



**Georgia Undergraduate
Research Conference
October 23-24, 2020**

***Virtual Conference hosted by:
University of West Georgia***



2020 Georgia Undergraduate Research Collective Officers:

President, Kate Theobald, University of West Georgia
Immediate Past-President, Anastasia Lin, University of North Georgia
President-Elect, Lavonna Lovern, Valdosta State University
Secretary, Kymberly Harris, Georgia Southern University

Special Thanks to:

GURC 2020 Abstract Reviewers
UWG Office of Undergraduate Research
UWG Honors College
UWG Undergraduate Research Committee
UWG SRAP Committee
UWG Career Services
UWG Online

GURC President's Welcome:

Welcome to GURC 2020! While I wish that we were welcoming you in person to Carrollton, Georgia, and the beautiful University of West Georgia campus, I am so excited that you are joining us virtually for this year's Georgia Undergraduate Research Conference. Thank you for joining us from your homes, offices, or wherever you are today. Presenters, your acceptance to GURC is a testament to your hard work and dedication to your research, especially during a time when virtual learning and quarantine have added many challenges to the research process.

We have decided not to hold a large welcome session or keynote this year so that you can focus on the student presentations and interacting virtually with researchers from across the state of Georgia and beyond. On Friday, we have many panels of oral presentations in all disciplines for you to choose from. We hope that you will choose a panel to attend during each of the 6 session times. The poster session is open on our YouTube channel throughout the conference, and presenters will be answering questions on their videos on Saturday during the poster session time.

Participating in undergraduate research is an incredibly valuable experience that prepares students for the work they will do in graduate school and their careers. Thank you for choosing GURC as one of the ways you are engaging with undergraduate research. We hope you enjoy this year's virtual conference.

-Kate Theobald
President, GURC
Office of Undergraduate Research
University of West Georgia

[\(Watch the welcome here.\)](#)

Graduate and Professional School Fair

Thursday, October 29, 2020 1:00 - 3:30PM

GURC presenters are invited to register for the virtual Graduate and Professional School Fair hosted by UWG Career Services. This is a great opportunity for you to meet representatives from graduate and professional schools across the country.

Register by Monday, October 26, 2020:

<https://forms.gle/L9TtLcCu5eJQAJU86>



Need help?

If you run into issues on the day of the conference, you can first try to [Troubleshoot any issues on your own](#)

If that doesn't work, contact UWG Online at 678-839-6248. Please be aware that the UWG Online support team is small. If they are all helping other presenters, you can also use the BB Collaborate Ultra support # 1(877) 382-2293.



ONLINE

We recommend that you review [Required Browsers \(minimum tech requirements\)](#) Please note that UWG Online recommends trying Mozilla Firefox or Microsoft Edge for Blackboard Collaborate Ultra, as they have seen some recent issues with Google Chrome working properly.

Schedule at a Glance

Friday, October 23, 2020: Oral/Panel Sessions

- Oral Session A, 8:30 - 9:30AM
- Oral Session B, 9:40 - 10:40AM
- Oral Session C, 10:50 - 11:50AM
- Oral Session D, 12:00 - 1:00PM
- Oral Session E, 1:10 - 2:10PM
- Oral Session F, 2:20 - 3:20PM
- GURC Board Meeting 3:30PM
(For GURC Board Members and all Institution Representatives)

Saturday, October 24, 2020: Poster Session 10:00AM - 12:00PM

The poster sessions are available throughout the conference. Presenters are expected to respond to questions on their poster videos during the session time.

Links:

- Oral Session Room 1: <https://us.bbcollab.com/guest/e3f2cb465fa7433d85b4cf6615746f0c>
- Oral Session Room 2: <https://us.bbcollab.com/guest/775d6262d89f4b94acf9680edf893fe1>
- Oral Session Room 3: <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>
- Oral Session Room 4: <https://us.bbcollab.com/guest/86145bd947b04d6b878a9452fd5c378b>
- Oral Session Room 5: <https://us.bbcollab.com/guest/6da97dbac92d4c478d3b98b5cba1d78a>
- GURC Board Meeting: <https://us.bbcollab.com/guest/609c2d6dd878487d8e9fef9ca8b6dec4>
- Science, Math, Health, and Engineering Posters:
<https://www.youtube.com/playlist?list=PLkURt7EtE9m0o1oZeh4PSFiTXliK6KIRW>
- Social Sciences, Education, and Business Posters:
<https://www.youtube.com/playlist?list=PLkURt7EtE9m1VOlofb5AlQa0IWJ4bw-kW>
- Arts and Humanities Posters:
<https://www.youtube.com/playlist?list=PLkURt7EtE9m0HN8RRWyjEx3qEq2K5zYU4>

Oral/Panel Presentations:

