginia Lewis, MATH 313), "Scratch Programming Game for Students Learning to Count Money"
- Montana Nelson (Faculty Mentor: Dr. David Niethamer, Music), "The Alexander Technique in Musician Lives"
- Crystal Rosenbaum, Cameron Roblewsky (Faculty Mentor: Mrs. Jo Ann Davis, NURS 225), "The hidden drug: Sugar"
- Ibrahim Kante (Faculty Mentor: Dr. Scott Cole, POSC 305), "Why Has the Democratic Republic of the Congo Outsourced Its Responsibility to Educate Its People? A Study on How the Inefficiency of the Civil Service Hinders the Capacity of the State" (*Published in INCTE: Journal of Undergraduate Scholarship)
- Haley Schultz (Faculty Mentor: Dr. Lee Bidwell, SOCL 351), "Increasing Parent Child Involvement at a Domestic Violence Shelter Utilizing Family Fun Times Activities"
- Kathryn Brandon, Kacie Reusser (Faculty Mentor: Dr. Aftab Khan, SPED 389) "The Effects of Sensory Integration Therapy on Students with Autism Spectrum Disorder"
- Abigail Mescher, Breanna Smalley (Faculty Mentor: Dr. Aftab Khan, SPED 389), "The effects of music therapy on children with autism"
- Madison Stafford, Brooke Harris (Faculty Mentor: Dr. Aftab Khan, SPED 389), "The impact of Special Olympics on students with disabilities"



- Evelin Salazar (Faculty Mentor: Dr. Susan Lynch, RECR 303), "Breast Cancer Intervention Therapeutic Recreation"
- Maegan Gregory (Faculty Mentor: Dr. Justin Contat, ECON 309), "Can Yield Curves Predict Recessions?"
- Jordan Berkompas (Faculty Mentor: Dr. Robert Marmostein, CMSC 362), "Utilizing Databases to Predict House Prices"
- Abigail Harris, Kathryn Bates, Tabitha Lenhart (Faculty Mentor: Dr. Adam Franssen, BIOL 360),
- "Behavioral Effects of *Drosophila melanogaster* Reared at Varying Sucrose or Crowding Levels in Effect of Wing Asymmetry"
- Nathan Sikora (Faculty Mentor: Prof Jessi Znosko, ANTH 495), "Human Experience of Illness through Metaphorical Comparison"
- Danielle Hess (Faculty Mentor: Dr. Xun Bian, FINA 451), "Financial Status of Students"
- Jamie Wagner, Abigail Johnson, Victoria Shirey and Amber Gordon (Faculty Mentor: Dr. Shannon Salley, CSDS 314), "Parental Guide to Language Disorders"

Poster Numbers: 60 - 78: Independent Research

- Kaitlyn McCleese (Faculty Mentor: Dr. Deborah Durham), "The Influence of Culture on Sleep Paralysis Experiences"
- Aaron Burstein, Garrett Reese, Harrison Runion (Faculty Mentor: Dr. Lacy Klinger), "Psycho-Physical Acting in the Musical Theatre Audition"
- Ashley Johnson (Faculty Mentor: Dr. Timothy Ritzert), "Addressing Mental Health Stigma: Evaluation of an Intervention"
- Dillon Tennis (Faculty Mentor: Dr. Chris Labosier), "Is there and Urban Heat Island (UHI) in Farmville, Virginia?"
- Adam Gyori (Faculty Mentor: Dr. Chris Labosier), "Thermal Safety of Children's Outdoor Play Equipment"
- Elle Richardson, Andrea Soles (Faculty Mentor: Dr. Amorette Barber), "Enhancing the anti-tumor efficacy of chimeric antigen receptor-expressing T cells with naturally occurring plant stilbenes"



