# Georgia Undergraduate Research Conference



**PROGRAM** 

Learning
Through
Research

Symposium on undergraduate research



November 11-12, 2022

Student union Ballroom & Theatre

Cover by: Esmeralda Facundo



### GURC Schedule November 11 & 12, 2022

All face-to-face events will be held in the VSU <u>Student Union</u>. Parking is in the Oak Street Parking lot across the street.

All Webinar events will take place in our VSU Undergraduate Research room. https://us.bbcollab.com/guest/e3949ee149064c7fa1f0461e5b4d7724

### Friday—Face-to-Face November 11, 2022

<u>2:00-3:00</u> Opening Panel Discussion—Moderator Dr. Anne Price 3<sup>rd</sup> Floor Ballroom A

"Discussions of Econometric Research Projects"

Speakers: Alexandra Redfearn, Alan Michael Bennett, Paul Wagner and Hannah Mcdaniel

Sponsor: Dr. Zulal Denaux, Professor of Economics Harley Langdale Jr. College of Business Valdosta State University

3:00-5:00 Conference Registration Open—3rd Floor outside Ballroom A

All participants need to stop by and sign in to ensure you have conference information and passes for food.

<u>4:00-6:00</u>—Reception for Registered Participants and Registered Guests 3<sup>rd</sup> Floor Ballrooms B & C

4:00-6:00 Georgia Graduate Schools will be present to answer questions.

5:00 President Dr. Richard Carvajal—Open 2022 GURC
Provost and Vice President for Academic Affairs—Dr. Robert Smith--Welcome
GURC President/VSU URC Chair Dr. Lavonna Lovern—Thank You
Door Prizes Awarded

<u>**6:00-6:30**</u>—GURC Meeting—open to all 3<sup>rd</sup> Floor Ballroom A https://us.bbcollab.com/guest/e3949ee149064c7fa1f0461e5b4d7724

### Saturday November 12, 2022 Face-to-Face

<u>7:30-8:30</u> Registered Participant/Guest Breakfast Registration Open 3<sup>rd</sup> Floor Ballroom B & C

### <u>8:00-8:50</u>

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Gayle Ramirez

Developing New Medications for Monkeypox; a QSAR-driven Discovery Approach

Yash Patel and Taylor Taylor Sponsor: Dr. Thomas Manning Valdosta State University

Worlds within Worlds: Heterotopias in Kazuo Ishiguro's "Never Let Me Go"

Laura Northup Sponsor: Dr. Theresa Thompson Valdosta State University

Mothers and Mirrors: The End of Alice and The City Son

Georgia J. Wynn Sponsor: Dr. Adam Wood Valdosta State University

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. A.J. Ramirez

The Perverse Principles of Poetry: Examining the Bleak Truth in 'Richard Cory' and 'The Raven'

> Leigh Ann Overlaur Sponsor: Dr. Ubaraj Katawal Valdosta State University

Developing Paraffin Histological Technique for Mosquito

Yasmin Guzman Sponsor: Dr. Theodore A. Uyeno Valdosta State University

### Political Party Affiliation and the Significance of Race: How Race is Correlated with Political Party Identification

Justus Robinson Sponsor: Dr. Bernard Tamas Valdosta State University

Temporal Shifting in Post-Modern Native American Literature

Tyler Cosper Sponsor: Dr. Ubaraj Katawal Valdosta State University

3rd Floor Meeting Room 2-- Dr. Glenda Swan

Literature as a Political Weapon in Latin America

William Steinberg Sponsor: Dr. Ericka Parra Valdosta State University

The Implementation of RFID in an Attendance System

Cravon A. Mallory, Jr. Sponsor: Dr. Chunlei Liu Valdosta State University

Super Shellfish: How Oyster Restoration Can Help Save Our Oceans

Madeline Pond Sponsor: Dr. Thomas J. Manning Valdosta State University

Teaching History through Video Games

Hannah Stanley Sponsor: Dr. Thomas Aiello Valdosta State University

9:00-9:50

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Anne Price

The Impact of COVID-19 on Women-Led Small Businesses

Lizbeth Avendano Sponsor: Dr. Katia Galdino Georgia Southern University

### Prototyping a UWG-Centric Smart Assistant to Support Student Life

Steven G. Kight Sponsor: Dr. Ana Stanescu University of West Georgia

Sex Differences in Renal Mitochondrial Function of Young Healthy Rats

Adam Jones and Ryan Schibalski Sponsor: Dr. Daria V. Ilatovskaya Medical College of Georgia, Augusta University

A Phrenological Reading of Whitman's "Song of Myself"

Ryan Bohn Sponsor: Dr. Cody Marrs University of Georgia

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. A.J. Ramirez

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

Andrea Merritt Sponsor: Dr. Leslie Whitmire Georgia State University

Securing Belonging: The Triumphs and Tribulations of Church-to-Mosque Conversion in Hamburg, Germany

Hannah Kreuziger Sponsor: Dr. Florian Pohl Oxford College/Emory University

Examining Pain Levels in Competition and Performance Female Athletes

Sylvia Clark, Elizabeth Niswonger, Christina Snider and Molly Dyer Sponsor: Dr. Kelly P. Massey Georgia College and State University