Oral Session A: 8:30-9:30AM

Panel 1: An Interdisciplinary Conversation about Native Americans

Room 1 <https://us.bbcollab.com/guest/e3f2cb465fa7433d85b4cf6615746f0c>

Moderator: Austina Jordan, UWG Graduate Student

8:30 *Dann V. Bundy: The Confusing Issue of Land Rights*

Presenter: **Bryan Moats**

Faculty Mentor: Dr. Fred Knowles

Valdosta State University

8:50 *Creek Strategies in the War Against the White Man*

Presenter: **Michael Coffman**

Faculty Mentor: Dr. Jess Usher

Abraham Baldwin Agricultural College

9:10 *Native American Education: Before and After the Boarding School Paradigm*

Presenter: **Kim Fromkin**

Faculty Mentor: Dr. Lavonna Lovern

Valdosta State University

Panel 2: An Interdisciplinary Conversation about COVID-19

(Continued in Oral Session B)

Room 2 <https://us.bbcollab.com/guest/775d6262d89f4b94acf9680edf893fe1>

Moderator: Summer Delgado, UWG Graduate Student

8:30 *Epidemiology of Coronavirus Disease (COVID-19): An Exploratory Study*

Presenter: **Valerie Morse**

Faculty Mentors: Dr. Skanda Vivek and Dr. Sairam Tangirala

Georgia Gwinnett College

8:50 *Predicting COVID-19 in Italy and France*

Presenter: **Anirudh Gattu**

Faculty Mentor: Dr. Manoj Thapa

Georgia Southwestern State University

9:10 *How Many People Wear a Face Mask in Milledgeville, Georgia?*

Presenter: **Jack Como**

Faculty Mentor: Jebessa Mijena

Georgia College & State University

Panel 3: A Conversation about Topics in Behavior and Special Education

Room 3 <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>

Moderator: Dr. Andrea Smith, Assistant Professor, UWG College of Education

8:30 *Does Behavioral Specific Praise vs General Praise Improve the Classroom and Students Behavior?*

Presenters: **Emma Bland, Addie Meade, and Losia Tomlinson**

Faculty Mentor: Dr. Kymberly Harris

Georgia Southern University

8:50 *There's a Difference? The Influence of Behavior Specific Praise.*

Presenter: **Emma Bland**

Faculty Mentor: Dr. Kymberly Harris

Georgia Southern University

9:10 *Addressing the Pros and Cons of School Wide Implemented Positive Behavioral Interventions on Students with Severe Disabilities*

Presenter: **Ashley Mercer**

Faculty Mentor: Dr. Kymberly Harris

Georgia Southern University

Panel 4: An Interdisciplinary Conversation about Reality and Meaning

Room 4 <https://us.bbcollab.com/guest/86145bd947b04d6b878a9452fd5c378b>

Moderator: Larissa McPherson, UWG Undergraduate Student

8:30 *Modernity and Eternity: Baudelaire and Platonic Philosophy*

Presenter: **Emily Tillman**

Faculty Mentor: Dr. Janet Donohoe

University of West Georgia

8:50 *Defy Reality: The Merits of a Virtual Realm*

Presenter: **Joshua Dye**

Faculty Mentor: Dr. Robert Lane

University of West Georgia

9:10 *Space and Meaning in a Labyrinth*

Presenter: **Sarah Rogers**

Faculty Mentor: Dr. Marjorie Snipes

University of West Georgia

Panel 5: An Interdisciplinary Conversation about Technological Innovations

Room 5 <https://us.bbcollab.com/guest/6da97dbac92d4c478d3b98b5cba1d78a>

Moderator: Kim Holder, Senior Lecturer, UWG Richards College of Business

8:30 *Applying Visual-Based Generative Adversarial Networks to Audio Enhancement*

Presenter: **Justin Hall**

Faculty Mentor: Dr. Rami J. Haddad

Georgia Southern University

8:50 *Loop Quasi-Invariant Peeling*
Presenter: **Assya Sellak**
Faculty Mentor: Dr. Clément Aubert
Augusta University

9:10 *Identifying the differences between 3 dimensional shapes Using a Custom built Smart Glove*
Presenter: **Davis Le**
Faculty Mentors: Dr. Sairam Tangirala and Dr. Tae Lee
Georgia Gwinnett College

Oral Session B: 9:40-10:40AM

Panel 6: An Interdisciplinary Conversation about War, Injustice, and Identity

Room 1 <https://us.bbcollab.com/guest/e3f2cb465fa7433d85b4cf6615746f0c>

Moderator: Ella Ann Smith, Retired Teacher

9:40 *The Argentina Dirty Wars and the US Involvement*
Presenter: **Savannah Stone**
Faculty Mentor: Dr. Virginia Teran
Georgia College and State University

10:00 *The Ghost of Palestine: Literary Expression of Palestinian Identity After the Nakba*
Presenter: **Hannelore Haas**
Faculty Mentor: Dr. Anouar El Younssi
Emory University

10:20 (open)

Panel 2 (continued): An Interdisciplinary Conversation about COVID-19

Room 2 <https://us.bbcollab.com/guest/775d6262d89f4b94acf9680edf893fe1>

Moderator: Summer Delgado, UWG Graduate Student

9:40 *A Tale of Two Pandemics: A Comparative Analysis of U.S. Government Responses*
Presenter: **Ashlyn Dewberry**
Faculty Mentor: Dr. Daewoo Lee
Columbus State University

