RESEARCH WEEK 2016 125 Years 2016 of Teaching, Research, and Community Outreach

Making ECSU a valuable resource for developing the intellectual capital of the state and the nation and for addressing the environmentally sensitive economic needs of Northeastern North Carolina





Monday April 11, 2016 * Department Displays 9:00 - 1:30pm, Lobby Jenkins Science Center Presiding: Tarsha Rogers and Dana Poole * Opening Session 10:00 - 10:50am Room 138 Jenkins Science Center Presiding: Dr. Alonzo DeCarlo, Academic Affairs & Dr. Jeanette Morris Welcome: Dr. Vann Newkirk, Vice Chancellor for Academic Affairs Research Week Social Media Presence : CERSER Team The Occasion : Dr. Eyualem Abebe, "The Importance of Research Activities at ECSU" * Reception 11:00 -12:30pm, Lobby Jenkins Science Center * Internship Roundtable I 3:00 – 3:50pm, Room 138 Jenkins Science Center Presiding: Dr. Lloyd Mitchell and Reshema Combs Presenters: Makitta Whitehurst-McLean, Career Development "Internships Make a Difference" Christin Smith, Intern NC Dept of Transportation **Department of Homeland Security Seminar** 6:00 - 7:00pm, Room 204 Gilchrist Education Building Presiding: Dr. Lloyd Mitchell Presenters: Joseph Shore, Joel Davies, Andrew Register, Joel Gonzalez-Santiago Refreshments * Senior Art Show ArtiSix 6:00 - 8:00pm, KE White University Gallery Incorporating Technology into the STEM classroom 6:30 - 8:00pm, Room 204 Gilchrist Education Building Presiding: Dr. Farrah Ward Presenting: Dr. Denise Johnson, WSSU Representatives Refreshments **Tuesday April 12, 2016 Supporting Faculty Research (For Staff)** 11:30 - 12:30pm, Room 104 McLendon Hall Refreshments Presiding: Kenya Hinton and Lila Gonzales Presenter : Dr. Sheryl Bradford & Sponsored Programs Staff * Using Computational Thinking to Solve Real World **Problems** 2:00 - 3:30pm Room 138 Lane Hall Presiding: Dr. Kenneth L. Jones Presenter: Dr. Denise Johnson, WSSU Representatives * Reception 1:00 - 2:00pm, Room 216 Ridley Student Center * Wilkins/Basnight Endowed Chair Lecture Series Time 2:00 - 3:20pm, Ridley Student Center Presiding: Dr. Claudie Mackey Presenters: Jedidiah Gist-Anderson, Joshua Mallory, James Futrell and Carl Seward **Business and Economics: UNC Businesswide Competition** Time 2:00 - 3:20pm, Room 114 Williams Hall Presiding: Dr. Ngozi Oriaku and Dr. Ebere Oriaku Presenter: Dr. Kingsley Nwala and Dr. Kungpo Tao Presenting: Brian Hyman, Camaria Flowers, Sergio Fletes 6th Annual Jazz Festival

7:30 – 9:00pm Burmin Fine Arts Center Presiding: Professor Clarence Goss Featuring Trombonist Michael Dease

Wednesday April 13, 2016

* Science Bowl Competition 9:00 -11:30am, Room 138 Jenkins Science Center Presiding: Dr. Leon Pringle, Dr. Gloria Payne, Dr. Gary Harmon * Reception Noon, Lobby Jenkins Science Center * Internship Roundtable II 1:00 - 1:50pm, Room 138 Lane Hall Presiding: Dr. Darnell Johnson Presenters: ECSU Students * NSF's Hubs and Spokes for Advanced Big Data **Applications** 2:00 - 4:00pm, Chancellor's Boardroom Presiding: Dr. Linda Hayden Presenters: Dr. Francine Alkisswani, NTIA BroadbandUSA Joyce Shaw, "ECSU BTOP Update" Suresh Murugan, ECSU Chief Information Officer Future Vision: Dr. Vann Newkirk, Vice Chancellor * Faculty Research Seminar 5:00 - 5:50pm, Room 104 Lane Hall Presiding: Dr. Dipendra Sengupta Presenters: Dr. Jinchun Yuan, Dr. Anthony Emekalam, Dr. Edmond Koker Thursday April 14, 2016 * African American Scientists 9:30 - 10:50pm Room 229 Dixon-Patterson Hall Presiding: Orestes Gooden and Dr. Jeanette Morris Presenters: Dr. Johnny Houston, Professor Emeritus Dr. Hirendranath Banerjee * Tour of CERSER lab and Aviation Department 11:00 - 12:20pm Room 229 Dixon Hall Presiding: Robin R. Mangham and Dr. Lloyd Mitchell The Beauty of Language, Literature, & Communication 2:00 - 3:20pm Johnson Hall 2nd Floor Room 220 Presiding: Dr. Michael Jasper Presenters: Dr. Michael Jasper, Dr. Melvin Williams, Dr. Amber Stamper * Libraries and the History of Lynching in North Carolina 3:30 – 5:00pm G.R. Little Library Presiding: Dr. Juanita Midgett Presenting: Dr. Vann Newkirk, Vice Chancellor * Reception – Free IEEE-GRSS membership for attendees 4:00 - 5:00pm Room 229 Dixon-Patterson Hall * Coastal Hazards Workshop 5:00 - 6:20pm Room 229 Dixon-Patterson Hall Presiding: Dr. Linda Hayden and Usha Kulkarni Welcome and Comments: Dr. Harry Bass Presenting: Dr. Robert George, CERSER Research Associate Andrew Brumfield and Kevin Jones Friday April 15, 2016 - NASA Day Presiding: Dr. Darnell Johnson, Ridley Student Center 9:00am - Noon Department Displays 9:00 - 11:00am NASA Sessions & Demonstrations 9:00 - 11:00am ECSU Student Poster Session 11:00 - Noon NASA Seminar for ECSU students/faculty * 12:15 - 1:00pm Moore Hall Auditorium Distinguished Lecture Assembly Dr. Erica J. Alston, NASA Langley Research Center

