

BEAR BDAY

BREAKTHROUGHS IN ENGAGEMENT,
ARTS, & RESEARCH

TUESDAY
APRIL 21



20
26

02

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WELCOME TO BEAR DAY 2026



Greetings, and welcome to the annual Breakthroughs in Engagement, Arts, and Research (BEAR) Day celebration! This year, we once again showcase outstanding undergraduate student research and special projects. BEAR Day includes oral presentations, poster sessions, and artist exhibits. The program this year has over 300 presentations with contributions from over 500 students.

BEAR Day demonstrates and honors the achievements of students and highlights the depth and breadth of the academic experiences at Mercer. I know you will enjoy the presentations and trust that BEAR Day will spark your own intellectual curiosity and inspire further scholarly pursuits.

Sincerely,
Wayne C. Glasgow, Ph.D.
Senior Vice Provost for Research

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BEAR DAY COMMITTEE

- David Davis
- Mary W. Mathis
- Ganghao Poh
- Jonathan Cohen
- Kyung-A Yoo
- Bob Allen
- Scot Mann
- Blake D. Bowler
- Joanna Thomas
- Garland Crawford
- Meredith E. Keating White
- Adam J. Keath

Co-Chairs

- Erin McClenathan
- Kerry Strickland

ACKNOWLEDGEMENTS

- Cover Designed by Ellis Elley
- Program Designed by Jonathan Cohen

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TUESDAY APRIL 21

BEAR DAY 2026
AT A GLANCE[Return to Table
of Contents](#)**Symposia and Oral Presentations:**9:00 AM - 3:00 PM,
*see below for locations***Bare Day III Exhibition:**9:00 AM - 3:00 PM
Hardman Hall Plunkett Gallery**Lunch and Jazz Performance:**11:00 AM - 2:00 PM
Historic Quad**Poster Presentations:**4:00 - 6:00 PM
UC IM Basketball Courts**MFS Film Festival - Student Film Showcase:**4:30-6:30 PM
Willet Auditorium
*View Poster on [Page 65](#)***Senior Art and Design Exhibition: (Closing Reception)**6:00 - 8:00 PM
McEachern Art Center (332 Second Street)
*View Poster on [Page 8](#)*GENERAL PAPER
SESSIONS

	TIME	LOCATION	PAGE
Arts, Humanities, and Languages	10:00 AM - NOON	KNT 206	9
Athletics and Education	1:00 - 2:00 PM	CSC CON 1	10
Engineering and Material Sciences	11:00 AM - NOON	CSC CON 3	11
Mathematics, Computer Science, and Computational Science	9:00 - 10:00 AM	STN 166	12
Physical and Natural Sciences	9:00 AM - NOON	GSC 203	13
Social Sciences	9:00 AM - 12:45 PM	CSC CON 1	14
Business	10:00 AM - NOON	STN 166	15

SYMPOSIA

	TIME	LOCATION	PAGE
Biblical Afterlives: Examining the Relevance of Biblical Tropes and Commandments	2:00 - 3:00 PM	KNT 308	<u>16</u>
Cancer, chemoresistance, and Cancer Stem Cells	2:00 - 3:00 PM	GSC 203	<u>17</u>
A Look at Food Access and Food Insecurity in Macon-Bibb County	2:00 - 3:00 PM	STN 251	<u>18</u>
Chemistry Capstone Presentations	10:00 - 11:00 AM	UC IM COURTS	<u>19 - 20</u>
Conservation Biology	9:30 - 11:00 AM	GSC 102	<u>21</u>
English & Creative Writing Honors Presentations	2:00 - 3:00 PM	KNT 108	<u>22</u>
From Molecules to Mortality: Data-Driven Research in Science, Health, Social Protection, and Actuarial Modeling	10:00 - 11:30 AM	STN 251	<u>23</u>
Growing Forward: Opportunities and Obstacles on the Path to Adulthood	12:30 - 2:00 PM	CSC CON 3	<u>24</u>
Jesus and Film	9:00 AM - 10:00 AM	KNT 203	<u>25 - 26</u>
Macabre Magic: Crafting Blood Soaked Theatre	11:00 AM - NOON	KNT 108	<u>27</u>
Medieval Women Mystics	1:00 - 3:00 PM	KNT 203	<u>28</u>
Metaphor and Testimony of Rescue during the Holocaust	1:00 - 2:00 PM	KNT 108	<u>29</u>

SYMPOSIA

	TIME	LOCATION	PAGE
Navigating Work and Identity: Psychological Insights into Life's Key Decisions	2:00 - 3:00 PM	CSC CON 3	<u>30</u>
PHI and PPE Symposium	11:00 AM - NOON	KNT 210	<u>31</u>
Senior Honors Projects in International and Global Studies	1:00 - 3:00 PM	KNT 207	<u>32</u>
Sociology & Criminal Justice Research Projects	9:00 AM - NOON	STN 233	<u>33</u>
Sociology & Criminal Justice Research Projects	1:00 - 3:15 PM	STN 233	<u>34</u>
Topics in Classical Studies	10:00 - 11:00 AM	KNT 210	<u>35</u>
Topics in History	9:00 AM - NOON	KNT 207	<u>36</u>
Topics in Voice Science, Vocal Pedagogy, and Choral Music Pedagogy	11:00 AM - NOON	MUB FRH	<u>37</u>
Virtual Reality Applications and Contents Development	9:00 AM - NOON	SEB 143	<u>38</u>
Executive Orders, Erasure, and Impact: Mercerians' Perceptions on DEI and Belonging	10:30 AM - NOON	KNT 203	<u>39</u>

SENIOR ART AND DESIGN EXHIBITION



*Poster Designed by Rafael Covarrubias
Graphic Design Major
Class of 2026*

GENERAL PAPERS

ARTS, HUMANITIES, AND LANGUAGES

KNT 206

MODERATOR: DAVID DAVIS

10:00 AM - NOON

The Poetics of Latinx Experience

Student Author(s): Sarah Williams

Faculty Advisor(s) or Coauthor(s): Alana Alvarez

"Mother, Bring Me into the World": Subversion of the Hero's Journey in Kirikou and the Sorceress

Student Author(s): Kayna Kambou

Faculty Advisor(s) or Coauthor(s): Elise Bouley

Furry as Counterpublic

Student Author(s): Sky Grzybowski

Faculty Advisor(s) or Coauthor(s): Rachel Schaff

Archiving AI: A Process Presentation Exploring the Creation of the Writer's Hub AI Archive

Student Author(s): Madeleine Pardue

Faculty Advisor(s) or Coauthor(s): Crescent Rainwater

Tracing Physical Subjectivity in Horror Games: A Silent Hill 2 Case Study

Student Author(s): Kathryn Volz

Faculty Advisor(s) or Coauthor(s): Cameron Kunzelman

REGENERATION ENGINE: A Process Presentation behind the Creation of a Digital Role-playing Game

Student Author(s): Maret McWhorter; Rajwol Chapagain

Faculty Advisor(s) or Coauthor(s): Cameron Kunzelman

Insufficient Sleep: The Rising Epidemic in Current Youth

Student Author(s): Sai Mediboyina

Faculty Advisor(s) or Coauthor(s): Cameron Kunzelman

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GENERAL PAPERS

ATHLETICS & EDUCATION

CSC CON 1

MODERATOR: ADAM KEATH

1:00 - 2:00 PM

Does intentionally losing weight prior to competition increase the likelihood of injuries during competition in combat sports

Student Author(s): Ryan Frischkorn

Faculty Advisor(s) or Coauthor(s): Rachel Le

Examining Learning Conditions and Support in STEM Education

Student Author(s): Chloe Powell; Joelle Coffey; Claudia Boero

Faculty Advisor(s) or Coauthor(s): Eazaz Sadeghvaziri

Traffick Jam Marketing Research and Curriculum Expansion

Student Author(s): Raven Dupree; Sarah Pruitt Messick; Morganne Eikelbarner; Carly Lenhardt;

Choice McCarty; Avery Morr

Faculty Advisor(s) or Coauthor(s): Tammy Crutchfield

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GENERAL PAPERS

ENGINEERING AND MATERIAL SCIENCES

CSC CON 3

MODERATOR: JOANNA THOMAS

11:00 AM - NOON

Evaluation of performance test results of polymer-modified asphalt mixtures on balanced mix designs

Student Author(s): Joshua Barber; Riley Lazansky; Cameron Parker
Faculty Advisor(s) or Coauthor(s): Saumya Amarasiri

Overview of Crash Trends Involving Automated Driving Systems Using NHTSA Standing General Order Data

Student Author(s): Sydney Farr
Faculty Advisor(s) or Coauthor(s): Eazaz Sadeghvaziri

Digitizing 3D Objects For Technical Documentation Using Photogrammetry Workflow

Student Author(s): Angel de Jesus Ramos
Faculty Advisor(s) or Coauthor(s): Bremen Vance

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GENERAL PAPERS

**MATHEMATICS, COMPUTER SCIENCE, AND COMPUTATIONAL
SCIENCE + BUSINESS**

STN 166

MODERATOR: BOB ALLEN

9:00 - 10:00 AM

Score-driven long memory dynamics of worldwide regional temperature anomalies

Student Author(s): Raven Dupree

Faculty Advisor(s) or Coauthor(s): Blazsek Szabolcs

Building Minimal Polytopes in Arbitrary Dimensions

Student Author(s): McKayla Beldyk

Faculty Advisor(s) or Coauthor(s): Margaret Symington

GENERAL PAPERS

PHYSICAL AND NATURAL SCIENCES

GSC 203

MODERATOR: KERRY STRICKLAND

9:00 AM – NOON

A Cross-species Comparison of Foxn1 and Foxn4 in Thymic Involution utilizing Multiple Sequence Alignments and 3D Structure Prediction

Student Author(s): Jalisa Williams; Elaine Do; Emma Teng; Cindy Cao; Zac Childs; Olivia Noble
Faculty Advisor(s) or Coauthor(s): Amy Wiles

Analysis of Plasma Biomarkers of Cerebral Malaria

Student Author(s): Jean Hyun
Faculty Advisor(s) or Coauthor(s): Sung-jae Cha

PRSS8-TGF- β Interplay in Glioblastoma Cells

Student Author(s): Huy Lam
Faculty Advisor(s) or Coauthor(s): Greulich

Stage-Specific Postnatal Hypothyroidism and Its Impact on Juvenile Rodent Behavior

Student Author(s): Isabella Phillips
Faculty Advisor(s) or Coauthor(s): Katharine Northcutt

Expression and purification of MS1D1 from *E. coli*.

