

Georgia Undergraduate Research Conference



PROGRAM

*Learning
Through
Research*

*Symposium on
undergraduate
research*



November 10-11, 2023

Student union Ballroom & Theatre

Cover by: Esmeralda Facundo

URC

VALDOSTA STATE UNIVERSITY
UNDERGRADUATE RESEARCH COUNCIL



Georgia Undergraduate Research Conference November 10-11, 2023

All Events Will Take Place in the Student Union



To find the name of your student, use ctrl F. You can also scroll through the schedule. Saturday is organized in the following order: on-site, webinar, posters.

Friday 10th

4:00-6:00 pm Registration, Reception, and Graduate School Tables
3rd floor Ballrooms

5:00-5:20 Welcome: VSU President Richard A. Carvajal, Ph.D.
Opening: VSU Interim Provost Sheri R. Noviello, Ph.D.

6:00-6:30 pm GURC Officers Meeting—Open to all who would like to attend.

Saturday 11th

On-Site Schedule

7:30-8:30 am Registration and Breakfast 3rd floor Ballrooms

8:00-8:50 am Heritage Room 3rd Floor
Moderator: Dr. Anne Price

*Wage Gap in the United States:
What Factors Explain the Pay Gap between Men and Women across the 50 States?*

Abigail Wilcher
Political Science
Valdosta State University
Sponsor: Dr. James LaPlant

Fostering Creative Thinking in K-8 Enrichment Classes

Rosicana Johnson
Human Resources
Valdosta State University
Sponsor: Dr. Ophélie A. Desmet

Effective Classroom Management Strategies for Students with Dyslexia

Elizabeth Bogani
Education and Elementary Education
Valdosta State University
Sponsor: Forrest R. Parker III

Meeting Room 1&2 3rd Floor
Moderator: Dr. Gayle Ramirez

Effective Classroom Management Strategies for Elementary Age Students

Gabrielle Stanford
Education and Elementary Education
Valdosta State University
Sponsor: Dr. Forrest R. Parker III

*Exploring the Efficacy of Differentiated Instruction Strategies in Enhancing Student Learning:
An Undergraduate Research Study*

Kendall Folsom
Education and Elementary Education
Valdosta State University
Sponsor: Dr. Forrest R. Parker III

*The Florida Panhandle:
Costal Property Values*

Alexandra E. Redfearn
Economics
Valdosta State University

Meeting Room 3 2nd Floor
Moderator: Darshi Patel

Analysis of Trends in the Projection of Research in Relation to CRISPR

Kristal Depass and Vanessa Brignolle
Biology
Valdosta State University
Sponsor: Dr. Jonghoon Kang

*The Copper-Sucrose Complex:
A Unique Bioactive Excipient*

Capri Persaud and Akshil Patel
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

Meeting Room 4 2nd Floor
Moderator: Kelley Parker, MSN RN

Formulation for Novel Approach to Treat Pancreatic Cancer

Carolina Aponte and Mariam Duarte Marcia
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

A Modified L-Shaped Band stop Filter for Industrial, Scientific, and Medical (ISM) Applications

Marissa Norlund and Jordan Hewins
Applied Mathematics and Physics
Valdosta State University
Sponsor: Dr. Shantanu Chakraborty

Simulating Interactions with Lunar Rocks

Rinisha Ramprakash
Physics and Astronomy
University of Georgia
Sponsor: Dr. Phillip C. Stancil

9:00-9:50

Heritage Room 3rd Floor
Moderator: Dr. Anne Price

Creative Writing in the K-12 Curriculum

Millettia J. Jackson
Undergraduate Research
Fort Valley State University
Sponsor: Dr. Asha K. Warren

The Roles of Government Policy and Media Imperialism on Small Film Market Sustainability, with Emphasis on the Caribbean

Amanda Whyllie
Entertainment and Media
University of Georgia
Sponsor: Dr. Kate Fortmueller

*Institutional Investment Strategies:
Theory of Risk, Decision, and Probability Analysis*

Ashton Jones-Obikpo
Philosophy
Valdosta State University
Sponsor: Dr. Lavonna Lovern

Meeting Room 1&2 3rd Floor
Moderator: Dr. Gayle Ramirez

Linguistic Transfer and its Application in Learning American Sign Language

Addeline Wright
Communication Sciences and Disorders and
Honors College
Valdosta State University
Sponsor: Dr. Jennifer S. Beal

*Exploring Hidden Talent:
Identifying and Supporting “Hard of Hearing” People’s Talent Development*

Jenna Herren
Communication Sciences and Disorders
Valdosta State University
Sponsor: Dr. Ophélie A. Desmet

Student Behavior Issues and their Impact on the Learning Environment

Taliyah Weston
Education and Elementary Education
Valdosta State University
Sponsor: Forrest R. Parker III

Room 3 2nd Floor
Moderator: Darshi Patel

Effects Perfluorooctane Sulfonate (PFOS) on Gene Expression of DJR-1.2 in Caenorhabditis elegans

Faith Smith, Marie Delcy, Joshua Smith, Micha’l McAlpine, and
Jabari Martin
Biology
Fort Valley State University
Sponsor: Dr. Celia Dodd

Proliferating and Differentiation of Primary Airway Epithelial Cells in an Air Liquid Interface (ALI) Culture Systems

Jaylen Spellman-Reliford
Biomedical Sciences
University of Georgia
Sponsor: Dr. Thomas M. Drunkosky, M.S., D.V.M

Novel Synthesis and Anti-Viral Applications for a Marine Natural Product

Thomas Wilson and Vanessa Brignolle
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

Room 4 2nd Floor

Moderator: Kelley Parker, MSN RN

An Analysis of the Prevalence of Potentially Zoonotic Diseases in Wild-caught Freshwater Fish in Georgia

Simone Phillips
Veterinary Science and Public Health
Fort Valley State University
Sponsors: Dr. Oreta Samples and Gregory Dykes

*From Patterns to Polygons:
A Recontextualization of Historic Foundry Patterns through
Digital Technologies*

Jared Wilson, Grace Holley, and Camila Peña
School of Art and Design
Kennesaw State University
Sponsor: Page Burch

Hypersonic-Borne HEMP Threat Analysis, Wargaming Scenarios, and the Breakdown of Mutually assured Destruction Doctrine

Micah Holston
Physics and Political Science
Kennesaw State University
Sponsor: Dr. James Boudreau

10:00-10:50

Heritage Room 3rd Floor

Moderator: Dr. Anne Price

*Listen to Them Play:
A LENA Communication Analysis of Children with Autism in
Makerspace Environments*

**Allyson Simmons and Maeve Spoor
Speech-Language Pathology
University of West Georgia
Sponsor: Dr. Kay**

*The use of Metaphors in the Care of Pediatric
Sexual Abuse Survivors*

**Aanya Ravichander
English and Healthcare
Oxford/Emory
Sponsor: Dr. Sarah Higinbotham**

Meeting Room 1&2 3rd Floor

Moderator: Darshi Patel

Engaging with the Unspoken

**Phylisicia J. Lundy
Art and Design
Valdosta State University
Sponsor: Glenda Swan**

Spectators on the Venus Pudica

**Maryellen Hagberg
Art and Women's Studies
Georgia College and State University
Sponsor: Sunita Manian**

Meeting Room 3 2nd Floor
Moderator: Dr. Shipra Gupta

*Unraveling the Mysteries of Plant Defense Hormones, Methyl
Jasmonate Signaling*

Morgan Wynn
Biology
Valdosta State University
Sponsor: Dr. Ansul Lokdarshi

*Thermoregulatory Nest Building in Eastern Blue Birds (Sialia sialis):
The influence of Temperature on Avian Reproductive Strategies*