10:00 *Technology Use and Child Development in Pandemic Time*
Presenter: **Anthony Cheang and Carly Holman**
Faculty Mentor: Dr. Tsu-Ming Chiang
Georgia College and State University

10:20 *Virtually Here: A New Approach to Designing Live Theatre*

**Best Presentation in Visual Arts Award, GURC 2020*

Presenter: **Natalie Sorrento**

Faculty Mentor: Ruth Brandvik

Valdosta State University

Panel 7: A Conversation about Diversity and Inclusive Teaching

Room 3 <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>

Moderator: Dr. Natasha Ramsay-Jordan, Assistant Professor, UWG College of Education

9:40 *Student Diversity: How it Contributes to Students Learning*

Presenter: **Gladys Padilla**

Faculty Mentor: Dr. Brent Allison

University of North Georgia

10:00 *Becoming Inclusive: A Collection and Analysis of the Perceptions of Newly Qualified General Elementary Education Teachers on their Preparedness for Teaching in Inclusive Settings*

Presenter: **Brooke Armesto**

Faculty Mentor: Dr. Meca Williams-Johnson

Georgia Southern University

10:20 *(open)*

Panel 8: A Conversation About Philosophy and Existence

Room 4 <https://us.bbcollab.com/guest/86145bd947b04d6b878a9452fd5c378b>

Moderator: Beth Sheppard, Faculty, UWG Library

9:40 *"Fail Again, Fail Better": Positioning Samuel Beckett within the Existential Conceptual Landscape*

Presenter: **Adream Thompson**

Faculty Mentor: Dr. Anita Turlington

University of North Georgia

10:00 *A Critique of William James' Account of Mystical Experiences*

Presenter: **Brant Entrekin**

Faculty Mentor: Dr. Rosemary Kellison

University of West Georgia

10:20 *A Phenomenological Examination of Religious Knowledge*

Presenter: **Nathan Garner**

Faculty Mentor: Dr. Janet Donohoe

University of West Georgia

Panel 9: An Interdisciplinary Conversation about Improving Community and Engineering

(Continued in Oral Session C)

Room 5 <https://us.bbcollab.com/guest/6da97dbac92d4c478d3b98b5cba1d78a>

Moderator: Dr. Sharmistha Basu-Dutt, Associate Dean and Professor of Chemistry, UWG College of Arts, Culture, and Scientific Inquiry

9:40 *University of North Georgia's Local Government Engagement Project*

Presenter: **Naumi Vate**

Faculty Mentor: Dr. Sarah Young

University of North Georgia

10:00 *Smart Valdosta City Project for Improved Traffic Safety*

Presenters: **Keagan McCartha, Genna O'Berin, and Seth Snipes**

Faculty Mentor: Dr. Barry Hojjatie

Valdosta State University

10:20 *Computer Vision Based Smart Parking Lot System*

Presenter: **Mark Stiller**

Faculty Mentors: Dr. Sairam Tangirala, Dr. Tae Lee

Georgia Gwinnett College

Oral Session C: 10:50-11:50AM

Panel 10: An Interdisciplinary Conversation about Colonization and Government Involvement

Room 1 <https://us.bbcollab.com/guest/e3f2cb465fa7433d85b4cf6615746f0c>

Moderator: Dr. Laurie Kimbrel, Assistant Professor, UWG College of Education

10:50 *The Political Marginalization of Indigenous Communities: Coloniality, Marginalization, and Resistance in Iciar Bollaín's También la Lluvia (2010)*

Presenter: **Maria Julia Bortolucci**

Faculty Mentor: Dr. Joshua Martin

University of North Georgia

11:10 *Uprooted: Fighting for Land and Food Rights in Burkina Faso's Largest Urban Garden*

Presenter: **Wittika Chaplet**

Faculty Mentor: Dr. Anouar El Younssi

Oxford College of Emory University

11:30 (open)

Panel 11: An Interdisciplinary Conversation about Medical Treatment and Therapy

Room 2 <https://us.bbcollab.com/guest/775d6262d89f4b94acf9680edf893fe1>

Moderator: Stacia Keller, UWG Undergraduate Student

10:50 *Analyzing Oxytocin and Vasopressin as Possible Biomarkers and Treatments for Autism Spectrum Disorder*

Presenter: **Joyce Liu**

Faculty Mentor: Dr. Chunlei Liu, Valdosta State University
Emory University

11:10 *Psychedelics and Therapy: Analyzing, Categorizing, and Comparing the Effects of Natural and Synthetic Psychedelics in Therapeutic Practices*

Presenter: **Rachel Joseph**

Faculty Mentor: Dr. Christine Simmonds-Moore
University of West Georgia

11:30 (open)

Panel 12: A Conversation about Selected Topics in English and Communication

Room 3 <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>

Moderator: Rachelle Brown, UWG Graduate Student

10:50 *Saturday Night Lear: "SNL" Casts as Today's Shakespearian Fools*

Presenter: **Jack Wolfram**

Faculty Mentor: Dr. Sarah Higinbotham
Oxford College of Emory University

11:10 *Nancy Drew at 90: Violence, Competence, and the Young Female Protagonist in Literature for Children*