Social Media Usage and Uncertainty Intolerance

J'Maica Frame-Cabell Sponsor: Dr. Chia-Ling Lynn Ho Valdosta State University

### 3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. Gayle Ramirez

Persistent Nematode: Fact or Fiction

Darius Ruff Sponsor: Dr. Kyle Slusher, USDA ARS Fort Valley State University

Realismo Mágico y Trauma: El Corazón Acuoso de "La Muñeca Menor" (Magical Realism and Trauma: The Watery Heart in "The Youngest Doll")

Georgia J. Wynn Sponsor: Dr. Ericka Parra Valdosta State University

The Philosophy of Winning: Leadership and Culture within Sport

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

1st Floor Theater—Moderator Dr. Grazyna Walczak

### Visual/Art/Performance Presentations

Black Madonna: Alexander Baumgarten's Aesthetical and Contemporary Application

Darrin Johnson Sponsor: Laura McCloskey Wolfe University of West Georgia

Drawing a Dot: Can A Community Create an Exhibition?

Lara Henry, Courtney Robinson, and Kaylin Kretzschmar Sponsor: Dr. Jenny Evans Valdosta State University

Producing Educational Videos to Help Local Educators and Schools in the Coastal Plain RESA

Chontele Abney, Avery Barnett, Jamie Collins, Nathan Harrell, Ethan Lowe, Brooke Meindl, Kaya Purcell, and Brianna West Sponsor: Dr. Colin M. Walker Valdosta State University

#### <u>10:00-10:50</u>

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Anne Price

A Co-Culture Between Genetically Modified C. minutissima and E. coli for Efficient Biofuel Production

Devadutta Balaji, Aliyah Bujong, Elizabeth Plumart, Chloe Benjamin, Pierre Manuel, and Bita Ongolo Sponsor: Dr. Matthew Brewer Georgia State University

Transforming Taboo: Discursive and Generic Uptake in South Asian Mental Health Recovery Narratives

Anusha Kothari Sponsor: Dr. Gwendolynne Reid Oxford College/Emory University

Sino-American Competition in the Field of Artificial Intelligence

Timothy Sabau Sponsor: Dr. Daewoo Lee Columbus State University

Cultural Research Strategies for Contemporary International Advertising

McKenzie Simpson Sponsor: Evelyn Davis-Walker, MFA Valdosta State University

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. Ahana Roy Choudhury

The Use of Photovoice Technique to Explore Veteran Identity: a Qualitative, Community-based Participatory Action Research Model

Joseph Pabian, Trenholm Fahy, Alicia Zarker, Elizabeth Schultz, Lauren Ernst-Fortin, and Meredith Robertson Sponsor: Dr. Stephanie Jett Georgia College and State University

What Really Matters in Effective Teaching?

Abigail Cannon Sponsor: Dr. Yan Yang University of West Georgia

### Are Eyewitnesses to Crime Reliable?

Kelsey Mock Sponsor: Dr. F. E. Knowles, Jr., MJIL, J.D. Valdosta State University

Why Do People Commit Crimes?

Caleb Acoff Sponsor: Dr. Fred Knowles, Jr. MJIL, JD Valdosta State University

3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. Lorena Aquirre Salazar

Carabelli's Trait in Apes and Old-World Monkeys

Victoria Hogans Sponsor: Dr. Frank L'Engle Williams Georgia State University

A Novel Approach to the Treatment of Cancer: Accelerate Its Growth

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

A Novel Complex for Treating Melanomas in Horses

Hannah Sorrow Sponsor: Dr. Thomas Manning Valdosta State University

1st Floor Theater—Moderator Dr. Grazyna Walczak

### Visual/Art/Performance Presentations

"4 of Costs" Alternative Altar Project: Plastic Pollution and Its Impact on the Environment

Ari Saucier Sponsor: Kaleena Stasiak, MFA Valdosta State University

Abandoning Ariadne: Visual Variations of Myth in Art

Marybelle Caldwell Sponsor: Dr. Glenda Swan Valdosta State University

### How They See Us: Violence and Harm Depicted against Black and Queer Bodies in Mass Media

Shanya Jackson Sponsor: Dr. Theresa Thompson Valdosta State University

### 11:00-11:50

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Glenda Swan

Mathematical Modeling of Different Pest-Control Strategies

Kelsey Cadenhead Sponsor: Dr. Susmita Sadhu Georgia College and State University

Experiencing Art and Gallery Culture

Ari Saucier Sponsor: Dr. Shelly Yankovskyy Valdosta State University

Spatial Analysis of Vaccine Policy and Coronavirus

Elizabeth A. Thornton and Jodeci L. Mitchell Sponsor: Dr. Jia Lu Valdosta State University

Dual-Modality Deep Learning for Predicting Traffic Congestion Duration

Alexander Schmidt Sponsor: Dr. Ana Stanescu University of West Georgia

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. Ahana Roy Choudhury

A Study on the Unemployment Rates in the U.S. during the COVID-19 Pandemic by Using Topological Data Analysis and Persistence Theory

Callie N. Reid Sponsor: José A. Vélez-Marulanda Valdosta State University

Inhalation Method for Treatment of Lung Cancer

Taylor Macera Sponsor: Dr. Thomas Manning Valdosta State University

## The Effect of the Soul Swim Cap on the Assessment of Percent Fat Estimate by Air Displacement Plethysmography: A Pilot Study

Briana Thompkins
Sponsors: Dr. Mark J. Kasper and
Dr. Lois Bellflowers
Valdosta State University