Haidee Martinez-Perez
Biology and Environmental Sciences
Georgia College
Sponsor: Dr. Katie Stumpf

*Identification and Characterization of a New Microbacterium Species from a Contaminated
Chlamydomonas reinhardtii TAP Culture Plate*

Chukwuemeka Okpala, Ellye Puckett, Kevin Nguyen, and Taylor Berry
Biology
University of West Georgia
Sponsor: Dr. Mautusi Mitra

Meeting Room 4 2nd Floor
Moderator: Dr. Ahanna Roy Choudhury

*An Analysis of Host Cell Protein Expression in Response to Variable
Ad5 Infections*

Elizabeth Seidita, Camille Browning, Zachary Taylor, and Kasey Karen
Biology
Georgia college and State University
Sponsor: Dr. Kasey Karen

Investigating Potential Sperm Size Dimorphism in Bluehead Wrasse (Thalassoma bifasciatum)

Amelia Osborne and Arabella Lewis
Biology
Agnes Scott College
Sponsor: Dr. Lock Rogers

11:00-11:50
Heritage Room 3rd Floor
Moderator: Dr. Anne Price

*The use of Metaphors in the Care of Pediatric
Sexual Abuse Survivors*

Aanya Ravichander
English and Healthcare
Oxford/Emory
Sponsor: Dr. Sarah Higinbotham

**A Theodicy of Contradiction:
The Narrative Betrails of Milton's God**

Conner Kelso
English
Oxford/Emory
Sponsor: Dr. Sarah Higinbotham

*Is Homosexuality a Choice:
An Examination of Social, Historical, and Biological Factors
Contributing to Homosexuality*

Damon Negron
Biology and Sociology
Valdosta State University
Sponsor: Dr. A.J. Ramirez

Meeting Room 1&2 3rd Floor
Moderator: Dr. Gayle Ramirez

*Accommodation Not Assimilation:
Independent Living and Its Role within the Disability Rights Movement*

Samuel Chernoff
American Studies and Disability Studies
Oxford/Emory
Sponsor: Dr. Eric E. Solomon

*Sims:
In His Own Backyard*

Krystle Freeman
Liberal Studies
Mercer University
Sponsor: Dr. Andrea L. Winkler

*Whose Narrative Is it?
The Intrusive Imagination of White Transcribers and Editors in African American Narratives*

Andrea Merritt
English
Georgia State University
Sponsor: Dr. Leslie Whitmire

Meeting Room 3 2nd Floor
Moderator: Dr. Shipra Gupta

Effect of Hypoxia on the Structure of HIF1A mRNA 5' Untranslated Region

Alexandra Furney
Biology
Georgia College and State University
Sponsor: Dr. Arnab Sengupta

*Deep Eutectic Solvents:
An Efficient Green Approach to Carotenoid Extraction*

David B. Vasquez
Chemistry
Valdosta State University
Sponsors: Dr. Gopeekrishnan Sreenilayam and
Dr. Ligia Alexandrina Focsan

*The University of North Georgia Herbarium:
Contribution to Research, Conservation, and Teaching of Southeastern Flora*

Alicia Rodriguez
Biology
University of North Georgia
Sponsor: Dr. James T. Diggs

Meeting Room 4 2nd Floor
Moderator Dr. Ahana Roy Choudhury

*Post-hatching Development of the Male Reproductive Tract in Eastern Fence Lizards
(Sceloporus undulatus)*

Christina Riecke
Biology and Environmental Sciences
Georgia College and State University
Sponsor: Dr. Matthew R. Milnes

The Relationship between Sexual Maturation, Body Size, and Season in Male Eastern Fence Lizards

Sarah Holder
Biological and Environmental Sciences
Georgia College and State University
Sponsor: Dr. Matthew R. Milnes

The Role of Adenovirus Protein E4 11k in P Body Protein Relocalization

Heather Vincent, Sarah West, Danny Robinson, and Ashley Garcia
Biological and Environmental Sciences
Georgia College and State University
Sponsor: Dr. Kasey Karen

12:00-12:50 Ballrooms 3rd Floor

LUNCH
Speaker: Sandra Jones
Prize Drawing

Next year at Oxford/Emory!

<https://oxford.emory.edu/academics/gurc.html>



1:00-1:50

Heritage Room 3rd Floor
Monitor: Dr. Sarah FitzGerald

The Construction and Functions of Value Arguments in Scientific Literature of the SARS and COVID-10 Pandemics

Delia Savin
English
Oxford/Emory
Sponsor: Dr. Gwendolynne Reid

The Pursuit for Safer Batteries

De'vonte Payton
Chemistry
Fort Valley State University

*Marketing Strategies to Increase Sales and Revenue for
Small Business in Middle Georgia*

Ian Swann
Accounting
Fort Valley State University
Sponsor: Dr. Josephine Dibie

Meeting Room 1&2 3rd Floor
Moderator: Dr. Ubaraj Katawal

*The Treatment of "Lunacy" at Central State Hospital:
Myths verses Reality*

Juliann Mackiewicz
History and Philosophy
Georgia College and State University
Sponsor: Dr. Stephanie E. Jett

*Controlling Drug Release Properties of Tetraethyl orthosilicate (TEOS)-based
Sol-Gel Nanoparticles*

Raven Glover
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Catrena H. Lisse

Synthetic Studies to a Novel Pyrimidodiazopino-Based Anti-Folate as Potential Anti-Cancer Drug

Abigail Wester
Chemistry
University of West Georgia
Sponsor: Dr. Partha

Meeting Room 3 2nd Floor
Moderator: Dr. Donna Gosnell

Establishment of Invitro Cultures of Rhizoma Peanut Plant

Taylor Arnold
Biology
Fort Valley State University
Sponsor: Dr. Samuels

What is Love? Jimmy—Don't Hurt Him No More

Angela Li
Neuroscience and Behavioral Biology
Oxford/Emory
Sponsor: Dr. Eric E. Solomon

Palatable Food Seeking Following the Selective Norepinephrine Neurotoxin DSP-4 in Rats after Forced Abstinence

Larura N. Callan, Josh Belflower, John T. Belflower, Gunhee Lee, Claudine V. Kase, Ayush Patel,
and Ali Gheidi
School of Medicine
Mercer University
Sponsor: Dr. Ali Gheidi

Meeting Room 4 2nd Floor
Moderator: Dr. Ahana Roy Choudhury

Developing Facial Recognition and Conversational Scripts for NAO Robot

Jarred Johnson
Mathematics and Computer Science
Fort Valley State University
Sponsor: Dr. Masoud Naghedolfeizi

Theoretical Study of the Interaction of Select Perfluorinated Alkyl Substances (PFAS) with Transcription Factor, Nuclear Factor Kappa β

Micha'l McApline and Martin Jabari
Natural and Computational Sciences
Fort Valley State University
Sponsor: Dr. Celia A. Dodd and Dr. Tiffani Holmes