Student Author(s): Cathy Anh Le
Faculty Advisor(s) or Coauthor(s): Kerry Strickland

Amplification and Purification of Kinase and Lambda-Phosphatase Plasmids for Downstream Co-expression

Student Author(s): Beth Ijeoma
Faculty Advisor(s) or Coauthor(s): Kerry Strickland

Analyzing the 5' Untranslated Regions in the *Abiotrophia defectiva* Genome for Common Motifs in Protein-coding Genes

Student Author(s): Shreya Sudakar
Faculty Advisor(s) or Coauthor(s): Amy Wiles

Comprehensive Guide to Bioinformatics in R: Creation and Analysis

Student Author(s): Dylan M. Ayres
Faculty Advisor(s) or Coauthor(s): Amy Wiles

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SOCIAL SCIENCES

CSC CON 1

MODERATOR: ANNA FLEMING

9:00 AM – 12:45 PM

The Memorability of Words and Vocabulary's Categorization in Memory

Student Author(s): Jonathan Jordan

Faculty Advisor(s) or Coauthor(s): Dorothy Buchli

The Impact of Childhood Adversity on Episodic Memory Functioning

Student Author(s): Analisa Silva

Faculty Advisor(s) or Coauthor(s): Dorothy Buchli

Outsourcing the mind: The neuroscience of cognitive offloading in the digital age

Student Author(s): Zachary Carman

Faculty Advisor(s) or Coauthor(s): Dorothy Buchli

"From Boomers to Zoomers: Selective Exposure Amongst Generational Cohorts in the United States"

Student Author(s): Riley G. Kelly

Faculty Advisor(s) or Coauthor(s): Anna Fleming

Social Media and Foreign Policy: Is Public Opinion Often Manipulated Online?

Student Author(s): Milind Rugnath

Faculty Advisor(s) or Coauthor(s): Anna Fleming

Childhood Trauma and Violent Delinquency: How Race and Gender Shape the Relationship

Student Author(s): Sanaa Strickland

Faculty Advisor(s) or Coauthor(s): Riku Kawaguchi

Exploring Perceptions of Neighborhood Issues and Local Narratives in Macon, Georgia

Student Author(s): Marti Sommers

Faculty Advisor(s) or Coauthor(s): Riku Kawaguchi

First Ladies and Public Perception- A Vision of Women in Power

Student Author(s): Milind Rugnath

Faculty Advisor(s) or Coauthor(s): Phoebe Moon

Regulatory Mechanisms and Innovative Capabilities: Traditional vs. Mainstream Pharmaceutical Firms in China

Student Author(s): Rishabh Mandal

Faculty Advisor(s) or Coauthor(s): Arnab Nayak

Where the forest feels: generational shifts in empathy expression among Indigenous Amazonian children

Student Author(s): Anna Strupp

Faculty Advisor(s) or Coauthor(s): Racheal Goodman; Lauren Dodaro

Open Eyes but Closed Minds?:

An Analysis of Factors Affecting College Student Attitudes Toward Abortion

Student Author(s): Rachel Chen

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

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GENERAL PAPERS

BUSINESS

STN 166

MODERATOR: BLAKE BOWLER

10:00 AM - NOON

An International Cross-Sectional Analysis of Rule of Law and Redistribution on Social Mobility

Student Author(s): Neha Viswanathan; Shafa Gilani

Faculty Advisor(s) or Coauthor(s): Antonio Saravia

Correlations between Economic Liberty and Domestic Funding for Tuberculosis Control in High-Burden Countries

Student Author(s): Emma Teng

Faculty Advisor(s) or Coauthor(s): Antonio Saravia

Economic Freedom, Logistics Performance, and the Determinants of Economic Complexity

Student Author(s): Neha Viswanathan

Faculty Advisor(s) or Coauthor(s): Antonio Saravia

Economic Freedom and Growth: How Do Individual Market Beliefs Correlate with National Performance?

Student Author(s): Jimmy Jones

Faculty Advisor(s) or Coauthor(s): Szabolcs Blazsek

Views on Open Borders and Economic Beliefs in the US

Student Author(s): Hannah Knight

Faculty Advisor(s) or Coauthor(s): Andres Marroquin

Modeling Money Demand in South Africa

Student Author(s): Manan Ramesh Patel; Happy Patel; Cole Wyatt Sunvold

Faculty Advisor(s) or Coauthor(s): Kenneth Tah

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SYMPOSIA

BIBLICAL AFTERLIVES: EXAMINING THE RELEVANCE OF BIBLICAL TROPES AND COMMANDMENTS TODAY

KNT 308

MODERATOR: JASON SMITH

2:00 - 3:00 PM

**Women in Power in the Hebrew Bible: Biblical Narratives and Their Influence on
Contemporary Gendered Political Leadership**

Student Author(s): Jenna Goodson

Faculty Advisor(s) or Coauthor(s): Jason Smith

Biblical Afterlives: Examining the Relevance of Biblical Tropes and Commandments Today

Student Author(s): Zack Burke ; Sebastian Blanco; Bella Baker

Faculty Advisor(s) or Coauthor(s): Dr. Jason Smith

Biblical Afterlives: Examining the Relevance of Biblical Tropes and Commandments Today

Student Author(s): Isabella Baker ; Zack Burke; Sebastian Blanco

Faculty Advisor(s) or Coauthor(s): Jason Smith

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SYMPOSIA

CANCER, CHEMORESISTANCE, AND CANCER STEM CELLS

GSC 203

MODERATOR: ILANA CHEFETZ MENAKER

2:00 - 3:00 PM

**Pathway and Amino Acid Frequency Analyses Reveal Mechanisms of Response to Olaparib
Treatment in Ovarian Cancer**

Student Author(s): Aditya Vayalapalli
Faculty Advisor(s) or Coauthor(s): Ilana Chefetz

**Evaluation of tumor-initiation capacity using a clonogenicity assay in High Grade
Serous Ovarian Cancer.**

Student Author(s): Arushi Cumer
Faculty Advisor(s) or Coauthor(s): Ilana Chefetz

**Characterizing and assessing AKR1 gene family as novel target for second-line ovarian cancer
therapy**

Student Author(s): Shivani Trivedi
Faculty Advisor(s) or Coauthor(s): Ilana Chefetz

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SYMPOSIA

A LOOK AT FOOD ACCESS & FOOD INSECURITY IN MACON-BIBB COUNTY

STN 251

MODERATOR: DEBBIE BLANKENSHIP

2:00 - 3:00 PM

A neighborly fight against hunger: Feeding Middle Georgia's older adults

Student Author(s): Gabriel Kopp

Faculty Advisor(s) or Coauthor(s): Debbie Blankenship

From Corner Grocers to Food Deserts: How Macon's Food Landscape Changed

Student Author(s): Harrison Montavon

Faculty Advisor(s) or Coauthor(s): Debbie Blankenship

Dollar Store Takeover in Food Deserts

Student Author(s): Shivika Nath

Faculty Advisor(s) or Coauthor(s): Debbie Blankenship

SYMPOSIA

CHEMISTRY CAPSTONE PRESENTATIONS

UC IM Courts MODERATOR: JOE KEENE & MAGGIE MEADOWS 10:00-11:00 AM

UV-Accelerated Bond Cleavage Suppression in PU/ZnO covered Steel

Student Author(s): Asia Loney

Faculty Advisor(s) or Coauthor(s): Joseph Keene

The Enhancement of Polyurethane Paint Using Zinc Oxide & Titanium(IV) Oxide Additives To Enhance The Anti-Degradation Properties In Polyurethane

Student Author(s): Trey May

Faculty Advisor(s) or Coauthor(s): Joseph Keene

The Effects of Ultraviolet-induced Weathering on Polyurethane paints with varying ratios of Zinc Oxide and Titanium (IV) Oxide nanocomposite additives.

Student Author(s): Erik Villarreal

Faculty Advisor(s) or Coauthor(s): Joseph D. Keene

The Effects of TiO₂ & ZnO Nanocomposite Additives on the Degradation of Polyurethane-Based Paint

Student Author(s): Manas Patel

Faculty Advisor(s) or Coauthor(s): Dr. Joseph Keene

The effect of TiO₂ and ZnO nanoparticles on the Durability and Degradation of Polyurethane

Student Author(s): Lawrence Slaton

Faculty Advisor(s) or Coauthor(s): Dr. Joseph Keene

The Effect of TiO₂ and ZnO Additives on Polyurethane Based Paint Under Accelerated UV Weathering Conditions.

