

BigSURS 2013

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High Point University - April 5th and 6th, 2013
Big South Undergraduate Research Symposium



Big South Participating Institutions

Campbell University

Coastal Carolina University

High Point University

Liberty University

Longwood University

Presbyterian College

Radford University

UNC-Asheville

Virginia Military Institute

Winthrop University

Big South Welcomes the Following Participants

Appalachian State University

Davidson College

Guilford College

North Carolina A&T State University

Salem College

UNC-Chapel Hill

UNC-Charlotte

UNC-Greensboro

Laura Schramm, a High Point University Graphic Design major, designed the program cover, t-shirts, and nametags for the Big South Undergraduate Research Symposium, 2013

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Welcome to High Point University

High Point University has entered an exciting new era of achievement, academic excellence, and growth. An investment of over \$750 million in new construction, campus improvements, state-of-the-art technology, and stellar faculty have transformed High Point's campus over the past seven years to enhance both academic pursuits and student life.

With 4,000 undergraduates, High Point is a small school with big school facilities. Its 16 varsity teams play at the NCAA Division I level. Students flock to High Point from 47 states and 34 countries, providing the school with great diversity in student history and experience. Yet, High Point University offers its students a safe community that feels like home, where the average class size is 17 and professors don't just know students' names – they know who they are and who they want to become.

High Point University is committed to academic excellence. Students are taught by outstanding professors who are academically and professionally recognized as leaders in their fields, and who are actively involved in both teaching and scholarly research. Faculty members are active in professional associations, are respected writers and researchers, and serve as mentors to our outstanding students. Currently, 76% of the faculty members have doctorates or other terminal degrees; others have one or more master's degrees.

High Point University's signature experiential learning program differentiates this collegiate experience from others. Students have opportunities for Study Abroad, off-campus practicums and internships, independent study, undergraduate research and collaboration, service learning, and volunteer partnerships with numerous nonprofit agencies. These outlets reinforce what is taught in our classes while providing students with resources for professional networking and deep, practical knowledge of their fields.

With High Point University taking such strides to practically equip students for successful futures, it is no surprise that alumni are honored in leadership positions across the world. The COO of BB&T, Bloomberg's NYC Hedge Fund manager, the head men's basketball coach of UMN, many government officials, the former executive producer of the NBC Today Show, several authors, a Grammy Award winner and an Emmy Award winner all call High Point University home.

U.S. News & World Report ranked High Point University as No. 1 among Regional Colleges in the South and No. 1 among Up and Coming Regional Colleges in the South in its 2013 edition of "America's Best Colleges."

Founded in 1924 and rooted in the liberal arts curriculum, High Point University has a strong academic history and is committed to building character, modeling values, and ensuring that students graduate with not only the expertise in their discipline, but also with the skills necessary to be successful in life.



April 5-6, 2013

Welcome to High Point and the 6th Big South Conference Undergraduate Research Symposium! We are extremely pleased that you are participating in this event, which showcases the amazing academic talent of students at Big South Conference member institutions and in the region. A special welcome goes out to those students from institutions outside the Big South. We are pleased you are with us. The Big South takes pride in developing leaders through athletics, and BigSURS 2013 is a great example of this!

In 2003 the Big South Conference chief executive officers began discussing the possibility of creating an academic consortium amongst the member institutions. It was one thing to associate and compete with each other in the athletic arena, but the CEOs felt it was time that the inter-institutional relationships expand to include other areas on campus.

Through the efforts of members' chief academic officers, the academic consortium took shape with one of the first initiatives being the creation of an undergraduate research symposium. A common thread through most of the Big South institutions is the importance of undergraduate research, and the development of this symposium would provide an opportunity for students to present their work, while also bringing the Big South institutions together in a non-traditional way.

The previous Big South Undergraduate Research Symposia have been tremendous successes. Nearly 300 students representing almost all Big South Conference institutions annually participate in oral and poster presentations, and juried art exhibitions.

This year's event, hosted by High Point University, will continue this success and enable even more students to display the fruits of their academic labors. For those here to observe – enjoy! For the students that are participating – congratulations and good luck!

The Big South Conference is very appreciative of the leadership of Dr. Nido R, Qubein, President, and the hard work and dedication of everyone at High Point for hosting BigSURS 2013. An outstanding effort once again!

Kyle B. Kallander Commissioner

Acknowledgements

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General Information

Registration

Registration will take place on the second level of Slane Student Center on Friday, April 5, from 10:00am-5:00pm and on Saturday, April 6, from 8:00am-11:00am.

Transportation and Parking

Conference participants are responsible for transportation from their hotel to the conference location. Cars can park in lots A & B on Montlieu Ave across from an entrance gate and BigSURS parking for busses is available at **Vert Track and Soccer Stadium**. High Point University shuttles will shuttle participants and mentors from Vert Track and Soccer Stadium to the Slane Student Center. (See the map on the website.)

Handicap Access and Parking

Handicap parking is available in front of Roberts Hall and Phillips School of Business.

Emergency Information

In case of an emergency please call 911 or High Point University Security at (336) 841-9111.

Presentation Etiquette Guidelines

Purpose of the BigSURS is to:

- Provide an opportunity for students to present their scholarship to audiences in academic communities outside of their own institutions, especially when NCUR is held in a distant location.
- Promote interactions among students in the Big South Athletic Conference and other schools within the states that contain Big South institutions.
- Promote an understanding and appreciation for different disciplines among the students attending the BigSURS.

To accomplish these goals the BigSURS advisory committee strongly suggests the following **Etiquette Guidelines** for students and faculty attending the BigSURS.

General

- Students attending the conference are expected to go to the keynote address.
- Students attending the conference are expected to go to the juried art exhibit reception.
- Students attending the conference are encouraged to participate in the entire conference.

Oral Presentations

- Students should arrive at least 10 minutes before the start of the session they are scheduled for and load their presentations to the desktop.
- Student presenters are expected to attend the entire session they present in.
- Never walk in or out while a student is in the middle of a presentation.
- If a student is unable to make a presentation, the student should contact the host institution meeting organizers before the start of the session.

Poster Presentation

- Poster presenters are expected to stay with their poster during the session.
- Students participating in the Friday session should arrive early and get something to eat before going to their poster or they may briefly leave their posters to get food. Presenters should be sure to eat!

BigSURS 2013 Program Highlights

Keynote Speaker: They keynote address will be given by Dr. Mark Leary, a Social Psychology and Neuroscience Professor at Duke University, who also serves as the Director of the Social Psychology Program. His research focuses on social motivation, emotion, and processes that involve self-reflection and thought. Many of Dr. Leary's works on topics such as social rejection, overreactions, and anxiety, have been published. He is a member of twelve psychological societies, and in addition to being well-published in various journals, Dr. Leary has served on numerous editorial boards of journals and continues to serve as an editor.

Graduate Fair: The graduate fair provides an opportunity for symposium attendees to meet representatives from graduate school programs in and around the Big South Conference. As a convenience, the fair will be held on Friday from 3:00pm to 5:00om to the general public. It will continue through the Friday poster session but only for individuals with conference badges. Please feel free to stop by a school's table to inquire about their degree program options and ask questions.

Juried Exhibition: The exhibition highlights research investigation as it relates to the visual arts. Submissions are original work in any art or design media that were completed in the past 18 months. Fifty six works were selected for the exhibit by painter and photographer, Mr. Todd Drake. During the reception Friday evening, the conference will present an award for Best in Show, and three Juror's Choice Awards.

Dinner Reception: Tasty, heavy appetizers will be served Friday night during Poster Session I. The poster session and reception will only be open to individuals with a conference badge. Presenters should be sure to take a few minutes and get something to eat. Dessert will be served during the Art Exhibit Reception.

Student and Faculty Social Evening Activities: High Point University is offering both students and faculty the opportunity to socialize and mingle in the University Center. The cinema and arcade on the lower level will serve as locations for the student reception, and the Learning commons on the third floor will serve as the location for faculty to gather.

Awards Ceremony: Students have a chance of earning an award for their research presentation! Each oral session and groupings of posters within a poster session will be judged by pairs of faculty volunteers who will confer and agree on the best presentation in their session. When there are 3 or fewer presentations under review, a first place award will be determined. If there are 4 or more presentations getting judged there will be assignment of a first and second place award.

Schedule

FRIDAY

10:00am- 5:00pm Registration- Slane Center

12:00pm Welcome by Provost and Director (University Center Extraordinaire Cinema)

	Phillips 215	Phillips 216	Phillips 217	Phillips 218	Phillips 219	Phillips 220		
12:30-1:30 Oral Session 1	Anthropology/ Sociology 1. Carroll & Windsor, Salem 2. David, Winthrop 3. Guthrie, HPU	English 1. O'Neal, Winthrop 2. Glymph, Presbyterian 3. Mixon, Winthrop 4. Giordano, Winthrop	History 1. Sullivan, HPU 2. Benham, Liberty 3. Ledford, UNC-Ash 4. Berthiaume, Coastal Carolina	Modern Languages 1. Melvin, HPU 2. Frazier, Liberty 3. Doherty, Liberty 4. Beel & Felder, Liberty	Education 1. Quigley, HPU 2. Griffith, HPU 3. Dolan, HPU	Economics 1. Cohen, HPU 2. Garrett, UNC-Ashville 3. Hall, Salem College 4. Michie, VMI		
1:35-2:35 Oral Session 2	Communication 1. Garcia, Radford. 2. Bloxom, HPU 3. Rhodes, Driscoll & Mason, Radford 4. Hensley, HPU	Anthropology/ Sociology 1. Rash, Radford 2. Mahathey, HPU 3. Otero, Salem	English Literature 1. Stroud, Winthrop 2. Stephens, Liberty 3. McDonnell, Winthrop 4. Chrisenberry, Winthrop	Psychology 1. McDonald, HPU 2. Hegedus, HPU 3. Abel , Liberty 4. Cullum, Presbyterian	Mathematics 1. Gill, UNC-Greensboro 2. Lucas, VMI 3. Findley, HPU 4. Michie, VMI	Chemistry/Physics 1. Johnson, Winthrop 2. Sanders, HPU 3. Gerber & Briley, Appalachian State		
2:40-3:40 Oral Session 3	History 1. Cannon, Coastal Carolina 2. Carrozza, HPU 3. Brinkley, HPU 4. Wiley, UNC-Asheville	Communication 1. Lillie, HPU 2. McCracken, Salem 3. Ryba, Coastal Carolina 4. Krewson, HPU	History/Sociology 1. Poteet, HPU 2. Deeley, Guilford 3. Incontro, VMI 4. Ellis, HPU	English 1. Nissen, HPU 2. Henry, Campbell 3. Everhart, Winthrop 4. Dick, Campbell	Health Sciences 1. Wisnoski & Powell, UNC-Asheville 2. Frank, HPU 3. Baellow, HPU	Economics 1. Langford, Sanders, & Weigandt, HPU 2. Palma & Beadle, Presbyterian 3. Murray & Garner, Presbyterian		
4:00pm	Vounata Casaker Hayayerth Fine Arts Contar. Theatre							
5:15-6:45pm	Keynote Speaker Hayworth Fine Arts Center –Theatre Poster Session I and Dinner Reception - Slane Student Center, lower level							
3:00-6:45pm	Graduate Fair- Slane lower level- posters should go up by 1pm and are open to public until 5pm							
7:00- 8:00 pm	Intercollegiate Juried Exhibition Reception at Sechrest Art Gallery, in Hayworth Fine Arts Center (dessert served)							
8:00-9:30pm	Student and Faculty Activities- students have access to the University Center (UC) Arcade and Cinema (lower level) and faculty will have time to schmooze in the UC library.							

SATURDAY

8:00AM - 11:00AM REGISTRATION

	Phillips 215	Phillips 216	Phillips 217	Phillips 218	Phillips 219	Phillips 220		
8:00 - 9:00am Oral Session 4	Cultural History 1. Patel, HPU 2. Quran, UNC Chapel Hill 2. Hawkins & McIntosh, Campbell (moved from room 217) 3. Palmer, HPU 4. Wright, Radford	English 1. Deming, Campbell 2. Holoubek, Winthrop 3. Bergmann, Winthrop 4. Bell, Campbell	Communication/ Gender Studies 1. Lauck, HPU 2. Carter, Ahrenberg, & Franklin, Radford 3. Kizer, HPU 4 Hawkins & McIntosh, Campbell (moved to this session room 215)	Art History/History 1. McGee, Winthrop 2. Caruso, Liberty 3. Eckersley, Coastal Carolina 4. Hudson, HPU	Education 1. Thomson, HPU 2. Angelo, HPU 3. Greene & Hackett HPU 4. Burden & Cohens, Coastal Carolina	Chemistry/Physics 1. Wells, Campbell 2. Tweedy, Coastal Carolina 3. Rhodes & Gasparik, Winthrop 4. Morris, UNC-Ashville		
9:05 - 10:05am Oral Session 5	Non-Profit 1. Dowdle, Salem 2. Linton, Campbell 3. Goscinski, Salem	Sociology 1. Ackerman, HPU 2. Melvin, HPU 3. Bell, UNC-Ashville	English 1. McMullen, Salem 2. Mack, Winthrop 3. Kanski, Winthrop 4. Giordano, Winthrop	Psychology 1. Vaughn, HPU 2. O'Neal, Winthrop 3. Nelson, HPU 4. Purcell, HPU	Economics 1. Levy, Presbyterian 2. Blanco & Michael, Presbyterian 3. McGraw, HPU	Computer Science 1. Palmer & Weigandt, HPU 2. Jeffrey, Davidson 3. Langford, HPU		
10:15 - 11:15am Oral Session 6	History 1. Hoey, HPU 2. McMinn, Guilford 3. Walker, HPU 4. Hopchak, Liberty	Communication 1. Hopkins, HPU 2. Schmidt, VMI 3. Branch, HPU	History 1. Beresford, UNC-Ashville 2. Short, HPU 3. Setliff, HPU 4. Beall, HPU	English 1. Todd, Winthrop 2. Sierra, Winthrop 3. Plyler, HPU 4. Mixon, Winthrop	Biology 1. Gregor & McDaniel, Radford 2. Scobie & Forrest, UNC- Asheville 3. Roberts, Campbell 4. Lombardi, UNC-Ashville			
11:20-12:30 pm	Poster Session II -	Slane Center Tower I	evel – Posters should	go un at 9am				
12:30-2:00 pm	Poster Session II – Slane Center, lower level – Posters should go up at 9am Lunch in The Café on the lower level of Slane. You will receive a lunch ticket with your registration.							
	BigSURS faculty planning meeting - Phillips 113							
2:00pm-3:00pm	Big South Undergraduate Research Symposium Concert Charles E. Hayworth Memorial Chapel (across the International Promenade from Phillips)							
3:00 pm	BigSURS Awards Ceremony – UC Extraordinaire Cinema							

Poster Session I: Friday, 5:15pm- 6:45pm

- 1. Alicia Brooks, High Point University
- 2. Heaven Cerritos, Longwood University
- Mary Funke, High Point University; B. Renee Bozard Baldowski, Deeksha Gambhir, Sudha Ananth, Vadivel Ganapathy, & Pamela M. Martin, Georgia Health Sciences University
- 4. Lucas Lyerly & Rachel Whitaker, Coastal Carolina
- 5. Beth Meloro, High Point University
- 6. Faithcaren Moche & Taek You, Campbell
- 7. Jasmine Spence, Longwood University
- 8. Emily Agee & Kyle Shaw, High Point University
- 9. Ashley Bondurant, High Point University
- 10. Colleen Calliham, Campbell University
- 11. Brian Carey, Coastal Carolina University
- 12. Megan May & Jessica Chavez, High Point
- 13. Allison Stahl, Winthrop University
- 14. Semone Trisvan, Longwood University
- 15. Michael Cantor, High Point University
- 16. Aaron Mosey, UNC- Asheville
- 17. Linda Poplawski, High Point University
- 18. Nikki Sanford, High Point University
- 19. Alison Parker, High Point University
- 20. Rachael Redmond, High Point University
- 21. Mariam Salib, Winthrop University
- 22. Justin J. Waller, Winthrop University
- 23. Samantha Arzon, High Point University
- 24. Kia Barrett & Alexandra Cupito, UNCG
- 25. Ashlee Branch, High Point University
- 26. Shannon Goldstein, High Point University
- 27. Chelsea Heim, High Point University
- 28. Reba Miller, Gabrielle Pidal &Robert Lambert, Radford University
- 29. Kandace Thomas, UNC- Chapel Hill
- 30. Olivia Bruner, High Point University
- 31. Lauren Gulledge, Anna Wilson & Brittany Donnelly, Presbyterian College
- 32. Molly Kent, Presbyterian College
- 33. Lauren Smith & Lyndsey Smith, Presbyterian
- 34. Charlene Smith, Radford University
- 35. Allison Thomson, High Point University
- 36. Shannon Curley, High Point University
- 37. Tiffany S. Francois & Sarah M. Voigt, HPU
- 38. Lizzie Leighton, High Point University
- 39. Ashley Sineath, Winthrop University
- 40. Skylar Spies, Winthrop University