A Modified L-Shaped Band stop Filter for Industrial, Scientific, and Medical (ISM) Applications

Marissa Norlund and Jordan Hewins
Applied Mathematics and Physics
Valdosta State University
Sponsor: Dr. Shantanu Chakraborty

Visual /Arts
Rotunda 2nd Floor
Moderator: Dr. Glenda Swan

*Enhancing ADA Compliance for Websites and Online Applications:
A Heuristic Evaluation Approach*

James Jarrett
Management and Engineering
Mercer University
Sponsor: Dr. Amro Khasawneh

More than Just a Sport

Madison Connolly
Art and Design
Valdosta State University
Sponsor: Lindsay Godin, MA, MFA

Performing Mozart's Fantasia in C minor, K.475

Rebeca Sierra
Music
Valdosta State University
Sponsor: Dr. Joshua K. Pifer

*Collaborative Performance:
The Integration of Musical Expression in German Lieder*

Aryn Hendon and Rebeca Sierra
Music
Valdosta State University
Sponsor: Dr. Joshua K. Pifer

Unspoken Truths

Phylisicia J. Lundy
Art
Valdosta State University
Sponsor: Prof. Lindsay Godin

**Poster Presentations—Posters listed after at the end of the schedule.
Ballrooms 3rd Floor
Moderator: Dr. Zulal Denaux**

2:00-2:50

**Heritage Room 3rd Floor
Moderator Dr. Sarah FitzGerald**

***Dominance of US Dollar Threatened by BRICS Nation’s Proposed
Gold-Backed Currency***

**Jenna Gardner
Economics
University of North Georgia
Sponsor: Dr. Ruohan Wu**

***The Connection between Chronic Kidney Disease (CKD) and Food Insecurity:
Georgia v. Alabama***

**Taelynn Walton
Sociology, Anthropology, and Criminal Justice
Valdosta State University
Sponsor: Dr. Ellis Logan**

**Meeting Room 1&2 3rd Floor
Moderator: Dr. Ubaraj Katawal**

Full Panel Presentation

***“I Do Not Want to be a Repeating Machine” A Collaborative Self-Study of Undergraduate
International Teaching Assistants’ (ITAs) Challenges, Negotiations, Learning, and Needs***

**Wenye Song, Xinyue Yan, and Weishan Deng
Applied Linguistics
Oxford/Emory
Sponsor: Dr. Zheng Gu**

Meeting Room 3 2nd Floor
Moderator: Dr. Donna Gosnell

Evaluating the Movement of Entomopathogenic Nematodes in Wood with and without the Presence of a Pheromone

Janyah Robinson, Kyle Slusher, and David Shapiro-Ilan
Biology
Fort Valley State University
Sponsor: Dr. Dwayne L. Daniels

Designing an Undergraduate Forensic Chemistry Experiment on the Levels of Amphetamine in Urine using Two Methods

Madeline Teigen and Mia Popkin
Chemistry
Georgia College and State University
Sponsor: Dr. Wathsala Medawala

Standardized Tobacco Assessment of Retail Settings (STARS) in Urban Georgia

Katelyn Hale
Public Health
Georgia College and State University
Sponsor: Dr. Damian K. Francis

Meeting Room 4 2nd Floor
Moderator: Dr. Gopeekrishnan Sreenilayam

Pheromone in Nematodes that Supports them in the Presence of Ultraviolet Light

Taylor Hodges
Biology
Fort Valley State University
Sponsor: Dr. David Shapiro-Ilan

Stress-induced Changes in 5' end Regulatory Structures of the TP53 mRNA

Jin Yeong Kim
Biology
Georgia College and State University
Sponsor: Dr. Arnab Sengupta

Genome Sequencing of the Invasive Mussel Mytella charruana

J.C. Adams, L.E. Cathey, L.L. Barrett, J.E. Wood, and C. Calestani
Biology
Valdosta State University
Sponsor: Dr. Cristina Calestani

3:00-3:50

Heritage Room 3rd Floor
Moderator: Dr. A.J. Ramirez

*It is an Attack on Education:
The Removal of Diversity, Equity, Inclusion and AP Classes in
Florida and Georgia*

Jose Ruben Gutierrez
Education
Valdosta State University
Sponsor: Dr. Karen A. Terry

*A Criminal Justice Internship as Fieldwork:
My Experience with the Jacksonville Sheriff's Office*

Jameshia Dover
Anthropology, Sociology, and Criminal Justice
Valdosta State University
Sponsor: Dr. R.K. Prine

Meeting Room 1&2 3rd Floor
Moderator: Darshi Patel

**Parasites Impacts on Largemouth Bass (*Micropterus salmoides*) Size and
Age Structure in a Small Coastal Plain Impoundment**

Sterling Brumbaugh
Forest Resources
Abraham Baldwin Agricultural College
Sponsor: Dr. Wally Wood, III

Community Perception on Tobacco use and Secondhand Smoke Exposure in Rural Georgia

Madeline Meiser, Ivey Whitworth, and Damian Francis
Public Health
Georgia College and State University
Sponsor: Dr. Damian K. Francis

*Developing a Hybrid Model for Advancing Medical Diagnosis of
Respiratory diseases:
Integrating Expert Systems and Machine Learning Algorithms*

Tykerria Jenkins
Computer Science
Fort Valley State University
Sponsor: Dr. Masoud Naghedolfeizi

Meeting Room 3 2nd Floor
Moderator: Samantha Paul

Evaluation of the Antibacterial Properties of Ethnomedical Plants

Airionna S. Fordham, Karlie M. Icard, and Ashton Z. Abbott,
Chemistry
Valdosta State University
Sponsors: Dr. Gopeekrishnan Sreenilayam,
Dr. Tolulope O. Salami, and Dr. Xiaomei Zheng

Role of FGF2 mRNA 5' UTR in Cap-independent Translation Initiation

Brittany Benner
Biology
Georgia College and State University
Sponsor: Dr. Arnab Sengupta

Increasing Biocrude Yield of Food Waste HTL via Combined Feedstocks

Madalyn Nesheim, Leila Kelly, and
Sara Engels
Environmental Engineering
Mercer University
Sponsor: Dr. Sarah K. Bauer

Meeting Room 4 2nd Floor
Moderator: Dr. Gopeekrishnan Sreenilayam

Myoglobin Non-Native Biocatalysis in Deep Eutectic Solvents

Mason Griffin, Kaylee O'Quinn, and Oluwatoni Temitayo Salami
Chemistry
Valdosta State University
Sponsor: Dr. Gopeekrishnan Sreenilayam

***Optimization in Advanced Laser Materials:
A Control Theoretical Approach***

Wesley Kinney, Ryan Bulharowski, and Carlos Gutierrez
Electrical and Computer Engineering
Mercer University
Sponsor: Dr. Makhin Thitsa

4:00-4:50

Heritage Room 3rd Floor
Moderator: Dr. A.J. Ramirez

***Understanding the 2022 Georgia Gubernatorial Elections:
What Factors Impacted Voter Turnout?***

Austin Peterson
Political Science
Valdosta State University
Sponsor: Dr. James LaPlant