Presenter: **Madison Brown**

Faculty Mentor: Dr. Lee Anna Maynard
Augusta University

11:30 *Scythe & Halo Cab Co.: A Creative Activity in Podcasting*

Presenter: **Madeline Burgin**

Faculty Mentor: Dr. Tim Sadenwasser
Augusta University

Panel 9 (continued): An Interdisciplinary Conversation about Improving Community and Engineering

Room 5 <https://us.bbcollab.com/guest/6da97dbac92d4c478d3b98b5cba1d78a>

Moderator: Dr. Sharmistha Basu-Dutt, Associate Dean and Professor of Chemistry, UWG College of Arts, Culture, and Scientific Inquiry

10:50 *Trail Activity Prediction Model for Zion National Park*

Presenter: **Heather Smith**

Faculty Mentor: Dr. Vinodh Chellamuthu
Dixie State University

11:10 *Pneumonia Radiograph Diagnosis Utilizing Deep Convolutional Neural Networks and Generative Adversarial Networks*

Presenters: **Justin Hall and Ziqi Wang**

Faculty Mentor: Dr. Rami J. Haddad

Georgia Southern University

11:30 *Source Localization and Deep Learning to Classify EEG Waves*

Presenter: **Terence Onyewuenyi**

Faculty Mentor: Dr. Sumit Chakravarty

Kennesaw State University

Oral Session D: 12:00-1:00PM

Panel 13: An Interdisciplinary Conversation about Culture and Identity

Room 1 <https://us.bbcollab.com/guest/e3f2cb465fa7433d85b4cf6615746f0c>

Moderator: Megan Tackett, UWG Undergraduate Student

12:00 *Colorism and Raciolinguistics in the Formation of the Latinx Identity*

Presenter: **Daniela Hernandez**

Faculty Mentor: Dr. Virginia Terán

Georgia College and State University

12:20 *Camille in a Kimono: An Interdisciplinary Comparison of Japonism and Orientalism*

Presenter: **Savannah Todd**

Faculty Mentor: Dr. Sunita Manian

Georgia College and State University

12:40 *Islamism: Choosing Between Democracy and Stability in the Middle East*

Presenter: **Gabriel Harr-Siebenlist**

Faculty Mentor: Dr. Anouar El Younssi

Oxford College of Emory University

Panel 14: A Conversation about Selected Topics in Psychology and Mental Health

Room 2 <https://us.bbcollab.com/guest/775d6262d89f4b94acf9680edf893fe1>

Moderator: Jean Cook, Instruction Librarian, UWG Library

12:00 *College Students and Mental Health Services*

Presenter: **Naomi Katz**

Faculty Mentor: Dr. Christopher Allen

Kennesaw State University

12:20 *Educación en Frente y Inmigración en la Mente: The Effect of Immigration on Mental Health and Academic Experiences of Latinx College Students*

Presenter: **Madison Rodriguez**

Faculty Mentor: Dr. Lauren Johnson

University of North Georgia

12:40 *The Relationship between Unit Support and Post-deployment Social Support in Military Veterans*

Presenter: **Sherree Clark-Metcalf**

Faculty Mentor: Dr. Stephanie Jett

Georgia College and State University

Panel 15: A Conversation about Psychology and Parents

Room 3 <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>

Moderator: Katelyn Edwards, UWG Undergraduate Student

12:00 *Parental Gender Beliefs and Socialization in Young Children*

Presenters: **Carly Holman, Caroline Miller, and Kayla Ruiz**

Faculty Mentor: Dr. Tsu-Ming Chiang

Georgia College and State University

12:20 *Parental Attributions of Young Children's Positive and Negative Behaviors*

Presenters: **Lauren Romfo and Emma Smith**

Faculty Mentor: Dr. Tsu-Ming Chiang

Georgia College and State University

12:40 *The Relationship Between Frequency of Misbehavior and Parental Discipline*

Presenters: **Alison Beale and Hannah Buggs**

Faculty Mentor: Dr. Tsu-Ming Chiang

Georgia College and State University

Panel 16: A Conversation about Math and Sports

Room 4 <https://us.bbcollab.com/guest/86145bd947b04d6b878a9452fd5c378b>

Moderator: Dr. Ryan Bronkema, Director of First-Year Academic Initiatives, UWG University College

12:00 (open)

12:20 *What Determines WAR in Baseball*

Presenter: **Sam Eichel**

Faculty Mentor: Dr. Jebessa Mijena

Georgia College and State University

12:40 *An Analysis of Soccer Data with Network Theory and Linear Regression*

Presenter: **Damen Maughan**

Faculty Mentor: Dr. Vinodh Chellamuthu

Dixie State University

Panel 17: A Conversation about Selected Topics in Medicine

Room 5 <https://us.bbcollab.com/guest/6da97dbac92d4c478d3b98b5cba1d78a>

Moderator: Natalie Hobbs, UWG Undergraduate Student

12:00 *Efficacy of MD-RN Communication During Interdisciplinary Team Rounds*

**Best Presentation Award, GURC 2020*

Presenters: **Seerat Chawla, Nikoo Dalili, Chidinma Ikonte, Dorothy H. Nguyen, and Sidhant M. Umbrajkar**