3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. Lorena Aquirre Salazar

The Literature of Siu Kam Wen and Julia Wong Kcomt: Disrupting Universalism in Peru's Popular Narratives

> Maria-Paula Ramirez Wong Sponsor: Dr. Randy Malamud Georgia State University

Creation of a Software Archive for the Museum of Technology

Ryan Ashford, Rachel Breland, and Patricia Starkey Sponsor: Dr. Tina K. Ashford Middle Georgia State University

Robert Colescott's Remodeling of Greek Myth

Avery Barnett Sponsor: Dr. Glenda Swan Valdosta State University

Developmental Coordination Disorder: One of the "Other" Twice-Exceptionalities

Jamaceo Rhodes Sponsor: Dr. Ophélie A. Desmet Valdosta State University

### **Keynote Address**

### Adventures in Undergraduate Research

Dr. James LaPlant
Dean of the College of Humanities and Social Sciences
Valdosta State University

### (Oral Sessions beginning at 1:00 are listed after the Poster Session)

<u>1:00-4:00</u>—Poster Presentations—Moderator B. Cordell Moats 2<sup>nd</sup> Floor past Starbucks

A Comparative Study of Genomic DNA Extraction Methods from Arabidopsis thaliana

Julio A. Rodil Sponsor: Dr. Lokdarshi Valdosta State University

Aircraft Runway Tracking and Navigation Using Ultrasonic Positioning Beacons

> Kody Pierce and Shaen Mehrzed Sponsor: Dr. Valentin Soloiu Georgia Southern University

A Mathematical Study of Popular Music

Tristin Sahagun, Caleb Epps, and Michael Cartier Sponsors: Dr. Denise Reid and Dr. Lorena Aguirre Salazar Valdosta State University

### An Integrated Approach to the Biodiversity and Conservation of Odontotaenius disjunctus and O. floridanus (Cleoptera: Passalidae)

Katelyn Enderle Sponsor: Dr. Frank M. Fontanella University of West Georgia

A Novel Non-Invasive Method for Imagining Seeds in Arabidopsis thaliana siliques

Brylie Ritchie and Chase McLeod Sponsors: Dr. Theodore Uyeno and Dr. Ansul Lokdarshi Valdosta State University

A Novel Puzzle to Familiarize Students with the Periodic Table

Paige Bland Sponsor: Dr. Thomas Manning Valdosta State University

A Pilot Study on Mental Health Treatment Preference in Veterans With Post-Traumatic Stress Disorder (PTSD)

> Elizabeth Schultz and Meredith Robertson Sponsor: Dr. Stephanie E. Jett Georgia College and State University

A Quantitative Analysis of Blood Lead Levels and Associated Factors in U.S. Adults

Osjah Ragin Sponsors: Dr. Yudan Wei and Dr. Jianmin Zhu Fort Valley State University

A Quantitative Investigation of the Effectiveness of 3D-Printed Plastic Natural Convective Heatsinks Using Computational Fluid Dynamics

Shyra LaGarde
Sponsors: Dr. Gregory Michna and Dr. Stephen Gent
South Dakota State University
Valdosta State University

Assessing County Food Environment Using the Healthy Food Assessment Index

Amelia Glaser and Madeline Meiser Sponsor: Dr. Damian K. Francis Georgia College and State University

#### Beliefs about the Behavior of Children from Single-Parent Families

Nybriah Gudes Sponsor: Dr. Anne Price Valdosta State University

Biomonitoring for Presence of Zebra Mussels (Dreissena polymorpha) in Lake Lanier using Environmental DNA (eDNA)

> Hannah Fontenot and Amy Rodriguez Sponsor: Dr. Margi Flood University of North Georgia

Can Painting Nest Boxes Provide a Cooler Environment for Breeding Eastern Bluebirds?

Mathew Gordon Sponsor: Dr. Katie Stumpf Georgia College and State University

Carotenoid Extraction using an Emerging Green Approach

Alexa Luna Sponsor: Dr. Gopeekrishnan Sreenilayam Valdosta State University

Cloning of an Aquaporin Gene into E. coli

Princess Wynn Sponsor: Dr. Donna L. Gosnell Valdosta State University

Compost in Soil Analysis at Georgia College and State University

Shannon E. Northen, Isabella Banich, and Savannah Kimbrell Sponsor: Dr. Allison Rick VandeVoort Georgia College and State University

Computational Analysis of UDP-glycosyltransferase Variation across Strains of Caenorhabditis elegans

> Aleya Johnson Sponsor: Dr. Dwayne Daniels Fort Valley State University

### Conductivity Analysis of Poly (ethylene oxide) Containing Boron Cross-link Electrolytes for Lithium-Air Batteries

Emily Emilien and Kymani Williams Sponsor: Dr. Dwayne Daniels Fort Valley State University

Corrective Feedback in Second Language Acquisition: an Examination of the Research on Recasts

Mark Mears Sponsor: Dr. Victoria Russell Valdosta State University

Cyanogel Templating Method for the Synthesis of Pd-Ni Bimetallic Alloy Catalyst for CO2 Reduction

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

Determining the Ration of Praise to Correction Statements in a High School Classroom

Katie Reece and Caroline Cibulskas Sponsor: Dr. Kymberly Harris Georgia Southern University

Developing a Non-Invasive Morphological Technique to Study Vertebral Element Heritability in the Dwarf Seahorse, Hippocampus zosterae

Thomas Wilson
Sponsors: Dr. Emily Rose and Dr. Ted Uyeno
Valdosta State University