***Film vs. Reality:
The Perspective of the Western Film The Undefeated from a Historic Lens***

Isabelle Reimer
History
Valdosta State University
Sponsor: Dr. John Dunn

Meeting Room 1&2 3rd Floor
Moderator: Dr. Ansul Lokdarshi

Photochemical Study of Vitamin D Field in Supramolecular Host Systems

Emily Lanier Baker and Shipra Gupta
Chemistry
Valdosta State University
Sponsor: Dr. Shipra Gupta

Simultaneous Classification of Who's Doing What in Videos

Philomina Ekezie
Computer Science
Mercer
Sponsor: Dr. Nyle Siddipui

Examining Maternal Childhood Maltreatment Correlates of Maternal-Infant Emotional Connection in a Community Sample of Black Mothers and Infants

Ahana Narayanan, Elizabeth McAfee, Emma Lathan, Catherine Abrams, Wallace Amie, Welch Shimarith, Martha Welch, David O'Banion, and Abigail Powers
Neuroscience and Behavioral Biology
Oxford/Emory
Sponsor: Dr. Abigail Powers Lott

Meeting Room 3 2nd Floor
Moderator: Samantha Paul

Geographic Distribution and *Dirofilaria immitis* Infection rates in members of the *Anopheles crucians* s.l. Species Complex in South Georgia

Zoe Barrett and Tod Butenschon
Biology
Valdosta State University
Sponsor: Dr. Eric W. Chambers

Effect of Silver on *A. Tumefaciens*

Layla Watkins
Animal Science
Fort Valley State University
Sponsor: Dr. Robin Bright

Meeting Room 4 2nd Floor
Moderator: Dr. Gopeekrishnan Sreeilayam

The Advance of Autonomous Self-Driving Vehicles

Grant Lopez
Computer Science
Valdosta State University
Sponsor: Dr. Chunlei Liu

Cloning of an Aquaporin Gene into Yeast

Nathaniel Dionne
Chemistry and Geosciences
Valdosta State University
Sponsor: Dr. Donna L. Gosnell

*Sky-high Spartina:
Atypical Growth due to the Noyes Cut within the Satilla River Estuary*

Sarah Conner
Biological Sciences
Augusta Georgia: Dr. Stacy Bennetts

Webinar

All Presenters will arrive 15-20 minutes early to test equipment in the room.
They will be placed into the proper rooms. Guests will be directed to the correct room.

<https://us.bbcollab.com/guest/8ff0aafe0da04f14b908d5f64b4c774a>

Dial in information:

+1-571-392-7650

PIN: 382 157 6598

9:00-9:30

Room 1

Moderator: B. Cordell Moats, MA

Simulating Interactions with Lunar Rocks

Rinisha Ramprakash
Physics and Astronomy
University of Georgia
Sponsor: Dr. Phillip C. Stancil

*Kinked-Tailed Mice:
Quantifying Severity of Vertebral Tail Deformities in a Transgenic Mouse Line*

Katelyn B. King and Victor A. Ruthig
Sexual Medicine Lab and Urology
Cornell Medicine
Sponsor: Dr. Victor A. Ruthig

Measuring Perceptions of Creativity through Collaborative Experience

Logan Mossor
Visual Art
Kennesaw State University
Sponsor: Dr. Jonathan Fisher

Room 2

Moderator: Laura Northup

Full Panel

An Affordable Planar Laser-Induced Fluorescence System for the Hydraulic Mixing Performance in Scaled Serpentine Chambers

Wren Kalin, Christalle Bristol, Shahanaz Abdul, and Sumia Alam
Civil and Environmental Engineering
Georgia State University
Sponsor: Andrew Kim

10:00-10:50

Room 1

Moderator: B. Cordell Moats, MA

*From Ambassadors to Outcasts:
How the Sephardim Changed Spain Before and Since Their Exile*

Lauren Mariah
Modern and Classical Languages
Valdosta State University
Sponsor: Dr. Grażyna Walczak

The Impact of COVID-19 on Young Children's Social and Emotional Behaviors

Natalie Clark, Josie Stover, and Kate Domaleski
Georgia College and State University
Sponsor: Dr. Tsu-Ming Chiang

(In)Evitable? Perspectives on Marriage chez the 18th Century French Heroine

Lauren Mariah
Modern and Classical Languages
Valdosta State University
Sponsor: Dr. Kelly Frances Davidson

Room 2
Moderator: Laura Northup

A County-by-County Analysis of Prison Admissions Rates in Georgia

Niels Armbruster
Economics and Statistics
Oxford/Emory
Sponsor: Dr. Sarah Higinbotham

Queer Worldbuilding and Role Playing as a Form of Security

Alex Campo
Women, Gender, and Sexuality Studies
Oxford/Emory
Sponsor: Dr. Eric E. Solomon

Isolation of Secondary Metabolites in E. Serotinum

Elise Snow
Chemistry
Columbus State University
Sponsor: Dr. Daniel W. Holley

11:00-11:50

Room 1
Moderator: Laura Northup

Family Values and Mental Health Implications for Immigrant Young Adults

Sophy Sanchez and Katherine Van
Psychology
Georgia College and State University
Sponsor: Dr. Tsu-Ming Chiang

*Determining the Divisive Nature of the Second Amendment in Education:
House Bill 1084*

Shane Holyoak
Education
Valdosta State University
Sponsor: Dr. Karen A. Terry

How the Migrant/Refugee Crisis of 2015 Fueled the Rise of Anti-Muslim Right-Wing Politics in Europe

Naeman Akhter Mahmood and Dana Marie Smiley
Arabic and Middle Eastern Studies
Oxford/Emory
Sponsor: Dr. Anouar El Younssi

***Mathematical Model of West Nile Virus Dynamics:
Study of Passive Immunity and Vertical Transmission***

Jiwon Choi
Biology
Savannah State University
Sponsor: Dr. Abhinandan Chowdhury

Room 2

Moderator: B. Cordell Moats, MA

Posters

Calculating Inflation in Athens-Clarke and Oconee Counties, Georgia

Ivelina Teneva
Business
University of North Georgia
**Advisors: Dr. Kelly Manley and
Dr. Yongseung Han**

***Analyzing Interactions Between Anti-Austerity Movements and European Governments
Following Economic Crisis***

Milouse Brice and Eva Capelson
Sociology
Oxford/Emory
Sponsor: Dr. Deric Shannon

***Enhancing Secondary Study Spaces:
An Exploratory Study of the Effects of Environment and Information Circulation on the Popularity of
Study Spaces on College Campuses***

Kelli Breed, Casey Brown, and Naudia Carroll
Communication, Film, and Media-Public Relations
University of West Georgia
Sponsor: Prof. Taylor Bryant

Authoritarian Media Cooptation and Its Implications for Cyber-feminist Activism in China

Shawn Chen
Sociology
Oxford/Emory
Sponsor: Dr. Deric Shannon

*Psilocybin in the Treatment of Depression:
A Meta-Analysis*

Destiney Dempsey
Psychology
University of North Georgia
Sponsor: Dr. Clayton I. Teem II

*Examining the Role of Autophagy Regulator Atg7 on the Tumor Immune
Response of Melanoma*

Erin Suh
Biochemistry and Molecular Biology
The University of Georgia
Sponsors: Dr. George Souroullas and
Dr. Sarah Zimmerman

12:00-12:50

Room 1

Moderator: Dr. F.E. Knowles, Jr.

