

RESEARCH, ECONOMIC DEVELOPMENT, AND ENGAGEMENT

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FROM THE OFFICE OF THE VICE CHANCELLOR



When I interviewed for this position almost a year ago, I promised to focus on creating a higher-level of transparency and communication with faculty and key stakeholders at ECU. I find that this, in fact, consumes a great deal of time and energy as I have been consistently meeting with key stakeholders at ECU and across the region on a daily basis. But, these opportunities to meet with faculty, staff, students, and community leaders are so rewarding and genuinely enjoyable.

This inaugural REDE newsletter is intended to further advance communication with our most important stakeholder - the ECU community.

Given this opportunity to reach so many of you through our newsletter, I would like to reinforce a couple key issues. As was communicated recently by academic council, research at ECU has an increasing role in our daily activities and greater importance in what is expected of all of us. Increasing research activities enables us to enhance opportunities provided to our students and better prepare them once they graduate. A larger research enterprise at ECU also provides a greater ability to positively impact the people and communities of eastern North Carolina, which is important given ECU's special mission and relationship with those of us who call this region home.

This past fall, we rolled out eight new pan-university research clusters with the intention of actively driving interdisciplinary research. Each of these clusters is broad in scope and focuses on addressing economic, health and educational disparities in our region. Many of you have been participating with the co-directors in forming their initial strategic plans.

I am excited to announce that the Academic Council, in the very near term, will be issuing a call for Faculty Initiated Research Team proposals. While more details will be forthcoming, the goal of this call is to encourage faculty across ECU to come together and develop novel and new approaches that can leverage ECU's intellectual and physical assets and advance our research in new directions under the broad research-cluster themes. Cross-college groups of faculty from at least three departments and two colleges are encouraged to submit pre-proposals for advancing the national prominence of ECU through the hiring of two to three eminent or highly promising faculty, at any rank, who will expand the expertise and capacity of the research team. Successful pre-proposal applicants will be provided with feedback and invited to apply for the final proposal stage. We believe this is a great opportunity for ECU to build on existing research collaborations and for faculty to help drive exciting new research directions.

While research clusters are important, they are just one way in which ECU will become the next great national university. We will continue to work with faculty in all of our colleges and schools to find ways to encourage, promote and support all types of impactful scholarship, service and research. To ensure progress towards that end, I will be hosting regular morning coffee meetings at different locations across campus and at the Coastal Studies Institute that will be open to all faculty. Faculty will be provided updates on research, economic development and engagement and, more importantly, I will be listening and learning about your fields, new ideas, questions, and concerns. These meetings will kick off soon and Drs. Ron Mitchelson and Phyllis Horns will join in when they are available.

It truly is an honor to be of service to all those at ECU and in our wonderful region. I take this responsibility very seriously and appreciate your input and continued support.

Jay

FACULTY HIGHLIGHTS



ECU Researchers Lead GenX Study

East Carolina faculty members, in partnership with N.C. State University, the Cape Fear River Watch, and the New Hanover County Health Department, are working together to study the potential health impacts of GenX on Cape Fear region residents. GenX, a chemical generated in the production of nonstick coatings for kitchenware, was detected in the Cape Fear River in 2017. The contamination could potentially affect residents in Brunswick, New Hanover and Pender counties. The study will look at blood and urine samples from 400 study volunteers to determine the GenX exposure levels of the participants.



SAE Award Presented to Abdel-Salam

Dr. Tarek Abdel-Salam, Associate Dean for Research and the Director of ECU's Center for Sustainability, was awarded the 2018 Forest R. McFarland Award from SAE International. SAE International is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries. Dr. Abdel-Salam was recognized for his contributions in the planning, development and dissemination of technical information through meetings, conferences and professional development programs at SAE events. Dr. Abdel-Salam has helped organize more than 30 SAE events in Japan, China, Brazil, England, Italy, and the United States in the past year.



ECU Researchers Measure Literacy Impact

ECU researchers Dr. Kimberly Anderson, Dr. Terry Atkinson and Dr. Elizabeth Swaggerty, in partnership with the United Way of Pitt County, the Early Literacy Coalition of Eastern North Carolina, and Dolly Parton's Imagination Library, are studying the impact of childhood literacy efforts in Pitt County. The study – part of East Carolina's Engagement and Outreach Scholars Academy – will evaluate the literary progress of students enrolled in Parton's Imagination Library. Parton's program donates one free book per month to children up to age 5.



