

Sandra and Jack Pine
Honors College



EASTERN ILLINOIS UNIVERSITY™

**STUDENT
RESEARCH AND
CREATIVE
ACTIVITY CONFERENCE**



April 9th, 2021

The Honors College is thrilled to present our extended virtual conference this year. In addition to some live-streams, we have maintained the traditional oral and poster presentation formats.

Posters will be available on the Student Research and Creative Activity Conference website from Wednesday April 7th through Friday April 16th. We hope that this allows you some time to browse at your leisure. Don't forget to leave a comment for all the wonderful presenters, most of whom are undergraduate students, who can benefit from knowing that you stopped by. In addition, there will be synchronous drop-in concurrent presentation sessions where you can move freely from room to room and ask questions and/or provide feedback directly to the presenter.

The oral presentations will run synchronously also on Friday afternoon. These will have multiple presenters in a room, who will present at prescheduled times. The full schedule for poster and oral presentations are below. Now take your pens/pencils/styluses and mark your favorites. Thanks in advance for making this year's conference a success.

A recorded set of performances by a few of EIU's many amazing music ensembles will also feature at 4 pm.

We begin our program at 11 am with the winners of Booth Library's awards for excellence, recognizing outstanding graduate and undergraduate research. Each awardee will give a brief precis of their work during this opening session.

BOOTH LIBRARY AWARDS FOR STUDENT RESEARCH EXCELLENCE SHOWCASE

11 am

<https://eiu.zoom.us/j/94165417191>

During the showcase, our first- through third-place honorees will present a 5- to 7-minute summary of their research. Please join us as we provide feedback and congratulate these students on their achievements.

Graduate division:

- Nicole Bridges, a History student, won first place for Mothers, Wives, and Sisters...But Also Citizens: Defining the Duty of Female Civilians Through the Publications of the Pankhurst Sisters during The Great War.
- James Kowalski, a History student, won second place for 'Everyone is Suffering': The Redefinition of Shell Shock from Curious National Concern to Conventionalized National Baggage in Post-World War I Britain.
- Carol Bruce Tagoe, an Economics student, won third place for Developed Stock Market Integration: New Evidence from the Pre- and Post-Financial Crisis of 2007-2009.

Undergraduate division:

- Paul Abraham, a Public Health student, won first place for Voluntary Refusal of the Seasonal Influenza Vaccine.
- Penny Nigh, a Communication student, won second place for Cultivating a Cohesive Workplace by Integrating Soft Skills Training in Professional Development Programs and Resources.
- Alexandra Mann, a History student, won third place for The Women of Wrigley's Dainty Baseball League.

POSTER PRESENTATIONS

A1 12:00-12:50 Nutrition and Dietetics

<https://eiu.zoom.us/j/91245861072>

Abigail Mann, Nutrition and Dietetics

Examining Effects of Mixing Variations on Physical and Sensory Characteristics of Muffins

Faculty Mentor: Melissa Maulding, Nutrition and Dietetics

Niondina Nyström, Exercise Science

Mixing strokes will effect volume and tunneling in muffins

Faculty Mentor: Melissa Maulding, Nutrition and Dietetics

Lauren Brake, Nutrition and Dietetics

Effects of Stirring on Gluten Development in Muffins

Faculty Mentor: Melissa Maulding, Nutrition and Dietetics

Hannah Lindsey, Nutrition and Dietetics

The Effect of Stirs on Gluten Development in Muffins

Faculty Mentor: Melissa Maulding, Nutrition and Dietetics

Jeanette Swick, Nutrition and Dietetics

Effects of Volume and Tunneling of Muffins, Based on Stroke Count

Faculty Mentor: Melissa Maulding, Nutrition and Dietetics

Quera Owens, Nutrition and Dietetics

Gluten Development in Muffins

Faculty Mentor: Krystal Lynch, Nutrition and Dietetics

Lia Templeman, Nutrition and Dietetics

Effects of the Number of Mixing Strokes on the Volume and Tunneling of Plain Muffins