Poster Session II: Saturday 11:20am-12:30pm

- Hillary Ballantine, Taylor Collins, Jessica Pietrefesa, Daniel Susral, & Stephen Watkins, Coastal Carolina
- 2. Michael Higginbotham, High Point University
- 3. Junior L. Neal, High Point University
- 4. Zachary Parker, Joshua Lynn, W. Beckett Hills, and Scott Parker, Coastal Carolina University
- Dakota Peachee*, Craig Moretz, & Gerald Smith*,
 *HPU & Forsyth Technical Community College
- 6. Madison Sapp, Morgan Sapp, & Gerald Smith, HPU
- 7. Benjamin Sykes, Virginia Military Institute
- 8. William S. Fravel, Nicole M. Hughes & William K. Smith, High Point University
- Nicole M. Hughes, Kaylyn L. Carpenter, Timothy S. Keidel, Charlene N. Miller, High Point University; William K. Smith, Wake Forest University
- 10. Dylan Malpass and Thomas Garbarino, HPU
- 11. Alex Mosier, Coastal Carolina University
- 12. Lorna Scribner, Caitlin Baker, Matthew Davin, Erin McCance, & Mike Phillips, Coastal Carolina
- 13. Adam Teufel, Virginia Military Institute
- 14. Jacob Brooks, High Point University
- 15. Matthew Carnaghi, High Point University
- 16. John P. Sheehan, Coastal Carolina University
- 17. Philip J. Wulfken, Virginia Military Institute
- 18. Tyler Couch, Winthrop University
- 19. Laura Fritts & Miranda Zupp, High Point University
- 20. Rebecca Giese, High Point University
- 21. Bryan A. Johnson & Jimmie L. Bullock, Longwood
- 22. Kristen Turner, High Point University
- 23. Kathryn E. Bruzios, High Point University
- 24. William Burke & Anne Caverly, HPU
- 25. Aimee Griffith, High Point University
- 26. John R. Purcell, High Point University
- 27. L. Rina Schick, Kody R. Draper, Michael A. Curry, & Stephen P. Casazza, Radford University
- 28. Shannon Curley, High Point University
- 29. Angela Best, Longwood University
- 30. Alexis Wright, Jennifer Johnson, & Chad Cook, HPU
- 31. Alexis Wright, Garrett. Naze, Alicia Emerson Kavchak, Danielle Paul, Brianna Kenison, Eric J. Hegedus, High Point University
- 32. Michelle Key, Campbell University
- 33. Nikki Frascione, High Point University
- 34. Abigail Hines, High Point University
- 35. Alexandra MacDonald, High Point University
- 36. Kayla Saunders, Radford University
- 37. Laura Twomey, High Point University

Keynote Speaker – Dr. Mark Leary Friday, April 5, 2013



Dr. Mark Leary is a Professor of Psychology and Neuroscience and the Director of the Social Psychology Program at Duke University. Dr. Leary completed his B.A. at West Virginia Wesleyan College and his M.A. and Ph.D. in Social Psychology at University of Florida. He started his career at Denison University and the University of Texas at Austin, and spent over 20 years at Wake Forest University also serving as Chair of the department. Dr. Leary has been at Duke University since 2006.

Dr. Leary's research focuses on social motivation and emotion, and on processes that involve self-reflection and self-relevant thought. His research has included topics such as social anxiety, self-presentation, hurt feelings, reactions to social rejection, and overreactions to trivial events. He has published over 200 articles and chapters, 14 books, and one video series ("Solving the Mysteries of Human Behavior"). Dr. Leary also blogs for the Society for Personality and Social Psychology. In recognition of his service to his discipline, Dr. Leary was named by the Institute for Scientific Information as among 25 most productive scholars in psychology (1986-1990) and was selected as the 2011 recipient of the Lifetime Career Award from the International Society for Self and Identity.

Dr. Leary is a member of 12 psychological societies, the founding editor of *Self and Identity*, former Associate Editor of the *Journal of Social and Clinical Psychology*, and current editor of *Personality and Social Psychology Review*. Dr. Leary has also served on the editorial boards of numerous other journals.

As a wonderful model of an undergraduate research mentor, Dr. Leary's website recognizes his most famous student, Tim Duncan, NBA star with the San Antonio Spurs! Tim was an undergraduate psychology major at Wake Forest University and was co-author on a book chapter [Leary, M. R., Bednarski, R., Hammon, D., & Duncan, T. (1997). Blowhards, snobs, and narcissists: Interpersonal reactions to excessive egotism. In R. M. Kowalski (Ed.), *Aversive interpersonal behaviors*. New York: Plenum.]



Intercollegiate Exhibition Juror Friday, April 5, 2013

Mr. Todd Drake creates art that is shaped by community. Currently an artist in residence at UNC Chapel Hill's Center for Global Initiatives, he began working with the center as a 2004-2005 Rockefeller fellow. While a fellow, Drake co-created with Dr. Hannah Gill the book *Going to Carolina del Norte, Narrating Mexican Migrant Experiences*. He has also worked collaboratively with undocumented immigrants to create a picture book *Give Me Eyes: Crossing borders to the heart*.

A painter and photographer, Drake has worked with a wide variety of communities including patients at an Alzheimer's nursing home, employees at an exotic night club, long distance truck drivers, and refugees from Vietnam, to create the large painting series "et al."

Drake has exhibited internationally including exhibitions in Saudi Arabia and Bahrain; in college venues including Rhode Island School of Design, NYU, Wake Forest, Michigan State University; in fine art galleries in Washington DC, Chicago, and Charlotte; and in museums such as the Heart Mountain Interpretative Center, the International Civil Rights Center and Museum, the Weatherspoon Art Museum, and The South Eastern Center for Contemporary Art (SECCA). His paintings and photographs are in private collections worldwide.

Graduate School Fair

The Graduate School at High Point University invites you to the 2013 BigSURS Graduate School Fair.

Date: Friday, April 5, 2013

Time: 3:00pm -5:00pm open to the general public

5:00pm-6:45pm open only conference registrants

Location: Slane Student Center, High Point University (Lower level of Slane Student Center)

What is the Graduate School Fair?

The graduate school fair provides an opportunity for students to meet representatives from graduate school programs in and around the Big South Conference. The fair provides a convenient way for students and faculty to gather information about graduate programs. Stop by a school's table to learn what degree programs they offer and ask any questions you have. Some possible questions to ask include:

What are the admissions requirements?
What type of financial assistance is available?
What do current and former students say about your school?

Schools:

Campbell Divinity School
Campbell University School of Business
Campbell University Department of Clinical Research
Campbell University School of Education Graduate Programs
Campbell University School of Law
Campbell University School of Osteopathic Medicine
Campbell University Pharmaceutical Sciences
High Point University Norcross Graduate School
Liberty University Resident Graduate School
Liberty University School of Law
Norfolk State University College of Science, Engineering, and Technology
Radford University Graduate College
Winthrop University Graduate School

For more information contact Tracy Collum in the Graduate School office at tcollum@highpoint.edu or 336-841-4840.

Intercollegiate Juried Art Exhibition Dessert Reception

7:00-8:00pm Sechrest Art Gallery, Hayworth Fine Arts Center

Kristin Walsh

UNC Charlotte

Emily Whittaker

Radford University

Eternal Circle Uncertainty of it all Impermanence 1-3 Joshua Knight Shamaz Denerson W. Taylor Owens Coastal Carolina University Salem College Campbell University **Day Dreaming Western Still Life Peacefully Sleeping Psychology Vegetation Meets Technology Chloe Betts** Hannah Naylor **Andrew Wells UNC** Greensboro High Point University Campbell University Erin An offering of Roses **Self Portrait in Thought The Green Door** Skull **Raised Eyebrow** Chaotic **Crowd Gathered** Jordan Rodinson **Andrew Williams** Catherine Jannuzzi NC A&T State University Radford University **High Point University Self Portrait Past and Present Self Portrait**

Still Life Musical Composition Owen
Twin Soul Active Sole Every Single Assistant I ever
Adrift had got sawed in half

Mary Beth JonesJames HayhurstLaura SchrammHigh Point UniversityUNC GreensboroHigh Point University

Lucy LukeNataliaBrokenCherishNatalia TwoFragmentsTattoosNatalia ThreeSummer RainSister with GlassesDebbieTrial and ErrorSandstoneVision

John WannamakerMarilynn BarrJessica StalveyHigh Point UniversityUNC GreensboroUNC Greensboro

Body Image Mad Hatter Cervine

Nightmare #1 In and Out Self Portrait as Deer

Untitled Landscape #1 Natural Keys Huntress
A man making lists St. John's Cathedral Raccoon

Stegasaurus sacrificing the The Information You requested Cool Morning Light

Christmas tree from Whoville is enclosed

Jamey Hahl Lennane

Coastal Carolina University

^{*}During the reception BigSURS 2013 will present the Best in Show and three Juror's Choice Awards. Awards will be presented during the dessert reception in the Sechrest Art Gallery.

Proceedings of the Big South Undergraduate Research Symposium

One benefit of presenting at BigSURS is the opportunity for students to publish their work in the Conference Proceedings, edited and produced by The University of North Carolina at Asheville. All student presenters at the conference (including students in the preforming/visual arts) are invited to submit manuscripts for review by the Proceedings Board. Submitting work to the Proceedings has many advantages, two of which are deemed especially important:

- The opportunity to receive comments from faculty outside your college or university, thereby enhancing the paper for submission to other sources in your field.
- The opportunity to list your publication on your resume for graduate and professional school applications.

Important Date: Papers Accepted March 20- May 20, 2013

Application Form:

• http://urp.unca.edu/home/BigSURS/application-form

Paper Formatting Guidelines:

- http://urp.unca.edu/paper-formatting-guidelines
- Single spaced, 1" margins, full justified, maximum 8 pages.
- Pictures, tables and graphs may be inserted into your paper.

Send papers to:

- UNC Asheville- <u>mlemaste@unca.edu</u>
- Email subject heading should read: BigSURS 2013 Proceedings Paper



Oral Session 1 (12:30-1:30)

12:30-1:30

Anthropology/Sociology

Phillips 215

12:30-12:45

Teaching Social Theory: A Bourgeoisie Dream Factory

Alana Carroll and Elroi Windsor, Salem College

Mentor: Dr. Elroi Windsor, Sociology

To illustrate Karl Marx's theory of alienation as written in "Estranged Labour" through a pedagogical activity, researchers perform as a bourgeoisie boss and a fellow worker, as students enact proletariat workers in factory production. Preliminary findings on the activity's ability to affect learning are reported.

12:45-1:00

What's Going On With Common Book Programs? Dwana David, Winthrop University

Mentor: Matthew Hayes, Psychology

Several sources provide guidance for constructing common book programs, but no published research reports what universities actually do. This study examined websites from at American universities and colleges to determine what schools do in their programs in four key areas: program goals, student learning outcomes, programming, and assessment.

1:00-1:15

The Appalachian Trail: Harnessing the Fanatic Kayla Guthrie, High Point University

Mentor: Dr. Terrell Hayes, Sociology

The Appalachian Region, notorious for its poverty and its exploited resources, contains an underappreciated asset: the Appalachian Trail. Using Census data as well as previous case studies, this research analyzes the current economic effects of the trail in addition to asserting a marketing strategy which could increase these positive effects.

12:30-1:30

English

Phillips 216

12:30-12:45

Differences in Accent Flexibility
Evan O'Neal, Winthrop University

Mentor: Dr. Josephine Koster, English

This paper attempts to use Howard Giles' "Communication Accommodation" theory and further research on attitudes regarding foreign accents to explain the varying degrees of accent adaptation in individuals who have immigrated or stayed abroad for an extended period of time. Research shows individual opinions on nationality influence accent change.

12:45-1:00

England Versus France: Unearthing Linguistic Identity through Early Modern Lexicography Mary Ellis Glymph, Presbyterian College

Mentor: Dr. Justin Brent, English

By examining the foundational dictionaries of Samuel Johnson and the Académie Française, this research concludes that the prescriptive nature of the French language has negatively affected its ability to adapt in a global culture. In contrast, the English language's descriptive nature has allowed it to expand more freely.

1:00-1:15

Pop Culture Blends and the Emergence of Online Dictionaries

Loren Mixon, Winthrop University

Mentor: Jo Koster, English

The rapidly expanding pop culture lexis has resulted in the creation of crowd-sourced lexicons that allow society to record small changes in lexis on a minute-to-minute basis. This paper argues that this documentation affords study of greater lexical changes over time with more detail and clarity than before.

1:15-1:30

When Anima Met Animus: A Jungian Analysis of the Macbeths

Joseph A. Giordano, Winthrop University

Mentor: Matthew Fike, English

My thesis is that Jung's psychological theory of anima/animus possession enables a strong evaluation of the Macbeths because certain passages in Macbeth reveal the unconscious as an overriding force.

12:30-1:30

History

Phillips 217

12:30-12:45

PT Barnum and Ringling Bros. Circus
Margaret Sullivan, High Point University

Dr. Paul Ringel, History Department

PT Barnum's Ringling Bros. Circus drew in its audiences 130 years ago to cater to people's curiosity of other's oddities. The development of the show reflects the relationship between consumer and producer behavior over all of these years in America.

12:45-1:00

John Quincy Adams and Slavery: Resolving the Founders' Contradiction
Kristina Benham, Liberty University

Mentor: Dr. David Snead, History

In the decades before the Civil War, tension between the states over conflicting rights, politics, morality, and slavery culminated in an ideological battle in the House of Representatives. John Quincy Adams became the voice for a flood of abolitionist petitions, calling into question the contradiction the founders could not resolve.

1:00-1:15

An Explosive Affair: The Acquittal of Congressman Daniel Sickles

Jonathan Ledford, University of North Carolina Asheville

Mentor: Dr. Ellen Pearson, History

Daniel Sickles shot dead his wife's lover. His lawyers argued that Sickles operated within his rights as a man whose honor had been violated in the worst manner. Newspapers' reactions varied by region, demonstrating a North/South divide on perceptions of masculine honor and marital license.

1:15-1:30

A Short History of American Theatre

Derek Berthiaume, Coastal Carolina University

Mentor: F. Eliza Glaze, History

American history is a series of cultural themes that can be mapped effectively through theatre. When analyzing the popular plays of the time, there exists almost a direct correlation with the social norms and emerging aspects of pop culture. From minstrel shows to performance art, theatrical history follows pop culture.

12:30-1:30

Modern Languages

Phillips 218

12:30-12:45

The Relationship Between Culture and Advertising: A Study of Coca-Cola in the United States and Spain

Brittany Melvin, High Point University

Mentor: Dr. Hayden Carron, Spanish

An analysis of advertising as a representation of culture and how it reveals the elements that form a social identity. Coca-Cola serves as a case study of the adaptation of advertising across cultures in the United States and Spain.

12:45-1:00

An Autosegmental Analysis of Chinese Loanword Phonology

Kristen Frazier, Liberty University

Mentor: Dr. Jaeshil Kim, English and Modern Languages

Suprasegmentals, such as tone, and segments are presumed autonomous. This research is expanded from an experiment in Chinese tone sandhi to include the exploration of loanword phonology to further understand this autonomous relationship. I propose that tonal distribution in loanwords is not random but crucially governed by syllable structure.

1:00-1:15

Music-based ESL Teaching: A Case Study of English Stress Patterns

Megan I. Doherty, Liberty University

Mentor: Jaeshil Kim, English & Modern Languages

Music and language are closely related in the brain. They are processed identically, and musical pitches are used to understand lexical and grammatical items in tonal languages. This study uses these connections to consider how music affects the acquisition of English stress patterns in native speakers of tonal languages.

1:15-1:30

Phonological Adaptations of English Loanwords in Turkish

Rachel Beel and Jennifer Felder, Liberty University Mentor: Dr. Jaeshil Kim, English and Modern Languages

When English loanwords are used in Turkish, native speakers employ systematic phonological methods to ease pronunciation. Because the syllable structure of modern Turkish does not allow for consonant clusters like English does, Turkish speakers use processes such as substitution, deletion, and epenthesis so that loanwords will fit the linguistic mold.