Faculty Mentor: Dr. Erin P. Dowling

University of California, Los Angeles

12:20 *Detection of Atp6v0d2 and Mcoln1 mRNAs in the Mouse Female Reproductive System Using In Situ Hybridization*

Presenter: **Suvitha Viswanathan**

Faculty Mentor: Dr. Xiaoqin Ye

University of Georgia

12:40 *Effects of Chemotherapeutic Agent Doxorubicin on the Corpus Luteum*

Presenter: **HaeYeun Byun**

Faculty Mentor: Dr. Xiaoqin Ye

University of Georgia

Oral Session E: 1:10-2:10PM

Panel 18: An Interdisciplinary Conversation about Gender, Community, and Economy

Room 1 <https://us.bbcollab.com/quest/e3f2cb465fa7433d85b4cf6615746f0c>

Moderator: Megan Tackett, UWG Undergraduate Student

1:10 *The Courage of Georgia's First Black City Councilwoman: Mrs. Carrie J. Mays*

Presenter: **Keturah Stewart**

Faculty Mentor: Dr. John Hayes

Augusta University

1:30 *Beyond Leaning In: Engendering an Economy of Women's Belonging*

Presenter: **Qianchi Wang**

Faculty Mentor: Dr. Alix Olson

Oxford College of Emory University

1:50 *Organizational Ethics: Gender Leadership Styles Effect on Company Performance*

Presenter: **Destinee Muldrow**

Faculty Mentor: Samantha White

University of West Georgia

Panel 19: An Interdisciplinary Conversation about Societal Pressures, Influences, and Perceptions

Room 2 <https://us.bbcollab.com/quest/775d6262d89f4b94acf9680edf893fe1>

Moderator: Natalie Hobbs, UWG Undergraduate Student

- 1:10 *Exploring Body Satisfaction in College Freshman through Body Mapping*
 Presenter: **Bianca Bill**
 Faculty Mentor: Dr. Duke Biber
 University of West Georgia
- 1:30 *Please Notice Me: The Impact of Parasocial Interactions on Social Relationships*
 Presenter: **Kennedi Anderson**
 Faculty Mentor: Dr. Jessica Traylor
 Gordon State College
- 1:50 *To Read or Not To Read: Addressing the Perception and Stigma of Visual types of Literature*
 Presenter: **Quarious Loper**
 Faculty Mentor: Dr. Jessica Traylor
 Gordon State College

Panel 20: An Interdisciplinary Conversation about Conservation

Room 3 <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>

Moderator: Katelyn Edwards, UWG Undergraduate Student

- 1:10 *Vertical Farming, A Modern Revolution in Agriculture*
 Presenter: **Kaila Jones**
 Faculty Mentor: Dr. David Janssen
 Gordon State College
- 1:30 *Reduce: The Success is in the Breakdown of Costume Shop Waste*
 Presenter: **Kathalina Thorpe**
 Faculty Mentor: Chalise Ludlow
 Valdosta State University
- 1:50 *Reusable Nanostructured Carbon Seawater*
 Presenter: **Matheus Prates**
 Faculty Mentor: Dr. Jungkyu (Justin) Park
 Kennesaw State University

Panel 21: A Conversation about Selected Topics in Business and Economics

Room 4 <https://us.bbcollab.com/guest/86145bd947b04d6b878a9452fd5c378b>

Moderator: Dr. Michael Sinkey, Assistant Professor, UWG Richards College of Business

- 1:10 *House-Price Predictive Modeling Using Support Vector Regression*
 Presenter: **Cesar Vasquez**
 Faculty Mentor: Dr. Vinodh Chellamuthu
 Dixie State University
- 1:30 *Does the Firm Superstar Model Explain Labor Share Dynamics? Evidence from*

Counties in Georgia

Presenter: **Shaheen Pirani**

Faculty Mentor: Dr. Christopher D. Blake
Oxford College of Emory University

1:50 *Cross Border Acquisitions: A Country-Level Analysis*

Presenter: **Jenny Heller**

Faculty Mentor: Dr. Katia De Melo Galdino
Georgia Southern University

Oral Session F: 2:20-3:20PM

Panel 22: An Interdisciplinary Conversation about Confidence and Conversation

Room 2 <https://us.bbcollab.com/guest/775d6262d89f4b94acf9680edf893fe1>

Moderator: Dr. Chelsea Morris, Assistant Professor, UWG College of Education

2:20 *The Division of America: Students and Their Struggle to Converse*

Presenters: **Sydney Kahle and Antonia Ramirez Ramirez**

Faculty Mentor: Dr. Toralf Zschau
University of North Georgia

2:40 *Disappearing Discourse*

Presenter: **Riley Abernathy and Chloe Hoover**

Faculty Mentor: Dr. Tony Zschau
University of North Georgia

3:00 *The Effects of Overconfidence in Physics Education*

Presenter: **Lani Chastain**

Faculty Mentor: Sarah Formica
University of North Georgia

Panel 23: A Conversation about Selected Topics in Biology and Chemistry

Room 3 <https://us.bbcollab.com/guest/1d85f88b4fb54b9797425bf65bf6d71e>

Moderator: Jean Cook, Instruction Librarian, UWG Library

2:20 *Identification and Characterization of Two Novel Strains of Bacteria that have Potential to*