Greetings!

Welcome to the Annual Research Week at Elizabeth City State University. Today is special in that it is set aside to recognize

the hard work and outstanding achievements of our students engaged in STEM research and other activities. Not only are we highly encouraged in our administrative capacities, but we also take great delight in each of our students who will present their undergraduate research results, senior projects, and class projects. This occasion constitutes a clear indication



of the hard work and aspirations of our students and their faculty mentors within each discipline.

A substantial number of today's presenters are preparing to graduate, leave the University, and ultimately join an increasingly competitive workforce. We hope that the analytical skills and specific knowledge and strong work ethic acquired at Elizabeth City State University will serve them as solid milestones in their future professional careers. We hope and strongly believe that they will become outstanding researchers, entrepreneurs, inventors, and strong advocates for their respective disciplines in every region of our nation and even of the world.

My very best wishes are extended to all who participate in the competitions. My hope is that each of you will be inspired in your efforts to become the best among your presenting peers.

Vann R. Newkirk, Ph.D. Provost and Vice Chancellor for Academic Affairs

Research Week Committee

Linda Hayden, Chair	Math & Computer Science
Jeanette Morris, Co-Chair	Language, Literature, & Comm
Darius Eure	Admissions & Recruitment
Orestes Gooden	Aviation Science
Confidence Amadi	Business & Economics
Debjani Kanjilal	Business & Economics
Yan Jin	Business & Economics
Delbert Garnes	Education & Psychology
Natasha Spellman	Education & Psychology
Kenneth E. Jones	Honors Program
Michael B. Jasper	Language, Literature, & Comm
Farrah Ward	Math & Computer Science
Kenneth L. Jones	Math & Computer Science
Gloria Payne	Math, Science, & Technology
Anthony Emekalam	Natural Sciences
Eyualem Abebe	Natural Sciences
Eyualem Abebe Margaret Young	Natural Sciences Natural Sciences
Eyualem Abebe Margaret Young Boung Jin Kang	Natural Sciences Natural Sciences Natural Sciences Natural Sciences
Eyualem Abebe Margaret Young Boung Jin Kang Darnell Johnson	Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences
Eyualem Abebe Margaret Young Boung Jin Kang Darnell Johnson Charles Reed	Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences
Eyualem Abebe Margaret Young Boung Jin Kang Darnell Johnson Charles Reed Shyamal Das	Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences
Eyualem Abebe Margaret Young Boung Jin Kang Darnell Johnson Charles Reed Shyamal Das Harry Bass	Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Natural Sciences Social & Behavioral Sciences

Research Week is on Twitter!! #ECSURW16

Follow this weeks Research Week on Twitter and win some great prizes!! Different criteria for each day can be found below so join in and tweet your fellow students about the sessions you are attending! Winners will be announced each day and prizes will be awarded on Friday during the poster student session!

Criteria of Each Days Giveaway:

Disclaimer: Tweets must use the **#ECSURW16** and follow the twitter account. All tweets must be between the beginning session and the end of the last session of the day.

Monday - Most tweets that Day (using the hashtag)

Tuesday - Potential Randomizer (i.e. Interactwive) for people who tweet and use the #ECSURW16

Wednesday - Best Picture a.k.a "Your Favorite Event" and caption (with research week in it, i.e. picture with presenter of perspective session) and in the caption have a substantial "why"

Thursday - "Guess The Image" -> this contest will be going on throughout the week leading up to thursday. Will post a part of a picture each day in random order (including thursday). Allow users to post their guesses and whoever is first to guess right, wins the contest on Thursday

Friday - Most pictures of poster session on Friday with an interesting thing about poster (have to take picture with poster and presenter and the caption for the picture has to be an interesting thing about the research as well as using the hashtag #EC-SURW16) minimum: 15 words

ONLY ONE PRIZE PER PERSON!!