12:30-1:30

Education

Phillips 219

12:30-12:45

Evaluation of the Efficacy of Pre-Service Teaching in a Service-Learning Environment During Planned Intervention Time

Alison Quigley, High Point University

Mentor: Dr. Sarah Vess, Education

A university level service-learning course assigned students to assist with planned intervention time at a local school. This study will examine the efficacy of the practical experience by analyzing survey and interview data. Recommendations for future courses that plan to utilize service-learning methods will be presented.

12:45-1:00

The Efficacy of Response to Intervention with Struggling Middle School Readers Aimee Griffith, High Point University

Mentor: Sarah Vess, Education

This project examines the efficacy of tier two interventions implemented with struggling middle school readers. Along with an explanation of conducted interventions, an analysis of progress monitoring data will be presented to determine the students' responses to the interventions. Suggestions will be given for increasing the efficacy of future interventions.

1:00-1:15

Evaluation of the Efficacy of Tier 2 Interventions in a Middle School Setting
Kayla Dolan, High Point University

Mentor: Sarah Vess, Education

The purpose of this study is to determine the efficacy of Tier 2 interventions at the middle school level. This study will look at three students who are receiving Oral Reading Fluency Interventions. The efficacy of the interventions will be determined based upon the examination of progress monitoring data.

12:30-1:30

Economics

Phillips 220

12:30-12:45

The First Oil Shock? Nixon's Oil Policy and the 1973 War.

Jordan Cohen, High Point University

Mentor: George L. Simpson, History

This paper will seek to investigate if the United States had prior knowledge of the oil embargo instituted by the Arab countries in 1973. I will argue that as early as 1971 the United States understood the Arab nations were willing to use oil as an economic weapon.

12:45-1:00

Green for Green: Willingness to Pay for Renewable

Energy in Buncombe County

Natalie Garrett, University of North Carolina Asheville

Mentor: Dr. Leah Greden Mathews, Economics

Traditional energy markets do not reveal consumer willingness to pay for renewable energy. A survey of Buncombe County residents indicated that 64.1% of respondents were willing to accept, on average, a 16.3% premium on their monthly electricity bill for renewable energy. This information could be helpful for local policy makers.

1:00-1:15

An Econometric Relationship Of Oil Production And Economic Growth In OPEC And Non-OPEC Countries

Victoria E. Hall, Salem College

Mentor: Dr. Megan Silbert, Business and Economics

An econometric analyses determines that membership in the Organization of Petroleum Exporting Countries (OPEC) is not a significant property in influencing the economic growth of member countries. Rather, it is the many other characteristics unique to those individual countries that determine their respective Gross Domestic Products (GDP).

1:15-1:30

Increasing Sustainability in the City of Lexington: A Study of Energy Modeling

Chap Michie, Virginia Military Institute

Mentor: Major Geoffrey Cox, Applied Mathematics

A tool for data visualization was developed to track the usage of energy throughout the city of Lexington for the purpose of increasing sustainability. Microsoft Excel was used to create a database capable of storing the city's data and creating visual models of each building's respective energy use.

Oral Session 2 (1:35-2:35)

1:35-2:35

Communications

Phillips 215

1:35-1:50

It's Nothing Personal: Research and Analysis of the Growing Popularity Trends of Text Messaging over Voice Calling.

Alejandro Garcia, Radford University

Mentor: Betty Kennan, Communications

This presentation is a research conducted to view the trends of voice calling, compared to text messaging in today's world. As technology advances, and people are forced to advance with it, this study will shed light on how it has affected the "quality" of our communication in our "fast-paced" lifestyle.

1:50-2:05

The Game Player As Cyborg - Issues Of Agency And Control - Mass Effect

William Bloxom, High Point University

Mentor: Dr. Stefan Hall, Communications (Games and Interactive Media Development)

A popular element in many games is humans augmenting themselves with technology to perform superhuman feats or fighting against technology they have created. I will explore the relationship between biologicals and technology in Mass Effect to show how this element is a metaphor for the creation and consumption of games.

2:05-2:20

Examining Identity Management in Electronic Relationship Initiation

Margaret Phodos Byonn Driscoll and Elizabeth

Margaret Rhodes, Ryann Driscoll and Elizabeth Mason, Radford University

Mentor: Betty Kennan, Communications

This presentation demonstrates the ways in which identity management strategies are used in relationship initiation. Through case study, interviews, and a survey of 200 undergraduate students at a MidAtlantic regional comprehensive university, this project shows the strategic management used in electronic identity construction in the most popular electronic dating sites.

2:20-2:35

"The Girl Power Behind 1990s Music: The Spice Girls And The Riot Grrls"

Kate Hensley, High Point University

Mentor: Judy Isaksen, Communications

This presentation will explore the powerful wave of feminism that was revealed during the 1990s by looking at two polarizing musical phenomena, the Spice Girls and the Riot Grrls.

1:35-2:35

Anthropology/Sociology

Phillips 216

1:35-1:50

Death Attitudes, Alcohol Consumption, and Religiosity

Curtis Rash, Radford University

Mentor: Dr. Jeanne Mekolichick, Sociology

There have been multiple studies that examine death attitudes and religiosity; however, few studies have examined these two variables with the amount of alcohol consumption. This project expands upon a pilot study to examine the relationship of these three variables. Results will be discussed.

1:50-2:05

Becoming More Religious: The Religious
Experiences of First-Generation Hindu Indian
Immigrant Women in the United States
Anna Mahathey, High Point University

Mentor: Dr. Joe Blosser, Religion and Philosophy

First-generation Hindu Indian immigrant women expressed that they became more religious as they settled in the United States. However, the women's religious devotion became much more apparent and made the women feel more religious because Hinduism became an institutionalized religion that served several purposes for the women.

2:05-2:20

Nuns Having Fun
Sara Otero, Salem College

Mentor: Marlin Adrian, Religion

As a field of study, Religious Studies is in its infancy. Using various methodologies from this emerging field, I will describe my experience as a participant observer of an obscure order of Catholic nuns based in Medellin, Colombia.

1:35-2:35

English Literature

Phillips 217

1:35-1:50

"Ax the Trunk, the Limb Will Die": Tree Imagery in Toni Morrison's Beloved
Jeanne Stroud, Winthrop University

Mentor: Kelly Richardson, English

The purpose of this paper is to highlight the tree imagery that Toni Morrison uses in *Beloved*, particularly mentions of trees, woods, and leaves, and to argue that these images are symbols of strength, safety, and faith respectively. The arboreal images unify the text and make the story more accessible.

1:50-2:05

The Persistence of Narrative: Archetypal and Thematic Parallelism in Milton and Shelley Doug Stephens IV, Liberty University

Mentor: Dr. James Nutter, English and Modern Languages

An astonishing number of thematic components translate directly between Shelley's *Frankenstein* and Milton's *Paradise Lost*. These narrative similarities result from the fact that these literary objects stem from the higher reality of the Genesis narrative, and speak to those indelible parts of the human psyche known as the *imago dei*.

2:05-2:20

The Lack of a Governess in Wuthering Heights Kalene McDonnell, Winthrop University

Mentor: Dr. Leslie Bickford, English

This paper evaluates the problem with Cathy and Heathcliff's relationship based on there being no governess present during their childhood, and shows that knowledge of the social structure would have saved them from the chain reaction of events that followed their realization of social hierarchy.

2:20-2:35

Holden Caulfield: Coming to Terms with His Own Sexuality

Kari Chrisenberry, Winthrop University

Mentor: Leslie Bickford, English

Using deep analysis of the text, as well as looking at current scholarship of *The Catcher in the Rye*, I examine how Holden's deteriorating psychological state and his behaviors are directly linked to repressed homosexuality.

1:35-2:35

Psychology

Phillips 218

1:35-1:50

Friendship Profiles and parental Socialization Efforts of Children with Developmental Delay Jamie McDonald, High Point University

Mentor: Dr. Kirsten Li-Barber, Psychology Study included 9 matched-pair parental reports of developmentally delayed (DD) or typically developing (TD) children based on reported friendship profiles as well as parental socialization efforts. Results indicate no differences in friendship quality or parental socialization efforts.

1:50-2:05

Canine Personality and Its Relationship to Recovery From Anesthesia

Haley Hegedus and Joanne Altman, High Point University

Mentor: Joanne Altman, Undergraduate Research and Creative Works

Personality has been shown to impact recovery from illness in human beings. An investigation of canine personality and recovery from anesthesia after routine wellness surgeries utilized validated canine personality tests and a recovery assessment, and provided insight into the impact of personality on post-surgical recovery in otherwise healthy dogs.

2:05-2:20

Material and Social Reinforcements in Children With High-functioning Autism Emily Abel, Liberty University

Mentor: Dr. Marilyn Gadomski, Psychology

The relationship between childhood autism and operant conditioning—the use of reinforcement to increase appropriate behaviors—involves the interaction between target behaviors and material or social reinforcements. A single case study will explore the influence of material and social motivation on task completion in a child with Asperger's syndrome.

2:20-2:35

Learned Avoidance in the Male Syrian Hamster Det Cullum, Presbyterian College

Mentor: Alicia Askew, Psychology

The purpose of the experiment was to demonstrate learned avoidance in male Syrian hamsters and to determine if it is affected by defeat context. Defeated subjects exhibited learned avoidance only when subjects were defeated in the modified passive avoidance apparatus fight arena. Results suggest learned avoidance depends on defeat context.

1:35-2:35

Mathematics

Phillips 219

1:35-1:50

Application of Game-Theoretical Models to Influenza Vaccination Decisions
Tracy Spears Gill, University of North Carolina at Greensboro

Mentor: Jan Rychtář, Mathematics and Statistics

Vaccination decisions can be modeled using game theory, where players choose influenza vaccination based on a cost/benefit analysis. These models explain how the vaccinating behavior of a community is the result of individual decisions, and provide insight into which factors may be targeted to best effect change to group behavior.

1:50-2:05

MLB Prediction: A Study of Artificial Neural Networks, Data Mining and Mathematical Models in Professional Baseball

Will Lucas, Virginia Military Institute

Mentor: John David, Applied Mathematics.

Data mining techniques were used to construct many different types of Major League Baseball (MLB) models. The main technique used was committees of artificial neural networks (ANNs). The ANNs proved to be an effective prediction tool for both individual game prediction and season long results.

2:05-2:20

Modifying The NFL's Quarterback Passer Rating Lucy Findley, High Point University

Mentor: Dr. Laurie Zack, Mathematics

As one of the most commonly recognized sports statistics, the quarterback rating has been widely criticized for its inconsistencies and inadequacies. I will explore several of the most frequently used quarterback ratings and provide modifications and adjustments in an attempt to improve the statistics effectiveness.

2:20-2:30

Increasing Sustainability in the City of Lexington: A Study of Energy Modeling

Chap Michie, Virginia Military Institute

Mentor: Major Geoffrey Cox, Applied Mathematics

A tool for data visualization was developed to track the usage of energy throughout the city of Lexington for the purpose of increasing sustainability. Microsoft Excel was used to create a database capable of storing the city's data and creating visual models of each building's respective energy use.

1:35-2:35

Chemistry/Physics

Phillips 220

1:35-1:50

Examining the Colorimetric and Calorimetric Properties of Various Copper (I) Complexes Destinee Johnson, Winthrop University

Mentor: Dr. Nicholas Grossoehme, Chemistry

Cu⁺ is the physiologically relevant oxidation state of copper, *in vitro* experiments have, in large, been focused on Cu²⁺ because it is stable under laboratory conditions. This research aims to develop the methodology to directly measure the thermodynamic forces associated with Cu⁺ binding energy using isothermal titration calorimetry.

1:50-2:05

Computational Modeling and Video Analysis of a Kicked Football

Kevin Sanders, High Point University

Mentor: Dr. Aaron Titus, Chemistry and Physics

An American football was kicked end-over-end and high-speed video was used to analyze its motion. The video was analyzed to determine the effect of drag on the path of the football. A numerical model was developed to approximate the solution using a brute force method. The results will be presented.

2:05-2:20

Light Element Abundance Inhomogeneities and Deep Mixing in Galactic Globular Clusters Jeffrey Gerber and Michael Briley, Appalachian State University

Mentor: Dr. Michael Briley, Astronomy and Physics

We conduct observations to further explain the theory of thermohaline circulation driven mixing in the evolving red giants of globular clusters within our own galaxy. We will create models to match with current theories to confirm that the mixing is causing the light element abundance inhomogeneities in these cluster stars.

Oral Session 3 (2:40-3:40)

2:40-3:40

History

Phillips 215

2:40-2:55

New Deal Resettlement Communities in South Carolina

Joseph Cannon, Coastal Carolina University

Mentor: Maggi Morehouse, History

One New Deal approach to dealing with poverty among small farmers in the South was the Subsistence Homesteads Program. Three subsistence communities were developed in South Carolina. This paper examines the development, contemporary failure and the longer term impact of these experiments on the participants and their communities.

2:55-3:10

Hot Dogs and the American Consumer
Christina Carrozza, High Point University

Mentor: Paul Ringel, History

At the turn of the century, the hot dog found itself becoming an increasingly popular food in America. This presentation will explore just how such a humble food achieved such popularity, and in turn became a quintessential American staple that today remains emblematic of the American culture.

3:10-3:25

Building Backwards: Correlating Lincoln Logs To American Consumer Culture Grace Brinkley

Mentor: Paul Ringel, History

In 1916 John Lloyd Wright invented the Lincoln Logs play-set. Through the child's toy, we see a new side of the American consumer, in which the impulse towards progression is checked by a desire to preserve tradition. This paper will explore this juxtaposition of American attitudes by depicting how these values were able to coincide during a time period revolving around advancement.

3:25-3:40

Southwest Radicalism During the Great War: The Twin Threads of Socialism and Syndicalism David L. Wiley, University of North Carolina at Asheville

Mentor: Sarah Judson, History

Radical politics in Oklahoma and the Southwest led to the crisis of the Green Corn Rebellion in the years leading up to World War I. Wartime patriotism sharply curtailed radicalism during the war, but the legacy of this movement influenced the development of social protest throughout the twentieth century.

2:40-3:40

Communications

Phillips 216

2:40-2:55

Coca Cola: Not Just a Product, but an American Product.

Stephen Lillie, High Point University Mentor: Dr. Paul B. Ringel, History

Coca Cola has become an iconic American drink through their successful advertising campaigns. Through their advertisements, Coca Cola created a desire as the process of convincing Americans to drink their product. This paper explores the different advertisements used to help promote this desire.

2:55-3:10

The New Consumer Revolution: Social Media, Empowered Consumers, and Brand Identity Heather McCracken, Salem College

Mentor: Dr. Eve Rapp, Department of Business and Economics

The new Consumer Revolution—consumer empowerment through social media—challenges traditional marketing communication and branding models. This presentation analyzes how technology is enabling consumers to be more actively engaged in their relationships with organizations and provides recommendations on how organizations can leverage these technologies to create stronger brand identities.

3:10-3:25

Theoretical Integration of Network Models of Memory and Limited Capacity Model for Assessing Logo Effectiveness

Zachery Ryba, Coastal Carolina University

Mentor: Wes Fondren

This paper integrates two cognitive models, Limited Capacity Model and Network Models of Memory, to better understand the effectiveness of logos. Orienting response, encoding, recall and priming are discussed, as well as the development of network associations. The presentation also aims to provide an informed approach to creating logos.

3:25-3:40

It's Not a Perfect Ten
Emily Krewson, High Point University

Mentor: Judy Isaksen, Media and Popular Culture Studies

The Dr. Pepper TEN "It's not for Women" campaign is a macho, action-packed advertisement that appeals to... no one.

2:40-3:40

History/Sociology

Phillips 217

2:40-2:55

Understanding and Combatting Human Trafficking within the United States

Melinda Poteet, High Point University

Mentor: Dr. Alixandra Yanus, Political Science

In the United States, over 17,500 people are trafficked annually; 33 percent of these victims are United States citizens. I propose that instead of creating new federal offices to write legislation and search for solutions, the government should partner with non-profit organizations to combine resources to end trafficking in America.

2:55-3:10

Finish Milk in Moscow: How American News Media

Lost the Cold War

Eamon Deeley, Guilford College

Mentor: Damon Akins, History

This paper examines the relationship between American news media and the government of the USSR from the end of World War II (1945) to the death of Leonid Brezhnev (1982).

3:10-3:25

Intelligence Collection in Mexico
Robert P. Incontro, Virginia Military Institute

Mentor: Prof Mary Ann Dellinger, Modern Languages and Cultures

The drug war in Mexico has spawned a new term to describe the scope and gravity of the situation:
Narcoterrorism. Drawing on both law enforcement and military sources, this project examines and recommends ways to make intelligence collection in Mexico effective and actionable in order to defeat the cartels.