be Used for Bioremediation of Environmental Pollutants

Presenter: **Taylor Box**

Faculty Mentor: Dr. Mautusi Mitra
University of West Georgia

2:40 *Cloning and Expression of Functional Domains of PyrD and PyrR as a Bifunctional Enzyme for Potential Use in the Biofortification of Riboflavin in Plants*

Presenter: Jose Izaguirre Garcia, Lilia Saber, and Briana Sargent

Faculty Mentor: **Ghulam Hasnain**
University of North Georgia

3:00 *Oxidation Potentials of Carotenoids*
Presenter: **Khushi Patel**
Faculty Mentor: Dr. Alexandrina Ligia Focsan
Valdosta State University

Panel 24: A Conversation about Energy in Physics and Engineering

Room 4 <https://us.bbcollab.com/guest/86145bd947b04d6b878a9452fd5c378b>

Moderator: Shaneka Thrash, UWG Career Services

2:20 *Developing A Model for Studying Collective Behavior in Active Matter*
Presenter: **Khamla Thavone**
Faculty Mentor: Dr. Skanda Vivek and Dr. Sairam Tangirala
Georgia Gwinnett College

2:40 *Phonon Scattering from SWCNT-Graphene Junctions under Strain*
Presenter: **Ian Durr**
Faculty Mentor: Dr. Jungkyu (Justin) Park
Kennesaw State University

3:00 *Thermal Conductivity of Graphene Composites*
Presenter: **Jihad Kudsy**
Faculty Mentor: Dr. Jungkyu (Justin) Park
Kennesaw State University

Panel 25: An Interdisciplinary Conversation about Justice and Ethics

Room 5 <https://us.bbcollab.com/guest/6da97dbac92d4c478d3b98b5cba1d78a>

Moderator: Aaliyah Carter, UWG Undergraduate Student

2:20 *Autonomy and Risk: A Defense of the Nozick Principles*
*Best Paper Award, GURC 2020
Presenter: **Brant Entrekin**
Faculty Mentor: Dr. Walter Riker
University of West Georgia

2:40 *Playing God in Science Fiction and Genetics*
Presenter: **Natalie Hobbs**
Faculty Mentor: Amy Ellison
University of West Georgia

3:00 *(open)*

Poster Presentations:

Saturday, October 24, 10:00AM - 12:00PM

Posters will be available for viewing throughout the conference. Attendees are invited to leave questions in the comments on the videos, and presenters are expected to respond to questions on their videos during the poster session time.

All posters are available on playlists on GURC's YouTube channel and are accessible through the links included below.

Science, Math, Health, and Engineering:

<https://www.youtube.com/playlist?list=PLkURt7EtE9m0o1oZeh4PSFiTXliK6KIRW>

Evaluating Antimicrobial Properties of Curcumin Extract Against Gram-negative and Gram-Positive Bacteria

Presenter: **Tessie Ritter**

Faculty Mentor: Dr. Kingsley Dunkley

Abraham Baldwin Agricultural College

The Effects of Climate Change on Phenology of Hemiparasite, Seymeria cassioides (Orobanchaceae)

Presenters: **Lucinda McEachin, Caroline Shaw, and Sharon Spiess**

Faculty Mentor: Dr. Benjamin Gahagen

Abraham Baldwin Agricultural College

Is It Possible to Quantify APL-1 Using an Antibody Targeted to a Human Ortholog?

Presenter: **Hannah Lindmeier**

Faculty Mentor: Dr. Heather Cathcart

Abraham Baldwin Agricultural College

Novel Characterizations of Potential Therapeutic Plants

Presenter: **Courtney Hood and Garret Pierzchajlo**

Faculty Mentor: Dr. Benjamin Gahagen

Abraham Baldwin Agricultural College

Removal of Cadmium Ions from Polluted Waste Water

Presenter: **Caleigh Eberhardt**

Faculty Mentor: Dr. Balika Khatiwada

Abraham Baldwin Agricultural College

Trends in Alzheimer's Disease Mortality in Georgia (2001-2018)

Presenter: **Ziaur Rahman**

Faculty Mentor: Dr. Abul Sheikh

Abraham Baldwin Agricultural College

Understanding and Calculating Covid-19 Fatality Rate through Big Data Analysis

Presenter: Jon Liu and Joyce Liu

Faculty Mentor: Chunlei Liu, Valdosta State University
Emory University

Size Estimates of Extinct Eocene Aquatic Snakes from Central Georgia

Presenter: **Colin Calvert**
Faculty Mentor: Dr. Al Mead
Georgia College and State University