- Haley Bresnahan, Adrianna Doggett (Faculty Mentor: Dr. Consuelo Alvarez), "Detecting Genetic Modifications in Common Household Foods in Farmville, VA"
- Madison Trebour (Faculty Mentor: Dr. Jo Morrison), "Physiological Demands of Hard Shoe and Soft Shoe Irish Dancing: A Pilot Study"
- Troy Clift (Faculty Mentor: Dr. Dina Leech), "Using High Frequency Sensor Data to Monitor Organic Matter Fluxes To A Coastal Stream"
- TJ Baumgart (Faculty Mentor: Dr. Dave Carkenord), "Extroversion and Problem Solving"
- Christine Rindfleisch (Faculty Mentor: Dr. Naomi Johnson), "#WhyIDidntReport: Reasons Given for Not Reporting Sexual Violence"
- Regan Standlick (Faculty Mentor: Dr. David Magill), "Men's portrayal in Society and How it Affects Their Mental Health"
- Lauren Johnson (Faculty Mentor: Dr. Benjamin Topham), "Energy level pinning in single molecule electronic devices" (*Published in INCITE: Journal of Undergraduate Scholarship)
- Bethany Adams (Faculty Mentor: Dr. Andrew Yeagley), "Investigation of 3,5 Substituted Paraben Antagonistic Effects in AF-2 Confirmational Changes via Substituted Bisphenol Probes"
- -Garrett Reese (Faculty Mentor: Dr. Lacy Klinger), "Psycho-Physical Acting in the Musical Theatre Audition"



Oral Presentations: BIOL 473, ENGL 305, and Independent Research, 1:45-4:00PM, Ruffner 116

1:45PM – Colin Dominick, Juliana Gordon, Michael Anderson, Theodore Gutches (Faculty mentor: Dr. Brandon Jackson, BIOL 473), "Identifying imbalances in jumping through asymmetric loading"

2:00PM – Kaitlyn Crow (Faculty mentor: Dr. Mary Carroll-Hackett), "Comparing Earthquakes to Sex:

A Poetic Exploration of the Female Body, Sexuality, and Power"

2:15PM – William Kish (Faculty mentor: Dr. Sujan Henkanaththegedara) "The Diversity and Distribution of Spiders (Arachnida: Araneae) along an Urban Gradient"

2:30PM – Brandon Hastings (Faculty mentor: Dr. Brandon Jackson), "Analyzing flight patterns and behavior of dragonflies engaged in aerial territory battles"

2:45PM – Travis Bresnahan (Faculty mentor: Dr. Robert Marmorstein), "An Investigation into Data Remanence"

3:00PM – Karyn Keane (Faculty mentor: Dr. Elif Guler, ENGL 305) "Care, No Matter What: Planned Parenthood's Rhetorical"

3:15PM – Alyssa Pacheco, Sara Robertson (Faculty mentor: Dr. Ian Danielsen), "The Kinship Care Debate: Is New Necessarily Better? A review of protective factors and risk factors in traditional versus contemporary policy approaches to child welfare"

3:35PM – Matthew Bowman (Faculty mentor: Dr. Benjamin Campbell), "Impact that Teacher's Degree Level and Years of Teaching Experience Have on the Concept Model"



Oral Presentations: International Studies 495 and Spanish 350, 1:45-4:00PM, Ruffner 115

Faculty Mentor: Dr. Renee Gutierrez

1:45PM – Abigail Bonilla (INST 495), "Immigration Journeys to the USA"

2:00PM – Ibrahim Maday (INST 495), "Guns, Gangs, and the Border: Overlapping Extensions of Power"

2:15PM – Chaniece Williams (INST 495), "Debating Immigration: Political Tropes in the Echo Chamber of Social Media"

2:30PM – Lacie Ellithorpe (INST 495), "'Will I Be Damaged?' Effects of Being in a Mixed-Status Family"

2:50PM – Cameron Roblewsky, Matthew Waterman, Danielle Weirup, Noemi Guzman (SPAN 350),

"Boom: la explosion de la literatura latino americana"

3:05PM – Kateleen Concepcion, Rebekah Steven Morales, April Escobar (SPAN 350), "El Pos Boom, Camo Pensaban en los 1970s-80s"

3:20PM – Genevra Mullis, Stephany Tropiano, Rita Ewald, Miranda Gomez (SPAN 350), "El Romanticismo no es Romantico"



Oral Presentations: Biology 251, 1:45-3:30PM, Martinelli Board room

Faculty Mentor: Dr. Mary Lehman

1:45PM – Adonel Grubb, Ryan Massey, Brionna Woolridge, "Can soaking seeds in aspirin help plants to overcome stress?"