Student Author(s): Sahithi Doddaka

Faculty Advisor(s) or Coauthor(s): Dr. Joseph Keene

The Effect of Polyurethane–Zinc Oxide and –Titanium (IV) Oxide Nanocomposites in Accelerated UV Weathering Conditions

Student Author(s): Martin J. Respass

Faculty Advisor(s) or Coauthor(s): Dr. Joseph D. Keene

**The Addition of Titanium(IV) Oxide and Zinc Oxide Nano Particles in Polyurethane Paints
and the Effect of UV Degradation on Polyurethane Samples**

Student Author(s): Vance Thomas

Faculty Advisor(s) or Coauthor(s): Joseph Keene

**Examination of UV and moisture weathering effects on polyurethane coatings with
addition of ZnO and TiO₂ nanocomposites.**

Student Author(s): Jonah Slovensky

Faculty Advisor(s) or Coauthor(s): Joseph Keene

**Effects of ASTM G154 Accelerated Ultraviolet Weathering on Polyurethane Degradation
with ZnO and TiO₂ Nanoparticle Additives on Steel**

Student Author(s): Nathan Lee

Faculty Advisor(s) or Coauthor(s): Joseph Keene

Effect of ZnO and TiO₂ Additives on Polyurethane Coating Stability

Student Author(s): Motunrayo George

Faculty Advisor(s) or Coauthor(s): Joseph Keene

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SYMPOSIA

CONSERVATION BIOLOGY

GSC 102

MODERATOR: REBECCA MCKEE

9:30 - 11:00 AM

The Influence of Human Interactions on Eastern Bluebird Populations

Student Author(s): Jordan King; Keerthi Athota; Taylor Huff

Faculty Advisor(s) or Coauthor(s): Rebecca McKee

The Effect of Environmental Factors on Eastern Bluebird Nestbox Utilization

Student Author(s): Samuel Vice; Laura Grace Groover; Alayna Parker; Mikenzie Norman;
Olivia Harris

Faculty Advisor(s) or Coauthor(s): Rebecca McKee

Assessing How Feeder Presence Influences Eastern Bluebird (*Sialia sialis*) Colonization Timing: Fed vs. Unfed Sites

Student Author(s): Zoe McAlpine; Annika Pees; Rachel Garver; Elena Nicholson

Faculty Advisor(s) or Coauthor(s): Rebecca McKee

Effect of Habitat Covariates on Mammal Occurrence at Mercer University Observatory

Student Author(s): Isabella Baker; Dominick Still; Samuel Mitchell; Derik Castillo

Faculty Advisor(s) or Coauthor(s): Rebecca McKee

The Effects of Painted Nestboxes on Eastern Bluebird Nest Occupancy in Amerson River Park

Student Author(s): Jayla Owens; Emoni Jones; Kaileigh Wallace

Faculty Advisor(s) or Coauthor(s):

Effect of Environmental Variables on Longleaf Growth Rates

Student Author(s): Jocelyn Sanders; Emily Timms; Samantha Tennison

Faculty Advisor(s) or Coauthor(s): Rebecca McKee

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SYMPOSIA

ENGLISH & CREATIVE WRITING HONORS PRESENTATIONS

KNT 108

MODERATOR: CHELSEA RATHBURN

2:00 – 3:00 PM

EVERYTHING IS NORMAL

Student Author(s): Maret McWhorter

Faculty Advisor(s) or Coauthor(s): Prof. Chelsea Rathburn

Coordinates to Loss

Student Author(s): Isabella Ragsdale

Faculty Advisor(s) or Coauthor(s): Chelsea Rathburn

SYMPOSIA

FROM MOLECULES TO MORTALITY: DATA-DRIVEN RESEARCH IN SCIENCE, HEALTH, SOCIAL PROTECTION, AND ACTUARIAL MODELING

STN 251

MODERATOR: PAUL ATANDOH

10:00 – 11:30 AM

Utilizing and Optimizing Machine Learning Models to Predict Microcystin Concentrations and Action Level Exceedance

Student Author(s): Taylor Goins

Faculty Advisor(s) or Coauthor(s): Paul Atandoh

The Cost of Aging: Stochastic Modeling of US Death Rates

Student Author(s): Ty Skaggs

Faculty Advisor(s) or Coauthor(s): Paul Atandoh

Supply Chains of Exploitation: Mapping the Economic and Institutional Drivers of County-Level Sex Trafficking in Georgia

Student Author(s): Meredith Hendrix

Faculty Advisor(s) or Coauthor(s): Dr. Paul Atandoh

How Driver Behaviors, Environmental Factors, and Traffic Safety Policy Predict Motor Vehicle Occupant Mortality Across the United States

Student Author(s): Haven Estabrook

Faculty Advisor(s) or Coauthor(s): Dr. Paul Atandoh

SYMPOSIA

GROWING FORWARD: OPPORTUNITIES AND OBSTACLES ON THE PATH TO ADULTHOOD

CSC CON 3

12:30 – 2:00 PM

MODERATORS:

DOE BUCHLI, KEEGAN GREENIER, AMBER INGRAM, SHAN RAN, DOYLE TATE

**Coming of age in COVID-19: Teenage exploration, attachment, and romantic commitment
reluctance**

Student Author(s): Jenna Goodson
Faculty Advisor(s) or Coauthor(s): Doyle Tate

Toxic Masculinity: The Effect of Exposure on a More Diverse Sample

Student Author(s): Graham Childs-Goodwin
Faculty Advisor(s) or Coauthor(s): Dr. Greenier

The Effects of Peer Influence and Online Status on Adolescent Prosocial Behavior

Student Author(s): William Spurlock
Faculty Advisor(s) or Coauthor(s): Dr. Amber Ingram

Neurocognitive Effects of Negative Emotion on Memory and Attentional Control

Student Author(s): Zil Patel
Faculty Advisor(s) or Coauthor(s): Dorothy Buchli

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SYMPOSIA

JESUS AND FILM

KNT 203

MODERATOR: BRYAN WHITFIELD

9:00 - 10:00 AM

Jesus Christ Superstar: Biblical and Historical Accuracy:

Student Author(s) Jenna Goodson

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

Jesus Christ Superstar: Jesus and His Teaching

Student Author(s): Katilia Stephens

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

Jesus Christ Superstar: Production

Student Author(s): Caroline Woodward

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

Jesus Christ Superstar: Reception

Student Author(s): Tori Noah

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

Jesus of Montreal: Biblical and Historical Accuracy

Student Author(s): Anabelle Witt

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

Jesus of Montreal: Jesus and His Teaching

Student Author(s): Will Spurlock

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

Jesus of Montreal: Production & Reception

Student Author(s): Anna Watson

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

The Robe: Biblical and Historical Accuracy

Student Author(s): Noah Porter

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

The Robe: Jesus and His Teaching

Student Author(s): Theophynie Afunyah

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

The Robe: Production

Student Author(s): Daylin Bruce

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

The Robe: Reception

Student Author(s): Gavin Fox

Faculty Advisor(s) or Coauthor(s): Dr. Bryan Whitfield

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SYMPOSIA

MACABRE MAGIC: CRAFTING BLOOD-SOAKED THEATRE

KNT 108

MODERATOR: FRANI ROLLINS

11:00 AM - NOON

Macabre Magic: Crafting Blood-Soaked Theatre

Student Author(s): Megan Bullock; Jordan Coppick; Sahithi Doddaka; Lu Borgia; Stella Shealy

Faculty Advisor(s) or Coauthor(s): Frani Rollins

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SYMPOSIA

MEDIEVAL WOMEN MYSTICS

KNT 203

MODERATOR: ELIZABETH HARPER

1:00 – 3:00 PM

Spiritual Autobiography and Margery Kempe

Student Author(s): Mia Rosario

Faculty Advisor(s) or Coauthor(s): Elizabeth Harper

Revealing Divine Love: A Semantic Approach to the Evolution of Theme and Structure in Julian of Norwich

Student Author(s): Liliana Bowling

Faculty Advisor(s) or Coauthor(s): Dr. Elizabeth Harper

Medieval Mystic Madness: Analyzing the Relationship between Julian of Norwich, Margery Kempe, and Medieval Perceptions of Madness Through a Foucault Lens

Student Author(s): Madeleine Pardue

Faculty Advisor(s) or Coauthor(s): Elizabeth Harper

Feminine Suffering and Christian Religious Devotion in The Book of Margery Kempe

Student Author(s): Abigail L. Rose

Faculty Advisor(s) or Coauthor(s): Dr. Elizabeth Harper

A Loving or Wrathful God: Comparing Julian of Norwich's Revelations of Divine Love and The Medieval Holy Church

Student Author(s): Makenna Hollis

Faculty Advisor(s) or Coauthor(s): Dr. Elizabeth Harper

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SYMPOSIA

METAPHOR AND TESTIMONY OF RESCUE DURING THE HOLOCAUST

KNT 108

MODERATOR: KATHERINE ROSEAU

1:00 – 2:00 PM

Metaphor and Testimony of Rescue During the Holocaust

Student Author(s): Anna Varisco; Ethan Pellegrino; Lina Kern; Jillian Burke; Norma Jones;
Grace Kouassi

Faculty Advisor(s) or Coauthor(s): Katherine Roseau

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SYMPOSIA

NAVIGATING WORK AND IDENTITY: PSYCHOLOGICAL INSIGHTS INTO LIFE'S KEY DECISIONS

CSC CON 3

MODERATOR: SHAN RAN & KEEGAN GREENIER

2:00 - 3:00 PM

Work That Matters: Predictors of Meaningful Work and Life

Student Author(s): Noah Porter

Faculty Advisor(s) or Coauthor(s): Shan Ran; Amber Ingram

The Joint Effects of Parenting and Culture in STEM Career Choice

Student Author(s): Leeza Ahmer

Faculty Advisor(s) or Coauthor(s): Shan Ran; Amber Ingram:

Disclosure and Sophistication of Chronic Illness Perceptions

Student Author(s): Madeline Silinskie

Faculty Advisor(s) or Coauthor(s): Keegan Greenier

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SYMPOSIA

PHI AND PPE SYMPOSIUM

KNT 210

MODERATOR: KEVIN HONEYCUTT

11:00 AM - NOON

**The Material Function of Morality in Relation to the Political and Civil state, and
Examination of the Prerequisites to Stable Moral Frame Works**

Student Author(s): Ayden Davis

Faculty Advisor(s) or Coauthor(s): Marc Jolley

Aristotle's Political Guide to Self-actualization

Student Author(s): Huntley Herring

Faculty Advisor(s) or Coauthor(s): Kevin Honeycutt

SYMPOSIA

SENIOR HONORS PROJECTS IN INTERNATIONAL AND GLOBAL STUDIES

KNT 207

MODERATOR: AMY NICHOLS-BELO

1:00 - 3:00 PM

Old School vs. New School: A study of the different effects of NewTown Macon's development efforts on Mercer University students and faculty

Student Author(s): Thomas X Bartlett

Faculty Advisor(s) or Coauthor(s): Amy Nichols-Belo

Negotiating Responsibility: Male Roles, Power, and Contraceptive Decision-Making in Teen Pregnancy Narratives from Middle Georgia

Student Author(s): Annie Potts

Faculty Advisor(s) or Coauthor(s): Chinekwu Obidoa

"I never want to make somebody feel like I wouldn't stand 10 toes down for them": Student Perceptions of Protest Spring 2025 to Spring 2026

Student Author(s): Sophia Hall

Faculty Advisor(s) or Coauthor(s): Amy Nichols-Belo

Impacts of Athletic Idolization on the Career choices of African American youth

Student Author(s): Nea Kulmala

Faculty Advisor(s) or Coauthor(s): Amy Nichols-Belo

Race, Pain Management, and the Role of Medical and Nursing Education

Student Author(s): Keslyn Billings

Faculty Advisor(s) or Coauthor(s): Amy Nichols-Belo

SYMPOSIA

SOCIOLOGY & CRIMINAL JUSTICE RESEARCH PROJECTS

STN 233

MODERATOR: FLETCHER WINSTON

9:00 AM - NOON

“That’s Criminal!”: Deciding Felony Sentencing Among College Students

Student Author(s): Addie White

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

The Price of Success: What Influences Students to Choose High-Paying Careers

Student Author(s): Kaylin Stone; Jahani Binion

Faculty Advisor(s) or Coauthor(s): Fletcher Wiston

Crime or Condition?:**Student Attitudes toward the Criminalization of Homelessness**

Student Author(s): Meredith Morgan

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Aren’t We the Same?: Student Attitudes towards Immigrants

Student Author(s): Jezie Garmon

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Rooted in the Unconscious: An Examination of Implicit Racial Bias in Mercer’s College of Liberal Arts Students

Student Author(s): Jackson Lees; Delaila Marquez

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Where Do We Belong? Social Groups and the Uneven Experience of Loneliness

Student Author(s): Kha’Niyah Allen

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

No Comment: A Sociological Perspective on Social Media Commenting Behaviors

Student Author(s): Emily Benelli

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

TikTok Mental Illness?: The Continuation of Misinformation Through Social Media

Student Author(s): Kendall Boyd

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

What are the factors that influence college students’ personal identity?

