ECU Research and Creative Achievement Week provides students with an excellent opportunity to practice their presentation skills and meet other innovative scholars at ECU with similar interests.

East Carolina University undergraduate, graduate, and postdoctoral scholars are invited to present their research to fellow students, scholars, colleagues, faculty, and the local community in a professional, conference-style setting. We define research as an original systematic investigation and/or original creative activity designed to develop or contribute to general knowledge or culture.

Students and scholars may present their research in any one of the following categories.

- Biomedical Sciences
- Business
- Community Engagement
- Education
- Engineering, Technology, & Computer Science
- Fine Arts, Visual Art, and Design
- Human Health
- Humanities
- Interdisciplinary Innovation
- Natural Sciences
- Social Sciences
Podium Presentation Awards

Biomedical Sciences & Human Health
Lauren Jung
Mentor: Dr. Elizabeth Ables
“Ecdysone signaling in the Drosophila germline regulates a stem cell transcriptional program”

Education & Social Sciences
Daniel Stickel
Mentor: Dr. Jeannie Golden
“Adverse Childhood Experiences, Risk Taking, and Protective Factors”

Engineering, Technology, and Computer Sciences
Colby Sawyer
Mentor: Dr. David Hart
“Evolving PITON: AI-Driven Simplification of IoT Data Access”

Fine Arts, Visual Arts, and Design
Katelyn Brewer
Mentor: Dr. Angela Wells
“Exploring Tourette Syndrome with Analog Photography”

Natural Sciences
Elnaz Pezeshki
Mentor: Dr. Stephen Moysey
“Using electrical resistivity tomography (ERT) to investigate the role of artificial channels on saltwater transport, Hyde County, NC”
GRADUATE STUDENT AWARDS

Poster Awards

Biomedical Sciences
Connor B. Cribb
Mentor: Dr. Roy Roop
“Investigating the role the polar autotransporter adhesin genes encoded by Brucella have on crossing mucosal barriers and virulence”

Education
Stephanie Wood
Mentor: Dr. Kristen Gregory
“Parents’ and Teachers’ Perceptions of the Effectiveness of Preschool in Terms of Mathematical Kindergarten Readiness”

Engineering, Technology, and Computer Science
Gabrielle Stein
Mentor: Dr. Nic Herndon
“The Perils of Generative Model Inbreeding: Evaluating the Consequences of Cross-Model Training in Large Language Models”

Human Health
Ben Brisard
Mentor: Dr. Cameron Schmidt
“Unveiling Sperm Capacitation Dynamics: A Novel Spectral Flow Cytometry and Stochastic Modeling Approach”
Social Sciences
Emilia N. Rose
Mentor: Dr. James E. Loudon
“Using stable carbon and nitrogen isotope values to estimate exposure to agricultural chemicals among green monkeys (Chlorocebus sabaeus) in St. Kitts”

Natural Sciences
Jahiem Hill
Mentor: Dr. Robert Hughes
“OptoProfilin: A Single Component Biosensor of Cellular Stress”

UNDERGRADUATE STUDENT AWARDS

Podium Presentation Awards

Biomedical Sciences
Nandini Vishwakarma
Mentors: Dr. Laxmansa Katwa and Dr. Srinivas Sriramula
“Discovering the Mysterious Effects of Intracardiac Dopamine Receptor Signaling”

Engineering, Technology, and Computer Sciences
Heath Faircloth
Mentor: Dr. Teresa Ryan
“Material Property Investigation of Common 3D Printer Filaments”
**Multidisciplines**

Jade McNeill
Mentor: Dr. Roshaunda Breeden
“Amplifying Our Voices: Exploring Black Women Student Leaders Experiences at East Carolina University”

**Natural Sciences**

Victoria Gonzalez Mundarain
Mentor: Dr. Nathan Hudson
“Examining Human Fibrinogen's Molecular Structure Using Electron Microscopy”

**Social Sciences**

Cassidy Fitz-Randolph
Mentor: Dr. Scott Walfield
“Rape Myth Adherence Among University Students”

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**UNDERGRADUATE STUDENT AWARDS**

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**Poster Awards**

**Biomedical Sciences**

Lucas Boldt
Mentor: Dr. Li Yang
“MADCAM-1 and TNF-α Expression Reduced in GPR4 Knockout Mice Given Immune Checkpoint Inhibitor Immunotherapy”
**Education**
Dhwani Hada
Co-Presenters: Kailee Ann Grubbs, Jameson Johnson Gerdts, Aliah Mikelle Spencer, Stephanie Marie Stewart
Mentor: Dr. Yilei Huang
“Enhancing Electrical Systems Technology Education: A Study on Virtual and Augmented Reality Integration in Community Colleges”

**Engineering**
Josey Wilson
Mentor: Dr. Daniel Perrucci
“Using the Critical Path Method (CPM) for Evaluating Allocation Potential of Temporary Housing Unit Design”

**Human Health**
Daniel Walker
Co-Presenter: Amelia Tart
Mentor: Dr. Sinan Sousan
“The Effects of Commercial Grade E-Cigarette Chemical Ratios and Nicotine Strength on the Gravimetric Filter Correction Factors and Real-Time Measurements”

**Interdisciplinary Innovation**
Joanna Mathew
Co-Presenter: Yanni Pavlikianidis
Mentor: Dr. William Godwin
“Innovation in Medical Education: Crafting a 3D Printed Female Pelvic Model”

**Multidisciplines**
Jack Meltsner
Mentor: Dr. Glenn Hubbard
“Eternal Light: Two Holocaust Survivors' Stories Of Perseverance”
Natural Sciences
Soham Patel
Mentor: Dr. Adam Offenbacher

Social Sciences
Katelynn Teli
Mentor: Dr. Aimee W. Smith
“Predictors of Cognitive Functioning in Infants Visiting the NICU Follow-Up Clinic”

CAPTURE 180 RESEARCH CHALLENGE

Grand Finalist
Rachana Charla
Mentor: Dr. Kristen Myers
“Emotional Laboring Through Birth: Insights From Doula Volunteers”

People’s Choice Awards
Sophie Arruza
Mentor: Dr. Teresa Ryan
“Tracking Cloud Coverage in Matlab”

Madison Nay
Mentor: Dr. Jon Kirchoff
“Sustainable Transformation of Fast Fashion Supply Chains: Challenges, Innovations, and Ethical Imperatives”