Green Synthesis of Silver Nanoparticles: Synthesizing Silver Nanoparticles with L-Theanine

Presenter: **Sarah Stogner**
Faculty Mentor: Dr. Peter Rosado-Flores
Georgia College and State University

Morphological Variations with Natural and Artificial Populations of a Common Diatom from South Carolina, US

Presenter: **Sydney Brown**
Faculty Mentor: Dr. Kalina Manoylov
Georgia College and State University

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

Presenter: **Sophia Bonser**
Faculty Mentor: Dr. Catrena Higginbotham-Lisse
Georgia College and State University

A Study of Near Infrared DNA Damage and Photo-Cytotoxicity by a Brominated 4-Quinolinium Dicarboxyanine Dye (ESS2-2-4)

Presenter: **Yewouemoe Lynda Waku Kouomou**
Faculty Mentor: Dr. Kathryn B. Grant
Georgia State University

Deep Learning Image Classification for Disaster Relief

Presenter: **Maria Gonzalez Bocanegra**
Faculty Mentor: Dr. Rami J. Haddad
Georgia Southern University

Easy Way of Understanding Acid-Base Balance in Blood Buffer System Using Henderson-Hasselbalch Equation in an Introductory Biochemistry/Anatomy and Physiology Courses

Presenter: **Jonathan Hughes**
Faculty Mentor: Dr. Cathy Lee
Gordon State College

Calculation of Convective/Radiative Coefficients Using Thermal Images

Presenters: **Omar Figuero, Revathy Vaidya, and Priyanka Velumani**
Faculty Mentor: Dr. Sathish Kumar Gurupatham
Kennesaw State University

The Study of Temperature Variation of Organic and Conventional Fruits Using Thermal Imaging

Presenters: **Omar Figuero, Revathy Vaidya, and Priyanka Velumani**

Faculty Mentor: Dr. Sathish Kumar Gurupatham

Kennesaw State University

Radiological Mask Exposure Experiment

Presenter: **Christopher Focht**

Faculty Mentor: Dr. Andrew Hummel

Kennesaw State University

*Probing the Genetic Diversity of Phages Infecting *Arthrobacter globiformis**

Presenter: **Charlene Mansour**

Faculty Mentor: Dr. Denise Monti

The University of Alabama at Birmingham

Effect of Spin-Dependent Processes and Intermolecular Energy Transfer on Photoluminescence in Organic Semiconductor Molecules

Presenter: **Yoong Phang**

Faculty Mentor: Dr. Tho Nguyen

University of Georgia

Coastal Water Quality Can Be Used as the Missing Link between Upland Processes and Coral Health in Belize

Presenter: **Clara Wheelock**

Faculty Mentor: Dr. Deepak Mishra

University of Georgia

The Effect of Gram Positive Bacterial Products on Nodose Ganglion Cultures

Presenter: **Shreya Pandya**

Faculty Mentor: Dr. Claire de La Serre

University of Georgia

Plasma Phospholipid Fatty Acids and Acute Myocardial Infarction: A Mendelian Randomization Study

Presenter: **Radhika Chatterjee**

Faculty Mentor: Dr. Kaixiong Ye

University of Georgia

*Avian Tissue Sampling Alternative: FTA® Card Viability in Detecting *Mycoplasma Gallisepticum* in Wild Birds from North Georgia*

Presenter: **Neil Patel**

Faculty Mentor: Dr. Linda B. Purvis

University of North Georgia

*An Investigation into the Co-habitation of Active *Marmota monax* Burrows*

Presenter: Nicholas Szabo

Faculty Mentor: Jessica Patterson

University of North Georgia

Probing Nuclear Dynamics in Jet Production at the Electron- Ion Collider

Presenter: **Rebecca Corley**

Faculty Mentor: Dr. Sonny Mantry

University of North Georgia

The Effect of Natural Products on the Growth of Docetaxel Resistant Triple Negative Breast Cancer Cells

Presenter: **Sonali Dutta**

Faculty Mentor: Dr. Ramneet Kaur

University of North Georgia

The Effect of Natural Products on the Growth of Docetaxel Resistant Androgen Independent Prostate Cancer Cells Expressing Cancer Stem Cell Markers

Presenter: **Briana Sargent**

Faculty Mentor: Dr. Ramneet Kaur

University of North Georgia

Enumeration of Coliforms and Antibiotic Resistant Bacteria in Tumbling Creek Construction Zone

Presenter: **Tyler Henderson**

Faculty Mentor: Swapna Bhat

University of North Georgia

Assessing the Edge Effects on Small Mammal Foraging Using Giving-up Density Stations

Presenter: **Danah Hunt**

Faculty Mentor: Dr. Michael Bender

University of North Georgia

*Snake Fungal Disease (*Ophidiomyces ophidiicola*) Found in North Georgia in Both Wild and Captive Snakes*