2:10PM – Katie Hedrick, Jess Moore, Jason Seagraves, Josh Walker, "Effects of Human Activity on Abundance and Diversity of Soil Microfauna Populations in Prince Edward County"

2:35PM – Hannah Meyls, Lindsay Moore, Bailey Teague, Arjahne White, "Bird Feeding Preferences: Seed or Suet?"

3:00PM – Graylin Dalton, Olivia Parisi, Mitchell Sharry, "Effects of Distance from Water Sources on Moss Density and Diversity"



Oral Presentations: GAND Senior and Junior Design Students, 1:45-5:00 PM, Bedford 209

Faculty Mentor: Dr. Wade Lough and Dr. Christopher Register

1:45PM: Haley Tebo, "CompostED"

2:00PM: Alex Feller, "Destrate Productions"

2:15PM: Kamarin Bradley, "DIGILab"

2:30PM: Ronnie Vance, "Head First"

2:45PM: Jeremiah Gilmer, "FishRight Education Campaign"

3:00PM: Courtney Driscoll, "Simply Communicate"

 $3:15 PM: Laura\ Gottschalk,\ ``Allergy\ Survival\ Kit"\ (*Published\ in\ INCITE:\ Journal\ of\ Undergraduate$

Scholarship)

3:30PM: Rachel English, "Bees Matter."

3:45PM: Aiden Waddell, "Senior Project"

4:00PM: Samantha Jones, "The Kitty Cause"

4:15PM: Devin Fields, "College-Map"

4:30PM: Benjamin Sullivan, "Sleep On It"

4:45PM: Rachel Hanson, "Unbox Graphic Design"

Oral Presentations: Visual Arts Student, 3:00-5:00 PM, Stevens 107

Faculty Mentor: Dr. Michael Mergen

Naajamah Jones- Comfort Zones

Theater workshop: Theater Students 1:45-2:45 PM, CSTAC Lab Theater

Faculty Mentor: Dr. Lacy Klinger

Mary Jo Corley, Matthew Howard, "Movement Techniques to Prepare and Actor"



Music Presentations: 1:45PM-4:30PM, Wygal Music Building Molnar Recital Hall

Music 219- Introduction to Recording Techniques; Faculty Mentor: Dr. Roland Karnatz

1:45PM-2:15 PM

Amber Both, "Christmas Gone Wrong"

Zach Fortune, "Monday Morning"

Josh Golub, "Paradise Undone"

Abby Joiner, "Nursery After Hours"

Pierce Johnson, "A Coconut Disaster"

Chad Ukrop, "Nostalgic Sunset"

Hannah Wolverton, "Save it for a Rainy Day"

Independent Projects

2:20-2:30 PM

Sam Taylor- State of Decay

- i. Indeterminacy
- ii. Florescent Blindness

Mya Chambers- Jule Suite

Music 281 – Sophomore Promotional Exam Demonstrations

2:30 - 4:00 PM

Caleb Bright Abigail Joyner Mya Chambers Zach Fortune



Posters: Biology, Integrated Environmental Science, Special Education, Health, Physical Education, Kinesiology, and English 1:45-2:45PM, Blackwell Ballroom

Poster Numbers 1- 15: Biology 326 (Faculty Mentor: Dr. Dale Beach) and Molecular and Cellular Biology (Faculty Mentor: Dr. Michael Wolyniak (Hampden-Sydney College)