Faculty Mentor: Melissa Maulding, Nutrition and Dietetics

A2 12:00-12:50 Tech

<https://eiu.zoom.us/j/93798146134>

Kyle Ignalaga, Rob Forrest Computer and Information Technology

Social Simulator

Faculty Mentor: Wutthigrai Boonsuk, Computer Information Technology

Ke'Ara Cherry, Computer and Information Technology
Water Monitoring Application
Faculty Mentor: Wuthigrai Boonsuk, School of Technology

Clement Niyigena, Computer Information Technology
Mobile Application
Faculty Mentor: Wuthigrai Boonsuk, School of Technology

Zachary Martin, Computer and Information Technology
A Guide to a Smarter Safer Home
Faculty Mentor: Wuthigrai Boonsuk, School of Technology

Caden Miller, Computer and Information Technology
Language Design using Virtual Machines and Variable Security
Faculty Mentor: Wuthigrai Boonsuk, School of Technology

Grant Sims, Jose Esparza Computer and Information Technology
Analyzing Functionality and Design of EIU Applications.
Faculty Mentor: Wuthigrai Boonsuk, School of Technology

Tiffani Jones, Michael Warren, Computer Information Technology
Utilizing Real-Time Facial Recognition to Allow for Keyless Home Entry
Faculty Mentor: Wuthigrai Boonsuk, School of Technology

B1 1:00-1:50 Health

<https://eiu.zoom.us/j/96041237836>

Nicole Cirrencione, Nutrition and Dietetics
Effects of Nutritional Status on the Response to Treatment of Pediatric Oncology Patients
Faculty Mentor: Krystal Lynch, Nutrition and Dietetics

Paul Abraham, Health Administration
No Flu at EIU
Faculty Mentor: Amanda Harvey, Public Health

Annabelle Heddell, Community Health
Growing Up Healthy: Young Adults and their Readiness to Transition to Independent Healthcare
Faculty Mentor: Lauri DeRuiter-Willems, Public Health

Karina Davis, Health Administration
Nutrition Education in Higher Learning
Faculty Mentor: Amanda Harvey, Public Health

Sabrina Chu, Chas Campbell, Recreation Administration
The Future Charleston Recreation Center
Faculty Mentor: Andrew Kerins, Recreation Administration

Emily Bernard, Community Health
Mental Health during COVID-19
Faculty Mentor: Lauri DeRuiter-Willems, Department of Public Health

Jade Mellen, Clinical Mental Health Counseling
Considerations for Family Therapy: Religious and Gender and Sexually Diverse Clients
Faculty Mentor: Angela Yoder, Counseling and Higher Education

Andrisell Martinez, Counseling and Higher Education - Clinical Track
Use of Play Therapy in Counseling Children of Individuals With Substance Use Disorders
Faculty Mentor: Angela Yoder, Counseling and Higher Education

Cheyenne Warman-Neal, Nutrition and Dietetics
The relationship between food insecurity and maladaptive eating patterns: A systematic review
Faculty Mentor: Krystal Lynch, Nutrition and Dietetics

B2 1:00-1:50 STEM and Technology

<https://eiu.zoom.us/j/96480933772>

Patrick Mallaney, Physics Astronomy
How Accurate are Astronomy Photometric Systems
Faculty Mentor: Tyler Linder, Physics

Avani Flanagan, Aleigh Crowder, Engineering Technology
Examination of Natural and Synthetic Knotted Fibers Using Polarized Light Microscopy
Faculty Mentor: Isaac Slaven, School of Technology

Allen Johanson, MS in Technology
The Importance of Safety Training in Identifying Workplace Safety Hazards: Examining the Dunning-Kruger Effect in Occupational Safety
Faculty Mentor: Isaac Slaven, School of Technology

Luken Henness, Computer and Info Technology
Controlling Multiple Robotics With an Interactive Graphical User Interface
Faculty Mentor: Wutthigrai Boonsuk, School of Technology