Social Media use and Mental Health during the Pandemic

Jenna Purdy, Maria Cook, and Riley Fader
Psychological Sciences
Georgia College and State University
Sponsor: Dr. Tsu-Ming Chiang

*So, Who's Bringing the Potato Salad?
Digesting the Black American Thanksgiving Table*

York Lewis
History
Georgia State University
Sponsor: Dr. Leslie Denita Whitmire

***Modeling Mandarin Loanword Adaptation of English Null Onset
Personal Names***

Rasmit Devkota
Physics
Georgia Institute of Technology
Sponsor: Dr. Hongchen Wu

Transing Reproductive Justice

Jay Jones
Women's, Gender, and Sexuality Studies
Emory/Oxford
Sponsor: Dr. Alix Olson

1:00-1:50

Room 1

Moderator: Dr. Ubaraj Katawal

***House Bill 1084 and Critical Race Theory:
An Abstract***

Dimitri Parris
History and Secondary Education
Valdosta State University
Sponsor: Dr. Karen A. Terry

***Examining the Omission of Slavery's Origins in Georgia's Educational Standards:
A Critical Analysis of House Bill 1084***

Marvin Spingle
Education
Valdosta State University
Sponsor: Dr. Karen A. Terry

***How the Politicization of COVID-19 Contributes to Social Determinants of Disability in the United
States***

Bianca Saini
Political Science, Anthropology, Sociology, and Public Health
Fort Valley State University
Sponsor: Karishma Saini, MS MPH

Effects of Anthropometry and Agility on Player's Performance in the National Basketball Association (NBA)

Jonas McClelland
Mathematics
Georgia College and State University
Sponsor: Dr. Jebessa B. Mijena

2:00-2:50

Room 1

Moderator: Dr. F.E. Knowles, Jr.

Physics-Informed Machine Learning-Enabled Digital Twin Implementation for Power Electronic Converters

Sabastian Oviedo
Electrical and Computer Engineering
Georgia Southern University
Sponsor: Dr. Masoud Davari, ACUE, SM IEEE

*"Proud to be Autistic":
Greta Thunberg's Queering Rhetorical Genre in Climate Change Advocacy*

Amiee Zhao
English
Oxford/Emory
Sponsor: Gwendolynne Reid

*Polynomial Codes over Finite Fields:
BCH Codes*

Monica Lichtenwalner
Mathematics
Georgia College and State University
Sponsor: Dr. Marcela Chiorescu

Synthesis and Characterization of Mellitic Synthesis and Characterization of Mellitic Triimide Based Covalent Organic Frameworks

Megan Brenner
Chemistry
Columbus State University
Sponsor: Dr. Daniel W. Holley

Posters-On-Site

Acoustic Properties of Connected Speech

Ashtyn Ray and Stephanie Lopez
Communication Sciences and Disorders
Valdosta State University
Sponsor: Dr. Matthew Carter, CCC-SLP

Adverse Childhood Experiences at Gordon State College

Viondra Zizi-Payton, Terrica Zellner, Shelby Peters,
Elijah clemmons, Aeneas Cantey, and Willis DeLee
Human Services
Gordon State University

A First-Person Mediation Experience using Virtual Reality

Abigail McDowell
Industrial Management
Mercer University
Sponsor: Dr. Amro Khasawneh

Age and Politics: Who Supports Reproductive Rights?

Tori-Anne Chambers
Sociology
Valdosta State University
Sponsor: Dr. Anne Price

Aluminum Doped Magnetic Nanoparticles for Nutrient Removal and Recovery from Animal Processing Wastewater

Victor Lim
Aerospace, Transportation, and
Advanced Systems Laboratory
Georgia Tech Research Institute
Sponsor: Dr. Jie Xu

A Microwave Assisted Cope Rearrangement Laboratory Experiment

Isabella Darwish
Organic Chemistry
University of North Georgia
Sponsor: Dr. Jeremy P. Olson

An Analysis of Host Cell Protein Expression in Response to Variable Ad5 Infections

Elizabeth Seidita, Camille Browning, Zachary Taylor, and Kasey Karen
Biology
Georgia College and State University
Sponsor: Dr. Kasey Karen

An Evaluation of the Antibacterial Properties of Chromolaena Odorata

Karli Icard and Ashton Abbott
Chemistry
Valdosta State University
Sponsors: Dr. Salami Tolulope,
Dr. Gopeekrishnan Sreenilayam, and Dr. Xiaomei Zheng

A Study of Social Media Usage

Jasmine Freeman and Leslie Hunt
Applied Mathematics and Physics
Valdosta State University
Sponsor: Dr. Denise Taunton Reid

Atomic and Molecular Investigation of Corrosion and Coating Degradation after Accelerated Weathering of 4130 Steel

Rafael Garcia Chirino
Chemistry
Mercer University
Sponsor: Dr. Joseph D. Keene

Authoritarian Media Cooptation and Its Implications for Cyber-feminist Activism in China

Shawn Chen
Sociology
Oxford/Emory
Sponsor: Dr. Deric Shannon

Benzalkonium Chloride Enhances Cell Death Induced by Etoposide in a p53-independent Manner

Amaiya Murphy
Biology
Savannah State University
Sponsor: Dr. Takayuki Nitta

Bioactive Excipients for Increasing the Efficacy In vitro of Tecovirimat

Morgan Wynn
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

*Black Music of Excellence:
The Racialization of Rock 'n' Roll*

Kayla Griffin
Music and Africana Studies
Valdosta State University
Sponsor: Dr. M. Denise Lovett

Brooding Rumination Partially Mediates the Association between Cyber Victimization and Depressive Symptoms

Emma Adams and Alyssa Chapman Klas
Psychology
Georgia Southern University
Sponsor: Dr. Lindsey B. Stone

*Bugs on Drugs:
The Effects of Common Anti-Depressant Drugs on the Growth Rate of Sarcophaga bullata larvae*

Lindsey Grimes
Science and Math
Abraham Baldwin Agricultural College
Sponsor: Dr. Gina Profetto

*Building an Accessible Basketball STEM Program using
Virtual Reality (VR)*

Samuel Sherman, Emily Jacobson, and Abigail McDowell
Industrial Management
Mercer University
Sponsor: Dr. Amro Khasawneh

Causes of Nest Predation of Endangered Black-Cheeked Ant Tanager Nests in Costa Rica

Madeline Ariail and Sarah Scott
Biology and Ornithology
Georgia College and State University
Sponsor: Dr. Katie Stumpf

Calculating Inflation in Athens-Clarke and Oconee Counties, Georgia

Ivelina Teneva
Business
University of North Georgia
Advisors: Dr. Kelly Manley and
Dr. Yongseung Han

Characterization of the TH2/At5g32470 Fusion Protein and its Role in Thiamin Metabolism in Plants

Madison Baty and Marjona Rustamova
Biology
University of North Georgia
Sponsor: Dr. Ghulam Hasnain

*College Students' Definitions of Intelligence and Giftedness:
Influence of Growth and Fixed Mindset and Attitudes towards Gifted Programs*

Haley Anthony, Tris Day, Aspen Moore, Rachel Martinez, Kendall Bell,
Amil-R Preyer, Mina Cruise, Connor Fickle, Sophia Pope, Courtney Calligan, Cam Wilson,
Courtney Everett, Kaylee Austin, and Meighan Rueden
Psychology
Kennesaw State University
Sponsor: Dr. Christina Salnaitis

*Computational and Crystallization Studies of a Capreomycin Complex for the Treatment of Drug
Resistant Tuberculosis*

Taelynn A. Walton
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

Computational Modeling a New Herpes Simplex 2 Drug

John Watt
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

*Controlling Drug Release Properties of Tetraethyl orthosilicate (TEOS)-based
Sol-Gel Nanoparticles*

Raven Glover
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Catrena H. Lisse

Could Woven Polypropylene Market Bags Successfully be used as a Geotextile Substitute in Construction?