- Caitlin Harris, Marcia Lanasa, "Better Gene, Better Beer"
- Morgan Tasseff, Matthew Bowman, Maurice Manchester, "Comparison of gene YAP1 within different brewing yeast strains"
- Grace Freeman, Emily McCartney, Cynthia Castillo, "Best in SHO1: Improved Brewing"
- Brandi Joyner, Haley Bresnahan, Sarah Dooley, "No Stale Ale -- Analyzing the Sequence of SPT10 in Different Brewing Strains"
- Natalie Wood, Ryan Servis, "What the HEK2 is Flocculation?"
- -David Fluharty and Matthew Moody, "Decreasing flocculation of Chico yeast through Flo1 gene protein truncation"
- Cole Burton and Michael Moody, "Decreasing fusel alcohol production at higher fermentation temperatures by protein truncation of the BAT2 gene for the French Saison yeast strain"
- Shaun Everson and Timothy Bryant, "Modification of the FLO1/YOR140W gene for the purpose of increases flocculation in Saccharomyces cerevisiae"
- Blake Martin and David Bushhouse, "Increasing flocculation of S. cerevisiae by the insertion of glucose-dependent ADH2 promoter for the FLO5 gene"
- Harrison Whaley and Damian Martinez, "Decrease of FLO5's unit-a repeat region to decrease the rate of flocculation in S. cerevisiae"
- Eric Bowen and Hunter Weiland, "Increasing the rate of flocculation of S. cerevisiae by insertion of a FLO1 gene and truncation of EMP47"
- Lucio Maestrello and Cory Allgood, "Overexpression of the FLO5 and FLO8 genes in the German Ale S. cerevisiae strain to increase flocculation"
- Ryan Tomlin and Jared Dunlap, "The effects of FLO5 gene deletion on flocculation in Chico strain yeast"



- Hudson Elmore and Anton Kheirani, "The effects of PEP gene deletion on fermentation temperature change and ester production in S. cerevisiae strains"

Poster Numbers 18- 23: Biology 404 (Faculty Mentor: Dr. Amorette Barber)

- Taylor Clements, Erica Harris, Emery Chittenden, Tessa Dewalt, "The role of Capsaicin and [6]-Gingerol in preventing cancer through altering immunity"
- Morgan Tasseff, Maurice Manchester, Zachary Long, "Effects of methylparaben and propylparaben on estrogen receptors"
- Lyndi Earnshaw, Caitlin Harris, Rayven Brown, Jessica Savas, "The effect of ethyl and butyl parabens to mimic estrogen to alter differentiation of myeloid derived suppressor cells"
- Elle Richardson, Taylor Alvey, Jada Russell, Arleigh Wood, "Do Phytoestrogens in the Hops Plant Have the Ability to Signal Myeloid-Derived Suppressor Cells and Drive Cancer Progression?"
- Amanda Moses, Uzma Gunter, Tiffany Yun, Sandra Ghali, "Methyl and Butyl-parabens initiate myeloid derived suppressor cell activity"
- Kathryn Kosiorek, Cecilie Elliott, Megan Bland, "Ability of Flavonoids to Mimic the Estrogen Receptor to Drive Myeloid Derived Suppressor Cell Differentiation"

Poster Numbers 25- 45: Health 325 (Faculty Mentor: Dr. Amanda Blaisdell)

- Andrew Clinton, "Kidney Cancer and Type 2 Diabetes prevention"
- Andrew Clinton, "Biking to Beat Obesity"
- Cody Weinberger, "Hypertension and Type 2 Diabetes"
- Sophia DeFeo, "Ulcerative Colitis and Colorectal Cancer"
- Devon Johnson, "The Teal Ribbon Project"
- Tyler Zier, "Cardiovascular Disease and Arthritis"
- Joelle Harthun, "Prevention Plans for Stomach Cancer and Chronic Atrophic Gastritis"
- Carie Sutliff, "Decrease Blood Pressure and Increase Bone Density"
- Nick Hessler "Cirrhosis and Liver Cancer"
- Gabrielle Huerta, "You've got to Be Kidney-ing Me, I Have Heart Disease?"



