

2018-19 END-OF-YEAR RESEARCH REPORT ECU FACULTY RISE TO THE CHALLENGE

ALL-TIME RECORDS

SPONSORED AWARDS

FY2019: \$129,039,569 FY2018: \$97,246,000 33% ANNUAL GROWTH

ECU reached the UNC System Office FY2022 goal of \$60M/year in sponsored awards, excluding ECU Physicians, by **achieving \$72M** in FY2019, up from \$39.6M in FY2018.

RESEARCH AWARDS

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INCREASED \$16M 76% ANNUAL GROWTH

INTERDISCIPLINARY AWARDS

INCREASED \$9.1M 99% ANNUAL GROWTH

RESEARCH PROPOSALS

622 SUBMITTED PROPOSALS 21% ANNUAL GROWTH \$232,275,248 TOTAL VALUE 14.5% ANNUAL GROWTH It's with great pleasure that I'm sharing the exciting news that 2018-19 was the most productive, and by many measures, the most successful year regarding research, innovation and creative activities in ECU history. In fact, last fiscal year, we achieved all-time research records in multiple categories, including total sponsored awards, research awards and submitted proposals.

Growth in research was identified as a strategy for increasing revenue through the 2015 Fiscal Sustainability Initiative and was included as a top priority in subsequent ECU and UNC System strategic plans for our university.

The continued growth of research and creative activities at ECU is inspiring and is a result of the hard work accomplished by our faculty, student researchers, innovators, and dedicated professional staff and administrators who support these programs.

REDE will continue to report on important milestones, including the National Science Foundation's annual Higher Education Research and Development Survey rankings. Your continued efforts to grow research and creative activities have important and lasting effects on the well-being of our region, further enhancing the reputation of our university. Most importantly, you're helping better prepare our students for success both in the classroom and after graduation.



Thank you for all that you do!

Dr. Jay Golden, Vice Chancellor for REDE Professor of Engineering

| RESEARCH AWARDS FY2019 VS. FY2018 | | | |
|---|--------------|--------------|-------------|
| UNIT | 2018 | 2019 | \$ GROWTH |
| Brody School of Medicine | \$10,042,826 | \$15,079,808 | \$5,036,982 |
| Thomas Harriot College of Arts and Sciences | \$4,224,442 | \$7,416,884 | \$3,192,442 |
| College of Education | \$1,656,270 | \$4,745,639 | \$3,089,369 |
| Integrated Coastal Programs | \$0 | \$1,928,172 | \$1,928,172 |
| College of Allied Health Sciences | \$571,799 | \$1,888,970 | \$1,317,171 |
| College of Nursing | \$72,604 | \$1,060,883 | \$988,279 |
| School of Dental Medicine | \$100,269 | \$1,060,431 | \$960,162 |
| College of Health and Human Performance | \$2,016,851 | \$2,935,758 | \$918,907 |
| College of Business | \$0 | \$357,394 | \$357,394 |
| College of Engineering and Technology | \$589,652 | \$946,137 | \$356,485 |
| College of Fine Arts and Communication | \$20,000 | \$7,267 | -\$12,733 |
| YEAR OVER YEAR % CHANGE | | | |
| Academic Affairs | \$10,578,437 | \$18,336,251 | 73.34% |
| Health Sciences | \$10,787,498 | \$19,090,092 | 76.96% |

REINVESTING IN RESEARCH & CREATIVE ACTIVITIES FISCAL YEAR 2018-19

Facilities and administration costs (F&A), also known as indirect costs, include the monetary amount awarded to ECU on new sponsored contracts. The largest contributor of awarded F&A is from research awards, primarily from agencies such as the National Science Foundation, the National Institutes of Health and the Department of Defense. It is important to note that awarded F&A is not the same as actual or effective F&A. ECU only realizes F&A funding when our researchers invoice the sponsor for all budgeted costs in accordance with the contract and timelines.



F&A AWARDED

FY2019: \$9,821,301 FY2018: \$6,375,833 54% ANNUAL GROWTH

EXAMPLES OF WHAT IS FUNDED BY F&A



FACULTY STARTUP PACKAGES

In 2019, REDE supported 86 faculty startup packages, up 10.2% from 2018. This provided an investment of \$4.3M, up 12% from the previous year. These funds support our new faculty in developing their labs and equipment, as well as providing faculty and student research support.



RESEARCH AND CREATIVE ACTIVITIES

F&A supports faculty senate campus-wide programs, which in FY2019, provided funding to faculty in the arts, humanities, natural sciences and the social sciences.



INTERDISCIPLINARY RESEARCH CLUSTERS

Several of our pan-university research clusters increased their activities, membership and research productivity in FY2019. REDE supported efforts by the clusters to further engage faculty, students and industry, and seeded promising research ideas through funding support.