Student Author(s): Kevion Wellington

Faculty Advisor(s) or Coauthor(s): Fletcher Winston

SYMPOSIA

SOCIOLOGY & CRIMINAL JUSTICE RESEARCH PROJECTS

STN 233

MODERATOR: FLETCHER WINSTON

1:00 - 3:15 PM

Students' Approval Towards Prison Reform

Student Author(s): Natalie Ogden; Jane Sword
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Is Life Leading to Higher Stress within College Students

Student Author(s): Miles Aikens; Alexandria Sulko
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Pro-life or Pro-choice

Student Author(s): Jaya Clair
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

An Important Right or a Waste of Money?: Students' Attitudes Towards Free Higher Education

Student Author(s): Jada Clement; Cameron Nixon
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Sleepless on Campus: How social roles shape college student sleep

Student Author(s): Jada Clements; Cameron Nixon
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Media, Misinformation, & Misguidance:

Exploring Students' Trust in Political News Sources Found on Social Media

Student Author(s): Chris Connolly; Ella Lane; Savannah Rueff
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

Factors that Influence Healthy Romantic Relationships

Student Author(s): Syanna Bailey
Faculty Advisor(s) or Coauthor(s): Fletcher Winston

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SYMPOSIA

TOPICS IN CLASSICAL STUDIES

KNT 210

MODERATOR: ACHIM KOPP

10:00 – 11:00 AM

The Use of First and Third Person Points-of-View in Julius Caesar's Commentarii de Bello Gallico

Student Author(s): Jonathan Jordan

Faculty Advisor(s) or Coauthor(s): Achim Kopp

A Long Story Short: The Fable of the Country Mouse and the City Mouse in Horace's Satire II.6

Student Author(s): Bethany Duggan

Faculty Advisor(s) or Coauthor(s): Achim Kopp

SYMPOSIA

TOPICS IN HISTORY

KNT 207

MODERATOR: DOUGLAS THOMPSON

9:00 AM - NOON

Schools in the Shadows: The Educational Network of Kowloon Walled City

Student Author(s): Aurora Gartland

Faculty Advisor(s) or Coauthor(s): Matthew Harper

Negotiating Belonging: Hong Jong-u and the Korean Diaspora

Student Author(s): Ethan Pellegrino

Faculty Advisor(s) or Coauthor(s): Matthew Harper

Minutes that made Inequality: Race and Public Education in Savannah, Georgia, 1900-1916.

Student Author(s): Neely Detwiler

Faculty Advisor(s) or Coauthor(s): Abby Dowling

Mercer Institute: The Janes Family

Student Author(s): Catherine Spainhour

Faculty Advisor(s) or Coauthor(s): Doug Thompson

Medieval Masculinity during the Benedictine Reform and Aelfric's "Passion of St. Julian and his Wife, Basilissa"

Student Author(s): Kieran Mckee

Faculty Advisor(s) or Coauthor(s): Abby Dowling

From Lived Experience to Law: Reconstructing Gus Garcia's Lost Argument in Hernandez v. Texas (1954)

Student Author(s): Emma Shields

Faculty Advisor(s) or Coauthor(s): Matt Harper

Clearing the Lens: Reframing the Reactions to the 1957 Kerala Education Act

Student Author(s): Athena Moorthy

Faculty Advisor(s) or Coauthor(s): Matt Harper

Life of the Resettled Roman War Captives in the Sassanian Persia

Student Author(s): Sara Yarahmadi

Faculty Advisor(s) or Coauthor(s): Matthew Harper

Ink, Image, and Identity: An Examination of Meaning, Representation, and Community in Douglass Theatre Newspaper Advertisements

Student Author(s): Tamaya Morrison

Faculty Advisor(s) or Coauthor(s): Abby Dowling

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SYMPOSIA

TOPICS IN VOICE SCIENCE, VOCAL PEDAGOGY, AND CHORAL MUSIC PEDAGOGY

MUB FRH

MODERATOR: RICHARD KOSOWSKI

11:00 AM - NOON

Healthy Metal Screaming: The Physiology and Foundation of Distorted Vocals

Student Author(s): Rowan Carter

Faculty Advisor(s) or Coauthor(s): Richard Kosowski

SYMPOSIA

VIRTUAL REALITY APPLICATIONS AND CONTENTS DEVELOPMENT

SEB 143

MODERATOR: SINJAE HYUN

9:00 AM - NOON

VR Research Scenario 4

Student Author(s): Bailey Braddon; Gavriel Hutchins; Gabrielle Scott
Faculty Advisor(s) or Coauthor(s): Michael Norenberg; Sinjae Hyun

VR Medical Simulation Model for Airway Management and Rapid Sequence Intubation

Student Author(s): Sofia Arias Magana; Joceline Mendez Mane; Mitchelle Mwaura; Smily Avula
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Virtual Reality Medical Simulation for Advanced Cardiac Life Support (ACLS) Focusing on Tachycardia

Student Author(s): Maya Jacob; Sophia Adomako; Naomi Scott
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Virtual Reality Applications and Contents Development Scenario 3: Stroke

Student Author(s): Sukumar Paidi; Giselle Guye; Elaine DeGuzman; Gregory Midura
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Immersive Outreach: Integrating VR Physics and Hand-Tracking Development in Middle School STEM Education

Student Author(s): Michael Norenberg
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Development of a Primitive Virtual Reality Training Module for Automated External Defibrillator (AED) Operation

Student Author(s): Michael Norenberg ; Smily Avula; Seungjun Lee; Carlee Schultz
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Developing a Seamless Pipeline for Finite Element Analysis Visualization in Virtual Reality

Student Author(s): Michael Norenberg
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Bridging Medical Training and Mixed Reality: A Rapid-Prototyping Approach to AED Simulation

Student Author(s): Rose Gambrell; Dao Pham; Darrell Yankey, Natalia Irvin
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

Ansys CFD to Unity

Student Author(s): Natalie Irvin
Faculty Advisor(s) or Coauthor(s): Sinjae Hyun

SYMPOSIA

EXECUTIVE ORDERS, ERASURE, AND IMPACT: MERCERIANS' PERCEPTIONS ON DEI AND BELONGING

KNT 203

MODERATOR: NATALIE BOURDON

10:30 AM - NOON

Executive Orders, Erasure, and Impact: Mercerians' Perceptions on DEI and Belonging

Student Author(s): Kathryn Mclagan; Eliza Penfield; Jackson Lees; Andrew Halliburton; Abigail Settiani

Faculty Advisor(s) or Coauthor(s): Natalie Bourdon

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POSTER PRESENTATIONS

ARTS, HUMANITIES, AND LANGUAGES

1: The Dulcimer: Volume LIX: Liberation

Student Author(s): The Dulcimer

Faculty Mentor(s)/Coauthor(s): Craig Coleman; Gordon Johnston

Division: Arts, Humanities, and Languages

2: The Effects of Semantic Interference on the Transfer of Second Language Vocabulary Learning

Student Author(s): Rose Nadershahi ; Jordan Buddo; Gianna Richards

Faculty Mentor(s)/Coauthor(s): Dr. José Luis Garrido Rivera

Division: Arts, Humanities, and Languages

3: Attention in a Distracted World

Student Author(s): Ayesha Patel ; Laila Isabelle Bright

Faculty Mentor(s)/Coauthor(s): Dr. Matthew J. Sroka

Division: Arts, Humanities, and Languages

4: The Black Church as a Political Institution: Faith, Mobilization, and Resistance in the South

Student Author(s): Jaime Stokes

Faculty Mentor(s)/Coauthor(s): Chris Grant

Division: Arts, Humanities, and Languages

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ATHLETICS

5: Reduction Risk of Concussions via Guardian Caps

Student Author(s): Krithi Balan

Faculty Mentor(s)/Coauthor(s): Rachel K Le

Division: Athletics

6: Post-COVID Vulnerability: Comparative Risk of Respiratory Complications in Athletes During Early Training Phases: A Critically Appraised Topic

Student Author(s): Dominique Carlson

Faculty Mentor(s)/Coauthor(s): Rachel Le

Division: Athletics

7: Sports Specialization and the Correlation of Injury Rates in Adolescent Athletes: A Critically Appraised Topic

Student Author(s): Caleb Duggan

Faculty Mentor(s)/Coauthor(s): Rachel Le

Division: Athletics

8: Sudden Cardiac Death in African American Athletes

Student Author(s): Tyra Allmon

Faculty Mentor(s)/Coauthor(s): Rachel Le

Division: Athletics

EDUCATION

9: Beyond the Canon: Reimagining Curriculum Through Student Identity

Student Author(s): Sita Patel ; Sydney Allie Ford

Faculty Mentor(s)/Coauthor(s): Matthew Sroka

Division: Education

10: Design and Validation of a 3D-printed Cost-Effective Thoracostomy Simulator

Student Author(s): Autumn R. Young ; Ethan Guest; Priya Patel; Oladipo Sonuga; Meshwa Patel; Michael A. Marcoux; Joanna Thomas