Geology Chair Honored

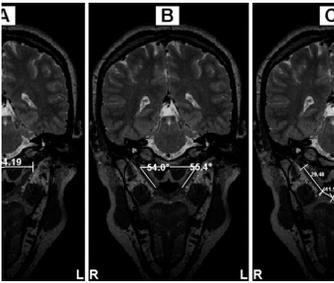
Dr. Steve Culver, Chair of ECU's Department of Geological Sciences, received an honorary doctorate from Universiti Malaysi Terengganu for his work in Malaysia over the past 10 years. Culver partnered with the university's Institute of Oceanography, collaborating with the institute in international field work while teaching short-courses to UMT students. Culver's partnership with UMT has led to a National Science Foundation grant, seven peer-reviewed publications, and ECU student exposure to the country.



Gowdy Receives Grant

Dr. Kym Gowdy, Assistant Professor of Pharmacology and Toxicology, was awarded a High Priority, Short-Term Project Award (R56) by the National Institute of Environment Health Sciences-National Institutes of Health. The High Priority, Short-Term Project Award was given to support Dr. Gowdy's high-priority NIH R01 application that received a priority score or percentile that fell just outside the funding limits. Dr. Gowdy's project "Novel role for CD163 in ozone induced alterations of pulmonary immunity" will be funded for \$150,000 and is scheduled to begin April 1.

FACULTY HIGHLIGHTS CONTINUED



Speech Imaging and Visualization Lab Research

Dr. Jamie Perry, an Associate Professor and Chair of the Department of Communication Sciences & Disorders, was recently awarded funding by the Oral Maxillofacial Surgery Foundation. Her doctoral student, Katelyn Kotlarek, had her Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (F31) funded as well. These projects serve to continue funding work in Dr. Perry's Speech Imaging and Visualization Lab. The lab examines how variations in pre-surgical anatomy affect post-surgical speech outcomes in children born with cleft palate. Dr. Perry's research has significant implications for improving clinical management for velopharyngeal insufficiency in children born with cleft palate.



Roberson Elected to Global AIDS Board

Dr. Donna Roberson, a College of Nursing Associate Professor and the Executive Director of Program Evaluation, was elected to the Association of Nurses in AIDS Care board of directors. The organization serves 2,200 members from 60 countries, shaping the research and treatment of HIV and AIDS around the world. Dr. Roberson began a three-year term on the board in November. She has been associated with the organization since 2008. Dr. Roberson's exposure to HIV and AIDS care began in the mid-1980s and she said that she hopes she is able to share her research with others so that they are aware of what innovations and care procedures are available for those infected with HIV and AIDS.



Soldier to Scholar Bridge Program

The Soldier to Scholar bridge program, designed to help ECU veterans acclimate to the university during their first semester on campus, wrapped up a successful first cohort this winter. The program, led by Dr. Anna Froula, an Associate Professor of Film Studies in the Department of English, set up five meetings for the students during the fall semester. Dr. Froula said that data from the program showed that the students felt "more confident" in the classroom and formed a "supportive cohort." A second cohort of 15 members is expected to be selected in July.



Literature Professor Awarded

Dr. Margaret D. Bauer, ECU Professor of Literature, was presented the North Carolina Award by Gov. Roy Cooper in November. The award recognizes significant contributions to the state and nation in the fields of fine art, literature, public service, and science. Bauer, who has served as the editor of the North Carolina Literary Review since 1997, is the author of "The Fiction of Ellen Gilchrist," "William Faulkner's Legacy," "Understanding Tim Gautreaux," and "A Study of Scarletts: Scarlett O'Hara's Literary Daughters," as well as numerous articles on southern writers in scholarly journals.