**Angel Mancio
Industrial Management
Mercer University
Sponsor: Dr. Todd Davis, PE, SE**

Design of Faraday Cages for High Frequency Electromagnetic Shielding

**Micah Holston
Physics and Political Sciences
Kennesaw State University
Sponsor: Dr. Kevin L. Stokes**

Detection of Antibiotic Resistant Genes in Northeast Georgia Water

**Noemi Leal, Michelle Vo, Brian Le
Biology
University of North Georgia
Sponsors: Prof. Margi Flood,
Dr. Jeanelle Morgan, and Dr. Swapna Bhat**

Determination of Fatty Acid Transport Proteins Catalytic Activity and Substrate Specificity

**Sophia McNeill, Rezwana Karim, and Hening Lin
Chemistry and Chemical Biology
Cornell University
Sponsor: Dr. Hening Lin**

Detection of Nitroaromatic Compounds using Porphyrin-Doped Silica Sol-Gels

**Nicole Snyder
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Catrena H. Lisse**

Developing a User-Friendly Software to Aid Management of Peer Supplemental Instruction Services at Georgia Gwinnett College

**Nero Dunmoye
Information Technology
Georgia Gwinnett College
Sponsor: Dr. Saiam Tangirala**

Development of an Attitude Toward Sex Education Scale

Joseph Harrell and Bailee Taylor
Psychological Sciences
Valdosta State University
Sponsor: Dr. Meagan M. Wood Hopkins

*Displacement and Disruption:
How Gentrification is a Product of White-Dominated Thinking and Systemic Racism in Atlanta,
Georgia*

Bailey Higgins
Sociology
University of West Georgia
Sponsor: Dr. Tiffany A. Parsons

*Does Habitat condition around Artificial Nest Boxes Influence Nest Success for Southeastern
American Kestrels?*

Jacob Owens
Natural Resource Management-Wildlife
Abraham Baldwin Agricultural College
Sponsor: Dr. Jason Scott

Do The Number of Hours Worked, Time Management, and Stress Predict GPA?

Jennifer Duque-Sanchez
Rural Studies
Abraham Baldwin Agricultural College
Sponsor: Dr. Janet L. Kopusko

eDNA Analysis to Detect Fungal Diseases in Waterways

Kyah Canty and Kennedy Dubose
Biology
University of North Georgia
Sponsor: Dr. Jeanelle Morgan

Effects of an Outdoor Environment on Student Behavior

Willow Gruber
Teacher Education and Elementary Education
Valdosta State University
Sponsor: Dr. Forrest R. Parker III

Elucidating the Effects of Artificial Lighting on African Mammal Behavior

Lillie Hayes
Biology
University of North Georgia
Sponsor: Dr. Jessy Patterson

*How Home Culture and Age Impact English Language Learning?
An International ESOL Comparative Case Study*

Brooklyn Van Deraa
Modern and Classical Languages
Valdosta State University
Sponsor: Dr. Luis G. Bejarano

*Enhancing Secondary Study Spaces:
An Exploratory Study of the Effects of Environment and Information Circulation on the Popularity of
Study Spaces on College Campuses*

Kelli Breed, Casey Brown, and Naudia Carroll
Communication, Film, and Media-Public Relations
University of West Georgia
Sponsor: Prof. Taylor Bryant

Examining the Role of Autophagy Regulator Atg7 on the Tumor Immune Response of Melanoma

Erin Suh
Biochemistry and Molecular Biology
The University of Georgia
Sponsors: Dr. George Souroullas and
Dr. Sarah Zimmerman

Exploring Kepler 62f's Climate Dynamics through an Energy Balance Model

Ian McLean, Jordan Hewins, and Jasmine Freeman
Applied Mathematics and Physics
Valdosta State University
Sponsor: Dr. Billy Quarles

*Exploring Snail Shell Morphology and Evolution in the Diverse
Ecosystems of Chile*

Maya Stevens
Biology
Valdosta State University
Sponsor: Dr. John Phillips and Dr. Uyeno

Exploring Veteran Identity through Lyric Analysis

Trenholm Fahy, Lilla Gillen, and Lauren Gibson
Psychological Sciences
Georgia College and State University
Sponsor: Dr. Sephanie E. Jett

Exploring Veteran Identity using the Photovoice Technique

Meredith Robertson, Haley Blackwell, and Dawson Robinson
Psychological Science
Georgia College and State University
Sponsor: Dr. Stephanie E. Jett

Flexible Energy Sources using Embedded PVDF Films

Chloe Taylor
Engineering
The University of Alabama
Sponsor: Dr. Mark Ming-Cheng Cheng

*From Worms to Wonders:
Exploring Total Protein Isolation in C. elegans*

Andrew Jimenez
Science and Mathematics
Abraham Baldwin Agricultural College
Sponsor: Heather M. Cathcart

*Geographic Distribution and Dirofilaria immitis Infection rates in members of the Anopheles crucians
s.l. Species Complex in South Georgia*

Zoe Barrett and Tod Butenschon
Biology
Valdosta State University
Sponsor: Dr. Eric W. Chambers

Gopher Tortoise Activity and Behavioral Patterns at Lake Louise Field Station in Valdosta, Georgia

Shyanne Christner
Biology
Valdosta State University
Sponsor: Dr. J. Mitchell Lockhart

*Green Tech Oyster Restoration:
Saving the Ocean One Bivalve at a Time*

Thomas Wilson
Chemistry
Valdosta State University
Sponsors: Dr. Thomas Manning and Dr. James Nienow

How Age Impacts Perceptions of Credibility as a Function of Author Race and Gender Identity

Daniel Faulkner
Psychology
Valdosta State University
Sponsor: Dr. Mark A. Whatley

How Organized Sports Help Kids with Behavioral Issues

**Savannah Stephenson
Teacher Education and Elementary Education
Valdosta State University
Sponsor: Dr. Forrest R. Parker III**

Identification of Gene Regulators of Germline Development in C. elegans

**Tara Chandhok
Biology
Oxford/Emory
Sponsor: Dr. Sheldon R. Lawrence II**

Identification of the Origin of Pediatric Glioblastomas using Human Embryonic Stem Cells

**Autumn Hampton
Biomedical Physiology and Sociology
University of Georgia
Sponsor: Dr. Kosuke Funato**

Identifying Need in the Animal Medicine Industry

**Danielle Ross
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning**

Impact of Fire on Germination Rates of Root Hemiparasite, Seymeria cassioides (Orobanchaceae)