Faculty Mentor(s)/Coauthor(s): Yahya A. Acar; Robert Sarlay

Division: Education

12: Reading Culture in Crisis: Changing Our Classrooms to Re-engage Readers

Student Author(s): Zitlali Blancas ; Claire Bussler; Timothy Jordyn Christensen

Faculty Mentor(s)/Coauthor(s): Dr. Matthew Sroka

Division: Education

13: A Comparative Analysis of Georgia's QBE and Texas's FSP School Funding Systems in Addressing Educational Inequality

Student Author(s): Vrunda Patel

Faculty Mentor(s)/Coauthor(s): Dr. Chris Grant; Dr. Lori Johnson

Division: Education

14: Introductory Biology Student Outcomes are Improved by a Mentorship Bridge Program

Student Author(s): Keerthi Athota ; Hayle Alemany

Faculty Mentor(s)/Coauthor(s): Dr. Shonteria Johnson; Dr. Craig Byron

Division: Education

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ENGINEERING AND MATERIAL SCIENCES

11: Developing a Seamless Pipeline for Finite Element Analysis Visualization in Virtual Reality

Student Author(s): Michael Norenberg

Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun

Division: Engineering and Material Sciences

15: Ansys CFD to Unity

Student Author(s): Natalie Irvin

Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun

Division: Engineering and Material Sciences

16: Immersive Outreach: Integrating VR Physics and Hand-Tracking Development in Middle School STEM Education

Student Author(s): Michael Norenberg

Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun

Division: Engineering and Material Sciences

17: Effect of Soil Anisotropy Permeability on Vertical Drain Consolidation

Student Author(s): Isabel Lima ; Mia Montero; Boris Felipe

Faculty Mentor(s)/Coauthor(s): Saumya Amarasiri

Division: Engineering and Material Sciences

18: Roberts Academy and Mercer University Interactive Engineering Education Program

Student Author(s): Reilly McKenna ; Julianna Ledford; Sophia Germano

Faculty Mentor(s)/Coauthor(s): Dr. Sarah Bauer; Dr. Adaline Buerck

Division: Engineering and Material Sciences

19: From Waste to Worth: Nutrient Recovery from HTL-Derived ACP via Struvite Precipitation

Student Author(s): Gracy Padgett ; Victoria Villani; Henry Fraley

Faculty Mentor(s)/Coauthor(s): Dr. Sarah Bauer

Division: Engineering and Material Sciences

20: From Food Waste to Soil Health: Evaluating HTL-Derived Biochar as a Soil Amendment

Student Author(s): Sydney Stapleton ; Natasha Kendall; Hannah Kermicle

Faculty Mentor(s)/Coauthor(s): Dr. Sarah Bauer

Division: Engineering and Material Sciences

21: Internal Mapping and Autonomous Navigation for Warehouse Robotics

Student Author(s): Nathan Lennox McCalla

Faculty Mentor(s)/Coauthor(s): Dr. Hunmin Kim

Division: Engineering and Material Sciences

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22: 2026 Go Baby Go! Blitz Build Event TEAM CHMMS

Student Author(s): Taylor (TJ) Cox ; Michael Alexander Hamilin; Robert Parks Harris; Lucas Mendoza
Faculty Mentor(s)/Coauthor(s): Dr. Mccreanor
Division: Engineering and Material Sciences

23: Accessibility Beyond Compliance: How Students with ADHD Navigate Academic Program Information

Student Author(s): Hope Bull ; Sydney Taylor
Faculty Mentor(s)/Coauthor(s): Dr. Philip Gallagher
Division: Engineering and Material Sciences

24: What impact do early lifecycle accessibility checkpoints, identified through path mapping, have on defect rates, costs, and release timelines?

Student Author(s): Angel R. Mancio
Faculty Mentor(s)/Coauthor(s): Guiseppe A. Getto
Division: Engineering and Material Sciences

25: VR Research Scenario 4

Student Author(s): Bailey Braddon ; Gavriel Hutchins; Gabriella Scott; Jillian Arnold; Michael Norenburg
Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun
Division: Engineering and Material Sciences

26: Time-of-Day Travel Behavior and Its Relationship to Estimated Vehicle Emissions Using NHTS Data

Student Author(s): Anna Patel
Faculty Mentor(s)/Coauthor(s): Eazaz Sadeghvaziri
Division: Engineering and Material Sciences

27: Consolidation of Vertical Sand Drains Under Single Ramp Loading

Student Author(s): Angel de Jesus Ramos ; Robert Delgado
Faculty Mentor(s)/Coauthor(s): Saumya Amarasiri
Division: Engineering and Material Sciences

28: Feasibility of DLP in lieu of SLA 3D Printing as a Cost-Saving Option for Evaluating Drug-Eluting Polymers

Student Author(s): Lila Turbiville ; Prakriti Sapkota; Cynthia Gaddam
Faculty Mentor(s)/Coauthor(s): Joanna Thomas
Division: Engineering and Material Sciences

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29: Thermal and Photothermal Healing of Thermoplastic Polyurethane Nanocomposites

Student Author(s): Aylar Gayypova ; Colby Withrow; Aaron Schneider; Bailey Collins

Faculty Mentor(s)/Coauthor(s): Alireza Sarvestani

Division: Engineering and Material Sciences

30: VR Simulation for MUSM Scenario 3: Stroke

Student Author(s): Sukumar Paidi ; Gregory Midura; Giselle Guye; Elaine Deguzman

Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun

Division: Engineering and Material Sciences

31: Development of a Primitive Virtual Reality Training Module for Automated External Defibrillator (AED) Operation

Student Author(s): Michael Norenberg ; Smily Avula; Seungjun Lee; Carlee Schultz

Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun

Division: Engineering and Material Sciences

32: Server Fueling Machine Learning Across Engineering Department

Student Author(s): James Davis ; Ayush Sahoo; Jared Bellamy; Jonathan Ramos

Faculty Mentor(s)/Coauthor(s): Dr. Anthony Choi

Division: Engineering and Material Sciences

33: HARP Tracker

Student Author(s): Ayush Sahoo ; Samhita Saragadam

Faculty Mentor(s)/Coauthor(s): Dr. Anthony Choi; Dr. Philip Mccreanor

Division: Engineering and Material Sciences

34: Sound Perception for Embedded Systems: Resource-Efficient AI Acoustic Localization.

Student Author(s): Kalp Patel ; Timothy Cordista

Faculty Mentor(s)/Coauthor(s): Dr. Anthony Choi

Division: Engineering and Material Sciences

35: VR Medical Simulation Model for Airway Management and Rapid Sequence Intubation

Student Author(s): Sofia Arias Magana ; Joceline Mendez Mane; Michelle Mwaura; Smily Avula

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

Division: Engineering and Material Sciences

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36: Handheld Braille Reader

Student Author(s): Shane Tharani ; Alex Brantley; Sophia Guilbeau

Faculty Mentor(s)/Coauthor(s): Dr. Sinjae Hyun

Division: Engineering and Material Sciences

37: A Multi-Material Surface Roughness Measurement Laboratory for Mechanical Engineering Students

Student Author(s): Caleb Luo-Gardner ; Michael Norenberg; Angel De Jesus Pablo Adan Ramos; Sofia Raquel Arias Magana; Joceline Mendez Mane

Faculty Mentor(s)/Coauthor(s): Arash Afshar; Dorina Mihut; Stephen Hill

Division: Engineering and Material Sciences

38: Carpal tunnel brace

Student Author(s): Shivali Patwary ; Alexis Hoard; Victoria Smith

Faculty Mentor(s)/Coauthor(s): Ha Van Vo

Division: Engineering and Material Sciences

39: Neat, Carbon-Reinforced, and Glass Reinforced PA12: An Analysis of Material Properties and Mechanical Performance

Student Author(s): Joceline Mendez Mane ; Sofia Arias Magana; Angel de Jesus Pablo Adan Ramos

Faculty Mentor(s)/Coauthor(s): Arash Afshar

Division: Engineering and Material Sciences

40: Manufacturing-Dependent Degradation and Abrasion Behavior of 3D-Printed and Molded ABS and PETG under UV–Moisture Exposure

Student Author(s): Caleb Luo-Gardner ; Michael Norenberg; Angel De Jesus Pablo Adan Ramos; Sofia Raquel Arias Magana; Joceline Mendez Mane

Faculty Mentor(s)/Coauthor(s): Arash Afshar; Dorina Mihut; Stephen Hill

Division: Engineering and Material Sciences

41: Thermal performance of Indium heat spring as Thermal Interface Material using a steady-state thermal testing apparatus

Student Author(s): Aidan Benefield ; Noah Harrell

Faculty Mentor(s)/Coauthor(s): Dr. Chandon Roy

Division: Engineering and Material Sciences

42: Experimental Analysis of the Resistivity of Graphene Sheets When Used as a TIM Conforming to ASTM D5470-12

Student Author(s): Landon Yarbrough ; Anugrah Dethe

Faculty Mentor(s)/Coauthor(s): Chandan Roy

Division: Engineering and Material Sciences

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43: Experimental Analysis of the Resistivity of Graphene Sheets When Used as a TIM Conforming to ASTM D5470-12

Student Author(s): Anugrah Dethe ; Landon Yarbrough

Faculty Mentor(s)/Coauthor(s): Dr. Chandan Roy

Division: Engineering and Material Sciences

44: Agent-Based Modeling and Gradient-free Optimization in Control

Student Author(s): Isaac Monteiro

Faculty Mentor(s)/Coauthor(s): Dr. Makhin Thitsa

Division: Engineering and Material Sciences

45: Portable Visually Impaired Aid

Student Author(s): Evan Abbott ; Aidan Benefield; Chase LaValley

Faculty Mentor(s)/Coauthor(s): Dr. Anthony Choi; Dr. Kevin Barnett; Dr. Chandon Roy

Division: Engineering and Material Sciences

46: Statistical observational study of amputee populations in Vietnam

Student Author(s): Natalie Nguyen ; Lydia Doan

Faculty Mentor(s)/Coauthor(s): Bich Nguyen; Dr. Ha Vo; Trung Le

Division: Engineering and Material Sciences

47: Nighttime Versus Daytime Fatal Crashes in Work Zones Using Fatality Analysis Reporting System (FARS) Data