Development of Alternate Visual Resources for Color Vision Deficient Individuals: a Pilot Study

Alena Pfeifer Sponsors: Lynsey Steinberg, MSMI, CMI and Dr. Soma Mukhopadhyay Augusta University

Drone Control Using Facial Gestures and Long Short-Term Memory (LSTM) Networks

Shaen Mehrzed, Joshua Hale, Destinee Hicks, Darryl Wiltz, Noah Dyer, and Akintomide Adebile Sponsor: Dr. Rocio Alba-Flores Georgia Southern University

### Enceladus: Analysis of Hydrothermal Vents as a Possible Reservoir for Life beyond Earth

Sam Panzica and Ian Mclean Sponsor: Dr. Martha Leake Valdosta State University

#### Exploring Optimism and Mental Health Symptoms

Isabella Sineo Sponsor: Dr. Carmen Brown Farrell University of South Carolina-Beaufort

Expression and Purification of HphB and ArAT: Enzymes in the L-Phenylalanine Homologation Pathway

Juan-Paolo Reynes Sponsor: Dr. Shogo Mori Augusta University

Extraction of Carotenoids Using Non-ionic Deep Eutectic Green Solvents

Maria V. Alvarez and Lizett Rubio Sponsors: Dr. Gopeekrishnan Sreenilayam and Dr. Ligia Alexandrina Focsan Valdosta State University

Food Deserts and Food Insecurity in Valdosta, Georgia

Zy'Ronica Lindsey Sponsor: Dr. Anne Price Valdosta State University

Gender Differences Related to Teacher Engagement

Megan Foster, Avery Hendrickson and Jaheim Laws Sponsor Dr. Kymberly Harris Georgia Southern University

Gaps in Women's Leadership and Pay Across 26 University System of Georgia Institutions

Tanisha Goldsboro Sponsor: Dr. Anne Price Valdosta State University

### How Does Gender and Birth Order Affect Family Responsibility in Latinx Immigrant Families?

Anahi Santiago Sponsor: Dr. Anne Price Valdosta State University

Implementation of a Hairpin Model Based Passive Microwave Tag Using Microstrip Structure

> William Logan Spooner Sponsor: Dr. Shantanu Chakraborty Valdosta State University

Individual Differences in COVID-19 Perceptions and Risk-Taking

Graison Conn Sponsor: Dr. Meagan M. Wood Hopkins Valdosta State University

Inhalation Method for Treatment of Lung Cancer

Taylor Macera Sponsor: Dr. Thomas Manning Valdosta State University

It's Just Pop Culture: The Appropriation of Black Aesthetics in the Music Industry

Dominique A. Pollard Sponsor: Dr. M. Denise Lovett Valdosta State University

Investigating Moral Judgements of Consensually Non-monogamous Relationships

Traveres Cox Sponsor: Dr. Mark A. Whatley Valdosta State University

Laboratory Activities with a Forensic Chemistry Focus

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

### LGBTQ Television Creator Chris Nee: One Women's Efforts to Diversify Characters on the Small Screen

Gabrielle Jones Sponsor: Anna Weinstein, MFA Kennesaw State University

Measuring Reproductive Quality in Wild-Caught Dwarf Seahorses (Hippocampus zosterae)

Taylor Taylor Sponsor: Dr. Emily Rose Valdosta State University

Mechanics of Inductive and Capacitive Sensors

Roberto Montiel Sponsor: Joshua Whittington Wiregrass Georgia Technical College Valdosta State University

Momentary Assessment of Research Learning Experiences Project (MARLE)

Tionee Adams Sponsor: Dr. Erin L. Dolan Fort Valley State University

Monitoring the Mortality of Gopher Tortoises (Gopherus polyphemus) and the Reliability of Passive Integrated Transponders (PIT tags)

Jazmin Borges and Nicole Woolridge Sponsor: Dr. J. Mitchell Lockhart Valdosta State University

Observations of Verrucose Hyphae of Nothopassalora personata and Its Pigmented Phytotoxin

Atalya Manchester Sponsor: Dr. Emily Cantonwine Valdosta State University

On-Campus Greenspaces in Aiding Student Mental Health

Nicole Woolridge Sponsor: Dr. Shelly Yankovskyy Valdosta State University

### Optimization of DNA Extraction for Genome Sequencing of the Invasive Mussel Mytella charruana

Jacob C. Adams Sponsor: Dr. Cristina Calestani Valdosta State University

Peptide Drug Delivery of Didanosine, Emtricitabine, Lamivudine, Letermovir, Nitazoxanide, and Tenofovir Disoproxil for Treatment of COVID-19: A QSAR Study

Taylor Macera Sponsor: Dr. Thomas Manning Valdosta State University

Personality, Perceived Stress, and Resilience

Samantha Taylor Sponsor: Dr. Carmen Brown Farrell University of South Carolina-Beaufort

Power Supply Utilizing Seebeck Effect Generators and Thermal Batteries Developed from Lunar Materials

> James O'Hara Sponsor: Dr. Valentin Soloiu Georgia Southern University

Practical Solutions of Circular Doubly Linked List Implementation

Caleb Epps and Alessa Castillo Sponsor: Dr. Anurag Dasgupta Valdosta State University

