



Undergraduate Research Week 2024!
April 8th-12th
“From Ideas to Impact”

Online Event Page: symposium.foragerone.com/undergraduate-research-week-2024

Poster Submission Link: symposium.foragerone.com/undergraduate-research-week-2024/submission

Contact Information

Dr. Nicole Austin, Director of Undergraduate Research (nvaustin@ecsu.edu, x8761)

Monday, April 8, 2024

10:00 am, Lane Hall 105

Opening Session: Exploring the VR & E-Sports Labs

Refreshments will be served.

Presiding: Dr. Nicole Austin, Director of Undergraduate Research

Welcome/ Opening Remarks

Dr. Farrah Ward, Provost and Vice Chancellor of Academic Affairs

Video Presentation

Dawning of Virtual Reality at ECSU

Dr. Tarsha Rogers, Director- Center for Teaching & Learning

Video by Mr. Bryan McNeil, Senior-Business Administration

Panel Presentation

“From Ideas to Impact: Undergraduate Research Immersion in the VR and Esports Labs at ECSU”

Moderator: Dr. Tarsha Rogers

Faculty Researcher: Professor Clarence Goss, Visual and Performing Arts, Director of 1704 Media Productions

Student Researchers

Q & A Session

Closing Remarks

Dr. Sharon Raynor, Interim Associate Vice Chancellor-Academic Affairs | Student Success

11:30am – 3:00pm, Lane Hall, VR & Esports Labs & 1704 Media Productions

Immersive Learning Open House

Refreshments will be served.

Facilitators: Dr. Tarsha Rogers, Ms. Donna Facer, Mr. Greg Miller, Mr. Joshua Harrell, Prof. Clarence Goss

Tuesday, April 9, 2024

The School of Humanities & Social Sciences Research Day

1:00pm-3:00pm, Fine Arts Center 235

Department of Music & Visual Arts

“Turner Duckworth Golden Duck Award”

Sandria Dorsey, Graphic Design Major

Serenity Shipp, Graphic Design Major

Faculty Mentor: Mr. John Stiles, Department of Music & Visual Arts

“Digital Storytelling”

Devon Grant, Digital Media Arts Major

Jaxon Monell, Digital Media Arts Major

Andre' Glover, Digital Media Arts Major

Ja Holmes, Digital Media Arts Major

Bilal Muhammad, Digital Media Arts Major

Korey Simmons, Digital Media Arts Major

Dailon Rawlinson, Digital Media Arts Major

Faculty Mentor: Dr. Karen Strother-Jordan, Department of Music & Visual Arts

“Children's Book Illustration and Design”

Marybeth Planck, Graphic Design Major

Faculty Mentor: Mr. Clarence Goss, Jr., Department of Music & Visual Arts

Wednesday, April 10, 2024

The School of Education & Business Research Day

10:30am-12:30 pm, Williams Hall 158

Department of Business, Accounting, and Sport Management

“Economic Issues in the Housing Market”

Blake Funderburg, Business Administration Major

Faculty Mentor: Dr. Debjani Kanjilal, Department of Business, Accounting, and Sport Management

“Creativity and Strategies of Small Business in E-Commerce: local businesses in the handmade jewelry market”

Jamiere Beasley, Business Administration Major

Faculty Mentor: Dr. Kungpo Tao, Department of Business, Accounting, and Sport Management

“An Interview with an Auditor: An Experimental Learning Experience”

Faculty Mentor: Dr. Narendra Sharma, Department of Business, Accounting, and Sport Management

Celina Petronila Oyono Ela, Accounting Major

“Dynamic Landscape of Internal Auditing: Insights from Cheryl Sauls”

Faculty Mentor: Dr. Narendra Sharma, Department of Business, Accounting, and Sport Management

12:30pm-2:00 pm, Gilchrist 201

Department of Education

“Exploring the Affordances of AI compared to other Online Tools for Designing Teaching Materials”

Janiah Beach, Elementary Education Major

Faculty Mentor: Dr. Chioma Ezeh, Department of Education

“Examining the Process and Impact of an Early Childhood Curriculum Study”