Student Author(s): Gracy Padgett

Faculty Mentor(s)/Coauthor(s): Eazaz Sadeghvaziri

Division: Engineering and Material Sciences

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MATHEMATICS, COMPUTER SCIENCE, AND COMPUTATIONAL SCIENCE

48: Graph-Based Modeling and Visualization of Cayo Santiago Family Relationships Using Neo4j

Student Author(s): Jaylene Bayona ; Robert Riordan

Faculty Mentor(s)/Coauthor(s): Martin Zhao

Division: Mathematics, Computer Science, and Computational Science

49: Translating 3D Spatial Data into Tactile Braille

Student Author(s): Christopher Choi ; Avery Goss

Faculty Mentor(s)/Coauthor(s): Dr. Choi; Dr. Kim; Dr. Yoon

Division: Mathematics, Computer Science, and Computational Science

50: Evaluating Graph Neural Networks for Cosmic-Ray Energy Reconstruction

Student Author(s): Rajwol Chapagain

Faculty Mentor(s)/Coauthor(s): Frank McNally

Division: Mathematics, Computer Science, and Computational Science

51: Bridging the Gap: Developing Data-Preprocessing Pipelines to Enable Advanced Cosmic-Ray Reconstruction with IceTop-CNN

Student Author(s): Johnathan Stowers

Faculty Mentor(s)/Coauthor(s): Dr. Frank McNally

Division: Mathematics, Computer Science, and Computational Science

52: Mobile Application Design for Histology Data Set Analysis

Student Author(s): Aarushi Verma

Faculty Mentor(s)/Coauthor(s): Chaohui Ren

Division: Mathematics, Computer Science, and Computational Science

53: Increasing Intentionality: A Mobile Design for Reclaiming Time from Short-Form Content

Student Author(s): Liliana Bowling

Faculty Mentor(s)/Coauthor(s): Dr. Chaohui Ren

Division: Mathematics, Computer Science, and Computational Science

54: Random Seed Implementation in IceTop-CNN

Student Author(s): Mariah Ellis ; Evan Gunderson

Faculty Mentor(s)/Coauthor(s): Dr. Frank McNally

Division: Mathematics, Computer Science, and Computational Science

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55: From Blueprint to Execution: A Standardized Framework for AI Systems

Student Author(s): Garrett Jones

Faculty Mentor(s)/Coauthor(s): Robert A. Allen

Division: Mathematics, Computer Science, and Computational Science

PHYSICAL AND NATURAL SCIENCES

57: A pipeline for studying transcription factor-mediated gene regulation in the human fungal pathogen *Cryptococcus neoformans*

Student Author(s): Shreyan Ghelani

Faculty Mentor(s)/Coauthor(s): Nathan Glueck

Division: Physical and Natural Sciences

58: Comparative Analysis of Eubacteria in Avian Excreta with Eubacteria in Porcine and Equine Feces on a Georgia Farm

Student Author(s): Ria Tamrakar ; Dhruv Thanki

Faculty Mentor(s)/Coauthor(s): Johnathan Coffman; Stacy Jones

Division: Physical and Natural Sciences

59: Regulation of the R3 Sheddase PRSS8 through Statin-Modulated Cholesterol Homeostasis Pathways Reduces TGF- β Signaling in Cancers

Student Author(s): Emma Teng ; Shreya Sudakar; Cion Kim

Faculty Mentor(s)/Coauthor(s): Dr. Benjamin Greulich

Division: Physical and Natural Sciences

60: Invasive Species Monitoring: Spotted Lanternfly in Macon, Georgia

Student Author(s): Dominick Still ; Samuel Mitchell

Faculty Mentor(s)/Coauthor(s): Heather Bowman-Cutway

Division: Physical and Natural Sciences

61: Dose-Dependent Effects of Acetaminophen and Ibuprofen on Mitochondrial ROS in *Drosophila melanogaster* Larvae

Student Author(s): Sanjeevini Nalla ; Angel Kinyua; Olivia Harris

Faculty Mentor(s)/Coauthor(s): Dr. Samantha Deal

Division: Physical and Natural Sciences

62: Structural and Phylogenetic Analysis of a Chemotaxis Scaffold Protein Homolog in *Rhizobium leguminosarum* and Related Bacteria

Student Author(s): Yesha Upadhyia ; Gianna Richards

Faculty Mentor(s)/Coauthor(s): Dr. Chris Tinkey

Division: Physical and Natural Sciences

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63: Potential Mechanisms of Inorganic Mercury Intoxication in Rat Kidney Cells

Student Author(s): Kathryn McLagan ; Anya Surani; Luke Wiley
Faculty Mentor(s)/Coauthor(s): Lucy Joshee; Christy C. Bridges
Division: Physical and Natural Sciences

64: The Determination of Lead Leachate from Mexican Mugs in Common Household Beverages: A Study of Coffee, Lemon Tea, and Hot Chocolate

Student Author(s): Ava M. Francis ; Arya D. Patel; Zackary A. Childs
Faculty Mentor(s)/Coauthor(s): Dr. Caryn Seney; Dr. Adam Kiefer; Dr. Adaline Buerck
Division: Physical and Natural Sciences

65: Comparative *In Vitro* Evaluation of Bacterial Adhesion and Biofilm Formation on Six Common Dental Sealant Materials Following Exposure to Human Saliva

Student Author(s): Kreeya Trivedi ; Anuj Tandon ; Ria Tamrakar
Faculty Mentor(s)/Coauthor(s): Stacy Jones; Jonathan Coffman
Division: Physical and Natural Sciences

66: A Baseline Assessment for Mammalian Diversity at the Mercer University Observatory and Field Station

Student Author(s): Jackson Bruce ; Philip Luciani
Faculty Mentor(s)/Coauthor(s): Rebecca McKee
Division: Physical and Natural Sciences

67: Scope and Limitations of a Low-Cost Fluorescence System for the Visualization of Lead

Student Author(s): Jacob P. Allinson ; Zackary A. Childs; Morgan N. Arens
Faculty Mentor(s)/Coauthor(s): Adam M. Kiefer; Adaline M. Buerck; Caryn S. Seney
Division: Physical and Natural Sciences

68: Analysis of Lnk Sequence and Microsynteny Conservation Across Multiple *Drosophila* Species

Student Author(s): Bethanee Stephens ; Tyler Gilson
Faculty Mentor(s)/Coauthor(s): John Stanga
Division: Physical and Natural Sciences

69: Investigating the Effects of Overexpression of Genes *flaA* and *rpoH* and Increased Temperatures on Flagellar Activity of *Rhizobium leguminosarum*

Student Author(s): Shreya Sudakar ; Aditya Vayalapalli; Niani Clermont; Annika Pees
Faculty Mentor(s)/Coauthor(s): Dr. Chris Tinkey
Division: Physical and Natural Sciences

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70: Genomic Extraction and Recombinant Cloning of Antibiotic Resistance Factor *Abcf1* from *M. smegmatis*

Student Author(s): Seymour Stennett ; Eniya Robinson; Raina Singhal; Tedra Ibegbulam; Komal Memon; Julia Tanase;

Faculty Mentor(s)/Coauthor(s): Elizabeth Peterson

Division: Physical and Natural Sciences

71: SHANK2A Overexpression prompts early life communication deficits in mice affecting ASD.

Student Author(s): Arya Prajapati ; Christian casteel

Faculty Mentor(s)/Coauthor(s): Dr.Ahmed Eltokhi

Division: Physical and Natural Sciences

72: Adapting the pRAP System to Produce Toxin-Based Protein Complexes

Student Author(s): Kayna Kambou

Faculty Mentor(s)/Coauthor(s): David Goode

Division: Physical and Natural Sciences

73: Extraction and Screening for the Presence of Pb from Aqueous Solutions

Student Author(s): Maylie Clement ; Naya Patel; Kayin Walker

Faculty Mentor(s)/Coauthor(s): Adam Kiefer; Adaline Buerck; Christian Grizzle; Meagan Stanley; Caryn Seney

Division: Physical and Natural Sciences

74: Biodiversity of aquatic organisms from Georgia and Belize revealed by morphology and DNA barcoding

Student Author(s): Angela Chen ; Kaylee Grace Mixon; Yaser Ibrahim Abuazizah

Faculty Mentor(s)/Coauthor(s): Adrian A. Vasquez

Division: Physical and Natural Sciences

75: Synthesis of Ester-Functionalized BDTH2 as Water-Soluble Chelators for Hg(II) Removal

Student Author(s): Abigail Williamson

Faculty Mentor(s)/Coauthor(s): Dr. David Goode; Dr. Adam Kiefer

Division: Physical and Natural Sciences

76: Improving Analysis of Isothermal Titration Calorimetry Experimental Data

Student Author(s): Taylor Goins

Faculty Mentor(s)/Coauthor(s): Dale Moore

Division: Physical and Natural Sciences

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77: A Greener Synthesis of Squaraines

Student Author(s): Andrew McCommon

Faculty Mentor(s)/Coauthor(s): Dr. Margaret Meadows

Division: Physical and Natural Sciences

78: Screening of Lead (Pb) in New Paint using Portable X-Ray Fluorescence Analyzers: A Tool for the Rapid Removal of Pb-based Paint from the Marketplace

Student Author(s): Matthew C.R. Campbell ; Benjamin J. Ashtar; Maylie D. Clement

Faculty Mentor(s)/Coauthor(s): Adam M. Kiefer; D. Christian Grizzle; Caryn S. Seney

Division: Physical and Natural Sciences

79: Genetic Localization of E5 and its role in AIF-mediated Apoptosis in *Drosophila melanogaster*

Student Author(s): Evan Smith ; Stephen Denham

Faculty Mentor(s)/Coauthor(s): Dr. John Stanga; Dr. Sabrina Walthall

Division: Physical and Natural Sciences

80: Comparisons between HIV-related virus-host protein interactions across species

Student Author(s): Callie Lowery ; Annie Potts

Faculty Mentor(s)/Coauthor(s): Amy Wiles

Division: Physical and Natural Sciences

81: Optimizing Green Fluorescent Protein (GFP) as a Model for Protein Exploration in the Biochemistry Laboratory