3:25-3:40

The Civil War over Civil Rights: Public Memory of the Civil War in 1960s Randolph County, North Carolina

Elizabeth Ellis, High Point University

Mentor: Dr. Paul Ringel, History

This paper explores the pro-Confederate public memory of the Civil War in Randolph County, North Carolina during the 1960s, despite the fact that much of the county opposed the Confederacy during the war itself.

2:40-3:40

English

Phillips 218

2:40-2:55

Ray Guns and Fancy Heaters: The Socio-Cultural Milieu's Influence on Comics

Monica Nissen, High Point University

Mentor: Dr. Jim Casey, English Department

This presentation investigates the evolution of Jimmy Woo of Marvel Comics' Agents of Atlas from the 1950s to the twenty-first century, examining the interaction between the stylistics of dialogue and the standard presentation of visual elements in comics to provide insight into the influence of contemporary events and attitudes.

2:55-3:10

Ben Jonson: The Religious Aspects of "On My First

Son"

Olivia Henry, Campbell University

Mentor: Dr. Donna Waldron, English Department

Religion in the face of death is explored in Ben Jonson's poem "On My First Son." It looks at a young life lost, and the thoughts and feelings of a grieving parent. This 16th century elegiac poem uses Biblical references and human reasoning to provide comfort after the death of Jonson's son.

3:10-3:25

Fate and Faith: Njal's Saga and Its Religious Character

Aaron Everhart, Winthrop University

Mentor: Dr. Jo Koster, English

The purpose of this paper is to correctly identify the religious elements of *The Saga of the Burning Njal*, and to categorize particular features as belonging to either Christian or "pagan" worldviews in order to determine whether or not the saga's author favors one particular religious system over the other.

3:25-3:40

Supernatural: Pagan Concepts in Christian Literature

Kaitlin Dick, Campbell University

Mentor: Dr. Donna Waldron, Literature

This presentation explores the "pagan" elements of Marie de France's *Lanval*. It explores how the pre-Christian literary tradition of human and supernatural being relationships have filtered down and found a place in Christian Literature.

2:40-3:40

Health Sciences

Phillips 219

2:40-2:55

The Impact of Decreased Lower Extremity
Proprioception in Balance and Falls Risk in Older
Adults

Jacob Wisnoski, and Clair Powell, The University of North Carolina at Asheville

Mentors: Jason Wingert, Health and Wellness, and Patrick Foo, Psychology

This research measured proprioception (sense of body position or movement) across the lifespan and related proprioception to fall-risk and postural sway. We hypothesized, and confirmed that older participants with increased proprioception error show an increase in sway and fall-risk. Thus, proprioception may guide interventions for people with diminished balance.

2:55-3:10

Diagnostic Accuracy of Scapular Physical Examination Tests For Shoulder Disorders: A Systematic Review

Alexis A. Wright, Craig A. Wassinger, Mason Frank, Lori A. Michener and Eric J. Hegedus, High Point University

Mentor: Alexis A. Wright, Physical Therapy

This systematic review reports on the diagnostic accuracy of scapular physical examination tests (SPETs) in patients with shoulder disorders. This review found that SPETs were unable to discriminate between patients with and without shoulder pain; therefore, the use of SPETs cannot be recommended for clinical practice to diagnose shoulder pathologies.

3:10-3:25

Comparison of Gluteus Medius Activation Between Weight Bearing and Non-Weight Bearing Limbs During a Functional Assessment of Hip Abduction Strength

Andrea Baellow, Yum Nguyen, High Point University; and Michelle C. Boling, University of North Florida

Mentor: Yum Nguyen, Department of Athletic Training

Decreased hip strength can increase the risk of knee injuries. However, hip strength is commonly measured in a non-weight bearing position and may not accurately reflect hip strength during activities. The purpose of this study was to examine the differences in muscle activation during a functional assessment of hip strength.

2:40-3:40

Economics

Phillips 220

2:40-2:55

EconApps: An Interdisciplinary Approach to Experimental Economics Thomas Langford, Kevin Sanders, and Christian Weigandt, High Point University

Mentors: Mr. Roger Shore, Mathematics and Computer Science; Dr. Daniel Hall, Economics

The EconApps iPad application was developed to minimize paperwork for the teacher and efficiently compile data about the experiments conducted. We will present the user interface and design of the application, creation of the application from start to finish, and the ability to use an iPad as a server.

2:55-3:10

Italian Sovereign Debt Crisis

Matthew Palma and Tyler Beadle, Presbyterian
College

Mentor: Jody Lipford, Economics

In our paper, we researched the reasons why the Italian economy plummeted due to debt as well as the economic conditions in Italy before and during the debt crisis. We analyzed the Italian debt-GDP ratio, real GDP per capita, real GDP growth, interest rates, unemployment rates, and dependent population percentages.

3:10-3:25

Analyzing Greece's Economic Crisis

Dylan Murray and Andrew Garner, Presbyterian

College Mentor: Dr. Jody Lipford, Economics

This paper analyzes and explains the economic crisis that Greece is currently dealing with. Through analyzing data of different economic measures for Greece, we show how poor Greece's economy is when compared to itself and other countries over the past decade and how Greece can move towards a recovery.

Poster Session 1 (5:15-6:45)

Slane Student Center (Lower Level)

Biology

1. Natural Remedies to Treat MRSA Alicia Brooks, High Point University

Mentor: Dinene Crater, Biology

A MRSA infection is caused by *Staphylococcus aureus* that cannot be killed by first line antibiotics. We hypothesized that there may be natural treatments that can kill MRSA. Based on initial trials, we tested spices, plants, and honey against MRSA with hopes of finding alternative treatment methods for MRSA infections.

2. Utilizing Protein Coding Sequences to Increase Phylogenetic Resolution of Pilobolaceae Heaven Cerritos, Longwood University

Mentor: Dale Beach, Biology and Environmental Sciences

The "shotgun fungi" are a group of fungal species capable of shooting spores great distances, transporting them far from their home in dung. We are working to adapt DNA sequence information to provide a rapid and consistent means to identify isolates from the family Pilobolaceae to the species level.

3. GPR109A as a Potential Anti-inflammatory Receptor in Human Retinal Endothelial Cells Mary Funke, High Point University; B. Renee Bozard Baldowski, Deeksha Gambhir, Sudha Ananth, Vadivel Ganapathy, and Pamela M. Martin, Georgia Health Sciences University

Mentor: Pamela M. Martin, Biochemistry and Molecular Biology

I found the presence of GPR109A in human retinal endothelial cells (HREC) and activation of GPR109A in HREC led to the suppression of pro-inflammatory cytokine IL-6 protein, a property that in vivo would likely mean less damage to the eye under diabetic conditions.

4. Elucidation of a Novel Alternative RNA Splicing Mechanism in Mammalian Cells Lucas Lyerly and Rachel Whitaker, Coastal Carolina University

Mentor: Rachel Whitaker, Chemistry and Biochemistry

We have demonstrated that Human cytoplasmic leucyl-tRNA synthetase (HcLeuRS) has specific protein-protein interactions with the nuclear enzymes SC35 and SRcyp. Based on our biochemical findings, we hypothesize that HcLeuRS, SC35 and SRcyp form a ternary complex that may influence RNA processing and maturation within the nucleus of mammalian cells.

5. Effectiveness of Fruit-Derived Compounds in Eliminating MRSA Beth Meloro, High Point University

Mentor: Dinene Crater, Biology

The prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) on High Point University's college campus inspired an effort to determine natural compounds with the ability to suppress growth of these harmful bacteria. Various fruits will be tested to examine the effectiveness of the juices in eliminating MRSA.

6. *Isolation of Microorganisms for Bioremediation*Faithcaren Moche and Taek You, Campbell University

Mentor: Taek You, Biological Sciences

Microorganisms were isolated from environmental samples of suspected contamination. After several rounds of purification, isolated microorganisms were characterized by 16s rRNA gene sequencing, morphological features and metabolic reactions. Bioremediation possibility of microorganisms is being explored.

7. Activation of the NKG2D Receptor Activates NFκB in Murine CD8⁺ T Cells Jasmine Spence, Longwood University

Mentor: Amorette Barber, Biological and Environmental Sciences

In tumors, the NKG2D receptor is likely engaged on T cells. NKG2D may activate multiple signaling pathways including nuclear factor kappa B (NFkB). The expression of multiple genes in the NFkB pathway was altered in NKG2D-stimulated T cells, including decreased apoptosis genes and increased inflammatory cytokine genes.

8. Cleaning Agents for Prevention of MRSA Transmission Emily Agee and Kyle Shaw, High Point University

Mentor: Dinene Crater, Biology

Methicillin-Resistant *Staphylococcus aureus* (MRSA) is resistant to many first line antibiotics, and can contribute to severe health issues. Cleaning agents were examined to determine if they were capable of killing MRSA. It is important that a disinfectant is found that is effective, but safe for our campus environment.

9. Effects of Ultraviolet Light on the Presence of Staphylococcus aureus in a College Community Ashley Bondurant, High Point University

Mentor: Dinene Crater, Biology

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a strain of *Staphylococcus aureus* that is resistant to antibiotic treatments. Since MRSA was isolated from the High Point University campus, I wanted to investigate methods to disinfect surfaces using ultraviolet light, hoping to identify a new strategy to decrease the spread of MRSA.

10. Isolation of Food Microorganisms of Importance Colleen Calliham and Taek You, Campbell University

Mentor: Taek You, Biological Sciences

Microorganisms play critical roles in the production of dairy products. Some produce toxin proteins that are harmful to insects but not mammals. After screening the contaminated dairy product, isolated microorganisms were characterized by genotypic and phenotypic features. Upon identification of microorganisms that produce insecticidal proteins, their genes will be cloned.

11. The Effects of Isocitrate Lyase and Malate Synthase Inhibition in Escherichia coli Brian Carey, Coastal Carolina University

Mentor: Michael Pierce, Department of Biology

The glyoxylate cycle is rarely found outside of single celled organisms. Isocitrate lyase and malate synthase are enzymes of the glyoxylate cycle that are inhibited by oxalate and glycollate. E. coli was used to determine if inhibiting glyoxylate cycle enzymes with oxalate and glycollate cause inhibition of cell growth.

12. Antimicrobial Properties of the Medicinal Plant Verbascum Thapsus Linnaeus, 1753.

Megan May and Jessica Chavez, High Point University

Mentor: Nicole Hughes and Kelli Sapp

This research study will examine the antimicrobial properties of *Verbascum thapsus*, mullein, against gram positive and gram negative bacteria associated with upper/lower respiratory infections, *Klebsiella pneumoniae*, *Streptococcus pyogenes*, *Streptococcus pneumoniae* and *Staphylococcus aureus*. Results will be discussed in the context of how mullein's antimicrobial properties compare to currently prescribed antibiotics.

13. The Protein C and Plasminogen Systems in Angiogenesis

Allison Stahl, Winthrop University

Mentor: Laura Neese Glasscock, Biology

Prostate cancer is the second leading cause of death in men in the United States (Siegel 2012). We are determining if PAI-I affects how the protein C system regulates microtubule formation in human umbilical vein endothelial cells. These studies will provide insight into how these proteins regulate prostate cancer progression.

14. Generation of Anti-tumor Immune Response using PD1-CD3 Chimeric Antigen Receptor-expressing T Cells Semone Trisvan, Longwood University

Mentor: Amorette Barber, Biological and Environmental Sciences

Cells of the immune system, specifically T cells, are a potential therapy for cancer. To enhance T cell recognition of tumors, we fused the PD-1 receptor and the CD3 zeta chain using genetic engineering. T cells expressing this fusion receptor had increased anti-tumor responses as shown by increased cytokine secretion.

Physics

15. An Apparatus to Measure Young's Modulus

Michael Cantor, High Point University

Mentor: Dr. Martin DeWitt, Chemistry and Physics

Young's modulus is a measure of the deformation of a material in response to an applied force. An apparatus was designed which uses a rotary motion sensor to measure the stretch of a wire. Values of Young's Modulus for different materials are reported.

16. Preparation of Lithium Niobate Crystals for Growing Silver Nanowires Aaron Mosey, University of North Carolina Asheville

Mentor: Dr. James Perkins, Physics

Periodically poled lithium niobate is a ferroelectric material, making it a candidate for the controlled deposition of silver nanostructures about the surface. This study intends to optimize conditions for controlled nanostructure growth for surface enhanced Raman spectroscopy. This is being explored through chemical and optical polishing techniques.

17. Measuring Viscous Fluid Flow with Biomimetic Cilia Linda Poplawski, High Point University

Mentor: Briana Fiser, Chemistry and Physics

We investigated the fluid flow of viscous fluids as driven by arrays of biomimetic cilia. These biomimetic cilia are micron-sized rods that mimic the size and beat shape of biological cilia and are capable of replicating the cilia-driven fluid transport in biological systems.

18. Simulation Studies of the Helium and Lead Observatory (HALO) Nikki Sanford, High Point University

Mentor: Kate Scholberg

HALO is the supernova neutrino detector at SNOLAB, Sudbury, Ontario. Improvements were made to its Geant4 simulation's geometry through water boxes which reflect scattered neutrons, and shield against outside neutrons and gammas. While studying detection efficiencies and event labeling, it was found that improvements cause a significant 2% efficiency increase.

Chemistry

19. Modification of Polysaccharides with Attachment of Iron Chelating Ligands Alison Parker, High Point University

Mentor: Chris Fowler, Chemistry

Iron overloading diseases require treatments of phlebotomy or more invasive intravenous iron chelators; the latter of which are both expensive and highly toxic. To find alternative treatment options we focus on the derivatization of polysaccharides with iron chelating ligands that can then sequester iron before absorption in the intestinal track.

20. *Thermodynamic Properties of Recyclable Materials* Rachael Redmond, High Point University

Mentors: Dr. Todd Knippenberg and Dr. Chris Fowler, Chemistry

The thermodynamic properties of various recyclable materials are compared using differential scanning calorimetry. A comparison of heat capacity, melting point, glass transition, and the energy required to recycle these materials is made to determine which recyclable material is most cost efficient.

21. Crystallization of CaQ97 Xylanase from Clostridium Acetobutylicum Mariam Salib, Winthrop University

Mentor: Dr. Jason C. Hurlbert, Chemistry, Geology, and Physics

Clostridium acetobutylicum produces a GH30 Xylanase that is capable of hydrolyzing hemicellulose at the β -1, 4 positions. This enzyme promises a bright future in biofuel production. To further understand the enzyme's mechanism of action a crystallographic structure is needed. The goal is to crystallize the enzyme for x-ray diffraction analysis.

22. Photocatalytic Hydrogen Evolution from Semiconductor Thin Films Justin J. Waller, Winthrop University

Mentor: Dr. Clifton Harris, Chemistry

The functionality of CdSe nanoparticles as catalysts for the photo reduction of water was investigated. CdSe nanoparticles were synthesized via reverse micelle method and electrophoretically deposited as thin films. Optimization, as well as physical and optical characterization was completed, and hydrogen evolution, was probed.

Social Science

23. The Role of Gender, Group Size, Rearing Location, and Personality on Bystander Intervention in Non-threatening Situations

Samantha Arzon, High Point University

Mentor: Dr. Jana Spain, Department of Psychology

The current study investigated the potential impact of gender, group size, and rearing location on bystander intervention in a non-threatening situation. Personality traits were also examined. Contrary to the literature, neither one of the independent variables had a significant effect. A significant correlation was found between conscientiousness and helping.

24. Parentification and the Quality of Sibling Relationships

Kia Barrett and Alexandra Cupito, The University of North Carolina at Greensboro

Mentor: Gabriela Livas Stein, Psychology

We examined the role of parentification (i.e., older siblings taking on caregiving roles) on the quality of sibling relationships and if this type of caregiving occurs more often in single-parent homes than two-parent homes in a sample of 52 African-American undergraduate students from The University of North Carolina at Greensboro.

25. Trading Up: Risk Regulation and Partner Selection Ashlee Branch, High Point University

Mentor: Dr. Sadie Leder, Psychology

This current work bridges the psychological theories of romantic partner selection, risk regulation, and evolutionary principles of attraction to identify the key factors involved in an individual's decision to leave their current relationship in pursuit of a new one.

26. Texting Behaviors in Interpersonal Relationships and Relationship Satisfaction Shannon Goldstein, High Point University

Mentor: Deborah Danzis, Psychology

This research examined texting behaviors in relationships. Results showed that texting was negatively correlated with relationship satisfaction; men showed more affection through text messages than women and people in serious relationships texted more than single individuals.