- Ashley Ellixson, "Coronary Heart Disease vs. Asthma"
- Kyle Weston, "Chronic Kidney Disease and Diabetic Retinopathy"
- Haleigh Nichols, "Cancer's Side Effect That You Can't See"
- Ieuan Phillips, "Heart Failure and Renal Insufficiency"
- Sara Jane Anderson, "The Suffocating Similarities between COPD and Esophageal Cancer"
- Sarah Banks, "Combating Comorbidities"
- Benjamin Brody, "Comorbidity: Diabetes and Depression"
- Victoria Higginbottom, "Pancreatic Cancer and Type 1 Diabetes"
- Abigail Clark, "Female Reproductive Diseases"

Poster Numbers 46- 50: Health and Physical Education 466 (Faculty Mentor: Dr. Amanda Blaisdell)

- Ben Brody, "Prince Edward Adults Choosing Health (P.E.A.C.H.)"
- Devon Johnson, "The Best Foot Forward Program"
- Taylor Nelson, "A Breath of Hope"
- Kyle Weston, "The Rise in Type 2 Diabetes in Black Women"
- Nicholas Hessler, "Hypertension and Nutrition"

Poster Numbers 51- 52: Kinesiology 387 (Faculty Mentor: Dr. Troy Purdom)

- Lauren Roten, Jeffrey Farriss, Jonathan Anderson, "The Aerobic Capacity and Demographic Profile of Kinesiology Students"
- Lauren Roten, Jordan Howard, Jacob Giles, "Multi-Frequency BIA to Evaluate Whole Body and Joint Inflammation In Overhead Single Segment Division I Collegiate Athletes"

Poster Numbers 53: Kinesiology 470 (Faculty Mentor: Dr. Laura Jimenez)

- Alexandra Rast, Samantha Thedieck, Kaitlynn Hening, Emily Chisarik, Hannah Sutphin, "Effects of Aluni Nu Pre-Workout (TM) on High Intensity Interval Training Exercise"



Poster Numbers 54 - 56: Special Education 389 (Faculty Mentor: Dr. Aftab Khan)

- Dana Zipfel, Leslie Mock, Maria Giarrusso, "Musical Interventions for Emotional and Behavioral Disorders"
- Tanna Turner, Harley Scott, "The Benefits of Wilson Training Program on Students who Struggle with Reading Fluency"
- Lindsey Moody, Shelbie Wells, "Spelling Mastery & Dyslexia"

<u>Poster Numbers 57 - 60</u>: Special Education 489 (Faculty Mentors: Dr. Karen Feathers and Dr. Aftab Khan)

- Dallas Phelps, "Developing Visual Supports for Individuals with Intellectual Disabilities who are Non-Verbal to Enhance Communication in the Home, School, & Community"
- Lauren Peters, Payton Vernier, "Improving Behavior from the Start: Integrating Social Training Programs into an Inclusive Preschool Classroom"
- Megan Smith, Kasie Fowler, "Word Recognition Software Programs and the Effects it has on Exceptional Children"

<u>Poster Numbers 61 - 66</u>: Environmental Science 201 (Faculty Mentors: Dr. Ken Fortino and Dr. Dina Leech)

- Graham Brown, Dylan Wegner, Mitch Andrew, "Analyzing the Limiting Nutrient using a Bioassay in Farmville Area Ponds"
- Kelsey Lam, Truman Blaha, "Assessment of nitrogen and phosphorus concentrations in the Appomattox River due to agricultural or urban runoff"
- Curran Atkinson, Bailey Teague, "An Analysis of Urbanizations effect on Mosquito Habitats"
- Jacob Jennings, Andrew Ayer, Graylin Dalton, "Heat Islands and Relationship with Land Use"
- Charlotte Pfamatter, Kirsten Bauer, Samuel Morgan, Griffin Mayo, "Comparison of the Toxicity of Standard vs. Eco-Friendly of Detergents"
- Nathanial Mylott, Cole Milliron, Olivia Parisi, Madeline Dabies, "Nutrient Runoff Investigation of Farmville"



Poster Numbers 67 - 85: English 400 (Faculty Mentor: Dr. Scott McDarmont)