Student Author(s): Bethany Gedle

Faculty Mentor(s)/Coauthor(s): Emilianne Limbrick

Division: Physical and Natural Sciences

82: *Caenorhabditis elegans*: the consensuses in genes, pathways, and ontologies in promoter regions

Student Author(s): Eva Pyne ; Huy Lam; Andrew McCommon; Cecily Tucker

Faculty Mentor(s)/Coauthor(s): Amy Wiles

Division: Physical and Natural Sciences

83: MSP1D1 Protein Expression and Purification

Student Author(s): Aanya Chaganthi

Faculty Mentor(s)/Coauthor(s): Dr. Kerry Strickland

Division: Physical and Natural Sciences

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84: MSP1D1 Purification for Ganglioside-Containing Nanodiscs

Student Author(s): Nathan Walsh

Faculty Mentor(s)/Coauthor(s): Kerry Strickland

Division: Physical and Natural Sciences

85: Activity-Dependent Targeting of mPFC Neuronal Ensembles During Cue-Induced Cocaine Seeking

Student Author(s): Sanjna Desai ; Luis Santana

Faculty Mentor(s)/Coauthor(s): Dr. Ali Gheidi; Anasalea Caroland-Williams; Jessica Zemp

Division: Physical and Natural Sciences

86: Investigating hangover Homology in Drosophila, Essential to the Cellular Stress Response

Student Author(s): Charles Johnson ; Kyiah Luther; Sahasra Maddu

Faculty Mentor(s)/Coauthor(s): Dr. John Stanga

Division: Physical and Natural Sciences

87: The Effects of Accelerated UV Weathering on the Corrosion Growth Rate on Aluminum Substrates

Student Author(s): Lauren Tickle

Faculty Mentor(s)/Coauthor(s): Joseph Keene

Division: Physical and Natural Sciences

88: Coatings with Low Autofluorescence for the Detection of Lead in Aqueous Solutions.

Student Author(s): Kayin Walker

Faculty Mentor(s)/Coauthor(s): Meagan Stanely; Adam Kiefer; Adaline Buerck; Caryn Seney; D. Christian Grizzle

Division: Physical and Natural Sciences

89: Weathering 1800 Steel Coupons: The Quantification of Corrosion

Student Author(s): Camren Nicholson

Faculty Mentor(s)/Coauthor(s): Joseph Keene

Division: Physical and Natural Sciences

90: The cadmium sulfide-copper sulfide alloy nanoparticle: synthesis and characterization

Student Author(s): Giang Doan

Faculty Mentor(s)/Coauthor(s): Dale Moore

Division: Physical and Natural Sciences

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91: Thiol-Dependent Formation Mechanisms in Metal Sulfide Alloy Nanoparticles

Student Author(s): Asia Loney

Faculty Mentor(s)/Coauthor(s): Dale Moore

Division: Physical and Natural Sciences

92: The effect of coral health on fish species richness.

Student Author(s): Courtney Kynard ; Chloe Clements

Faculty Mentor(s)/Coauthor(s): Troy Nash

Division: Physical and Natural Sciences

93: Effects of Ozempic on Cancer Cell Migration and ERG Expression in A549 (Lung) and Hela (Cervical) Cells

Student Author(s): Rachel Garver ; Elise Jones

Faculty Mentor(s)/Coauthor(s): Benjamin Greulich

Division: Physical and Natural Sciences

94: Determining an Alternative Media for *Vibrio natriegens* Growth

Student Author(s): Sara Botwinik

Faculty Mentor(s)/Coauthor(s): Dr. Kerry Strickland

Division: Physical and Natural Sciences

95: Angular Power Spectra with IceTop

Student Author(s): Aiden Hinnars

Faculty Mentor(s)/Coauthor(s): Frank McNally

Division: Physical and Natural Sciences

96: Rigidity Analysis with the IceCube Neutrino Observatory

Student Author(s): Robert T. Futrell ; Aiden Hinnars

Faculty Mentor(s)/Coauthor(s): Frank McNally

Division: Physical and Natural Sciences

97: MSP Purification for Protein Assembly

Student Author(s): Lucas Ardelean

Faculty Mentor(s)/Coauthor(s): Dr. Kerry Strickland

Division: Physical and Natural Sciences

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98: Event Rate Study with IceTop

Student Author(s): Charles Joiner

Faculty Mentor(s)/Coauthor(s): Frank McNally

Division: Physical and Natural Sciences

99: IceCube Experimental Data vs. Monte Carlo Simulation

Student Author(s): Tobias Melaku

Faculty Mentor(s)/Coauthor(s): Frank McNally

Division: Physical and Natural Sciences

100: Longleaf distance to edge of property effect on growth rates

Student Author(s): Jocelyn Sanders ; Emily Timms; Samantha Tennison

Faculty Mentor(s)/Coauthor(s): Dr. Rebecca McKee

Division: Physical and Natural Sciences

PUBLIC HEALTH AND HEALTH STUDIES

101: The Effects of Stimulant and Non-Stimulant Based Pre-Workouts on Mitochondrial Health

Student Author(s): Ransom Tah ; Bethanee Stephens; Thomas Chenkus

Faculty Mentor(s)/Coauthor(s): Dr. Samantha Deal

Division: Public Health and Health Studies

102: Mental Health of Undergraduate Emerging Adults in a Socio-Economic Crisis in Nigeria - Preliminary Findings

Student Author(s): Janiyah Castle

Faculty Mentor(s)/Coauthor(s): Dr. Chinekwu Obidoa

Division: Public Health and Health Studies

103: The Life Cycle of Single Use Plastics

Student Author(s): Allison Joy

Faculty Mentor(s)/Coauthor(s): Dr. Suzie Madden; Dr. Whitney Hamilton

Division: Public Health and Health Studies

104: The Good Kid Effect: Prosocial Siblings as Buffers of Parental Stress

Student Author(s): Riddhi Maheshwari

Faculty Mentor(s)/Coauthor(s): Dr. Anastasia Kerr-German

Division: Public Health and Health Studies

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105: Food Restriction Results in Sex Differences for Palatable Food Seeking

Student Author(s): Ujvali Patel ; Arya Datta; Francis Hoang; Shahi Patel

Faculty Mentor(s)/Coauthor(s): Ali Gheidi; Jessica Zemp

Division: Public Health and Health Studies

106: Risk of cardiovascular event during sport officiating varies by sport but not by geographical region in the United States

Student Author(s): Antonio Taylor

Faculty Mentor(s)/Coauthor(s): Anne Mulholland

Division: Public Health and Health Studies

107: Swimming exercise improves noncognitive behaviors in the rTg4510 tau mouse model.

Student Author(s): Zoe McAlpine ; Andrew Halliburton; Betsy Timmons; Emily Lee; Johnelle Forrester; Shrouya Dhruv;

Faculty Mentor(s)/Coauthor(s): Dr. Stephen Lippi

Division: Public Health and Health Studies

108: Exploring whether swimming exercise can affect inflammatory, neurotrophic, and hallmark proteins in a tauopathy mouse model.

Student Author(s): Zoe McAlpine

Faculty Mentor(s)/Coauthor(s): Dr. Stephen Lippi; Dr. Benjamin Greulich

Division: Public Health and Health Studies

109: Big Sisters Guide to Going Out

Student Author(s): Kayden Cash

Faculty Mentor(s)/Coauthor(s): Lauren Shinholster

Division: Public Health and Health Studies

SOCIAL SCIENCES

110: Candied Grapes: A Student Entrepreneurship Case Study.

Student Author(s): Kome onowotu

Faculty Mentor(s)/Coauthor(s): Anthony hand

Division: Social Sciences

111: Like Father Like Son: Identifying Heritability Patterns of ADHD

Student Author(s): Emily Lundstrum

Faculty Mentor(s)/Coauthor(s): Anastasia Kerr-German

Division: Social Sciences

112: The Effects of Political Rhetoric on Public Trust for the United Nations

Student Author(s): Precious A Clark

Faculty Mentor(s)/Coauthor(s): Dr. Anna Fleming

Division: Social Sciences

113: Friendship Jealousy and Attention Allocation in Adolescents

Student Author(s): Zil Patel ; Mary Grace Nasr; Haven McGaha; Lilly

Faculty Mentor(s)/Coauthor(s): Dr. Ker-German; Dr. Ingram

Division: Social Sciences

114: Exploring the Link Between Hyperacusis and Auditory Processing Disorder to Central Auditory Dysregulation in ADHD

Student Author(s): Pranati Swayampakula ; Shreya Ranabhotu; Abigail Furrow; Nina Nwigwe

Faculty Mentor(s)/Coauthor(s): Anastasia Kerr-German

Division: Social Sciences

115: The Inbox Initiative: How Professionalism Affects Perceptions of Email Communication

Student Author(s): Ariel Basa ; Ifeoluwa Ogundipe; Taylor Goodly; Tatum Turk

Faculty Mentor(s)/Coauthor(s): Shan Ran

Division: Social Sciences

116: Examining the relationship between athletic participation and disordered eating in a large sample of college students: Findings from the Healthy Minds Study

Student Author(s): Johnelle Forrester

Faculty Mentor(s)/Coauthor(s): Stephen Lippi

Division: Social Sciences

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117: Auditory Habituation and fNIRS

Student Author(s): Greer Gardner ; Nicholas Frye; Kaitlyn Wright; Michele Ngo; Samia Moid Ahmed
Faculty Mentor(s)/Coauthor(s): Dr. Anastasia Kerr-German
Division: Social Sciences

118: Sibling Relationships and Problem Behaviors in Children with a Sibling with Intellectual Disability

Student Author(s): Ishva Patel
Faculty Mentor(s)/Coauthor(s): Candace Evans
Division: Social Sciences



119: Spring 2026 Go Baby Go! Blitz Build Event TEAM ABDJW

Student Author(s): Brandon Andorfer, Michael Boster, Brayden deRijke, Cooper Jones, Dane Wyles
Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

120: Spring 2026 Go Baby Go! Blitz Build Event TEAM ASJW

Student Author(s): Jillian Arnold, Zahri Jones, Cassandra Schneider, Marshall Wheeler
Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

121: Spring 2026 Go Baby Go! Blitz Build Event TEAM ADOVRZ

Student Author(s): Grace Artz, Steven Dasari, Danielle Owen-Vides, Samia Rizzo, Allison Zitsch
Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