27. Psychopathy and Its Relationship to Narcissism, Self-Esteem, and Sociosexuality Chelsea Heim, High Point University

Mentor: Dr. Christopher Lootens, Psychology

Psychopathy and narcissism are problematic personality styles that cause difficulty in relationships. This study examines the relationships among psychopathy, narcissism, self-esteem, sociosexuality (the willingness to engage in casual sexual behavior) in an undergraduate sample that, unlike prior studies, includes both male and female participants.

28. *Influence Of New Communication Technology On Undergraduate Students* Reba Miller, Gabrielle Pidal and Robert Lambert, Radford University

Mentor: Betty Kennan, Communications

This research reports on a survey measuring how university students communicate with various audiences through the use of existing and new technology. Results indicate that there is a continued preference for and an attachment to cell phones, text messaging, e-mail and communicating through social networking sites.

29. Well-Being in Panhellenic Sorority Women

Kandace Thomas, The University of North Carolina at Chapel Hill

Mentor: Dr. Barbara Fredrickson, Psychology

The National Panhellenic Conference forms social relationships through membership in sorority chapters. This study investigated well-being among Panhellenic sorority women and non-Panhellenic women at a large south-eastern university. The findings suggest Panhellenic sorority women have higher rates of social sensitivity and feel more integrated to their environment than non-Panhellenic women.

Education

30. *Take Note: Why the Pen Is Mightier than the Keyboard*Olivia Bruner, High Point University

Mentor: Dr. Anna Piperato, Art History

Despite high-tech campuses, the old-school approach to note taking endures and proves to be beneficial to students' learning. Using my own illustrated journal and citing scientific studies, I highlight the importance of hand-written notes, as well as underscore the concept that illustrated notes enrich learning.

31. Student Perspectives on Student-Teacher Relationships and Classroom Management Lauren Gulledge, Anna Wilson and Brittany Donnelly, Presbyterian College

Mentor: Julie Smart, Education

This study examined the impact of the student-teacher relationship on elementary students' perceptions of implemented classroom management strategies. Surveys were administered to groups of second, third and fourth graders. These surveys measured student perceptions of the student-teacher relationship and the teachers' management style implemented within the classroom.

32. A Difference of Opinion: Attitudes of Preservice and Inservice Teachers on Testing Molly Kent, Presbyterian College

Mentor: Julie B. Smart, Education

This study explored the differences between pre-service and in-service teachers and their opinions and attitudes towards testing. The results of this study imply that pre-service teachers may not have an accurate perception of what their in-service teacher counterparts face.

33. The Effect of Classroom Separation on Twins' Behavior and Academic Achievement Lauren Smith and Lyndsey Smith, Presbyterian College

Mentor: Dr. Julie Smart, Education

The purpose of this study is to investigate the impacts that separating twins in elementary school has on their behavior and academic achievement. To conduct this study, the researchers composed a questionnaire that was distributed to teachers of twins at a local elementary school.

34. Chinese Language-Learning Software Programs as Effective Learning Tools Charlene Smith, Radford University

Mentor: Dr. I-ping Fu, Foreign Languages and Literatures

This research evaluates Chinese language-learning software programs and their features for 1) compliance with the academic language-learning standards of the American Council on the Teaching of Foreign Languages and 2) their effectiveness in teaching a non-native Chinese speaker the Chinese language.

35. *Diversity in the Classroom: A Teacher's Perspective* Allison Thomson, High Point University

Mentor: Dr. Beth Holder, Education

This research addresses various aspects of diversity of students in our public schools. This includes a literature review as well as an overview of attitudes and perceptions of teachers at Jamestown Middle School regarding students with diverse backgrounds. A survey was completed by several teachers to determine how diversity affects their classroom environment and instruction.

Humanities

36. Homes and the Fostering of Dreams in Hansberry's "A Raisin in the Sun" Shannon Curley, High Point University

Mentor: Kirstin Squint, English

Lorraine Hansberry's A Raisin in the Sun follows a black family in 1960s America, and the challenges they must overcome in order to achieve their dreams. Hansberry uses different homes to represent and interpret dreams and their long-term achievability for both her characters and all US citizens during this time.

37. Refuting Stereotypes: Themes in the Writings of Appalachian Ohio Youth Tiffany S. Francois and Sarah M. Voigt, High Point University

Mentor: Dr. Terrell Hayes, Human Relations, Sociology and Non-profit studies

Using content analysis, we examined 222 essays/poems from the 2009 and 2010 "I'm a Child of Appalachia" essay contests sponsored by the Foundation for Appalachian Ohio. Six recurring themes were found that contrast sharply with and challenge the common negative stereotypes outsiders hold about Appalachian people and the region.

38. *Music and Mood Affecting Memory* Lizzie Leighton, High Point University

Mentor: Dr. Deborah Danzis, Psychology

This study tested whether the mood of music, mood of words, and mood of music while recalling affected memory for words. Results showed main effect of mood of music and an interaction of mood of words and mood of music.

39. Career Exploration, Recruitment, Retention and Connectivity Through Social Media Ashley Sineath, Winthrop University

Mentor: Jennifer Belk, Department of Design

This presentation will focus on social media opportunities for college students and alumni to connect with professional contacts. The purpose is to inform attendees about the benefits of using social media outlets, the professional advantages of sites, such as LinkedIn, and strategies for successful utilization.

40. Experiential Education & Narrative Writing: Gateway to User Empathy Skylar Spies, Winthrop University

Mentor: Jennifer Belk, Department of Design

Experiential narrative writing opportunities are ways of interjecting critical thinking toward the advancement of user empathy. The course presented explored the use of autobiographical narrative writing. Students developed a multiplistic view of design and increased client understanding and empathy, resulting in more substantive project development ability and verbal/written communication skills.

Intercollegiate Juried Art Exhibit and Dessert Reception

Friday, 7:00pm - 8:00pm, Sechrest Gallery in the Hayworth Fine Arts Center

Student Reception (Friday, April 5th from 8:00pm - 9:30pm)

High Point University is offering students the opportunity to socialize in the lower level of the University Center. This area contains an arcade where all games are complimentary. Additionally, students will have access to the Extraordinary Cinema also located in the lower level of the University Center. The Cinema will be playing episodes from *The Big Bang Theory* for student's enjoyment.

Faculty Reception (Friday, April 5th from 8:00pm - 9:30pm)

Faculty will have time to relax and network on the third floor of the University Center in the Learning Commons (accessed by the elevators). Comfortable seating and coffee will be available to faculty during a time of informal meeting.



"Vision" by Laura Schramm
Be sure to visit the BigSURS Art Exhibition, Sechrest Art Gallery, Hayworth Fine Art Building

Saturday, April 6, 2012 <u>Oral Session 4 (8:00-9:00)</u>

8:00-9:00 Cultural History Phillips 215

8:00-8:15

The Ferris Wheel: A Representation of True American Culture Ameer Patel, High Point University

Dr. Paul Ringel, History

The Ferris Wheel was created to be a symbol of American pride for the World's Columbian Exposition in 1893. It was intended to showcase American industrial ingenuity and optimism, but it would also go on to illustrate the class division that existed in American entertainment at the time.

8:15-8:30

A Masterpiece of Resistance: The Impact and Role of the Arts in Palestine

Layla Quran, University of North Carolina-Chapel Hill

Mentor: Sarah Shields, History

My research reveals the current impact and role of the arts in Palestine. I discuss the attitude towards the arts in the area, the obstacles it faces, and the importance of the arts in the lives of Palestinians through interviews with nearly 50 Palestinian artists in 10 major Palestinian cities.

8:30-8:45

The Hoop Skirt and the Roles of Women in the 1850's

Alexandria Palmer, High Point University

Mentor: Dr. Paul Ringel, History

As a result of the economic changes in America women's fashions became more restricting and cumbersome, culminating with the first hoop skirt patent in 1846.

8:45-9:00

Goffman, Lorber, and Marx: Applying Theory to Little Miss Sunshine

Heather Wright, Radford University

Mentor: Carla Corroto, Sociology

This theoretical analysis of a contemporary film uses sociological theory to inform the foundation of research on pop culture and other sociological work. Using theories from Marx, Lorber, and Goffman, this piece analyzes the individual members of the family and how they are influenced by higher social structure.

8:00-9:00

English

Phillips 216

8:00-8:15

The United States of Milton: Milton's Influence on Thomas Jefferson, John Adams, and the American Revolution

Lora Deming, Campbell University

Mentor: Dr. Donna Waldron, English Department

Thomas Jefferson and John Adams integrated within the Declaration of Independence and the U.S. Constitution political ideology, including consent of the governed and social contract theory, taken from John Milton's political tracts *The Tenure of Kings and Magistrates, The Ready and Easy Way to Establish a Free Commonwealth,* and *Areopagitica*.

8:15-8:30

Bottom's Climb toward Self-acutalization in Terms of Maslow's Hierarcy of Needs
Molly Holoubek, Winthrop University

Mentor: Matthew Fike

This paper suggests that Titania helps Shakespeare's Bottom in A Midsummer Night's Dream attain both the love/belonging and esteem stages of Maslow's hierarchy of needs, as well as some characteristics of the self-actualization stage.

8:30-8:45

Gloucester's Blind Side
Chelsea Bergmann, Winthrop University

Mentor: Matthew Fike, English

In Shakespeare's King Lear, Edgar acts as an agent of the imagination to help his father, Gloucester, overcome his despair and sense of meaninglessness. The old man is thus reborn to the value of his own life and, ironically, regains proper "sight."

8:45-9:00

John Donne's Interpretation of Love Kendra Bell, Campbell University

Mentor: Donna Waldron, English

John Donne's style and his interpretations of different themes vary from the standards of his contemporaries, particularly his interpretation of love in a physical, political, and religious context.

8:00-9:00

Communication/Gender StudiesPhillips 217

8:00-8:15

"Oh You're a Nurse Bro?"
Eric Lauck, High Point University

Mentor: Dr. Judy Isaksen, Gender Studies

Based on a gender-activism project, this paper explores the discussions of HPU fraternity brothers about the topic of professional pride and career planning and its relevance to their sense of masculinity.

8:15-8:30

Examining Conflict Management Styles in Face-to-Face and Computer Mediated Communication Dakota Carter, Meg Ahrenberg, and Taylor Franklin, Radford University

Mentor: Betty Kennan, Communications

This presentation demonstrates the ways in which conflict management strategies such as competition and avoidance are used in face-to-face interactions, and answers the research question of whether undergraduate students use the same strategies in computer-mediated communication.

8:30-8:45

Multimodal Fiction and Mediated Boyhood: The Changing Construction of Contemporary Teenaged Masculinity as a Result of Convergent Storytelling James Kizer, High Point University

Mentor: Dr. Jenn Brandt, Women's and Gender Studies

This paper examines how convergent media are providing teenaged boys the agency needed to construct and perpetuate their own ideals and demonstrations of masculinity.

8:45-9:00

Organized for Good: A Qualitative Look at a Non-Traditional Housechurch Organization Kena Hawkins and Emily McIntosh, Campbell University

Mentor: Dr. Dean Farmer, Communication Studies

This paper will qualitatively examine a non-traditional church organization that utilizes feminist organizing principals such as heterarchy, connectedness, and consensus building yet still maintains some traditional structure and an external focus, especially seeking to empower the large Hispanic population which they serve through various programs.

8:00-9:00

Art History/History

Phillips 218

8:00-8:15

By the Hand of a Woman: Judith in Baroque Painting

Morgan McGee, Winthrop University Mentor: Laura Dufresne, Art History

This paper examines Baroque depictions of the story of Judith and Holofernes in order to demonstrate the difficulties in interpreting this story and explore what these paintings tell the viewer about virtue and womanhood in seventeenth-century Europe.

8:15-8:30

Captain John Smith: Liar or Legend?
Kaylyn Caruso, Liberty University
Mentor: Dr. David Snead, History

The veracity of Captain John Smith's writings regarding his Old World adventures and New World exploits has been thoroughly questioned for years and often discounted by scholars. However, by examining Smith's own orthography, contemporary European records, and archaeological finds, it becomes clear that his writings are both accurate and credible.

8:30-8:45

Repackaging Women: Making The Femme Fatale Safe In The Works Of Dante Gabriel Rossetti Amber Eckersley, Coastal Carolina University

Mentor: Elizabeth Howie, Art History

Dante Gabriel Rossetti repackages the femme fatale and makes her a commodity that can be safely consumed by the viewer. Because the femme fatale is contained in a painting, the viewer becomes a voyeur saved from her ultimate destruction, but allowed to experience the fantasy from a safe distance.

8:45-9:00

Brooks Brothers: The Significance to American

Consumer Culture

Tayler Hudson, High Point University

Mentor: Dr. Paul Ringel

On April 7th, 1818 Brooks Brothers opened its first emporium in New York City; this was the introduction of the first brand name men's clothier in America. Brooks Brothers started as a custom tailoring company for wealthy New Yorkers, but shifted to become a ready-made clothing manufacturer. My paper will explore the growth and change of the Brooks Brothers suit in nineteenth-century America.

8:00-9:00

Education

Phillips 219

8:00-8:15

Gender Differences in Attitudes and Perceptions of Middle Grades Mathematics Students Allison Thomson, High Point University

Mentor: Dr. Shirley Disseler, Education

Even in today's modern society women are still the minority among the science, technology, engineering and mathematics fields. We investigated what the attitudes were between boys and girls at the middle school level. Our hypothesis was that female students show more potential than males in mathematics yet don't have the same confidence as males.

8:15-8:30

Student Attitudes Toward STEM Compared to Previous STEM Exposure

Katie DeAngelo, High Point University

Mentor: Shirley Disseler, Education

Through a survey conducted among 6th grade students in Jamestown NC, we attempted to investigate the attitudes students have toward STEM subjects in correlation with previous exposure of STEM subjects.

8:30-8:45

To Wii or Not To Wii: A Comparison of Teaching Methods

Meredith Greene & Drew Hackett, High Point University

Mentor: Martie Bell, Health and Physical Education

Many children today develop bowling skills while playing Wii games, but do these skills transfer to actual bowling? Is the Wii as effective as traditional teaching methods for developing bowling skills? This study compared the Wii to a traditional method for teaching children bowling skills.

8:45-9:00

The More The Educator Knows: The More The Student Succeeds

Jacob Burden & Brantay Cohens, Coastal Carolina University

Mentors: Emma Savage-Davis and Todd Cherner, Middle Level Education

Today students come to school with diverse learning needs and abilities as well as learning experiences. This presentation will demonstrate how reading is fundamental to all learning and how educators must be prepared to use a multitude of differentiated reading instructional strategies to meet their needs.

8:00-9:00

Chemistry/Physics

Phillips 220

8:00-8:15

Microwave Dehydration of Tertiary-butyl Alcohol Jacob R. Wells, Campbell University

Mentor: Michael B. Wells, Chemistry and Physics

In a laboratory microwave, tertiary-butyl Alcohol was dehydrated with sulfuric acid to form two alkene dimers. IR spectroscopy with an attenuated total reflectance (ATR) unit and ¹H NMR spectroscopy were used to determine the Hofmann to Zaitsev product ratio. The microwave method was compared to classic reflux method.

8:15-8:30

Wintertime Enhancement of Mesospheric-Lower Thermospheric Ozone

Olga V. Tweedy, Coastal Carolina University

Mentor: Varavut Limpasuvan, Chemistry and Applied Physics

Above 15 km, ozone concentration protects life against harmful ultraviolet radiation. In the Mesospheric-Lower Thermospheric (MLT) Region (60-100 km altitude), a maxima ozone layer forms in the wintertime darkness as a result of photochemical equilibrium. This study investigates the episodic enhancement of this ozone layer due to unusual atmospheric conditions.

8:30-8:45

Characterization of the DNA Binding Properties of the Nickel Uptake Regulator of Streptomyces coelicolor

Lauren Rhodes & Jessica Gasparik, Winthrop University

Mentor: Dr. Nicholas Grossoehme, Chemistry

NUR from *S. coelicolor* is a Ni²⁺ sensing protein responsible for regulating the transcription of certain genes that affect both the uptake of nickel and how it is used within the cell. The work described here highlights experiments carried out to assess the metal dependence of DNA binding.

8:45-9:00

Controlled Synthesis of Silver Nanostructures Using Ferroelectric Lithography
Robert Morris, University of North Carolina
Asheville

Mentor: Dr. James Perkins, Physics

Silver nanostructures are created through the reduction of silver nitrate onto a polarity patterned ferroelectric substrate. The particles can be preferentially positioned optimizing localized surface enhancement activity. Control of the position and size of the nanoparticles would make them useful in Raman spectroscopy potentially

improving spatial resolution for macromolecule analysis.