Tia Brown, Birth-Kindergarten Education Major

Faculty Mentor: Dr. Nicole Austin, Department of Education

“Shaping Futures: An Exploration of the Influence of An Early Childhood Curriculum Study on Development & Learning”

Jaila Gross, Birth-Kindergarten Education Major

Faculty Mentor: Dr. Nicole Austin, Department of Education

“Nurturing Young Minds: An Early Childhood Case Study”

Rayven Brown, Birth-Kindergarten Education Major

Faculty Mentor: Dr. Nicole Austin, Department of Education

Thursday, April 11, 2024

The School of Science, Aviation, Health, & Technology Research Day

8:30am-9:30am, Dixon-Patterson Hall 218

Department of Mathematics, Computer Science, and Engineering Technology

Session Chair: Prof. Usha Kulkarni, Department of Mathematics, Computer Science, and Engineering Technology

“Producing Squared, Cubed and Natural Numbers in Python”

Qimora Mason, Computer Information Science Major

Faculty Mentor: Prof. Usha Kulkarni, Department of Mathematics, Computer Science, and Engineering Technology

“Binary Numbers”

Quintin Boone, Computer Information Science Major

Faculty Mentor: Prof. Usha Kulkarni, Department of Mathematics, Computer Science, and Engineering Technology

“A Brief Look at Number Systems and Their Uses”

Samuel French, Computer Information Science Major

Faculty Mentor: Prof. Usha Kulkarni, Department of Mathematics, Computer Science, and Engineering Technology

“Techniques Devised to Solve Sudoku Problems Without the Use of a Computer”

Deonna Sinclair, Mathematics Major

Faculty Mentor: Prof. Usha Kulkarni, Department of Mathematics, Computer Science, and Engineering Technology

9:30am-10:30am, Online Live Zoom Panel Discussion Session

Department of Health & Human Studies

Session Chair: Dr. Kulwinder Kaur-Walker, Department of Psychology

“Exploring the Intersection of Ethics, Morals, and Responsibilities: A Deep Dive into the APA Code of Ethics and Institutional Review Board”

Autumn Healy, Psychology Major

Jeffrey Weedon, Psychology Major

<https://ecsu.zoom.us/my/kaur.walker?pwd=MERsTzFiQ0ZLVzc1RmJiTWxFeGJLUT09>

10:00am-12:00pm, Online Live Zoom Session

Department of Health & Human Studies

Session Chair: Dr. Kim Downing, Department of Social Work

<https://ecsu.zoom.us/j/7017539501>

Meeting ID: 701 753 9501

“Food Deserts: Vulnerable Populations Experiencing Food Insecurity in Rural Northeastern North Carolina”

Trinitee Smith, Social Work Major

Saniya Coston, Social Work Major

“Social Work Student Advocates and their Role in the Guardian Ad Litem (GAL) Program”

Noel Herron, Social Work Major

11:00am-1:00pm, STEM Complex 203-204

Department of Mathematics, Computer Science, and Engineering

“Internship Roundtable: Summer 2023 Reports & Summer 2024 Internship Opportunities”

Refreshments served.

1:00pm-2:00pm, Jenkins Science Center 138

“Journeys of Black Mathematicians” Documentary Film Screening & Q/A Session

Moderator: Dr. Johnny L. Houston, Professor Emeritus-Elizabeth City State University

2:00pm-3:00pm, Online Live Zoom Session

Department of Health & Human Studies

Session Chair: Dr. Jennifer Brown, Department of Health & Human Studies

<https://ecsu.zoom.us/j/91708558055?pwd=aS9TRWg3MEg1ZUI2RURsaXZaRE96Zz09>

Meeting ID: 917 0855 8055 Passcode: 682792

“Challenges Faced by Student-Athletes Pre and Post Injury”