EMERGING RESEARCH



Kelsey Fisher-Wellman, Assistant Professor at the Brody School of Medicine

Dr. Kelsey Fisher-Wellman joined the ECU faculty in January following a postdoctoral fellowship at Duke University's Molecular Physiology Institute. Dr. Fisher-Wellman began his research career at the University of Memphis, receiving his master's degree in Exercise Physiology. Under the direction of ECU's Dr. Darrell Neuffer, Dr. Fisher-Wellman earned his Ph.D. at ECU in Bioenergetics, focusing on explaining the mechanisms by which periods of metabolic imbalance induce alterations in skeletal muscle mitochondria which promote increased peroxide emission, an oxidative shift in the cellular redox environment and the manifestation of insulin resistance. While at Duke University, Dr. Fisher-Wellman worked in the lab of Dr. Deborah Muoio, incorporating quantitative proteomics using Tandem Mass Tags along with comprehensive mitochondrial functional analysis to identify the biochemical consequences of lysine acylation induced by various reactive acyl-CoAs and the role of that process in driving metabolic disease. At ECU, Dr. Fisher-Wellman's laboratory's principle goal is to identify the mechanisms by which mitochondria regulate energetic efficiency in the face of nutrient overload and/or energy deficits. The lab is interested in understanding how change in mitochondria efficiency occurs at the molecular level and subsequently how mitochondria communicate their "fuel" status to the rest of the cell.



Rachel K. Gittman, Assistant Professor of Biology

Dr. Rachel K. Gittman joined the ECU faculty in 2017 after serving as a Postdoctoral Research Associate at Northeastern University. Dr. Gittman earned her Bachelor of Science in Environmental Science at the University of Virginia before earning her Ph.D. in Ecology from the University of North Carolina at Chapel Hill. Dr. Gittman also worked as an environmental scientist at the Eastern Research Group, a multidisciplinary consulting firm offering advising on issues including air-quality services, ecological services, energy services, and water quality and resource management. Dr. Gittman's research interests include understanding how humans modify the coastal environment and how best to manage or mitigate the ecological consequences of those modifications to sustain ecosystem structure, functions and services. She is particularly interested in identifying novel approaches for conserving and restoring coastal habitats and supported services in the context of developed coastal areas. Through collaborations with fellow ecologists, social scientists, policymakers, and coastal engineers, Dr. Gittman is exploring the ecological and social drivers of coastal development and associated shoreline hardening, as well as identifying ecological, engineering, political, and socioeconomic barriers to the implementation of natural and nature-based alternatives. Dr. Gittman is also part of an interdisciplinary and cross-sector working group focused on synthesizing data on coastal habitat restoration projects to inform decision-making and development of achievable metrics and approaches for aligning ecological and social restoration goals.



FACULTY PUBLICATIONS

Cell Metabolism

Dr. Darrell Neufer, Director of the East Carolina Diabetes and Obesity Institute, along with a team of ECU researchers, recently published “ 17β -Estradiol Directly Lowers Mitochondrial Membrane Microviscosity and Improves Bioenergetic Function in Skeletal Muscle” in *Cell Metabolism*. ECU postdoctoral scholar Dr. Maria J. Torres was the lead author. The study helps explain why menopause leads to increases in weight gain, insulin resistance and diabetes and cardiovascular disease risk. The findings are a departure from the previously perceived role of estrogen in metabolism.



Shocking Impact

Dr. Samuel Sears, Professor of Psychology and Cardiovascular Sciences and Director of Health Psychology, recently published “Defibrillator Shocks and their Impact on Objective and Subjective Patient Outcomes: Results from the PainFree SST Clinical Trial” in the *Heart Rhythm* journal. The study aimed to measure the acute and long-term effects of implantable cardioverter defibrillator (ICD) shock on objective behavioral data and subjective patient-reported outcomes. The study found that ICD shocks have long-lasting, adverse impacts on both objective, device-measured physical activity and subjective patient-reported outcomes of quality of life and shock anxiety.



Marriage and Family Therapist Identity

Dr. Jennifer Hodgson, Director of the ECU Medical Family Therapy program, recently published “From private practice to academia: Integrating social and political advocacy into every MFT identity” in the *Journal of Marital and Family Therapy*. East Carolina Ph.D. student Jessica Goodman was the lead author. The paper reviews the importance of being active in social and political advocacy and highlights the attributes of marriage and family therapist’s professional identity that uniquely position them for success. Other mental health fields’ pedagogical approaches to training and education are explored and recommendations are made for how MFTs can begin to increase their competency in social and political advocacy.