Jacob Williams, Computer Information and Technology
Complex Computing on a Budget: A Case Study of Cluster Computing and Applications
Faculty Mentor: Wutthigrai Boonsuk, School of Technology

Sam Erickson, BJ Ojo, Engineering Technology
Small Scale Hemp Decorticator
Faculty Mentor: Isaac Slaven, School of Technology

B3 1:00-1:50 COVID Foodways (Anthropology)

<https://eiu.zoom.us/j/94799831864>

Elaine Barnes, General Studies major
COVID-19: The Impact on Food Insecurity
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Brandon Downen, Sociology major
The Giving Place: A Central Illinois Food Pantry Addresses Food Insecurity
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Ian Hannah, Psychology major
Food, Friends and Family: Altered Eating Traditions during COVID
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Makalah Koeberlein, Psychology major
Commensality during COVID: The Impact of the Pandemic on Eating with Others
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Duncan Price, Sociology major
Drive to Fries: Fast Food During COVID-19
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Dawson Rhoads, FCS/Dietetics major
Do We Gather Together? Holiday Meals during COVID
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Emily Sivia, Sociology major
Eating On and Off Campus: EIU Students and Access to Food during COVID
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Crystol Smith, General Studies major
How COVID-19 Changed the University Dining Experience
Faculty Mentor: Angela Glaros, Sociology/Anthropology

Manny Uribe, General Studies major
Food Waste in the COVID-19 Pandemic
Faculty Mentor: Angela Glaros, Sociology/Anthropology

C1 2:00-2:50 CDS

<https://eiu.zoom.us/j/95478048597>

Bayley Neece, Laurel Teller, Communication Disorder Sciences
Generalization in Speech Sound Disorders: Research and Practice
Faculty Mentor: Laurel Teller, Communication Disorder Sciences

Shelby Freeman, Communication Disorders and Sciences
Foster Parents' Knowledge and Perceptions of Behaviors and Behavior Management in Children with Adverse Childhood Experiences
Faculty Mentor: Nichole Mulvey, Communication Disorders and Sciences

Ellie Tutewiler, Communication Disorders and Sciences
Teaching Object and Gesture Imitation to Children with Autism Spectrum Disorder Using Reciprocal Imitation Training
Faculty Mentor: Jacki Tish, Communication Disorders and Sciences

Claire Conrady, Laurel Teller, Communication Disorders and Sciences
Effect of Online Learning Modules on Sound Segmentation in Preprofessional Instruction
Faculty Mentor: Laurel Teller, Communication Disorders and Sciences

Grace Snider, Communication Disorders and Sciences
Comparison of Language Sample Analysis Procedures
Faculty Mentor: Nichole Mulvey, Communication Disorders and Sciences

C2 2:00-2:50 Art and History

<https://eiu.zoom.us/j/97404468334>

Kofi Bazzell-Smith, Studio Art
Rabbit and Toad: manga series
Faculty Mentor: Bradley Olson, Art

Zarek Nolen, Curriculum and Instruction
Korean War Coverage in High School History Textbooks
Faculty Mentor: John Bickford, Teaching, Learning, and Foundations

Sydney Gelb, History with Teacher Licensure

Richard W. Young and The Great War

Faculty Mentor: Edmund Wehrle, History

John Bien, History with Teacher Licensure

Collegiate Journalism: Kent State Shooting

Faculty Mentor: Edmund Wehrle, History

Kimberly McWherter, History with Teacher Licensure

Race Riots: The East St. Louis Race Riot of 1917 and the Tulsa Race Riot of 1921

Faculty Mentor: Edmund Wehrle, History

Miranda Smith, History with Teacher Licensure; Math with Teacher Licensure

TransAtlantic Asylums: Pliny Earle, A Visit to Thirteen Asylums for the Insane in Europe, and the American Asylum

Faculty Mentor: Bonnie Laughin-Schultz, History

ORAL PRESENTATIONS

A3 12-12:50 Physics and Chemistry

<https://eiu.zoom.us/j/94462038294>

Start Time: 12 pm **Katelynn Fuller-Svarz**, Chemistry

Development and Evaluation of a Fluorescent Probe to Detect the Expression of Glutamate Carboxypeptidase II