Purification of Aquaporin Protein from the Sea Lettuce Ulva lactuca

Shelby Raybon Sponsor: Dr. Donna L. Gosnell Valdosta State University

Role of Regulatory mRNA Structures in the Expression of Cancer-Related Genes

Alexandra Furney, Brittany Benner, Jin Yeong Kim Sponsor: Dr. Arnab Sengupta Georgia College and State University

### Role of Translational Regulation (Messenger RNA to Protein) in the Plant Defense Hormone, Salicylic Acid Signaling

Daniel Rincon Diaz Sponsor: Dr. Ansul Lokdarshi Valdosta State University

She Said WHAT? The Effects of Confessor Sex and Breakup Reasons on Public Judgement

> Jose A. Palacios Gonzalez Sponsor: Dr. Mark A. Whatley Valdosta State University

Sociability and the Drosophila Microbiome

Peyton Panos Sponsor: Dr. Emily McLean Oxford College/Emory University

Social Experience and Mating Success across Genotypes in Drosophila Melanogaster

> Ian Goldman Sponsor: Dr. Emily McLean Oxford College/Emory University

Super Shellfish: How Oyster Restoration Can Help Save Our Oceans

Madeline Pond Sponsor: Dr. Thomas J. Manning Valdosta State University

Stability and Activity of Engineered Myoglobin Biocatalyst in Deep Eutectic Solvents at Different Conditions

Dipa Patel Sponsor: Dr. Gopeekrishnan Sreenilayam Valdosta State University

Stigmatizing Sexuality: Public Support for Restrictions on Blood Donation for Men Who Have Sex with Men

> Brandon Booker Sponsor: Dr. Anne Price Valdosta State University

### Synthesis and Characterization of a Furfural Derived Semi-Rigid Diol

Mason Jones Sponsor: Dr. Rahul Shahni University of North Georgia

Synthetic Studies to a Novel Pyrimidodiazepine-based Anti-folate as a Potential Anti-Cancer Drug

> Christian McDowell Sponsor: Dr. Partha S. Ray University of West Georgia

Taking on Monkeypox with a Novel Anti-Viral Strategy

Madelyn Adair, Sara Taylor, and Daniel Rincón Sponsor: Dr. Thomas Manning Valdosta State University

The Dynamic Formation of Nuclear RNA Foci in Proliferating Fibroblast Cells Derived from ALS patients

Robert Garrard Sponsor: Dr. Yao Yao University of Georgia

The Neural Circuits Underlying Evasive and Scavenging Behaviors in Eisenia fetida in Oxford, Georgia: The Effects of Interneuron AIB on the Reversal-Omega Turn Behavior

Rebecca Urato Sponsor: Richmond Thompson Oxford College/Emory University

The Risk at Birth: Racial Health Disparities Among Pregnant Black Women

Doreen Okeh Sponsor: Dr. Jenny Mischel Oxford College/Emory University

The Use of Behavior Specific Praise in a Secondary Math Classroom

Caroline Ray and Macee Chappuis Sponsor: Dr. Kymberly Harris Georgia Southern University

### "Tick-Tock!" for Women, Gender Expectations in Marriage as Presented by Company: The Musical

Ella Risa Marroquin Sponsor: Chalise Ludlow, MFA Valdosta State University

Tracer Dilution Studies in Coal Creek, Colorado, to Predict Metal Transport

Jenelle Cockerham, Kenneth Swift Bird, and Dayana Arrue Sponsor: Dr. Kamini Singha Fort Valley State University

Using Deep Learning to Develop an Android App for Image Segmentation

Alessa Castillo Sponsor: Dr. Ahana Roy Choudhury Valdosta State University

Voices from Tohoku: Oral Narrative Video Translation Project

Kirstie Carson Sponsor: Dr. Robin O'Day University of North Georgia

#### 1:00-1:50

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Karen Acosta

The Therapeutic Value of Cinematic Storytelling: A DBT-Based Interpretation of "Eternal Sunshine of the Spotless Mind"

Haley Hunt Sponsor: Anna Weinstein, MFA Kennesaw State University

The Necessity of Hands-On Science through the Lens of Non-traditional Teaching

Raya Schilke Sponsor: Dr. Gayle Ramirez Valdosta State University

Generating Features for Machine Learning Study of Cyclotides

Rachel Schaffer Sponsor: Dr. Sairam Tangirala Georgia Gwinnett College

### Confidence and Social Interactions

Emily E. LaPierre Sponsor: Dr. Chia-Ling Lynn Ho Valdosta State University

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. Ahana Roy Choudhury

Compostability on Campus: A Pilot Project for Assessing the Effectiveness of Compostable Dishware

> Isabella Banich Sponsor: Dr. Allison Rick VandeVoort Georgia College and State University

Bellowing and Sound Recognition in American Alligators (Alligator mississippiensis)

Ciara A. Rowe, Karla Lumbard, and Daniel Holt Sponsor: Dr. Michael W. Dentzau Columbus State University

Unraveling the Rapid Signaling of Versatile Plant Stress Hormone, Methyl Jasmonate (MeJA)

> Teressa Konyo Akuoko Sponsor: Dr. Ansul Lokdarshi Valdosta State University

3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. Glenda Swan

Modelling Acid Rain in Laboratory Conditions

Aidan Moses Simmons Sponsor: Dr. Tzvetelin D. Iordanov Georgia Southwestern State University

Investigating the Effects of Algal Turbidity on the Dwarf Seahorse (Hippocampus zosterae) Mating System

Darshi N. Patel Sponsor: Dr. Emily Rose Valdosta State University

The Great Resignation: What are the Factors That Caused People to Quit Their Jobs across the 50 States?