122: Spring 2026 Go Baby Go! Blitz Build Event TEAM B.C.D.K

Student Author(s): Arthur Resende Bringhenti, Parker Campbell, Hannah Daly
Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

123: Spring 2026 Go Baby Go! Blitz Build Event TEAM CHHMMS

Student Author(s): Taylor Cox, Michael Hamlin, Robert Harris, Lucas Mendoza
Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

124: Spring 2026 Go Baby Go! Blitz Build Event TEAM MSMMLNKFC

Student Author(s): Onithi Fonseka, Shreya Kumar, Elizabeth Lasiter, Urvee Mishra, Emily Nguyen
Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

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125: Spring 2026 Go Baby Go! Blitz Build Event TEAM YLS

Student Author(s): Aurora Li, Eli Stalinescu, Hana Youssef

Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

126: Spring 2026 Go Baby Go! Blitz Build Event TEAM SHARP

Student Author(s): Ethan Sharp

Faculty Mentor(s)/Coauthor(s): Michael Marcoux, Sybil Martin, Philip McCreanor

127: Composite Materials Testing

Student Author(s): Angel de Jesus Ramos, Sofia Arias Magana, Joceline Mane

Faculty Mentor(s)/Coauthor(s): Arash Afshar

128: Evaluating the Food, Water and Energy Footprint of Hydroponics Controlled Environment Agriculture

Student Author(s): Kassia Bono , Jasmine Johnson, Jocelyn Ramirez

Faculty Mentor(s)/Coauthor(s): Dr. Sarah Bauer

129: Portable heavy metal analyzer comparison

Student Author(s): Sophia Germano

Faculty Mentor(s)/Coauthor(s): Adaline Buerck

130: Biochar-Enhanced Concrete for Sustainable Infrastructure

Student Author(s): Santiago Arroyave Granados, Reagan Cooke, Isaac Pardue

Faculty Mentor(s)/Coauthor(s): Natalia Cardelino

131: HARP Tracker

Student Author(s): Ayush Sahoo, Samhita Saragadam

Faculty Mentor(s)/Coauthor(s): Anthony Choi

132: Application of Z-Source circuit breaker in micro-grid power system

Student Author(s): Kusum Neupane

Faculty Mentor(s)/Coauthor(s): Ruiyun Fu

133: Exploring the Role of Artificial Intelligence in Supporting Quality Engineering and FDA Compliance for Medical Device

Student Author(s): Sophia Adomako

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

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134: VR Simulation for MUSM Scenario 3: Stroke

Student Author(s): Elaine DeGuzman, Gregory Midura, Sukumar Paidi

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

135: Re-design of a Functional Training Balance Board

Student Author(s): Joshua Cadman

Faculty Mentor(s)/Coauthor(s): Philip McCreanor

136: Turbine Measurement

Student Author(s): Kyle Kayonga

Faculty Mentor(s)/Coauthor(s): Loren Sumner

137: Agent-Based Modeling and Gradient-free Optimization in Control

Student Author(s): Isaac Monteiro

Faculty Mentor(s)/Coauthor(s): Makhin Thitsa

138: Fabrication and Evaluation of Pediatric Lead-Doped Composite Bone Phantoms

Student Author(s): Kara Dell

Faculty Mentor(s)/Coauthor(s): Joanna Thomas

139: Mechanical Lower Extremity Exoskeleton Development Project

Student Author(s): Maverick Anderson, Kaylee Nichols

Faculty Mentor(s)/Coauthor(s): Ha Vo

140: Electrical Lower Extremity Exoskeleton Development Project

Student Author(s): Mohamad Oudat, Thomas Schwartz

Faculty Mentor(s)/Coauthor(s): Ha Vo

141: VLA-Based Bioinspired Robotic Arm for Humanoid Robotic Applications

Student Author(s): Melanie McElroy, Jordi Riera Shephard

Faculty Mentor(s)/Coauthor(s): Lianjun Wu

142: Go Baby Go-Wild Things Frame

Student Author(s): Andrew Hobson, Andrew McKee

Faculty Mentor(s)/Coauthor(s): Philip McCreanor

143: Adaptive Tech-Interactive Balance Board Project

Student Author(s): Julianna Ledford, Priya Patel

Faculty Mentor(s)/Coauthor(s): Philip McCreanor

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144: Biomechanical Analysis of a Front Kick

Student Author(s): Carson Davis, Evan Wiebold

Faculty Mentor(s)/Coauthor(s): Philip McCreanor

145: Assistive technology to improve driving safety

Student Author(s): Gemir Rounsaville ; Moses Huggins

Faculty Mentor(s)/Coauthor(s): Hunmin Kim

Division: Engineering and Material Sciences

146: Virtual Reality Medical Simulation for Advanced Cardiac Life Support (ACLS) Focusing on Tachycardia

Student Author(s): Maya Jacob

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

147: 3D-printed Models for Computational

Student Author(s): Gabriel Hill, Hannah Kermicle

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

148: Inhalation Drug Delivery in More Realistic Hum

Student Author(s): Kelly McIntyre, Masa Popovic

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

149: TPU and Vitriimer Research

Student Author(s): Aylar Gayypova

Faculty Mentor(s)/Coauthor(s): Alireza Sarvestani

150: Off Loading Knee Brace

Student Author(s): Addison Denney, Rebecca Mullaly

Faculty Mentor(s)/Coauthor(s): Ha Vo

152: Water Structure Mapping in the Dominican Republic

Student Author(s): Reilly McKenna

Faculty Mentor(s)/Coauthor(s): Adaline Buerck

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153: Unlocking Impactful Secrets of Zeolite in

Student Author(s): Sarah Fenimore

Faculty Mentor(s)/Coauthor(s): Natalia Cardelino

154: Solar Charging System

Student Author(s): Henry Kashin

Faculty Mentor(s)/Coauthor(s): Philip McCreanor

155: Artificial Intelligence-driven Chatbot

Student Author(s): Bruno von Eicken Heller

Faculty Mentor(s)/Coauthor(s): Anthony Choi

156: Aerosol Inhalation Rsch Study w/Nebulizer Tec

Student Author(s): Mia Jastrzembski

Faculty Mentor(s)/Coauthor(s): Sinjae Hyun

157: Feedback Cntrl & Safety Algorithms - Non-Linear Sy

Student Author(s): Wesley Kinney

Faculty Mentor(s)/Coauthor(s): Makhin Thitsa

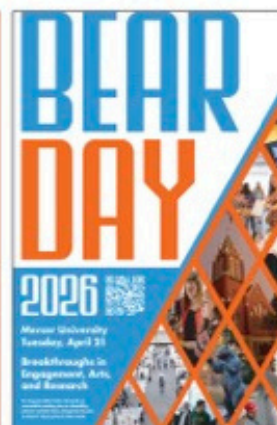
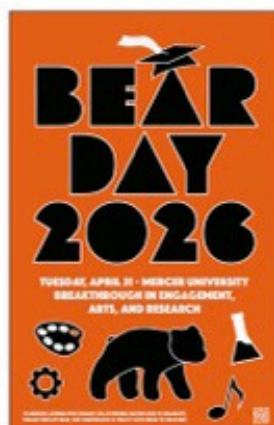
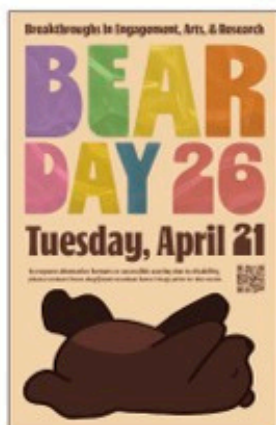
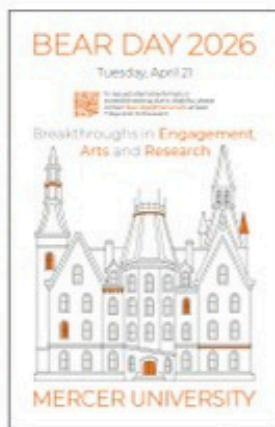
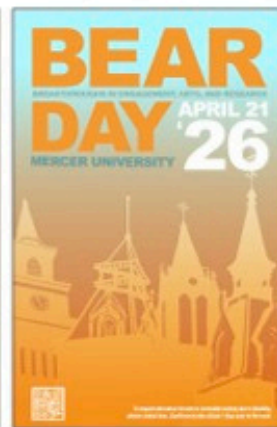
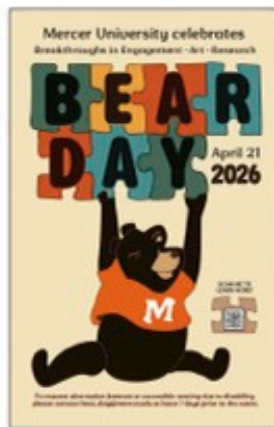
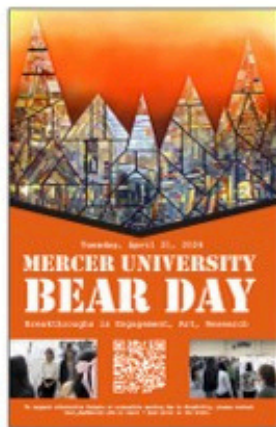
158: Ankle Brace for Drop Foot Injuries

Student Author(s): Claudia Boero

Faculty Mentor(s)/Coauthor(s): Ha Vo

2026 BEAR DAY POSTERS

STUDENT SUBMISSIONS / GRA 320 / TYPOGRAPHY II

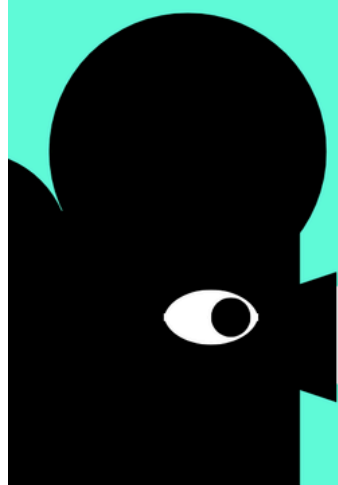


MFS FILM FESTIVAL

Student Film Showcase

Willet Auditorium

BEAR Day



Tuesday, April 21

4:30 - 6:30 PM

All are welcome!

Snacks will be provided!

Attendees that need accessibility accommodation please contact the event organizer Jacqueline Pinkowitz at pinkowitz_jm@mercer.edu.