Faculty Mentor: Gopal Periyannan, Chemistry

Start Time: 12:15 pm **Matthew Hartung**, Computational Physics

Computer Modeling and Simulation of a Falling Slinky

Faculty Mentor: Jie Zou, Physics

Start Time: 12:30 pm **Michel Inman**, Physics

Neutron Radiation Effects on Semiconductor Devices

Faculty Mentor: Douglas Brandt, Physics and Engineering

A4 12-12:50 In school

<https://eiu.zoom.us/j/92209078863>

Start Time: 12 pm **Toluwalase Solomon**, Curriculum and Instruction

Unchallenged and Obedient: Status of Nigeria junior secondary school social studies curriculum.

Faculty Mentor: John Bickford, Teaching, Learning, and Foundations.

Start Time: 12:15 pm **Shannon Watkins**, Curriculum & Instruction

Taking a look at The Chicago Renaissance: A Literary Movement

Faculty Mentor: John Bickford, Teaching, Learning, and Foundations

Start Time: 12:30 pm **Erin Zurek**, CDS & Foreign Languages: Spanish

SLP Practice and Assessment of Bilingual Students in Illinois

Faculty Mentor: Angela Anthony, CDS

C3 2-2:50 Health Issues

<https://eiu.zoom.us/j/95531620742>

Start Time: 2 pm **Monique Mays**, Health Promotion

Polycystic Ovarian Syndrome in Women

Faculty Mentor: Misty Rhoads, Public Health

Start Time: 2:15 pm **Ambrosia Roberts**, Health Administration

STI's Among College Students

Faculty Mentor: Misty Rhoads, Public Health

Start Time: 2:30 pm **Abigail Smith**, CDS

Knowledge, Perception, and Implementation of Oral Care in Patients with Head and Neck Cancer Before, During, and After Radiation Therapy

Faculty Mentor: Nichole Mulvey, CDS

C4 2-2:50 Politics

<https://eiu.zoom.us/j/96518262100>

Start Time: 2 pm **Hunter Driggers**, Political Science

The Relationship between Socioeconomic Inequality and Authoritarian

Faculty Mentor: Ryan Burge, Political Science

Start Time: 2:15 pm **Ian Palacios**, Philosophy & English

A Commonsense Case for Animal Politics

Faculty Mentor: Janelle DePetro, Philosophy

D1 3-3:50 COVID contact tracing panel

<https://eiu.zoom.us/j/91322742593>

Paul Abraham, Annabelle Heddell, Monique Mays, Public Health

Contact Tracing @EIU: an Interprofessional Learning Experience

Faculty Mentor: Sheila Simons, Public Health

(Additional members of the COVID contact tracing team: Ambrosia Roberts, Juliana Gratzl, and Emily Bernard)

D2 3-3:50 Business and Technology

<https://eiu.zoom.us/j/98419076007>

Start Time: 3 pm **Md Ziad Haidar, MBA**

The CSR Activities of Illinois' Fastest Growing Private Companies

Faculty Mentor: Dr. David Boggs, School of Business

Start Time: 3:15 pm **Jason Tabit, Business Management**

The Decision to Play: College Football in the Era of COVID-19

Faculty Mentor: Michael Dobbs, Management

Start Time: 3:30 pm **Jacob Williams, Computer Information and Technology**

Complex Computing on a Budget: A Case Study of Cluster Computing and Applications

Faculty Mentor: Wutthigrai Boonsuk, School of Technology

D3 3-4:15 Sustainability

<https://eiu.zoom.us/j/95882648806>

Start Time: 3 pm **Arwa Ibrahim, Sustainability**

Fulbright Scholar and research interest in "The role of Water Food Energy Nexus in addressing energy crisis in Sudan"