Oral Session 5 (9:05-10:05)

9:05-10:05

Non-Profit

Phillips 215

9:05-9:20

A Practical Fundraising Plan For A 501(c)3 Not-forprofit Organization

Sara Dowdle, Salem College

Mentor: Darlene Rodriguez, Not-for-Profit Management & Arts Management

This project utilizes practitioner and academic research to create a practical fundraising plan for a 501(c)3 not-for-profit organization, Initiative for Affordable Housing. This plan was created based on research on fundraising plans and methods for acquiring donors, as well as analyzing organizational budgets, revenue sources, and past fundraising efforts.

9:20-9:35

Service Learning Through the Process of Feeding the Hungry: Reflections on Efforts Made Marisa Linton, Campbell University

Mentor: J. Dean Farmer, Communication Studies

As a part of a service learning assignment, a student group analyzed the communication practices of the Harnett County Food Pantry. This paper analyzes processes used in assisting the organization. It discusses applications of Diffusion Theory (Rogers, 2003) and Social Judgment Theory (Sharif, & Nebergall, 1965) during the project.

9:35-9:50

Development as a Means to Give Back Sarah Goscinski, Salem College

Mentor: Darlene Rodriguez, Not-for-Profit Management

Annual giving to one's alma mater is quite common, however Senior class gifts are less so. Salem College created a plan to increase the percentage of seniors who give to the class gift as a way of growing their donor-base and cultivating a lifestyle of philanthropy.

9:05-10:05

Sociology

Phillips 216

9:05-9:20

Gender Equality and the Modern American Woman Mikhaela Ackerman, High Point University

Mentor: Dr. Alixandra Yanus, Political Science

This research examines the meaning of gender equality and how it affects society's notion of the modern American woman. We found that citizens' understandings of equality vary greatly and their perceptions of what feminism is also diverge. These conceptual misunderstandings and reliance on stereotypes perpetuate inequality for the modern woman.

9:20-9:35

Driving on the Right Side of the Road: An Approach to Developing an Effective Bi-Lingual Safe Driving Campaign for Spanish-Speaking, Hispanic Young People

Brittany Melvin, High Point University

Mentor: Virginia McDermott, Strategic Communication

A study of a bi-lingual safe driving campaign and the most effective methods by which to communicate with Spanish speaking, Hispanic youth. An analysis of teens' attitudes towards driving and their responses to culturally adapted videos.

9:35-9:50

Helpers of Helpmate – Healing the Community Kenton Bell, The University of North Carolina, Asheville

Mentor: Heidi Kelley, Sociology and Anthropology

The advocates of Helpmate, a domestic violence and intimate partner violence (DV/IPV) agency in Asheville, shared their lived experiences with DV/IPV advocacy through interviews and surveys. The resulting ethnography illustrates the diverse identities and motivations of advocates that converge to promote healing at Helpmate and activism in the broader community.

9:05-10:05

English

Phillips 217

9:05-9:20

Ideals of Femininity as Represented by Disney's **Princesses**

Meghan McMullen, Salem College

Mentor: Dr. Jo Dulan, English

Disney's popular princess characters promote certain agendas that the company is attempting to sell to its viewers, including female passivity, women's consumerism and racial stereotyping. In examining each princess, viewers may pinpoint her message as well as determine what Disney hopes young girls will take away from these women.

9:20-9:35

Ophelia's Flowers Andra Mack, Winthrop University

Mentor: Matthew Fike, English

This paper argues that the flowers in Ophelia's bouquet were chosen specifically to make a visual argument that she and Hamlet had a sexual relationship. Ophelia uses her flowers like a suicide note to tell the other characters and the audience about her seemingly hopeless situation.

9:35-9:50

Archetypal Possession in King Lear Alison Kanski, Winthrop University

Mentor: Matthew Fike, English

This paper addresses the extraordinary power of the characters' unconscious by arguing that Regan and Goneril's masculine traits and Lear's feminine traits arise respectively from possession by the Jungian archetypes of animus and anima. It is this possession that moves the action toward tragedy.

9:50-10:05

"Tearful Marionettes: An Analysis of Marginalized Female Sexuality in William Faulkner's Absalom, Absalom!"

Joseph A. Giordano, Winthrop University

Mentor: Dr. Leslie Bickford, English

Since Ellen and Judith's behaviors expose potential homosexuality, their sexualities are unfixed. Ellen's sorrow to heterosexual marriage results in an unfulfilled existence; this repressed sexuality may directly influence Judith's sexuality, rendering it equally unstable. An analysis of other women characters may reveal similar sexual ambiguity sought in the male characters.

9:05-10:05

Psychology

Phillips 218

9:05-9:20

Bilingual Processing of Interlingual Homographs: Is There Evidence for Inhibition? Kelly Vaughn, High Point University

Mentor: Kimberly Wear, Psychology

The study examined inhibitory processing of interlingual homographs with a semantic relatedness decision task in bilinguals. Homographs were presented once with a related word in each language. Response times for pairs of related words were evaluated. Preliminary results provide support for an uninhibited view of homograph processing, and language non-selectivity.

9:20-9:35

Sherlock Holmes, Psychology, and Pop Culture Evan O'Neal, Winthrop University

Mentor: Dr. Casey Cothran, English

This paper examines the various adaptations of Sherlock Holmes and how the quirks and flaws demonstrated by Sir Arthur Conan Doyle's detective in literature are exaggerated and exploited on screen to create new characters with diagnosable psychological disorders to fit popular culture's entertainment fads.

9:35-9:50

The Effect of Sexual Orientation and Couple Makeup on the Likelihood to Receive Help Samantha Nelson, High Point University

Mentor: Dr. Deborah Danzis, Psychology

The study investigated how the makeup of couples (heterosexual, lesbian, and gay males) affected the perception and intervention behavior of a witness of an act of dating violence. The sexual orientation of the couple and the sex of the perceiver affected the likelihood of the perceiver to intervene and help.

9:50-10:05

Beyond Listening: Musical and Semantic Effects of Favorite Songs

John R. Purcell, High Point University & Liz Redford, California State University, Sacramento Mentors: Adam Lonsdale & Clare Rathbone, Oxford Brookes University, Psychology

Participant mood and arousal ratings were measured before and after listening to a favorite song, reading favorite song lyrics, or listening to white noise. Participant self-focus and meaning in life was also measured. Results suggest that listening to music and reading lyrics have a similar impact on mood and arousal.

9:05-10:05

Economics

Phillips 219

9:05-9:20

The Portuguese Sovereign Debt Crisis
Sam Levy, Presbyterian College

Mentor: Jody Lipford, Economics

For the better part of the past decade Portugal, like other Eurozone countries, has been heading down a dangerous path of increasing private and public debt and an increasing role for government intervention. This has led to a sovereign debt crisis that is proving difficult to resolve.

9:20-9:35

The Euro Crisis: Germany
Laura Blanco and Edith Michael, Presbyterian
College

Mentor: Jody Lipford, Economics and Business Administration

We examine why Germany stood firm in the midst of the Euro Crisis by analyzing the reforms imposed, data (RGDP, unemployment and employment, long term interest rates and credit default swap prices), and leadership of the country.

9:35-9:50

FIKA-Introducing Scandinavian Sweets and Swedish Eats

Cameron McGraw, High Point University

Mentor: Lou Anne Flanders-Stec, Business-Entrepreneurship

FIKA is a restaurant concept created by young entrepreneur, Cameron McGraw. Inspired by one of the quickest rising cuisines in the world, FIKA is a modern take on Sweden's favorite pastime. FIKA will present an in-depth analysis on the nine building blocks required to fund, start, and manage a successful ethnic restaurant.

uses the Deluge networking protocol for dissemination and remote reprogramming.

9:05-10:05

Computer Science

Phillips 220

9:05-9:20

Artificial Neural Networks: My Computer Can Do WHAT?!

Alex Palmer and Christian Weigandt, High Point University

Mentor: Mr. Roger Shore, Mathematics and

Computer Science

Artificial Neural Networks are mathematical models that are used heavily in regression and classification tasks. In our talk, we will discuss the back-propagation learning algorithm as well as introduce its applications, including our web application to recognize handwritten digits.

9:20-9:35

Spreading Sickness on a College Campus: The Effect on Utility

Scott Jeffrey, Davidson College

Mentor: Dr. Gouri Suresh, Economics

The conventional wisdom is to never skip school; however, should one still attend class while sick? Using agent-based modeling in MATLAB to simulate a college campus that is entering flu season, I found the collective utility of the college decreases when sick students attend class, but individual utility differs.

9:35-9:50

On Demand Adaptive Computing
Thomas Langford, High Point University

Mentor: Mr. Roger Shore, Mathematics and Computer Science

The On Demand Adaptive Computing framework provides a way to generate applications on a host device and disseminate and reprogram them on a remote device. This framework is written in C and

Oral Session 6 (10:15-11:15)

10:15-11:15

History

Phillips 215

10:15-10:30

Media and Government Interaction in the 1973 Arab-Israeli War

Alexandra Hoey, High Point University

Mentor: George Simpson, History

This paper examines the interaction between the media and government in a comparative context as well as the issue of the Arab-Israeli peace process in historical perspective. It focuses in particular on the 1973 Arab-Israeli War, and the way that the print media reported on that conflict.

10:30-10:45

The Crusades of a Peacemaker: Saint Catherine of Siena

Amy McMinn, Guilford College

Mentor: Timothy Kircher, History

Saint Catherine of Siena is known as a peacemaker throughout Tuscany and Europe in the fourteenth century. She wrote over 400 letters, including to Pope Gregory XI. I will explore Catherine's use of crusade rhetoric to various political figures and its implications during the Avignon Papacy.

10:45-11:00

Armor Warfare In The 1973 Arab Israeli War Tim Walker, High Point University

Mentor: George L. Simpson, History

The 1973 Arab Israeli War pushed Israeli armor to its breaking point. This paper examines the challenges that servicemen faced and how these trials forced Israeli commanders to rethink their conceptions of armored warfare.

11:00-11:15

Neo-Platonism and Augustine: How the Acceptance of Pagan Philosophy Allowed Augustine to Become a Christian William Hopchak, Liberty University

Mentor: David Snead, History

This paper identifies three philosophical questions Augustine had regarding truth, evil, and God. It describes the way in which Neo-Platonism provided truly intellectually satisfying answers to the questions he had held for years. The paper argues that Neo-Platonism provided the intellectual framework Augustine needed in order to accept Christianity.

10:15-11:15

Communications

Phillips 216

10:15-10:30

Is What We Have Here Is A Failure To Communicate?: Collegiate Athletic Directors Responses To The Penn State Sex Abuse Scandal Jeremy Hopkins, High Point University

Mentor: Virginia McDermott, Communications

The Penn State sex abuse scandal rocked the nation. But did this scandal affect how athletic directors manage their programs? I interviewed five collegiate athletic directors about their personal reactions to the events and if their programs changed any formal and informal communication policies in response.

10:30-10:45

Rhetoric In Ethnography?: Balancing Argument And Research

Kylen C. Schmidt, Virginia Military Institute

Mentor: Mary Beth Pennington, English

In this paper, I consider the role of argument in ethnography by investigating Gerry

Philipsen's Speaking "Like a Man" in Teamsterville: Culture Patterns of Role Enhancement in an Urban Neighborhood. I specifically analyze how Philipsen uses Aristotle's rhetorical appeals to balance both the rhetor and researcher roles.

10:45-11:00

Gendered Violence: When Easy, Breezy, isn't

Beautiful

Ashlee Branch, High Point University

Mentor: Judy Isaksen, Communications

This observational study uses FX makeup techniques to test the hypothesis that people perceive the same act of violence in different ways depending on the gender expression of the victim.

10:15-11:15

History

Phillips 217

10:15-10:30

The Prince of Steel & the Prince of Gotham: The Modern Aristocracy and the Criminal Poor Chelsea Beresford, University of North Carolina at Asheville

Mentor: Dr. Ellen Pearson, History

American culture has created a heroic aristocracy of wealth at the expense of criminalizing the poor. The figures of Andrew Carnegie and Batman, the fictional Bruce Wayne, embody American capitalism, which creates unaccountable elites and criminalizes poverty. This paper compares two American heroes while examining cultural views of wealth and poverty.

10:30-10:45

The Boxing Glove: A Gentlemanly Endeavor Travis Short, High Point University

Mentor: Paul Ringel, History

The sport of boxing has existed for centuries, but for most of that time gloves were not used. The concern for the athlete's safety shows shifts in what was becoming culturally acceptable as true manliness, like other aspects of social life the art of manliness took on a gentlemanly aspect.

10:45-11:00

The Emergence of Superman
Luke Setliff, High Point University

Mentor: Dr. Ringel, History

Superman is one of the first and most influential characters in the American superhero world, created in 1938. My research takes a closer look at the American identity and culture in the 1930's and the 1940's to understand how Superman immediately became an American superhero sensation.

11:00-11:15

The Colt Peacemaker's Effect On American Consumerism

Nicholas Beall, High Point University

Mentor: Dr. Paul Ringel, History

The Colt Single Action Army or the Peacemaker pioneered center-fire cartridge technology and became one of the most popular weapons in history. This paper works to explain why this one weapons popularity is historically significant and determine how it gained this popularity.

10:15-11:15

English

Phillips 218

10:15-10:30

Facing the Lion: Orlando's Transformation Laura-Leigh Todd, Winthrop University

Mentor: Matthew Fike, English

Through a process of transformation, Shakespeare's Orlando in *As You Like It* overcomes his initial social position and lack of education in order to become worthy of Rosalind. This process culminates in the scene where he saves his brother Oliver from natural predators.

10:30-10:45

Portia's Manipulation in The Merchant of Venice Hollie Sierra, Winthrop University

Mentor: Matthew Fike, English

Portia's sincerity is superficial, and underneath her masquerade lies a master of craftiness. By examining her biblical allusions and by referencing her other actions throughout the play, this paper presents a preponderance of evidence for Portia-asmanipulatrix.

10:45-11:00

Sam Spade: Revelations of the Wrench, the Beam,

and the Man

Devan Plyler, High Point University

Mentor: Dr. Matthew Carlson, English

An exploration of morality within Dashiell Hammett's *The Maltese Flacon*, and how individualistic hero Sam Spade arrives at the truth that our perceptions of conventions—and the faith that we place in them—are illusory.

11:00-11:15

"My poor fool": The Doubling of Cordelia and the Fool in King Lear

Loren Mixon, Winthrop University

Mentor: Matthew Fike, English

This paper argues that the themes of wisdom and folly are constructed and strengthened through the metatheatric doubling of Cordelia and the Fool in *King Lear*.

10:15-11:15

Biology

Phillips 219

10:15-10:30

CYP4F18 Regulates the Inflammatory Response
Dana Gregor and Dylan McDaniel, Radford
University

Mentor: Peter Christmas, Biology

CYP4F18 is an enzyme that metabolizes bioactive lipids, and our hypothesis is that it regulates inflammatory responses. To test this, CYP4F18 knockout mice were studied using two mouse models of inflammation. In each model, significant differences in inflammatory gene expression were measured in the knockout mice compared to wild type.

10:30-10:45

A Phylogenetic Analysis of the Round-headed Katydids (Tettigoniidae: Amblycorypha) Micaela Scobie and Tim Forrest, University of North Carolina Asheville

Mentor: Dr. Tim Forrest, Biology; Dr. Brian Byrd, Biology

Demarcation within groups of the katydid genus *Amblycorypha* is unclear due to similar morphologies among species and incomplete knowledge of their relationships. Significant song differences among populations indicate there are several cryptic species. Molecular sequencing was used to determine species boundaries and identify phylogenetic relationships in the group.

10:45-11:00

Swainson's Warbler (Limnothlypis swainsonii) Density along a Hydrologic Gradient in an Old-Growth Bottomland Forest

Mark Roberts, Campbell University

Mentor: John G. Bartlett, Biological Sciences Swainson's Warbler (*Limnothlypis swainsonii*) is the second most endangered songbird in the southeastern US. Breeding males were surveyed in Congaree National Park, SC between 2010-2012. Males were sparsely distributed among canopy gaps in mature hardwood stands, but large densities of males were present in vast clearcuts along the Congaree River.