- Jessica Paquette, "Greenwashing"
- Camryn Rubin, "Inclusion Classrooms"
- Sarah Boehling, "Dyslexia in the Classroom (Teaching students with Dyslexia)"
- Michaela O'Toole, "Inclusion Classrooms"
- Reece Theakston, "Genome Editing"
- Christaan Oliphant, "Marketing/Perception of Cannabinoids in Public Eye"
- Sam James, "Community Corrections"
- Meg Coughlin, "Theatre in the Classroom"
- Chris Belote, "Benefits of Gaming (Health, social, etc.)"
- Jessica Sanfilippo, "Starting a Business"
- Matthew Berry, "Not Abandoning History in the Classroom"
- Bailey Johnson, "ADHD in the Classroom (Teaching students with Attention Deficit Hyperactivity Disorder)"
- Cameron Basham, "The "Forgotten" Middle"
- Autumn Schiavone, "Child Rearing"
- Vanessa Barahona-Hickerson, "Electrical Stimulation for Swallowing Disorders"
- Eric Petrides, "Anti-vaxxers"
- Madeline Davies, "Juvenile Rural Gang Involvement"
- Madison Pinchbeck, "Planned Parenthood"



Posters: Biology, English, Chemistry, Independent Research 3:00-4:00PM, Blackwell Ballroom

Poster Numbers 1-15: Chemistry 302, 351, and 403 (Faculty Mentor: Dr. Sarah Porter)

- Jamie Breunig, "The LC Determination of Capsaicin in Hot Sauces by Liquid Chromatography"
- Sarah Elsakr, "What Can Be Learned About Conjugated Molecules from Their Uv-Vis Spectra?"
- Corri Calandra, "LC Determination of Active Ingredients in Over the Counter Medications"
- Bethany Adams, "What Can Be Learned About Conjugated Molecules from Their Uv-Vis Spectra?"
- Hannah Meyls, "Can we use biological organisms as chemical sensors"
- Joshua Walker, "What determines the rate of reaction?"
- Bethany Adams, Jamie Breunig, Corri Calandra, Sarah Elsakr, Hannah Meyls, Kelsey Norton, Morgan Tasseff, Joshua Walker, "Chemistry meets art: X-ray fluorescence analysis of art from the LCVA collection"
- Zachary Morgan, "Investigating the Importance of Argon Gas Bombardment of Au(111) and Ag(111) in Nanoporous Graphene Synthesis"
- Hope Grausgruber, "Enumeration of Escherichia Coli in the James River using Thioglycolic Acid (TGA) CdSe Quantum Dots and Fluorescence Spectroscopy"
- Sarah Goetz, "Nicotine Concentration and Flavor Aldehyde Presence in Juul Device Liquids"
- Bryan Stewart, "Investigation of a two-dimensional Identification Method for Different Types of Beer via Mathematically Treated UV-Vis Spectra Data Sets"

Poster Numbers 16 – 17 (Electronic): English 400 (Faculty Mentor: Dr. Elif Guler)

- Charla Faulkner, Abbie Preston, Tracy Davis, "Project Flashlight"
- Sarine Thomas, Jordan Clark, Kyle Sorrell, "Pollution Patrol"

Poster Numbers 18 - 45: Biology 488 (Faculty Mentor: Dr. Amorette Barber)

- Kathryn Kosiorek, "Double Gene Knockout of PDX-1 and HNF1B Leads to the Possibility of a Novel Gene Therapy for Patients with Type 1 Diabetes"
- Cecilie Elliott, "CCL21 Protein Leads to Advancements in Understanding Lung Transplant Rejection"