Ablation Protocols

In the editorial “Atrial Substrate Modification for Atrial Fibrillation: Striving to Get Smarter” published in *Circulation: Arrhythmia and Electrophysiology*, ECU’s Dr. J. Paul Mounsey discusses catheter ablation protocols in the management of atrial fibrillation. The editorial was co-written with Dr. Prabhat Kumar, clinical assistant professor of medicine at UNC-Chapel Hill. The editorial particularly focuses on the pros and cons of circumferential pulmonary vein isolation (CPVI) alone and CPVI with additional ablation techniques in nonparoxysmal atrial fibrillation.



FUNDING OPPORTUNITIES

Faculty Reassignment Awards in the Arts & Humanities

Funds will be made available to reassign faculty members during the 2018-19 academic year. Reassignment opportunities provide dedicated time for faculty to apply for fellowships, residencies and grants in support of research and creative activities in the Arts and Humanities. This award replaces one three-credit-hour course of a faculty member's teaching and service assignments. The expected period for reassignment is Fall 2018 or Spring 2019. **Applications are due March 2 at 5 p.m.** For more information, contact Mary Farwell, Assistant Vice Chancellor and Director of Undergraduate Research, by email at farwellm@ecu.edu.

Funding for Faculty Development for Undergraduate Research

Funding is available through a grant from the North Carolina General Administration to the Office of Undergraduate Research for faculty development projects designed to enhance undergraduate research activities at ECU. Approaches are encouraged in three main areas of focus:

- Assessment;
- Diversity and Inclusion in Research;
- Course-based Undergraduate Research Experiences.

Requests in the range of \$500-1,300 will be funded or individuals or teams.

Proposals are due by Feb. 5. For more information, contact Mary Farwell, Assistant Vice Chancellor and Director of Undergraduate Research, by email at farwellm@ecu.edu



Diversity and Inclusion Research and Scholarship

ECU is offering internal seed grant opportunities through its Diversity and Inclusion Research and Scholarship program. The program is a faculty development and seed grant program that provides funds to departments with faculty who engage in research projects related to diversity, equity, inclusion, and cultural competence. **Applications are due March 12.** Faculty interested in the program can contact the Office of Equity and Diversity at 252-328-6804.



POLICY NOTES

IRB Policy Changes

Changes in federal policy for the protection of human subjects, also known as "Common Rule," have been delayed until July 19 to provide regulated entities additional time to prepare to implement these revisions. ECU's ePIRATE is being updated to comply with the new guidelines. The changes affect the exempt categories, continuing review of expedited protocols, consent process, and more. For more information, visit the ECU IRB website or contact the University & Medical Center Institutional Review Board at 252-744-2914.

Sponsored Programs Spreadsheet Update

The Office of Sponsored Programs budget spreadsheet has been updated to include the latest fringe rates, tuition and university fees. A worksheet has been added to the budget spreadsheet to document facilities and administrative sharing and allocation of credit for awards and expenditures.





COMMUNITY ENGAGEMENT

SECU Public Fellows Internship Program (PFI)

The SECU PFI at East Carolina University is funded by the State Employees Credit Union and connects the university and communities through projects that address community-identified priorities. Undergraduate student placements provide opportunities for fellows to develop leadership, analytical, problem solving, communication, and project management skills, as well as networking opportunities in professional settings. The Office of Community Engagement and Research will begin recruiting for 20 internship positions on February 1. See www.ecu.edu/communityengagement for more information. Students receive a \$4,500 stipend for their internship placement.

REDE FACULTY ADDITIONS



Export Control

Tony Rowe has replaced Hiromi Sanders as ECU's Director of Export Control. Tony can be contacted by email at rowea17@ecu.edu or by phone at 252-744-2395.



Grants and Contracts

Julie Cole has been appointed as Director of Grants and Contracts and Steve Ayers has assumed the role of Associate Director. Julie can be reached by email at coleju17@ecu.edu. Steve can be reached by email at ayerss@ecu.edu.



Sponsored Programs

Adam Lapidas joined the Office of Sponsored Programs as a contract negotiator. Adam will assist with negotiating and executing fee-for-service contracts, fixed term contracts and sub-awards. He can be reached by email at lapidasa17@ecu.edu.