Faculty Mentor: Nichole Hugo, Sustainability

Start Time: 3:15 pm **Martin Osei, Sustainability**

Phase Change Thermal Storage: Cooking with more Power and Versatility

Faculty Mentor: Nichole Hugo, Hospitality and Tourism Management

Start Time: 3:30 pm **Shaibu Ibrahim, Sustainable Energy**

Improving voltage stability in solar PV grid integration

Faculty Mentor: Peter Liu, Sustainability

Start Time: 3:45 pm **Christine Kariuki, Sustainable Energy**

Investigating Validity of Environmental Kuznets Curve Hypothesis in Kenya: Role of Renewable Energy, Trade Openness, Agriculture and FDI

Faculty Mentor: Nichole Hugo, Hospitality and Tourism Management

D4 3-3:50 Nutrition

<https://eiu.zoom.us/j/97027431419>

Start Time: 3:00 pm **Madison Easton**, Dietetics

Using Marketing Strategies to Encourage Donations to the Partners in Produce Program

Faculty Mentor: Krystal Lynch, Nutrition and Dietetics

Start Time: 3:15 pm **Ruth Nicholson**, Dietetics

The Effects of a Diabetes Management Education Program on Diabetes Knowledge and Self-Competencies Among Public School Nursing Staff: A Pilot Study

Faculty Mentor: Krystal Lynch, Nutrition and Dietetics

Start Time: 3:30 pm **Asana Rimal**, Nutrition and Dietetics

Potential Role of Vitamin D supplements in Treatment and Prevention of Depressive Symptoms in Adults

Faculty Mentor: Krystal Lynch, Nutrition and Dietetics

D5 3-3:50 History

<https://eiu.zoom.us/j/96179512709>

Start Time: 3 pm **Alex Mann**, History w/ teacher licensure

The Women of Wrigley's Dainty Baseball League

Faculty Mentor: Edmund Wehrle, History

Start Time: 3:15 pm **Jackson Melvin**, History

Ten Tongues and One Lie: Turco-Roman Diplomacy in Late Antiquity

Faculty Mentor: Lee Patterson, History

D6 3-3:50 Anxiety

<https://eiu.zoom.us/j/92857204004>

Start Time: 3 pm **William Barquin**, Psychology

The effects of anxiety and exercise on working memory

Faculty Mentor: Jeffrey Stowell, Psychology

Start Time: 3:15 pm **Kaylee Spinner**, Neuroscience

Effects of COVID-19 on the Perceived Anxiety and Coping Mechanisms of Undergraduate College Students

Faculty Mentor: Jeffrey Stowell, Psychology

E1 4-4:50 College Student Affairs

<https://eiu.zoom.us/j/98824455242>

Start Time: 4 pm **Sophie Cieslicki**, College Student Affairs
Female Student Service Member's Higher Education and Military Transitions
Faculty Mentor: Jon Coleman, Counseling and Higher Education

Start Time: 4:15 pm **Anna Goldberg**, College Student Affairs
Adapting to Change: Transitional Experiences of Vertical Transfer Students
Faculty Mentor: Richard Roberts, Counseling and Higher Education

E2 4-4:50 Music Ensemble Performances

<https://eiu.zoom.us/j/97874554920>

Charles Gounod—*Petite Symphonie*

flute—Elizabeth Ornduff
oboe—Riley Cutright
oboe—Carleigh Tessereau
clarinet—Haley Harrison
clarinet—Maura Daly
clarinet—Ashlyn Dahler
horn—Caitlyn Ricketts
horn—Trevor Huffman
bassoon—Jay Dawson
bass clarinet—Sean Haynes
conducted by Alicia Neal

Madeline Dring, *Trio for Flute, Oboe and Piano*

flute-Elizabeth Ornduff
oboe-Riley Cutright
piano-Hyeonjeong Gong
mentored by Victor Cayres de Mendonca

THANKS!

The Undergraduate Research Task Force thanks all the presenters, faculty mentors, and participants in this research event. We also acknowledge the support of the Office of the Vice President of Academic Affairs, the assistance of the deans of the academic colleges, as well as the dean of the Graduate School and of Booth Library. Thanks also to all who agreed to moderate or host a Zoom session!