- Murriel Grimes, "Punicic acid as a possible supplemental treatment of adolescent Type I Diabetes"
- Taylor Clements, "The role of plastic debris found in the loggerhead sea turtle's digestive tract and how it effects the reproduction survival rate"
- Emery Chittenden, "The Role of Genome Mapping in Diagnosing Bipolar Disorder"
- Amanda Moses, "Curing Multiple Sclerosis by Genetically Engineering Oligodendrocytes and treating them with Chemotherapy"
- Andrea Soles, "The Connection between Emotional Stress and Developing Grave's Disease"
- Zack Long, "Identifying the Outcomes of Colloidal Silver Nanoparticles and their Mechanics of Action against the Lysosomes of Gram Positive Bacteria"
- Uzma Gunter, "The Use of HeLa derived telomerase on NK Cells in Treatment of Ovarian Cancer"
- Lyndi Earnshaw, "Postural Orthostatic Tachycardia Syndrome in relation to anxiety and cognitive impairments"
- Juliana Gordon, "Long-term aerobic exercise can enhance cognition and delay the onset of Alzheimer's disease"
- Elle Richardson, "Does Beer Enhance T cells to kill Leukemia?"
- Hastings Williamson, "CRISPR/CAS9 Experiments On Human Sperm Cells: Carriers of the Cystic Fibrosis Delta F508 Mutation"
- Colin Dominick, "The Comparative role of Tail Feathers in American Goldfinches"
- Christina Bell, "Restoring the Population of Keystone Species in the Chesapeake Bay: How the Preservation of Submerged Aquatic Vegetation Can Improve the Blue Crab Population"
- Rana Haboush, "Successfulness of live capture eradication efforts of the Golden Eagle on the Channel Island Fox"
- Ted Gutches, "Von Willebrand Disease: the viability of a technology-based diagnosis modality"
- Caroline Carter, "Microplastic biomagnification within detritovores alters fecundity and survivorship"
- Rex Liggon, "Observing the Cooperation of Varroa Destructor and DNA Virus AmFV in the Onset of Colony Collapse Disorder in Emerging Apis mellifera"
- Meagan St John, "Enhancing a Hepatitis C virus vaccine with Toll-like receptor 3 agonist in a mouse model"



- Sandra Ghali, "Enhancement of Macrophage Affinity in Response to Antibiotic-Resistant *N. gonorrhea* Infection"
- Angelica Romero, "Modifying the effects of AB40 and AB42 proteins in patients with Alzheimer's disease"
- Tiffany Yun, "The Effects of Pramipexole and Carbidopa-levodopa on Blocking Abnormal Activity in Gene LRRK2 Which Causes Loss of Dopaminergic Neurons in Parkinson"
- Erica Harris, "The role of genetics with alcoholism and its effects on genes ALDH2, ADH1B, and GABRB1 by causing mutations in the genome"
- Samuel Kane, "Studying the Feeding Habits of Red Snappers in the Gulf of Mexico within Artificial Reefs vs. Natural Reefs"

Poster Numbers 46 - 60: English 362 (Faculty Mentor: Dr. David Magill)

- Morgan Bates, "Analysis of the use of gender and bodies in the popular Netflix show, "YOU""
- Jessie Sawyer, "Hegemonic Masculinity in the Sons of Anarchy"
- Kaitlyn Crow, ""Where's the Spunk?" Sexuality as Performance in the Netflix Original Series "Sex Education""
- Emily Gough, "Pretty as an Insult in Rick Riordan's "The Lost Hero""
- Summer Reardon, "Feminism and Gender in James Cameron's "Aliens""
- Katie Kline, ""You Da Man": Performing Masculinity in Disney's Mulan"
- Lauren Ashworth, "Expectations of 1950s Teen Dating in "Grease""
- Hannah Taylor, "Cross Dressing and Gender Construction as Depicted in Visual Media"
- Amber George, "Masculinity in Dead Poets Society"
- Sara Holdsworth, "Views of Pregnancy in Bird Box"
- Samuel Hite, "Gender Roles in "The Simpsons""
- Leah Merone, "Feminism in Harry Potter"
- Glenn Spencer, "Masculine Performance"

Poster Numbers 61- 65: Independent Research



- Carrie Reaver (Faculty Mentor: Dr. Bjoern Ludwar), "Symmetry as an indicator of developmental stability"
- Taylor Alvey, Cody Hyle, Brianna Cervantes (Faculty Mentor: Dr. Denis Trubitsyn), "The role of mad2 gene expression in elongation of cuboctahedral magnetosome morphology"
- Ibrahim Kante (Faculty Mentor: Dr. Phil Cantrell), "The study of precolonial kingship in Sub-Saharan Africa"
- Bailey Gadberry, Tessa Dewalt, Tabitha Lenhart (Faculty Mentor: Dr. Sujan Henkanaththegedara),
- "Potential Impacts of Hurricanes on Avian Community Diversity and Composition"

Poster Numbers 66 - 83: English 400 (Faculty Mentor: Dr. Scott McDarmont)