11:00-11:15

Statistical Analysis of Water Quality in Western North Carolina Rivers John Lombardi, UNC-Asheville

Mentor: Steve Patch, Mathematics

Potential regression models are implemented on water data from Western North Carolina rivers to explore the effects of flow, season and time on water quality parameters. Various models are compared and contrasted in order to assess which are best at predicting trends in the quantity of pollutants in W.N.C. rivers.

Poster Session II (11:20am-12:30pm)

Slane Student Center (Lower Level)

Biology

1. The Function of Stabilimenta in Webs of the Spiny Orb Weaver, Gasteracantha cancriformis: Testing the Prey Attraction and Web Advertisement Hypotheses.

Hillary Ballantine, Taylor Collins, Jessica Pietrefesa, Daniel Susral, and Stephen Watkins, Coastal Carolina University

Mentor: Dr. Chris Hill, Biology

We studied web decorations (stabilimenta) in webs of the spiny orb weaver, *Gasteracantha cancriformis*, testing the prey attraction and web advertisement hypotheses. The prey attraction hypothesis was not supported, as prey remains were uncorrelated with numbers of stabilimenta. However, webs rebuilt after experimental destruction had more stabilimenta, supporting web advertisement.

2. Cave Annelids from Alabama and Georgia and Their Association with Soil Characteristics Michael Higginbotham, High Point University

Mentor: Josh Campbell, Biology

Annelid worms are poorly documented from caves of the Southeast. We collected annelids from caves and compared them with the cave soil composition and characteristics to determine potential controlling factors for cave annelid abundance and species richness.

3. The Effects of Leaf Morphology on Photosynthesis in High Altitude Tree Seedlings Junior L. Neal, High Point University

Mentor: Dr. Nicole Hughes, Biology

Plant leaf morphology evolves based on environmental factors such as sunlight and temperature. In this study, we test the hypothesis that conifer needle morphology can contribute to increased photosynthesis under cloudy conditions, as needle packing results in greater surface area able to absorb diffuse light.

4. Modeling Nesting Ecology of Diamondback Terrapins based on Terrestrial Habitat Features Zachary Parker, Joshua Lynn, W. Beckett Hills, and Scott Parker, Coastal Carolina University

Mentor: Dr. Scott Parker, Biology

The diamondback terrapin is an aquatic turtle that requires terrestrial environments to deposit their eggs. A 3D analyst model was developed to predict environmental features associated with terrapin nesting sites in estuarine habitats. If proven accurate, this may be useful in determining which terrestrial habitats are essential to protect.

5. Phylogenetic Investigations in Sarracenia Species

Dakota Peachee, High Point University

C. Craig Moretz, Forsyth Technical Community College

Gerald L. Smith, High Point University

Mentor: Gerald L. Smith, Biology

A phylogenetic study of *Sarracenia*, the American pitcher plant genus, is being undertaken. *Darlingtonia* californica serves as the outgroup taxon. Our studies involve ISSR (a type of DNA fingerprinting). We hope to gain information on the origin and evolutionary history of the species.

6. Phylogenetic Investigations in Zephyranthes Species Madison Sapp, Morgan Sapp, and Gerald Smith, High Point University

Mentor: Gerald Smith, Biology

A phylogenetic study of southeastern and southwestern United States and Mesoamerican white-flowering and yellow-flowering *Zephyranthes* species is being undertaken. *Habranthus robustus* serves as the outgroup taxon. Our studies involve ISSR (a type of DNA fingerprinting). We are interested in determining the sister relationships that will be developed in our tree.

7. The Effects of Nitric Oxide on the Sensory-Motor Functions in the Developing Zebrafish (Danio rerio) Benjamin Sykes, Virginia Military Institute

Mentor: Dr. James E. Turner, Biology

This study brings us closer to determining the mechanism and cause of the 'listless' condition, which may be linked to a lack of NO release due to E2 deprivation. In turn, this study points to the possibility of a direct role of NO in the developing nervous and cardiovascular systems.

8. Anthocyanins And Leaf Temperature: A Biophysical Model

William S. Fravel, Nicole M. Hughes and William K. Smith, High Point University

Mentor: Nicole M. Hughes, Biology

Anthocyanins are non-photosynthetic, vacuolar pigments which absorb strongly in green wavelengths, causing leaves to appear red. In this experiment, we use modeling and field measurements test whether absorption of sunlight by red pigments can significantly increase leaf temperature in red evergreen leaves (relative to green conspecifics) under controlled environmental conditions.

9. Abaxial Versus Adaxial Anthocyanins effects On Photosynthesis Rates In Understory Environments Nicole M. Hughes, Kaylyn L. Carpenter, Timothy S. Keidel, Charlene N. Miller, High Point University; William K. Smith, Wake Forest University

Mentor: Nicole Hughes, Biology

Plants adapted to deep shade often exhibit red/purple coloration of their lower (abaxial) leaf surfaces due to anthocyanin pigments, but rarely in their upper (adaxial) surfaces. Using *Colocasia esculenta* 'Mojito', we test the hypothesis that abaxial anthocyanins protect shade-adapted leaves from photoinhibition through light attenuation, without interfering with shaded photosynthesis.

10. Environmental Surveillance of Batrachochytrium dendrobatidis in Streams of Central North Carolina Dylan Malpass and Thomas Garbarino, High Point University

Mentor: Dr. Charles K. Smith, Biology

Batrachochytrium dendrobatidis (Bd) is the causative agent of chytridiomycosis, an emerging infectious amphibian disease. We conducted qPCR assays to detect Bd in water samples from 11 NC streams. We found no evidence of Bd in our samples suggesting that Bd is currently not widespread in the streams of the region.

11. Kleptoplasty in the Foraminifera of Coastal South Carolina Alex Mosier, Coastal Carolina University

Mentor: Megan Cevasco, Biology

The phenomenon of kleptoplasty, the ability of a heterotrophic host organism to "steal" the photosynthetic organelles (plastids) of its prey, is examined both molecularly and microscopically in Foraminifera collected from two locations on the South Carolina coast.

12. Blue Dasher Perch Orientation and Preference

Lorna Scribner, Caitlin Baker, Matthew Davin, Erin McCance, and Mike Phillips, Coastal Carolina University Mentor: Dr. Chris Hill, Biology

Perch location and orientation may affect dragonfly fitness. We recorded perch choices for 292 male Blue Dasher (*Pachydiplax longipennis*) dragonfly landings at five Conway, SC ponds in September 2012. Significantly more landings were facing the pond on perches emerging from water, suggesting males chose perches to detect other males.

13. The Effects of Estrogen and Nitric Oxide Deprivation on the Morphogenesis of the Caudal Fin in Embryonic Zebrafish (Danio rerio)

Adam Teufel, Virginia Military Institute

Mentor: Dr. James E. Turner

The effects of estrogen (E2) and nitric oxide (NO) depriving solutions were studied to examine the effect on zebrafish tail morphogenesis. The results were found to be statistically significant for multiple treatment groups, indicating a negative impact on caudal fin development as a result of either E2 or NO deprivation.

Physics

14. The Effects of Initial Conditions on the Motion of the Boleadora Weapon Jacob Brooks, High Point University

Mentor: Aaron Titus, Chemistry & Physics

The dynamics of an ancient hunting weapon called the boleadora and the effects of mass, radius, and initial conditions on its motion were studied. Its motion was measured with high-speed video analysis and was compared to a computational model.

15. The Path of Springs Released from Uniform Circular Motion Matthew Carnaghi, High Point University

Mentor: Aaron Titus, Chemistry and Physics

As an extension of the original slinky drop experiment, video analysis was used to study the path of a spring released from uniform circular motion and its dependence on spring stiffness, mass, and initial conditions. Results were compared to a computational model.

16. Automation of Regional Numerical Weather Simulation John P. Sheehan, Coastal Carolina University

Mentors: Varavut Limpasuvan, Chemistry and Applied Physics; Michael Murphy, Computer Science Accurate weather forecasts are crucial in everyday planning. Yet, detailed, local forecasting is not typically done due to lack of computational and observational resources and technical knowhow. This project streamlines the process of generating high-spatial resolution, regional numerical weather prediction through the automation of meteorological data accumulation and computational tasks.

17. The Effects of Gamma Trimming on Normalized Stokes Parameters.

Philip J. Wulfken, Virginia Military Institute

Mentor: Gregory A. Topasna, Physics and Astronomy

Polarization data from a set of images of standard stars was analyzed. Outliers and scatter in the data sets affected the Stokes parameters q and u. The gamma trimmed mean method was used to trim the data and statistical tests were used compare the effect trimming had on the distribution.

Biochemistry

18. Cloning of Human Sphingosine Kinase 1 for Future Expression Studies Tyler Couch, Winthrop University

Mentor: Jason C. Hurlbert, Chemistry, Geology, and Physics

Human sphingosine kinase 1 (SK1) is an enzyme that has been shown to be overexpressed in various types of cancer and promotes antiapoptoic cellular proliferation. By overexpressing recombinant SK1 in *Escherichia coli*, the structure of SK1 may be solved by x-ray crystallography aiding in structure based design of novel inhibitors.

19. Tat-specific factor 1's Role In Insulin Signaling Laura Fritts and Miranda Zupp, High Point University

Mentor: Heather Miller, Chemistry and Physics

Microarrays have revealed that Tat-SF1 up-regulates the levels of many human genes, including some in the insulin signaling pathway. To explore this, we analyzed insulin-related gene levels by PCR. If Tat-SF1 has a role in signaling, then we should detect differential gene expression between control and Tat-SF1-depleted cells.

20. GFAP and CD68 in the Brains of Knockout Mice after a Model Brain Injury Rebecca Giese, High Point University

Mentors: Jeffery Iliff, Center of Translational Neuromedicine at the University of Rochester Missy McCorquodale, High Point University

This research was aimed at studying the atrophy and glial cell activation after an administered brain injury to determine at which level of injury the brain is significantly damaged. This was achieved by measuring the amount of GFAP antibodies and CD68 antibodies in the brain at different times after the injury, which showed a significant amount of white matter atrophy at the 7 day mark with a correlating increase in glial activation.

21. Capsaicinoids Enhance the Luminescence of Tb(III) Complexes Bryan A. Johnson and Jimmie L. Bullock, Longwood University

Mentor: Christopher Gulgas, Chemistry and Physics

Capsaicinoids are molecules structurally related to capsaicin, the molecule responsible for the pungency of hot peppers. Members of the capsaicinoid family, including two novel compounds, have been shown to augment the luminescence of Tb(III) complexes. The synthesis of the capsaicinoids and luminescence enhancement studies shall be presented.

22. Analyzing the HIV-1 Genome for Putative Tat-SF1 Binding Sites Kristen Turner, High Point University

Mentor: Heather Miller, Department of Chemistry and Physics

HIV-1 uses numerous human proteins to aid in successful viral replication. One of these host factors is Tatspecific factor 1 (Tat-SF1). If Tat-SF1 regulates HIV-1 RNAs post-transcriptionally, it may interact with the HIV-1 genome. To explore this idea, several putative Tat-SF1 binding sites were mapped on the HIV-1 genome.

Social Science

23. Now You See It, Now You Don't: Effects of Change Blindness on the Ability to Detect Change Kathryn E. Bruzios, High Point University

Mentor: Dr. Deborah Danzis, Psychology

Change blindness is when people do not detect changes in a stimulus. This study evaluated how type of change affected change blindness. Results showed that participants recognized when something disappeared from an image more often than other changes. They also overestimated their ability to detect change and underestimated others' ability.

24. Accessing the Internal Lexicon: Evidence for the Influence of both Context and Frequency William Burke and Anne Caverly, High Point University

Mentor: Kimberly Wear, Psychology

What are the roles of context and frequency in lexical access of ambiguous words? The current study assessed the effects on relatedness decision times of processing a word pair related to two meanings of a homograph on a word pair containing the homograph. Results support a model including both context and frequency.

25. The Effect of Self-Esteem on Metacognitive Factors that Affect School Performance Aimee Griffith, High Point University

Mentor: Deborah Danzis, Psychology

Participants filled out a self-esteem scale, studied word-pairs, and predicted how many pairs they would remember on a future test to test the effects of self-esteem on two factors that affect school performance. Results showed self-esteem did not have a significant effect on these factors.

26. Is It a Matter of Fact? The Impact of Presentation Style on Schizophrenia Knowledge & Stigmatization John R. Purcell, High Point University

Mentor: Jana Spain, Psychology

Participants reported their attitudes before and after viewing one of two PowerPoint presentations about schizophrenia. Presentations contained different perspectives and information about schizophrenia. Findings suggest that schizophrenia knowledge can be gained regardless of information presented, but desires for social distance and reported empathic willingness were not affected by either presentation.

27. Developmental Cannabinoid Exposure during Lactation: Psychopathological Effects in Adulthood L. Rina Schick, Kody R. Draper, Michael A. Curry, and Stephen P. Casazza, Radford University

Mentor: Dr. Pamela Jackson, Psychology

Perinatal exposure to cannabinoids has been shown to alter emotional regulation and cognitive performance in adults. The present study investigated the effect of lactational exposure in rats. Results suggested that exposure via mother's milk adversely affected weight gain in the offspring and produced slight alterations in adult behavior.

28. Isolation, Idealism, and Gender Roles in Marie de France's "Lanval" Shannon Curley, High Point University

Mentor: Laura Linker, English

In Marie de France's "Lanval," the accepted notions of power, love, and gender stereotypes are challenged by discrepancies of character. Using stock heroines and heroes to deal with real and symbolic turmoils, de France explores love through an isolated, idealized world where traditional gender roles are both challenged and reversed.

Health Sciences

29. Leisure is My Therapy: Improving the Quality of Life for Individuals with Disabilities Angela Best, Longwood University

Mentor: Dr. Susan Lynch, Therapeutic Recreation

A child with an undiagnosed developmental disability was observed participating in different recreational activities including tee-ball, bowling, and a therapeutic aquatic program. The data collected during this study demonstrated the value of these programs on improving the child's functional abilities as well as her quality of life.

30. Reported MCID Estimates of Hip Related Patient Reported Outcomes: A Systematic Review Alexis A. Wright, Jennifer Johnson, High Point University and Chad Cook, Walsh University

Mentor: Alexis A. Wright, Physical Therapy

Minimal clinically important difference (MCID) scores are utilized amongst healthcare professionals in determining patient response to treatment. A systematic review was performed identifying MCID scores for all hip outcome measures. A total of nine studies were included with variable reported MCID estimates based upon patient population and baseline functional status.

31. Variables Associated With Progression of Femoroacetabular Impingement of the Hip: A Systematic Review Alexis A. Wright, Garrett S. Naze, Alicia Emerson Kavchak, Danielle Paul, Brianna Kenison, Eric J. Hegedus, High Point University

Mentor: Alexis A. Wright, Physical Therapy

This systematic review reports on variables associated with the progression of femoroacetabular impingement (FAI). Radiographic variables including increased alpha angle demonstrate moderate evidence of progression of FAI to labral pathology but not hip osteoarthritis. Most radiological variables demonstrated no association with progression.

32. Assessment of the Effects of Controlled Frequency Breathing on Lactate Levels in Swimming Michelle Key, Campbell University

Mentor: Jennifer Bunn, Exercise Science

This study assessed differences in blood lactate, heart rate (HR), and completion time of a maximal 100-yard freestyle swim in normal breathing (NB) and controlled-frequency breathing (CFB) conditions. Results showed no difference between conditions on blood lactate or recorded time. HR was significantly higher in NB trial compared to CFB.

Art & Design

33. Back To Egypt: An Interactive Map Nikki Frascione, High Point University

Mentor: Dr. Anna Piperato, Art History

This poster outlines the process of creating an interactive research-based website using Adobe Flash. The map features ten small objects and information about them and Ancient Egyptian culture. A laptop will be on display so that guests may interact with the map itself.

34. Concrete Masonry Units

Abigail Hines, High Point University

Mentor: Cathy Nowicki, Home Furnishing and Design

The purpose of this poster is to identify and describe what a Concrete Masonry Unit is. The rich historic background of CMU is what drew my attention to this topic in particular. The goal is educate others on this innovative building material while hopefully expanding its popularity.

35. Rainscreen Systems

Alexandra MacDonald, High Point University

Mentor: Cathy Nowicki, School of Art and Design

Rainscreen systems are innovative façade systems designed to further protect buildings from water infiltration and related moisture damage while providing aesthetic enhancement to a structure.

36. Rocky Coast Exhibit Design

Kayla Saunders, Radford University

Mentor: Julie Temple, Interior Design

Questioning what attracts visitors, this research provides recommendation that the North Carolina Zoological Park could take to create a fully engaging visitor experience. This study includes the integration of research on animals in the current Rocky Coast exhibit, observation findings, and written and visual recommendations for the new renovation.