**John Thomas Prater
Arts and Sciences
Abraham Baldwin Agricultural College
Sponsor: Dr. Benjamin Gahagen**

Implementing Tracking Abilities for Sensor Retrieval in USVs using Computer Vision

**Morgan McCaskill
Mathematics
Francis Marion University
Sponsor: Dr. K. Daniel Brauss**

Indole-3 Acetic Acid induces Arteriolar Vasodilation by Stimulating Nitric Oxide Production from Endothelial Cells

**Priyanka Nochur Yagneswaran, Sreelakshmi N. Menon, Farzana Zerine,
Emmanuella Ezewudo, and Raquibul Hasan
Pharmaceutical Sciences
Mercer University
Sponsor: Dr. Raquibul Hasan**

Indole-3 Acetic Acid induces Arteriolar Vasodilation by Stimulating Nitric Oxide Production from Endothelial Cells

**Priyanka Nochur Yagneswaran, Sreelakshmi N. Menon, Farzana Zerín,
Emmanuella Ezewudo, and Raquibul Hasan
Pharmaceutical Sciences
Mercer University
Sponsor: Dr. Raquibul Hasan**

Investigating the Effect of Seasonal Variation on Cirri Appendages in Dwarf Seahorses

**Paige Bland and Dalila Sanchez
Biology
Valdosta State University
Sponsor: Dr. Emily Rose**

License Plate Upscaling with Super Resolution Generative Adversarial Network

**Yuzheng Mei
Electrical and Computer Engineering
Georgia Southern University
Sponsor: Dr. Rami J. Haddad**

***Listen to Them Play:
A LENA Communication Analysis of Children with Autism in Makerspace Environments***

**Allyson Simmons and Maeve Spoor
Speech-Language Pathology
University of West Georgia
Sponsor: Dr. Kay Green**

Modeling the Orbital Dynamics of Super Earth Kepler-62f

**Jordan Hewins, Ian McLean, and Jasmine Freeman
Mathematics and Physics
Valdosta State University
Sponsor: Dr. Billy Quarles**

Morphological Assessment of Hawaiian *Anolis carolinensis/porcatus* Specimens

**Mia Price
Biology
Valdosta State University
Sponsor: Dr. John G. Phillips**

My Contributions to Ghost Fragment, a Method to Compare Fragmentation

Walker Hayes
Physics
Valdosta State University
Sponsor: Dr. Ryan M. Richard

*Myth and Reality:
Literary and Scientific Perspective in the Short Story “El hijo”/“The Son” by the Uruguayan Writer
Horacio Quiroga*

Aldo Madrigal Olivarez
Modern and Classical Languages
Valdosta State University
Sponsor: Dr. Ericka Helena Parra

*Nematode Navigators:
Unraveling Alzheimer’s Secrets using 3D Printed Mazes*

Grayson Peek
Biology
Abraham Baldwin Agricultural College
Sponsor: Dr. Heather M. Cathcart

Novel Medications for the Chikungunya Virus

Camden L. Reynolds-Mosley
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

Novel Synthesis and Anti-Viral Applications for a Marine Natural Product

Thomas Wilson and Vanessa Brignolle
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

Object Recognitions with Flex Sensor Glove using Classification Machine Learning Models

Elijah Philippe Noisin
Machine Learning, Data Science, and
Computer Science
Georgia Gwinnett College
Sponsor: Dr. Sairam Tangirala

Palatable Food Seeking Following the Selective Norepinephrine Neurotoxin DSP-4 in Rats after Forced Abstinence

**Larura N. Callan, Josh Belflower, John T. Belflower, Gunhee Lee,
Claudine V. Kase, Ayush Patel, and Ali Gheidi
School of Medicine
Mercer University
Sponsor: Dr. Ali Gheidi**

Data Analytics Study on Peer Supplemental Instruction at Georgia Gwinnett College for the Academic Year of 2021-2022

**Roger Pacheco
Management Information Systems
Georgia Gwinnett College
Sponsor: Dr. Sairam Tangirala**

***“People Don’t Get Me”:
The Creation of a Scale to Measure being Misunderstood***

**Katherine D. Carpenter
Psychological Sciences
Valdosta State University
Sponsors: Dr. Mark A. Whatley and Dr. David Monetti**

***Police Killings:
Why Here, Why Me?***

**Alana Murray
Criminal Justice
Mercer University
Sponsor: Dr. David A. Davis**

Pollination of *Seymeria pectinata*

**Lindsey Grimes
Science and Math
Abraham Baldwin Agricultural College
Sponsor: Dr. Ben Gahagen**

Predicting Future Conflict using Targeted Maximum Likelihood Estimation and Political Stability

**Josephine Hughes
Economics
Mercer University
Sponsor: Dr. Andre Waschka**

Prenatal Cannabinoid Exposure leads to Memory Deficits through Alterations in Glutamate Receptor Expression

Katie Moerschel and Allisa George
Molecular and Cellular Biology
Kennesaw State University
Sponsor: Dr. Vishnu Suppiramaniam

***Psilocybin in the Treatment of Depression:
A Meta-Analysis***

Destiney Dempsey
Psychology
University of North Georgia
Sponsor: Dr. Clayton I. Teem II

Qualitative Detection of Illicit Drug Use in Hair Samples via GC/MS

Carson Griffeth
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Catrena H. Lisse

Qualitative Determination of Heavy Metals through the use of Tetra Hydroxyphenyl Porphyrin-Doped Silica Sol-Gels

Morgan Collins
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Catrena H. Lisse

***Rapid Parasitic Plant Evolution:
Parasitic Evolution of RPL_16 and Photosynthetic Dependencies***

Anna Kelly Lawless
Cellular and Biomedical Biology
Berry College
Sponsor: Dr. Caitlin E. Conn

Relationships between Concentration Level and Breakfast Habits

Abby Kennedy
Rural Studies
Abraham Baldwin Agricultural College
Sponsor: Dr. Janet L. Kposko

Seasonal Population and Ongoing Size Analysis of Dwarf Seahorses (Hippocampus zosterae)

Diah Brown
Biology
Valdosta State University
Sponsor: Dr. Emily Rose

*Sensorized Tissue Phantom for Magnetic Resonance Elastography
Benchtop Experimentation*

Charles Hong and Tarun Vinodkumar
Mechanical Engineering
Georgia Institute of Technology
Sponsor: Dr. Jun Ueda

Signal Processing Technique for Audio Improvement

Uchechuwku Onwukeme
Engineering
Valdosta State University
Sponsor: Dr. Dr. Oingsong Cui

*SNRs:
The Stellar Graveyard*

Samuel Kimball and Kayleen Linge
Earth and Space Science
Columbus State University
Sponsor: Dr. Rosa Williams

Study of Producer Preference for Small Ruminant in Southeastern and Other Regions: Sheep vs. Goat

Keyanne Johns
Animal Science
Fort Valley State University
Sponsor: Dr. Tiffani Holmes

Surface Imaging and Analysis of Electrocatalysts for Co2 Reduction

Karli M. Icard
Chemistry
Valdosta State University
Sponsor: Dr. Tolulope O. Salami

Synthesis and Characterization of Furan-Based Semi-Rigid Diol Monomer

Riley Rowland
Chemistry and Biochemistry
University of North Georgia
Sponsor: Dr. Rahul Shahni