Nyla Cyan Williams Sponsor: Dr. James LaPlant Valdosta State University

### 2:00-2:50

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Karen Acosta

Bioluminescent Bacteria and Its Correlation with Virulence in Wax Worms

Miranda Mensah Sponsor: Dr. Colin Wong, USDA ARS Fort Valley State University

Settler Colonialism in Palestine: How Settler Colonial Identities Inform Historical Narratives and Understandings

> Jessica Cloud Sponsor: Dr. Leslie Whitmire Georgia State University

From Victory Gardens to Inflation Gardens: Investing in Our Backyard to Combat Food Insecurity, Increase Income, and Reduce Inflation

Heather A. Chason and Michael A. Carter Sponsor: Dr. Fady Mansour Columbus State University

Conductivity Analysis of Poly (ethylene oxide) Containing Boron Cross-link Electrolytes for Lithium-Air Batteries

> Emily Emilien and Kymani Williams Sponsor: Dr. Dwayne Daniels Fort Valley State University

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. Chi-Ling Ho

Hyperoxia Injury Alters the Expression of Collagen Type IV in the Developing Lung

Yeongseo Son Sponsor: Dr. Jennifer M. S. Sucre University of Georgia Vanderbilt University

Reaching Out and Lifting Up: Peer Mentoring in Teacher Education

Myah Anderson Sponsor: Dr. Rhonda Amerson Georgia State University

### Planned Parenthood: Structural Evolution and Organizational Change

Sana Punjani Sponsor: Dr. Eric Solomon Oxford College/Emory University

Customized Model for Fatty Acid Selection to Treat Any Viral Infections

Corey Q. Barron Sponsor: Dr. Thomas Manning Valdosta State University

3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. James LaPlant

Covert Resistance to #MeToo: The Uptake of Social Change and Public Anxiety in the Men's Lifestyle Magazine Cover Genre

> Mercedes Sarah Sponsor: Dr. Gwendolynne Reid Oxford College/Emory University

How Chemistry Can Fight NDD

Cheyenne Stapleton and Lindsey Henderson Sponsor: Dr. Thomas Manning Valdosta State University

Optimal School Garden Model Strategies to Combat Food Insecurity

Jami Nakan Sponsor: Dr. David Patterson University of North Georgia

### 3:00-3:50

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Charles Talor

Utilizing Mathematical Modeling to Approximate Tumor Growth

Michal McAlpine Sponsor: Dr. Patcharin Tragoonsirisak Marion Fort Valley State University

### "In the Blood": Decoding and Understanding the Nature of Systemic Violence through the Works of Dr. Sindiwe Magona

Elijah Byrd Sponsor: Dr. Renée Schatteman Georgia State University

Analysis of Copper-Catalyzed Reaction Mechanisms in Nanoreactor by Accelerated MD

Walker Hayes
Sponsors: Dr. Shafat Mubin and Dr. Todd Martinez
Valdosta State University

With Great Intellectual Property Comes Great Responsibility: The Moral Decay of Spider-Man in the Marvel Cinematic Universe

> Gracie Whitney Sponsor: Dr. Gina Caison Georgia State University

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. Gopeekrishnan Sreenilayam

The Search for a Universal Influenza Vaccine: Broadening Influenza and Immunization using Next-Generation COBRAs and Nanoparticle Technology

Abigail Roegner Sponsor: Dr. Jarrod Mousa University of Georgia

The Mental Health of Collegiate Athletes Due to Athletic Demands

Madeleine Mayer Sponsor: Dr. Christine James Valdosta State University

Cinematizing Immunity: The Rhetorical Effects of Science Fiction in the Public Communication of Science

Yizhuo Yang Sponsor: Dr. Gwendolynne Reid Oxford College/Emory University

### 3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. Lorena Aquirre Salazar

### Measuring Hydrophobicity and Host-Guest Complexation of Coumarin 343 and Cucubit[7]uril

Ryan Spencer Sponsor: Dr. John Hansen University of West Georgia

Stigmatizing Sexuality: Public Support for Restrictions on Blood Donation for Men Who Have Sex with Men

> Brandon Booker Sponsor: Dr. Anne Price Valdosta State University

Tattoos and Bumper Stickers: Public Symbols as a Window into Appalachian Identity

David Myers Sponsor: Dr. Robin O'Day University of North Georgia

Bryostatin: A Natural Marine Product that Treats Cancer, HIV, MS, and ALZ

> Beth Sharpe and Sandra Arellano Sponsor: Dr. Thomas Manning Valdosta State University

### <u>4:00-4:</u>50

3<sup>rd</sup> Floor Ballroom A—Moderator Dr. Chia-Ling Ho

The Ecosystem of Collaboration: Artist as Art Piece

Logan Mossor Sponsor: Jonathan Fisher, MFA Kennesaw State University

Postcolonial Discourse: A British Perspective

Anna Cooper Sponsor: Dr. Marty Williams Valdosta State University

### Public Health Districts Readiness for Program Evaluation of Nutrition and Physical Activity Programs

Madeline Meiser
Sponsors: Ms. Ivey Whitworth MS and Dr. Damian Francis Ph.D.
Georgia College and State University