37. Slate Roofing: The History and Culture

Laura Twomey, High Point University

Mentor: Cathy Nowicki, School of Art and Design

My poster is a small summary of my research investigation into the rich history and culture of slate roofs. There is a long history and many reasons people chose slate as a roofing material, in present day slate is manly used for the aesthetic appeal.

Lunch

Boxed lunches will be available for conference registrants from 12:30pm to 2pm at the BigSURS registration desk in Slane Student Center.

Faculty Planning Meeting

The BigSURS faculty planning meeting will take place in room 113 of the Phillips School of Business.

Big South Undergraduate Research Symposium Concert

Members of the High Point University Jazz Ensemble and Percussion Ensemble will perform a concert in the Charles E. Hayworth Memorial Chapel at 2pm.

BigSURS Awards Ceremony

Awards will be presented to students in the Extraordinaire Cinema located on the lower level of the University Center. The ceremony will begin at 3pm.

Student Presenter List

Abel, Emily Ackerman, Mikhaela Agee, Emily Ahrenberg, Meg Arzon, Samantha Baellow, Andrea Baker, Caitlin Ballantine, Hillary Barr, Marilynn Barrett, Kia Beadle, Tyler Beall, Nicholas Beel, Rachel Bell, Kendra Bell, Kenton Benham, Kristina Beresford, Chelsea Bergmann, Chelsea Berthiaume, Derek Best, Angela Betts, Chloe Blanco, Laura Bloxom, William Bondurant, Ashley Branch, Ashlee Brinkley, Grace Brooks, Alicia Brooks, Jacob Bruner, Olivia Bruzios, Kathryn Bullock, Jimmie Burden, Jacob Burke, William Calliham, Colleen Cannon, Joseph Cantor, Michael Carey, Brian Carnaghi, Matthew Carpenter, Kaylyn Carroll, Alana Carrozza, Christina Carter, Dakota Caruso, Kaylyn Caverly, Anne Cerritos, Heaven Chavez, Jessica Chrisenberry, Kari Cohen, Jordan

Liberty University **High Point University High Point University** Radford University **High Point University High Point University** Coastal Carolina University Coastal Carolina University **UNC-Greensboro UNC-Greensboro** Presbyterian University **High Point University Liberty University Campbell University UNC-** Asheville **Liberty University** UNC -Asheville Winthrop University Coastal Carolina University Longwood University **High Point University** Presbyterian College **High Point University High Point University** Longwood University **Coastal Carolina University High Point University Campbell University** Coastal Carolina University **High Point University** Coastal Carolina University **High Point University High Point University** Salem College **High Point University** Radford University **Liberty University High Point University Longwood University High Point University** Winthrop University **High Point University**

Cohens, Brantay Collins, Taylor Couch, Tyler Cullum, Det Cupito, Alexandra Curley, Shannon David, Dwana Davin, Matthew DeAngelo, Katie Deeley, Eamon Deming, Lora Denerson, Shamaz Dick, Kaitlin Doherty, Megan Dolan, Kayla Donnelly, Brittany Dowdle, Sara Draper, Kody Driscoll, Ryann Eckersley, Amber Ellis, Elizabeth Everhart, Aaron Felder, Jennifer Findley, Lucy Francois, Tiffany Frank, Mason Franklin, Taylor Frascione, Nikki Fravel, Scotty Frazier, Kristen Fritts, Laura Funke, Mary Garbarino, Thomas Garcia, Alejandro Garner, Andrew Garrett, Natalie Gasparik, Jessica Gerber, Jeffrey Giese, Rebecca Gill, Tracy Spears Giordano, Joseph Glymph, Mary Ellis Goldstein, Shannon Goscinski, Sarah Greene, Meredith Gregor, Dana Griffith, Aimee Gulledge, Lauren

Coastal Carolina University Coastal Carolina University Winthrop University Presbyterian College **UNC-Greensboro High Point University** Winthrop University **Coastal Carolina University High Point University Guilford College** Campbell University Salem College Campbell University **Liberty University High Point University** Presbyterian College Salem College **Radford University Radford University Coastal Carolina University High Point University** Winthrop University Liberty University **High Point University High Point University High Point University Radford University High Point University High Point University Liberty University High Point University High Point University High Point University Radford University** Presbyterian University **UNC-Asheville** Winthrop University Appalachian State U. **High Point University UNC-Greensboro** Winthrop University Presbyterian College **High Point University** Salem College **High Point University** Radford University **High Point University** Presbyterian College

Guthrie, Kayla Hackett, Drew Hall, Victoria Hawkins, Kena Hayhurst, James Hegedus, Haley Heim, Chelsea Henry, Olivia Hensley, Kate Higginbotham, Michael High Point University Hills, William Hines, Abigail Hoey, Alexandra Holoubek, Molly Hopchak, William Hopkins, Jeremy Hudson, Tayler Incontro, Robert Jannuzzi, Catherine Jeffrey, Scott Johnson, Bryan Johnson, Destinee Johnson, Jennifer Jones, Mary Beth Kanski, Alison Keidel, Timothy Kenison, Brianna Kent, Molly Key, Michelle Kizer, James Knight, Joshua Koslowski, Rachel Krewson, Emily Lambert, Robert Langford, Thomas Lauck, Eric Ledford, Jonathan Leighton, Lizzie Lennane, Jamey Levy, Sam Lillie, Stephen Linton, Marisa Lombardi, John Lucas, Will Lyerly, Lucas Lynn, Joshua MacDonald, Alexandra High Point University Mack, Andra

High Point University High Point University Salem College **Campbell University UNC-Greensboro High Point University High Point University** Campbell University **High Point University** Coastal Carolina University **High Point University High Point University** Winthrop University **Liberty University High Point University High Point University** Virginia Military Institute **High Point University Davidson College** Longwood University Winthrop University **High Point University High Point University** Winthrop University **High Point University High Point University** Presbyterian College Campbell University **High Point University Coastal Carolina University Campbell University High Point University Radford University High Point University High Point University UNC-Asheville High Point University Coastal Carolina University** Presbyterian College **High Point University Campbell University UNC-** Asheville Virginia Military Institute **Coastal Carolina University** Coastal Carolina University

Winthrop University

Mahathey, Anna Malpass, Dylan Mason, Elizabeth May, Megan McCance, Erin McCracken, Heather McDaniel, Dylan McDonald, Jamie McDonnell, Kalene McGee, Morgan McGraw, Cameron McIntosh, Emily McMinn, Amy McMullen, Meghan Meloro, Beth Melvin, Brittany Michie, Chap Miller, Charlene Miller, Katie Miller, Reba Mixon, Loren Moche, Faithcaren Morris, Robert Mosey, Aaron Mosier, Alex Murray, Dylan Naylor, Hannah Neal, Junior Nelson, Samantha Nissen, Monica Nolan, Ryan O'Neal, Evan Otero, Sara Owens, William Palma, Mathew Palmer, Alex Palmer, Alexandria Parker, Alison Parker, Zachary Patel, Ameer Paul, Danielle Peachee, Dakota Phillips, Mike Pidal, Gabrielle Pietrefesa, Jessica Plyler, Devan Poplawski, Linda Poteet, Melinda

High Point University **High Point University** Radford University **High Point University Coastal Carolina University** Salem College **Radford University High Point University** Winthrop University Winthrop University **High Point University Campbell University Guilford College** Salem College **High Point University High Point University** Virginia Military Institute **High Point University Longwood University** Radford University Winthrop University **Campbell University UNC-** Asheville **UNC-** Asheville Coastal Carolina University Presbyterian College Campbell University **High Point University High Point University High Point University High Point University** Winthrop University Salem College Campbell University Presbyterian College **High Point University High Point University High Point University Coastal Carolina University High Point University High Point University High Point University Coastal Carolina University** Radford University **Coastal Carolina University High Point University High Point University High Point University**

Powell, Clair Purcell, John Quigley, Alison Quran, Layla Rash, Curtis Redmond, Rachael Rhodes, Lauren Rhodes, Margaret Roberts, Mark Rodinson, Jordan Ryba, Zachery Salib, Mariam Sanders, Kevin Sanford, Nikki Sapp, Madison Sapp, Morgan Saunders, Kayla Schick, Rina Schmidt, Kylen Schramm, Laura Scobie, Micaela Scribner, Lorna Setliff, Luke Setzer, Jessica Shaw, Kyle Sheehan, John Short, Travis Sierra, Hollie Sineath, Ashley Singh, Justin Smith, Lauren Smith, Lyndsey Smith, Charlene Spence, Jasmine

UNC- Asheville **High Point University High Point University UNC- Chapel Hill Radford University** High Point University Winthrop University Radford University **Campbell University** North Carolina A&T State **Coastal Carolina University** Winthrop University **High Point University High Point University High Point University High Point University** Radford University **Radford University** Virginia Military Institute **High Point University UNC-Asheville** Coastal Carolina University **High Point University High Point University High Point University** Coastal Carolina University **High Point University** Winthrop University Winthrop University **High Point University** Presbyterian College Presbyterian College Radford University **Longwood University**

Spies, Skylar Stahl, Allison Stalvey Jessica Stephens, Doug Stroud, Jeanne Sullivan, Margaret Susral, Daniel Sykes, Benjamin Teufel, Adam Thomas, Kandace Thomson, Allison Todd, Laura-Leigh Trisvan, Semone Turner, Kristen Tweedy, Olga Twomey, Laura Vaughn, Kelly Voigt, Sarah Walker, Tim Waller, Justin Walsh, Kristin Wannamaker, John Watkins, Stephen Weigandt, Christian Wells, Andrew Wells, Jacob Whittaker, Emily Wiley, David Wilson, Anna Wisnoski, Jacob Wright, Heather Wulfken, Philip Zupp, Miranda

Winthrop University Winthrop University **UNC-Greensboro Liberty University** Winthrop University **High Point University Coastal Carolina University** Virginia Military Institute Virginia Military Institute **UNC- Chapel Hill High Point University** Winthrop University Longwood University **High Point University** Coastal Carolina University **High Point University High Point University High Point University High Point University** Winthrop University **UNC-Charlotte High Point University Coastal Carolina University** High Point University **UNC-Greensboro** Campbell University Radford University **UNC-** Asheville Presbyterian College **UNC** -Asheville Radford University Virginia Military Institute **High Point University**

Mentor List

Adrian, Marlin	Salem College	Fowler, Chris	High Point University
Akins, Damon	Guilford College	Fredrickson, Barbara	UNC Chapel Hill
Alice, Rachel	Coastal Carolina	Fu, l-ping	Radford University
Altman, Joanne	High Point University	Gadomski, Marilyn	Liberty University
Askew, Alicia	Presbyterian College	Glasscock, Laura	Winthrop University
Barber, Amorette	Longwood University	Glaze, Eliza	Coastal Carolina University
Bartlett, John	Campbell University	Greden, Mathews Leah	UNC –Asheville
Beach, Dale	Longwood University	Grossoehme, Nicholas	Winthrop University
Belk, Jennifer	Winthrop University	Gulgas, Christopher	Longwood University
Bell, Martie	High Point University	Hall, Daniel	High Point University
Bickford, Leslie	Winthrop University	Hall, Stefan	High Point University
Blosser, Joe	High Point University	Harris, Clifton	Winthrop University
Brandt, Jennifer	High Point University	Hayes, Matthew	Winthrop University
Brent, Justin	Presbyterian College	Hayes, Terrell	High Point University
Briley, Michael	Appalachian State	Hill, Christopher	Coastal Carolina University
Bunn, Jennifer	Campbell University	Holder, Beth	High Point University
Byrd, Brian	Western Carolina University	Howie, Elizabeth	Coastal Carolina University
Campbell, Joshua	High Point University	Hughes, Nicole	High Point University
Carlson, Matthew	High Point University	Hurlbert, Jason	Winthrop University
Carron, Hayden	High Point University	Illiff, Jeffery	High Point University
Casey, Jim	High Point University	Isaksen, Judy	High Point University
Cevasco, Megan	Coastal Carolina University	Jackson, Pamela	Radford University
Cherner, Todd	Coastal Carolina University	Judson, Sarah	UNC -Asheville
Christmas, Peter	Radford University	Kelley, Heidi	UNC-Asheville
Corroto, Carla	Radford University	Kennan, Betty	Radford University
Cothran, Casey	Winthrop University	Kim, Jaeshil	Liberty University
Cox, Goeffrey	Virginia Military Institute	Kircher, Timothy	Guilford College
Crater, Dinene	High Point University	Knippenberg, Todd	High Point University
Danzis, Deborah	High Point University	Koster Joseph	Winthrop University
David, John	Virginia Military Institute	Leder, Sadie	High Point University
Dellinger, Mary Ann	Virginia Military Institute	Li-Barber, Kirsten	High Point University
DeWitt, Martin	High Point University	Limpasuvan, Varavut	Coastal Carolina University
Disseler, Shirley	High Point University	Linker, Laura	High Point University
Dufresne, Laura	Winthrop University	Lipford, Jody	Presbyterian College
Dulan, Jo	Salem College	Lootens, Christopher	High Point University
Farmer, Dean	Campbell University	Lonsdale, Adam	Oxford Brookes University
Fike, Matthew	Winthrop University	Lynch, Susan	Longwood University
Fiser, Briana	High Point University	Martin, Pamela	High Point University
Flanders-Stec, Lou Ann	eHigh Point University	McDermott, Virginia	High Point University
Fondren, Wes	Coastal Carolina University	Mekolichick, Jeanne	Radford University
Foo, Patrick	UNC-Asheville	Miller, Heather	High Point University
Forrest, Timothy	UNC -Asheville	Morehouse, Maggie	Coastal Carolina University

Nguyen, Yum Nowicki, Cathy Nutter, James Parker, Scott Patch, Steve Pearson, Ellen Pennington, Mary Perkins, James Pierce, Michael Piperato, Anna Rapp, Eve Rathbone, Clare Richardson, Kelly Ringel, Paul Rodriguez, Darlene Rychtar, Jan Sapp, Kelli Savage-Davis, Emma Scholberg, Kate Shields, Sarah Shore, Roger Silbert, Megan Simpson, George L. Smart, Julie

High Point University High Point University Liberty University Coastal Carolina University UNC-Asheville UNC- Asheville Virginia Military Institute **UNC-** Asheville **Coastal Carolina University High Point University** Salem College Oxford Brookes University Winthrop University **High Point University** Salem College **UNC-** Greensboro **High Point University** Carolina Coastal University **High Point University UNC -Chapel Hill High Point University** Salem College **High Point University** Presbyterian College

Smith, Charles Smith, Gerald Snead, David Spain, Jana Squint, Kirstin Stein, Gabriela Suresh, Shyam Gouri Temple, Julie Titus, Aaron Topasna, Gregory Turner, James Vess, Sarah Waldron, Donna Wear, Kimberly Wells, Michael Whitaker, Hellmann Whitaker, Rachel Windsor, Elroi Wingert, Jason Wright, Alexis Yanus, Alixandra You, Taek Zack, Laurie

High Point University High Point University Liberty University High Point University High Point University UNC-Greensboro Davidson College Radford University High Point University Virginia Military Institute Virginia Military Institute **High Point University Campbell University High Point University** Campbell University **Coastal Carolina University Coastal Carolina University** Salem College **UNC-** Asheville High Point University **High Point University** Campbell University **High Point University**

HIGH POINT UNIVERSITY



Belk Residence Hall	30	Millis Athletic and Convocation Center	33	Roberts Hall	27
Blessing Residence Hall	31	Millis Residence Hall	22	School of Education	12
		Nido R. Qubein School of Communication			
Congdon Hall	3	Norcross Graduate School	32	Slane Student Center	25
Coy O. Williard Baseball Stadium	36	North College Administration	44	Smith Library	28
David R. Hayworth Hall	8	North College C-Store 3	45	Steele Sports Center	37
David R. Hayworth Park	24	North College Court and Bistro	43	Townhome Community 1	14
Erath Baseball Field	35	North College Terrace	47	Townhome Community 2 (proposed)	15
Fifth Street Lofts (proposed)	16	North College Townhomes	46	University Center	23
Finch Residence Hall	5	Norton Hall	9	U-Ville Apartments	42
		Old Student Center/Security			
Hayworth Chapel	7	Phillips Hall	6	Village	41
Hayworth Fine Arts Center	2	Plato S. Wilson School of Commerce	10	Wilson Residence Hall	21
Ike Belk Track	38	Point Place Apartments, 806	20	Wrenn Admissions Building	1
Kester International Promenade					
McEwen, North, Wesley, Yadkin Residence	e Halls 29	Point Place Apartments, 818	18		