Synthesis of a Sensor for Methamphetamine using a Novel Naphthalimide Based Florescent Dye Entrapped in Silica Nanoparticles

Richard Jenkins
Chemistry
Georgia College and State University
Sponsor: Dr. Caterna Higginbotham Lisse

Synthesis of Iron (III) Oxide Nanoparticles in Aqueous Solution

Jason Phillips
Chemistry and Geosciences
Valdosta State University
Sponsor: Dr. Linda de la Garza

Teacher Candidates Working to Create Inclusive Classrooms that Engage Learners with Disabilities

Maeve Spoor and Allyson Simmons
Communication Sciences and Disorders
University of West Georgia
Sponsor: Dr. Katy Green

The Design and Identification of Fructosamine-3-Kinase Specific Nanobodies

Jason Lu
Biochemistry and Molecular Biology
University of Georgia
Sponsor: Dr. Natarajan Kannan

The Effect of Brown v. Board of Education Locally at Valdosta State College and Lowndes High School

Isabelle Reimer
History
Valdosta State University
Sponsor: Deborah Davis

The Effect of Exercise Mode on Time Perception during Exercise

Kade Johnson
Kinesiology
Augusta University
Sponsor: Dr. Andrew Moore

The Effects of Category 4 Hurricane Ian on the Gulf Pipefish, Syngnathus scovelli

Aldo Madrigal Olivarez, Kenneth Armstrong, and Megan Sims
Biology
Valdosta State University
Sponsor: Dr. Emily Rose

The Effects of Having Health Insurance and the Course of Action Taken by College Students when an Injury Occurs

Jaclyn Talbert and Collin Tomeny
Honors College
Valdosta State University
Sponsor: Dr. Michael Savoie

The Effects of Migratory Status on Avian Species Preservation

Catherine M. Cook, Madison M. Miller, Gabriel J. Rodriguez, and
Hasten J. Veal
Biology
University of North Georgia
Sponsor: Dr. Dawn E.W. Drumtra

*“The Fearful Count was coming to London”:
How Study Abroad Redefines the Scholarship of Literature*

Leigh Ann Overlaur
English
Valdosta State University
Sponsor: Ms. Susan LaPlant

*The Function of KAI2 Genes in the Parasitic Plant *Triphysaria versicolor**

Amanda Merrilles
Biology
Berry College
Sponsor: Dr. Caitlin E. Conn

The Impact of Adaptive versus Maladaptive Strategies for Coping with COVID-19 Related Stress on Mental Well-Being in College Students

Paige Russo, Emma Whitener, and Shay Silvia
Psychological Sciences
Georgia College and State University
Sponsor: Dr. Stephanie E. Jett

The Impact of Loneliness, Parental control, Friendship Conflict, and Covid-19 on Anxiety Symptoms in Children and Adolescents during the Pandemic

Savannah French and Reemah Hazama
Psychology
Mercer University
Sponsor: Dr. Amber Ingram

The Impact of Metaphors on Perception

**Aditi Mahendran
Psychology and Sociology
Oxford/Emory
Sponsor: Dr. Sarah Higinbotham**

***The Importance of Oral Reading in Relation to the Elementary
Classroom and Students Behaviors***

**Katie Flythe
Education and Elementary Education
Valdosta State University
Sponsor: Dr. Forrest R. Parker III**

The Role of Adenovirus Protein E4 11k in P Body Protein Relocalization

**Heather Vincent, Sarah West, Danny Robinson, and Ashley Garcia
Biology
Georgia College and State University
Sponsor: Dr. Kasey A. Karen**

***The Synthesis of Analogues of p-Cresylphenyl Acetate Under Solvent
Free Conditions***

**Skylar Reid
Chemistry and Organic Chemistry
Georgia College and State University
Sponsor: Dr. Ronald Okoth**

***The Synthesis of Mesalamine and Curcumin Capped Metal Nanoparticles for the Treatment of
Inflammatory Bowel Disease (IBD)***

**Isabella Dattilio and Sarah Trask
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Peter Rosado**

The Usage of Deep Eutectic Solvents for Aerobic Myoglobin Biocatalysis

**Kaylee O'Quinn, Mason Griffin, and Oluwatoni Temitayo Salami
Chemistry
Valdosta State University
Sponsor: Gopkrishnan Sreenilaym**

*The Use of Quantitative Structure:
Activity Relationships to Increase the Efficacy of Medication for a T-Lymphotropic Virus-1 Viral
Infection*

Jacqueline Farmer
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

*The Use of Quantitative Structure:
Activity Relationships to Increase the Efficiency of Medication for Dengue Virus*

Isabella Najar
Chemistry
Valdosta State University
Sponsor: Dr. Thomas Manning

*The Use of Quantitative Structure–Activity Relationships to Increase the Efficacy of Medication for an
Epstein-Barr Viral Infection*

Tyler Knight
Chemistry Department
Valdosta State University
Sponsor: Dr. Thomas Manning

*Trait Impulsivity and Alcohol Use:
Resting State Functional Connectivity Analysis*

Matthew I. Bazan, Emily Norton, James Mackillop, and Lawrence Sweet
Neuroscience
University of Georgia
Sponsor: Dr. Lawrence H. Sweet

Two-Step Synthesis of a Novel Phthalein Based pH Indicator

Marissa “Rose” Wagely
Chemistry
Georgia College and State University
Sponsor: Dr. Wathsala Medawala

*Understanding How Anuran Acoustic Data Indicates the Environmental
Conditions of an Area*

Jewell Johnson and Alysa Smith
Biology
Valdosta State University
Sponsors: Dr. John Phillips and
Dr. Erin Grabarczyk

*Unraveling the Mysteries of Plant Defense Hormones, Methyl
Jasmonate Signaling*

Morgan Wynn
Biology
Valdosta State University
Sponsor: Dr. Ansul Lokdarshi

*Use of Trail Cameras on Sub-Adult Gopher Tortoise Burrows to
Monitor Activity*

Maeghan McIe
Biology
Valdosta State University
Sponsor: Dr. J. Mitchell Lockhart

*Using Hair Cortisol Levels to Understand the Effect of the COVID-19 Pandemic on Stress in
Healthworkers*

Madison Williams
Psychological Sciences
Valdosta State University
Sponsor: Dr. Kristin Kirchner

*Using Multi-Step Synthesis for the Production of Hydrogels with
Adhesive Properties*

Cole Smith
Chemistry, Physics, and Astronomy
Georgia College and State University
Sponsor: Dr. Catrena Higginbotham Lisse

Utilizing Virtual Reality (VR) to Provide Accessible and Immersive Rock-Climbing Experience

Emily Jacobson, Abigail McDowell and Samuel Sherman
Industrial Engineering
Mercer University
Sponsor: Dr. Amro Khasawneh

Voltametric Response of Antiarrhythmic Drugs

Denetria Thomas
Chemistry
Valdosta State University
Sponsor: Dr. Linda de la Garza

Who Loves Which Cat?
Processing of Mandarin wh-in-situ in RPVP

Jill McLendon
Linguistics
University of Georgia
Sponsor: Dr. Dustin A. Chacón

Yellow Fever Virus

Kalen C. Allen
Chemistry
Valdosta State University
Sponsor: Thomas Manning