3<sup>rd</sup> Floor Meeting Room 1—Moderator Dr. Gopeekrishnan Sreenilayam

Fluidity and Liminality: Piracy in the 19th Century South China Sea

Kennya Jean-Baptiste Sponsor: Dr. Ghulam A. Nadri Georgia State University

A Quantitative Investigation of the Effectiveness of 3D-Printed Plastic Natural Convective Heatsinks Using Computational Fluid Dynamics

Shyra LaGarde
Sponsors: Dr. Gregory Michna and Dr. Stephen Gent
South Dakota State University
Valdosta State University

Effects of Silver Nanoparticles on Respiration of Baker's Yeast

Julia Higdon and Thomas Mancil Sponsor: Dr. Kurt Winkelmann Valdosta State University

Simple Synthesis of Trimetallic Electrocatalysts for CO2 Reduction

Jodeci L. Mitchell Sponsor: Dr. Tolulope O. Salami Valdosta State University

3<sup>rd</sup> Floor Meeting Room 2—Moderator Dr. Lorena Aquirre Salazar

A Quantitative Analysis of Blood Lead Levels and Associated Risk Factors in U.S. Children

> Alivia Johnson and Yudan Wei Sponsor: Dr. Jianmin Zhu Fort Valley State University

> The Missionary vs. Her Movie

Hannah M. Clark Sponsor: Dr. John Dunn Valdosta State University

### Battle of the Sexes: Gender Differences in Achievement and Social-Emotional Functioning

Tammy Byrd Sponsor: Dr. Ophélie A. Desmet Valdosta State University

### Webinar Schedule

#### 9:00-9:50

Breakout Room 1-Oral Presentations—Moderator Dr. Samantha Paul

Establishing a Quantitative Relationship between Carcinogens in Cigarettes and Lung Squamous Cell Carcinoma through Gene Expression Analysis

Jayasri Mankan Sponsor: Dr. Ying Xu University of Georgia

Precision Studies for String Derived Z's at Hadron Colliders

Andrew McEntaggart and Alon E. Faraggi Sponsor: Dr. Marco Guzzi Georgia Institute of Technology/Kennesaw State University

So Much to Say: Contributing Alternative Discourses on College Mental Health

Julia Kwak, Cody Nelson, and Gracie Wilson Sponsor: Dr. Alicia DeNicola Oxford College/Emory University

Employer Perception of Public Health Graduates and Interns on Workplace Competency

Jordan Yeater
Sponsor: Dr. Ernie Kaninjing and Dr. Damian Francis
Georgia College and State University

#### 10:00-10:50

Breakout room 1-Oral Presentations—Moderator Dr. Samantha Paul

Examining Fennel Extracts for Potential Anti-Tumorigenic Properties in Metastatic Triple-Negative Breast Cancer Cells In Vitro

> Srisha Jayakumar, Austin Scharf, Ivan Zhu, Brenda Harmon, and LaTonia Taliaferro-Smith Sponsor: Dr. Margaret McGehee Oxford College/Emory University

#### Exploring the New Black Renaissance through the Lens

Kikelomo Sanni Sponsor: Anna Weinstein, MFA Kennesaw State University

Should Blood Be Thicker Than Water? Examining the Place of Preferential Treatment within the Stoic Cosmopolitan Ideal

> Nana Yaa Awere Sponsor: Dr. Allison Piñeros Glasscock Georgia State University

Physiological Evaluation of Newly Invasive Jorō Spiders (Trichonephila clavata) in the Southeastern USA Compared to their Naturalized Cousin, Trichonephila clavipes

Benjamin Frick Sponsor: Dr. Andy Davis University of Georgia

Breakout Room 2-Poster Presentations—Moderator Dr. Fred Knowles

An Investigation of the Impact of Post-traumatic Growth, Coping, and Resilience on Coherence and Perceived Self-Efficacy in Young Adult Survivors of Sexual Harassment and Trauma

> Alicia Zarker and Lauren Ernst-Fortin Sponsor: Dr. Stephanie E. Jett Georgia College and State University

Essential Oils as Potential Therapeutics for COVID-19

Matan Chester, Angela Abraham, and Bianca Vasquez Sponsor: Dr. Nilmi Fernando Georgia State University

Pain Related Depression of Behavior in Mice following a Frontal Traumatic Brain Injury

> Dylan MacLean Sponsor: Dr. Michael R. Hoane Augusta University

The Design and Activity of a Novel Antimicrobial Hairpin Peptide

Barrette Jackson II Sponsor: Dr. Jonathan M. Meyers Columbus State University

#### <u>11:00-11:50</u>

Breakout Room 1-Oral Presentations—Moderator Dr. Samantha Paul

"Don't Say Gay" and Other Political Exploitations in Public Education

Kenneth Watson Sponsor: Dr. Karen A. Terry Valdosta State University

The Use of Modern Technology in Museums

Katherine Nichols Sponsor: Dr. Lavonna Lovern Valdosta State University

Exercise, Social Media, and Mental Health during the Pandemic

Carson Beasley, Rachel Howell, and Reagan Lippold Sponsor: Dr. Tsu-Ming Chiang Georgia College and State University

Breakout Room 2-Poster Presentations—Moderator James Lane

Crohn's Disease and COVID-19: A Literature Review

Ferris Abu-Ghosh Sponsor: Dr. Frank Cruz Georgia State University

Access to Lactation Support Services and the Relationship with Breastfeeding Initiation across Georgia Counties