Deiya Staton, Kinesiology Major

Shawn Jones, Kinesiology Major

Eric Phelps, Kinesiology Major

Teonne Porter, Kinesiology Major

Faculty Mentor: Dr. Jennifer Brown, Department of Health & Human Studies

“A Survey of Stress and Coping Mechanisms in University Students”

Bailey Joyner, Kinesiology Major

Courtney Staggs, Kinesiology Major

Brianna Johnson, Kinesiology Major

Tesean Jones, Kinesiology Major

Shai Wheeler, Kinesiology Major

Faculty Mentor: Dr. Jennifer Brown, Department of Health & Human Studies

5:00pm-7:00pm, STEM Complex 203-204

CERSER IEEE GRSS Distinguished Lecture

Guest Speaker: Dr. Ronni Grapenthin, Geophysical Institute University of Alaska-Fairbanks

Facilitator: Dr. Linda Bailey Hayden, Professor Emeritus-Elizabeth City State University

Refreshments will be served.

Poster Session, STEM COMPLEX 1st Floor Lobby

"The Effects of Physical Activity, Social Interaction, Kinesthetic Desks, and Time Spent Outdoors on Mood"

Leslie Billotte, Psychology Major

Dorsey Bourrage, Kinesiology Major

Brandy Kushto, Kinesiology Major

Madison Short, Psychology Major

Faculty Mentors: Dr. Kacey Hopson and Dr. Scott Bradshaw, Department of Health & Human Studies

Asynchronous, Forager One Virtual Platform Posters

symposium.foragerone.com/undergraduate-research-week-2024

Department of Aviation & Emergency Management

"Configuration to Achieve Autonomous Successful Flight of a Prototype 3D Printed Fixed Wing Drone Using Pixhawk Cube Orange"

Benjamin Parham, Aviation Science Major

Faculty Mentors: Dr. Chandra Asthana, Department of Aviation & Emergency Management and **Dr. Akbar Eslami**, Department of Aviation & Emergency Management

"Aviation Accidents and the Critical Role of Effective Communication"

Addison Lane Travis, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

"Reassessing the 1,500 Flight Hour Requirement for Airline Transport Pilot Certification"

Austin Householder, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

"Underwater Drone for Asset Monitoring and Marine Research"

Chaz Terry, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“Do Runway Incursions Happen More in Part 121 or Part 135 Operations?”

James Matheney, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“ADS-B and the Impact on General Aviation”

Jazmine Dunham, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“From Analog to Glass: The Evolution of Flight Instruments and Its Impact on Flight Training”

Keaton Hurdle, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“Enhancing Safety and Proficiency in Aviation: Understanding Learning Setbacks Among Private Pilots and Tailored Training Solutions”

Keegan Williams, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“The Creation and Development of Airport Security”

Kercy Ayers, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“UAS and AI Applications for Risk Mitigation and Health Monitoring in Construction”

Kevaun Reid, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“Effects of Caffeine on Pilots and the Aviation Industry”

Liam Pearson, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“The Importance of Human Factors and How to Counteract Their Effects in 121 Pilot Operations”

Madelyn Knowles, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“Male vs Female Pilot Safety Statistics: Gender Differences in Aviation Safety”

Nahom Beyero, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

“Enhancing Awareness Towards Aviation English”

Raymund Bugarin, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

"The Correlation Between Screen Time and Daily Performance"

Ryan Brotherton, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

"Air Traffic Control and its Effect on Aviation"

William Quinney, Aviation Science Major

Faculty Mentor: Dr. Chandra Asthana, Department of Aviation & Emergency Management

Department of Health & Human Studies

"Does loudness of music affect emotion in college students?"

Arabia Johnson, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

The Effect of Mood After Viewing Different Genres Video Games

Scott Bobot, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

"Effect of Music Genres on Attention and Memory"

Emily Smithson, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

"The Well-Being Among Church Goers After Conversational Activity"

Tammara Huffman, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

"The Influence of Appearance on Preference and Judgement"

Tamecia Daye, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

"Social Media Affecting Your Body Image"

Ashante Bradley, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

The Effect of Music Genre on Physiological Reactions Among College Students.