*If students have questions about the contest throughout the week, they can follow the twitter account as well as use the **#ECSURW16**



Friday, April 15, 2016 - 9 - 11:00 am, Ridley Student Complex

Amber Henderson :: Starbucks and Social Media

Divine Bembury :: The Power of Demographics

Shevonna Brinkley :: What Makes Them Bark? and Location, Location, Location

Sonia Whitehurst :: McDonald's Marketing Blend

Natasha Maurer :: Michael Kors Planned Retail Locations

Shakir Jones and Deneal Banks :: Market Segmentation Used by Nordstrom

Dandrea Ray and Diamonte Sanders :: Walmart Competitive Advantage against Intertype and Intratype Competitors

Nikeya Welch :: Saks 5th Avenue

Natify Power, Jennifer Mitchell, and Janeeka Harris :: Beer Game: A Simulation of Bullwhip Effect in a Supply Chain

Essence Bradley :: Where Dreams Come True - Walt Disney World

Aleeza Bryant and Shelny Infinger :: *Preliminary Studies on Cytoxic Properties of Artemisinin and Mitoxantrone on Prostate Cancer Cell Line*

Derek Morris :: Analyzing the Security Infrastructure of the Android Operating System

Tatyana Matthews :: Investigating the Security Risks and Vulnerabilities of an Android System

Jefferson Ridgeway :: *Regression Testing Selection for Android Applications*

Nigel Pugh :: *Exploration of Mobile Testing through Automatic Test Case Generation*

Tori Wilbon :: Exploring Learning Algorithms for Layer Identification

Cornelius Holness :: Remote Sensing Archaeological Sites through Unmanned Aerial Vehicle Imaging

Joshua Hollowell and Akyah Atkinson :: Color Contrast Versus Monochromatic Color on Visual Displays

Ciara Spence :: Integrating Reverse Engineering and 3D Printing for Manufacturing Process

Shunafrica White :: Influence of Chain Extenders on Tensile Mechanical Properties of Polymers

Tyrrel Jones, Shauran Mouzonoe, Danielle Hill, Angel Lassiter, R J Bond :: Viking Physical Activity

Keshara Wiley :: The Synthesis and Characterization of Metal Complexes with Acetyl Acetone by NMR

Angela Whitehurst :: Exercise and quality of Life Among Elderly Adults in Different Living Environments

Shanice Stephenson :: The Effect of Font Size, Type and Presentation Medium on Reading Comprehension

Taquez Willis and Narendra Banergee :: *Heavy Metal Levels and Chemicophysical Characteristics of Various Water Bodies in Pasquotank County, NC*

Mariah Andrade :: Women in the Workforce: Cases of USA, Ethiopia, and India

Charday White :: Non-Marital Child Bearing: Cases of USA, France, and China

Joshua Ruffin :: *The African American Struggle in the Child Support System*

Joshiah Sampson :: Homelessness in the USA

Miltonia Cherry :: The Incarceration of the African American Males

Tyrrel Ruffin :: Unequal Access to Employment by Race & Gender in the USA

Dwayne Ponton :: Poverty Rates and Crime Rates in North Eastern North Carolina

Shelby Infinger :: Anti-Asian Racism and Violence: A Historical Sketch

Bianca Knight :: Higher Education and Race: A Comparative Analysis of Graduation Rates between HBCUs and PWIs

Summer Tyson :: Teen Pregnancy Rates Among Blacks & Whites

Shaquita Walker :: Effects of Race on Homicide Rates

Mia Jackson :: Learning Racism

Kiana Rivers :: Effects of Minority Family Income on Crime Rates

Bryana Ballard :: Effects of Race on Drug Use

Rodnika Jones :: Life After Prison: Effects of Incarceration

Tinisha Pearson :: Effects of Race on Crime Rates

Sh'Nautica Battle :: Domestic Violence in African American Families

Tiffani Bogue :: Changing Immigration in the USA, Belgium, and Germany

Robert Black :: Violence in the African American Community

Paris Rankins :: Socialization and Race Consciousness: The Doll Test

Tiphanie Mason :: Fertility Rates in Cuba, Nigeria, and Egypt

Jasmine Arthur :: Effects of African American Incarceration on their Employment

Joshua Moss :: Environmental Racism in a Small Town in North Carolina

Cecilia Hathaway :: The Impact of Key Legislation on the African Americans

Jensen Price :: Intimate Partner Violence Victimization and Its Effects on African American Women

Melissa Borum :: Effects of Economic Dependency on Intimate Partner Violence

DeVonna Lee :: The Understatement of the African American Income and Wealth



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