> Sherifa Akinniyi Sponsor: Dr. Sina Gallo, RD University of Georgia

> > Sepsis Care

Tristee Pickle, Alexa Montalbano, Cole Maxwell and Lauren Mcclure Sponsor: Dr. Laura Kim Gosa Georgia Southwestern State University

#### **12:00-12:50**

Breakout Room 1-Oral Presentations—Moderator Dr. Samantha Paul

The Overruling of Roe v. Wade: Educational Affects and Consequences

Emma Strickland Sponsor: Dr. Karen A. Terry Valdosta State University

The Relation between Contrast Sensitivity and Macular Pigment

Cameron Wysocky Sponsors: Dr. Randy Hammond and Dr. Lisa Renzi-Hammond University of Georgia

Effects of Dynamic Pre-Event Stretching on Hamstring Injury Prevention on Male College Soccer Athletes

Michael Grainger Sponsor: Dr. Jinkyung Park Georgia College and State University

Sea Lettuce is a BLAST: Using Bioinformatics to Find Aquaporin Genes in Ulva mutabilis

> Arbrianna Goolsby Sponsor: Dr. Donna L. Gosnell Valdosta State University

Breakout Room 2-Poster Presentations—Moderator Tremaine Genias

Past SKIN Deep: Pressure Injuries

Anna Cannarella, Jacqueline Dugger, Bailey Christian and Bryce Schmitz Sponsor: Dr. Laura Kim Gosa Georgia Southwestern State University

Effects of Nerve Cord Transection on Expression of Voltage Gated Ion Channels in the Abdominal Ganglia of Crayfish (Procambarus clarkii)

> Richard J. Wilson Sponsor: Dr. David J. Schulz University of Missouri, Columbia

Getting the Jab: Good Habits and COVID-19 Vaccination

Amber Oliver Sponsor: Dr. Hans E. Schmeisser Abraham Baldwin Agricultural College

### Simulation Experiments of a Distributed Fault Containment Algorithm Using Randomized Scheduler

David Tan Sponsor: Dr. Anurag Dasgupta Valdosta State University

#### <u>1:00-1:50</u>

Breakout Room 1-Oral Presentations—Moderator Dr. Sarah FitzGerald

The Effects of Pollution on Carotenoid Allocation in the Eggs of Bluegill and Redbreast Sunfish in Columbus, GA

Likhita Aluri Sponsor: Dr. Michael Newbrey Columbus State University

Characterization of Combustion of F-24, IPK and S-8 Blends in a Constant Volume Combustion

Aidan Rowell Sponsor: Dr. Valentin Soloiu Georgia Southern University

The Political Economy of Insulin

Jay Jones Sponsor: Dr. Deric Shannon Oxford College/Emory University

Teen Pregnancy: Social Impacts and Solutions

Raneshia Hudson Sponsor: Dr. Ellis Logan Valdosta State University

Breakout Room 2-Poster Presentations—Moderator Tremaine Genias

Fall Prevalence and Evidence-based Measures for Prevention

Hannah Kendall, Joshua Seworkpor, Bryson Langford and Isabelle Grodzki Sponsor: Dr. Laura Kim Gosa Georgia Southwestern State University

Essential Oils as Potential Therapeutics for COVID-19

Matan Chester, Bianca Vasquez, and Angela Abraham Sponsor: Dr. Nilmi Fernando Georgia State University

### Prevention of Hospital Acquired Clostridium Difficile

Sarah Smith, Brianna Boone, Dane Stirrat and Hannah Harbage Sponsor: Dr. Laura Kim Gosa, DNP RN, PTA Georgia Southwestern State University

Investigating the Effects of Microplastic Contamination on Maternal Health and Newborn Neurodevelopment Through Unsupervised Machine Learning

Adrian Bozocea Sponsor: Dr. Renzi-Hammond University of Georgia

#### 2:00-2:50

Breakout Room 1-Oral Presentations—Tremaine Genias

Chicana/o Mourning in Viramontes' "The Moths"

Julia Grace Jones Sponsor: Dr. Ian Afflerbach University of North Georgia

Technological Distraction in Italian Personal Relationships

Anna Marie Boughton, Caroline Veal and Regan Mitchell Sponsor: Dr. Tsu-Ming Chiang Georgia College and State University

Psychological Effects on Bilingual Children's Education

Laura James Sponsor: Dr. Lavonna Lovern Valdosta State University

Critical Race Theory and House Bill 1084: The Great Misunderstanding of K-12 Implementation

> Zach Bryan Sponsor: Dr. Karen A. Terry Valdosta State University

### <u>3:00-3:50</u>

Breakout Room 1-Oral Presentations—Moderator Dr. Fred Knowles

Hallyu and the Digital Graphic Novel: Understanding Student Perceptions of Korean Culture through Webtoons

Abigail Welch Sponsor: Dr. Jin Sook Lee University of California- Santa Barbara

Affection and Independence Promotion from Italian Parents to children

Anna Marie Boughton, Caroline Veal, and Regan Mitchell Sponsor: Dr. Tsu-Ming Chiang Georgia College and State University

"Save the Bees" – Effects of Urbanization and Local Habitat Characteristics on Bee Populations in Texas

> Sarah Toole Sponsor: Dr. Andrea Ramirez Florida State University

Teaching with Technology During the Pandemic

Alisha Gordon Sponsor: Dr. Danilo Baylen University of West Georgia