Jordan Thornton, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

"The Effects of Lyrical vs Instrumental Music on Reading Comprehension"

Keiarrah Thompson, Psychology Major

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Health & Human Studies

Department of Mathematics, Computer Science, and Engineering

“Bitemporal high-resolution satellite images normalization for change detection”

Gabrielle Morgan, Mathematics Major

Faculty Mentor: Dr. Mohamed Elbakary, Department of Mathematics, Computer Science, and Engineering

“Synthesis of Ag nanoparticles with tunable size via electrochemical pulse deposition method for glucose sensing application”

Luz Vazquez Rivera, Engineering Technology Major

Faculty Mentor: Dr. Bijandra Kumar, Department of Mathematics, Computer Science, and Engineering

Friday, April 12, 2024

Virtual Showcase; University Day; Sponsored Programs, Honors Program

9:00am-10:00am, Online Live Zoom Session

ECSU Office of Sponsored Programs

“Working with the New Cayuse Human Ethics Module for IRB Submission/Approval”

Ms. Annemarie Delgado, Office of Sponsored Programs

Mr. George Cox, Office of Sponsored Programs

<https://ecsu.zoom.us/j/92482261746?pwd=NnFNZW9LWGd1aWlIVUh3RUlwUmRVUT09>

Meeting ID: 924 8226 1746 Passcode: 136316

10:00am-12:00pm, Live Virtual Poster Showcase

University-Wide Departments Participating

symposium.foragerone.com/undergraduate-research-week-2024

Session 1

10:00am-10:30 am

“The Effects of COVID-19 and other Factors on Students' Reading Performance”

Ceanna Kinney, Honors Program Student/English Major

Session Link: [Live Sessions - Undergraduate Research Week 2024 - Symposium](https://symposium.foragerone.com)

foragerone.com

Faculty Mentor: Dr. Dolapo Adedeji, Director-Honors Program

“Preliminary Test of Phytochemical Profiles in Crude Plant Extracts of the Medicinal Plants Basil (Ocimum basilicum), Italian Parsley (Petroselinum crispum), and Cilantro (Coriandrum sativum)”

Carmen Strong, Biology Major

Session Link: [Live Sessions - Undergraduate Research Week 2024 - Symposium \(foragerone.com\)](#)

Faculty Mentors: Dr. Margaret Young, Department of Natural Sciences

Session 2

10:30am-11:00am

Using in vitro protocols to isolate salt-tolerant mutants of the Kalanchoe

Robert Chase, Biology Major

Session Link: [Live Sessions - Undergraduate Research Week 2024 - Symposium \(foragerone.com\)](#)

Faculty Mentor: Dr. Margaret Young and Dr. Gloria Payne, Department of Natural Sciences

“Discerning Art from Algorithm: The Effect of Authorship Disclosure on Perceived Attractiveness of Artworks”

Jeffrey Weedon, Psychology Major

Session Link: [Live Sessions - Undergraduate Research Week 2024 - Symposium \(foragerone.com\)](#)

Faculty Mentor: Dr. Kulwinder Kaur-Walker, Department of Psychology

Session 3

11:00-11:30 am

“Comparing the Transformation Rate of Four Tobacco (*Nicotiana tabacum*) Cultivars with the RUBYRED Plasmid Using *Agrobacterium tumefaciens*, Strain AGL-1”

Juelle St. Clair, Biology Major

Session Link: [Live Sessions - Undergraduate Research Week 2024 - Symposium \(foragerone.com\)](#)

Faculty Mentor: Dr. Margaret Young, Department of Natural Sciences

Session 4

11:30 am-12:00 pm

BIOL 499: Transformation of *Mimulus parishii* with RUBYRED plasmid via Floral Dip using *Agrobacterium tumefaciens*, strains AGL-1 and GV3101

Juelle St. Clair, Biology Major

Session Link: [Live Sessions - Undergraduate Research Week 2024 - Symposium \(foragerone.com\)](#)

Faculty Mentor: Dr. Margaret Young, Department of Natural Sciences