UNDERGRADUATE STUDENT RESEARCH

F&A directly supports undergraduate student research. In FY2019, ECU was able to provide a 36.5% increase in UG research support from the prior year. Our goal is for ECU to graduate the most students per year with mentored research experiences in the UNC System.

ADDITIONAL F&A INVESTMENTS

Research Administration • Course Reassignments • Research Equipment • Software Postdoctoral Programs Conferences • Research Field Sites • Travel Awards • Faculty Professional Development

ECU RESEARCH & CREATIVE ACTIVITIES HIGHLIGHTS

FISCAL YEAR 2018-19

FELLOWSHIPS

Fellow of the American Association for the Advancement of Science (AAAS)

• Dr. Baohong Zhang, Biology

National Academy of Inventors (NAI) Fellow

• Dr. Andrew Stuart, Communication Sciences and Disorders

Fulbright U.S. Scholar Program

Dr. Alex Manda, Geological Sciences

Alfred P. Sloan Foundation Research Fellowship

• Dr. Rebecca Asch, Biology

Mellon/American Council of Learned Societies Scholars & Society Fellowship

• Dr. Helena Feder, English

Yale University Gilder Lehrman Center for the Study of Slavery, Resistance, and Abolition Fellowship

• Dr. Karin Zipf, History

AAAS Judicial Branch Fellowship

• Dr. Mamadi Corra, Sociology

American Academy of Arts and Letters Goddard Lieberson Fellowship in Music

• Dr. Travis Alford, Theory, Composition and Musicology

National Academy of Kinesiology Fellow

- Dr. Paul DeVita, Kinesiology
- Dr. Joseph Houmard, Kinesiology

American Heart Association

Cardiovascular and Stroke Nursing Council

• Dr. Linda Bolin, Nursing

American Dental Education Association Fellowship

• Dr. Paul Lindauer, Surgical Sciences

American Board of Dental Public Health Diplomate

• Dr. Mark Moss, Foundational Sciences

American Board of Orofacial Pain Diplomate

• Dr. Amna Hasan, Surgical Sciences

Andrew Carnegie Fellows Program

• Dr. Crystal Chambers, Educational Leadership

NATIONAL SCIENCE FOUNDATION PROGRAM DIRECTOR APPOINTMENT

PROGRAM DIRECTOR APPOINTMEN

Dr. Chris Balakrishnan, Biology

UNESCO PROGRAM IN MARITIME STUDIES

• ECU's Maritime Studies program was invited and joined UNESCO's prestigious research and education program for underwater archaeology

CONGRESSIONAL TESTIMONY

• Dr. Jamie DeWitt, Pharmacology and Toxicology

NEW AGENCY BOARD APPOINTMENTS

- Dr. Ronny Bell, Chair for NIH grant review panels
- Dr. Joseph Houmard, Chair of NIH study section clinical and integrative diabetes and obesity panel
- Dr. Reide Corbett, Integrated Coastal Programs, NOAA's North Carolina Sentinel Site Cooperative Management Team
- Dr. Cristina Richie, Bioethics, Founded the NC Unit of UNESCO and Chair of the Bioethics Steering Committee
- Dr. Stephen Russ Price, BSOM, President-elect International Society of Renal Nutrition and Metabolism

EARLY CAREER AWARDS

NSF CAREER

• Dr. Ariane Peralta, Biology

U.S. Environmental Protection Agency and Oak Ridge Institute for Science and Education Early Career Fellowship

• Dr. Jacob Hochard, Economics

BOOKS

- Dr. Edmund Wall, Philosophy and Religious Studies, Foundation for a Natural Morality: A Deductive Approach for Defending and Developing a Moral Theory
- Dr. Christopher Oakley, History, New South Indians: Tribal Economics and the Eastern Band of Cherokee in the Twentieth Century

<u>ARTS</u>

- Dr. Edward Jacobs, Theory, Composition and Musicology, completed "Anima/Animus" for solo marimba and "Qualia" for five trumpets, published by ACA
- Dr. Cynthia Bickley-Green, Art Education, Yellow Miss painting, U.S. Department of State Art in Embassies Program

STUDENTS & POSTDOCTORAL

- Emory Wellman, Biology, NSF Graduate Research Fellowship
- Shawna McMillin, Kinesiology, NIH F-31 Fellowship
- Katelyn Kotlarek, Communication Sciences and Disorders, NIH F-31 Fellowship
- Jocelyn Bayles, Honors College, Nutrition and Hispanic Studies, Truman Scholar finalist
- Suja Davis, Nursing, received the top student abstract Biobehavioral Research Interest Group, Southern Nursing Research Society
- Shelby Powers, Physiology, best poster award, American Urological Association
- Omar Glover, Dental Medicine, selected to participate in the NIH Medical Research Scholars (MRS) program; one of only two dental students to be invited
- Dr. Samantha McDonald, Dental Medicine Foundational Sciences, awarded an American Association of University Women (AAUW) Postdoctoral Fellowship