- Cameron Pelletier, "Anti-vaccine Debate"
- Essence Mitchell, "Gender Inequality in the Criminal Justice Workplace"
- Samantha Hunter, "Gender Wage Gap"
- Terika Williams, "CRISPR"
- Sarah Banks, "ASL as a Foreign Language Requirement"
- Rayven Brown, "Why Vaccines are Important"
- Cody Bell, "Youth Sport Specialization"
- Hannah Sutphin, "Fad Diets (Ketosis, Paleo, Mediterranean)"
- Brianna Reyes, ""Broken" U.S Criminal Justice System"
- Annika Cline, "Anti-Vaxxers"
- Ryan Flanagan, "Why Music Education is Important"
- Samantha Jenkins, "The Effects of Social Media on Emotions"
- Rebecca Sydnor, "The Influence of Social Media on Businesses"
- Ryan Johnson, "What types of people are drawn to Conspiracy Theories"
- Charlie Fournell-Ferrall, "The Misconceptions and Biases of Drugs and Their Effect on Society"
- Branden Pleasants, "How to start a business"
- Lauren Ratliff, "Artificial Intelligence"
- Caroline Smith, "Vaccines and Autism"



Graduate Symposium, 2:30 – 7:00 P.M., Upchurch University Center

Join the students from the College of Graduate and Professional Studies as they present their research. Disciplines include counseling, elementary and middle school mathematics, health and physical education, reading, literacy & learning, school librarianship, speech-language pathology, and special education.

- 2:30-2:45PM Opening Remarks
- 2:50-3:05PM 2-Three-Minute Thesis presenters
- 3:10-3:50PM Posters
- 3:50-4:05PM 2- Three-Minute Thesis presenters
- 4:10-5:00PM Oral presentations 1
- 5:10-6:00PM Oral presentations 2
- 6:10-6:25PM 3 Three-Minute Thesis presenters
- 6:25-7:00PM Reception & Awards

Junior Show for Studio Art and Graphic and Animation Design Programs, 4:00PM-6:00PM, Bedford Gallery

Please join the department of Theatre, Art, Graphic and Animation Design for the opening reception of the Junior Show. Held in Longwood's Bedford Gallery, this yearly exhibition highlights the work of our junior class students in the Studio Art, and Graphic and Animation Design programs. We will also announce our scholarship recipients and the winners of the Greenwood Library Junior Art Award. Come by the Bedford Atrium from 4-6 pm to help us celebrate our students' achievements in Art and Design!



Math and Computer Science Colloquium, 3:30 – 5:00 P.M. Hiner 207

Designed for a broad audience, Longwood's Mathematics and Computer Science Colloquium Series is an interesting and varied series exploring ideas, developments and careers in the fields of mathematics, computer science and mathematics education. This year we are pleased that the Longwood College of Education and Human Services and Longwood College of Business and Economics are co-sponsors of the series.

Dr. Sudharshana Apte, Altria Group

"Factory Scheduling in the Era of Supply Chain Innovation: A Practical Approach"

A rapidly changing, competitive marketplace along with the growing complexity of manufacturing systems makes it extremely critical to plan and schedule effectively. While in the past companies were stable enough to have the logisticians learn from experience and execute based on their judgement, it is continually more difficult for such approaches to provide cutting edge performance. Although long range planning and supply chain decisions are somewhat automated with sophisticated algorithms, currently short-term scheduling is still carried out by individuals, often using spreadsheets. The strides in theoretical research have had limited impact on actual practice. This talk aims at discussing why these barriers exist and attempts to offer proven solution techniques and insights to develop applicable computational methods for real-world scheduling problems.

The NEA BIG READ Author Visit, 7:00 – 8:00 P.M. Jarman Auditorium

The author of *Burning Bright*, Ron Rash, will discuss his book and the greater cultural impact of the included stories. Join us for discussion, reception, and book signing. Bring your copy, or pick one up at the reception/ Book signing. Reception to follow at 8:00 P.M. in the Ruffner Rotunda.

For more information about the BIG READ, visit us at https://libguides.longwood.edu/BigRead/home





Central Campus Map