Presenter: **Elizabeth Noble**

Faculty Mentor: Jessica Patterson

University of North Georgia

The Effects of Neonicotinoids on Local Amphibian Populations

Presenters: **Brandon DeBlois and Amanda O'Connell**

Faculty Mentor: Jessica Patterson

University of North Georgia

Predictive Analysis of Protein Corona Development on Engineered Nanomaterials

Presenter: **Nicholas Ferry**

Faculty Mentor: Dr. Ahmed Kishwar

University of South Carolina Beaufort

Reactivity and Recyclability of Immobilized Engineered Sperm Whale Myoglobin Containing E. coli Cell Beads in Aqueous and Deep Eutectic Solvents

Presenter: **Nathan Hart**

Faculty Mentor: Dr. Gopeekrishnan Sreenilayam

Valdosta State University

Association of Lung Capacity in Musicians and Singers

Presenter: **Cydney Daquila**

Faculty Mentor: Dr. Benjamin Wescoatt

Valdosta State University

Developing Protein-Polymer Nanoconstructs as Reusable Biocatalysts

Presenter: **Thomas Falkenhausen**

Faculty Mentor: Dr. Gopeekrishnan Sreenilayam

Valdosta State University

The Effect of Social Media Influencers on the Diet Choices of People Aged 18-30

Presenter: **Stephanie Petrillo**

Faculty Mentor: Dr. Heidi Gonzalez

Valdosta State University

Exploring Novel Reactivity for Engineered Myoglobin Biocatalyst: [2,3] Sigmatropic Rearrangement of Allylic Acetals

Presenter: **Wali Haamid**

Faculty Mentor: Gopeekrishnan Sreenilayam

Valdosta State University

Dual-Mode Hairpin Resonator using FR-4 Material

Presenter: **Rena Viele**

Faculty Mentor: Dr. Shantanu Chakraborty

Valdosta State University

Sunless Tanning Additives to Provide Sun Protection

Presenter: **Jamie Grady**

Faculty Mentor: Dr. Linda de la Garza

Valdosta State University

An Eight-Year Photometric Study of the Seyfert 1 Galaxy NGC 5548

Presenter: **Elizabeth Scott**

Faculty Mentor: Dr. Kenneth S. Rumstay

Valdosta State University

Cytochrome C-Based Detection of Superoxide

Presenter: **Abbey Warren**

Faculty Mentor: Dr. Yakov Woldman

Valdosta State University

How to Combat Mass Memorization with Puzzles

Presenters: **Kwajalen Hall and Natalie Wyatt**

Faculty Mentor: Dr. Thomas J. Manning

Valdosta State University

Social Science, Education, and Business:

<https://www.youtube.com/playlist?list=PLkURt7EtE9m1VOlofb5AIQa0IWJ4bw-kW>

A Linear Probability Model of Retail Beverage Store Locations

Presenters: **Justin Cook and Matthew Peaster**

Faculty Mentors: Dr. Abul Sheikh and Dr. Carlos Lopes

Abraham Baldwin Agricultural College

Colorism and Self-Esteem: Minority Women

Presenters: **Corinna Balom, Kieira Benton, Cori Griffith, and Savannah Lampkin**

Faculty Mentor: Dr. Diane Bryd

Fort Valley State University

Retention at HBCUs

Presenter: **Aleeah Muhammad**

Faculty Mentor: Dr. Diane Byrd

Fort Valley State University

Techniques for Creating Positive Teacher-Student Relationships within the Classroom

Presenters: **Caityln Morgan and Mackenzie Williams**

Faculty Mentor: Dr. Kymberly Harris

Georgia Southern University

How Classroom Management Apps Can Support PBIS Framework

Presenters: **Madison Morgan, Savannah Rodriguez, and Abigail Walker**

Faculty Mentor: Dr. Kymberly Harris

Georgia Southern University

The Experience of Dispositional Optimism among female African-Americans, Latinas/Hispanics, and Caucasians In Generation Z: An Existential Phenomenological Investigation

Presenter: **Katie Kennedy**

Faculty Mentor: Dr. Daniel Czech

Georgia Southern University

Fading Reinforcements for Positive Behavior

Presenters: **Karlye Claxton, Kara Gottberg, and Parker Taylor**

Faculty Mentor: Dr. Kymberly Harris

Georgia Southern University

Online Education

Presenters: **Patricia Knauff and Madison Wood**

Faculty Mentor: Dr. Kymberly Harris
Georgia Southern University

Implementation of a Behavior Intervention Plan

Presenter: **Mekenzie Royal**
Faculty Mentor: Dr. Kymberly Harris
Georgia Southern University

Mind Control: The Power of Commercial and Advertisement Influence

Presenter: **Courtney Faro**
Faculty Mentor: Dr. Amy Buddie
Kennesaw State University

Exploring the Most Effective Dog Adoption Advertisement

Presenter: **Sarah Barker**
Faculty Mentor: Dr. Allison Martin
Kennesaw State University

COVID-19 and Stress in Student Service Members and Veterans

Presenter: **Michael Schlenk**
Faculty Mentor: Dr. Brian Moore
Kennesaw State University

Sleep Disturbances in Military Personnel: Incidence and Diagnoses of Insomnia and Obstructive Sleep Apnea

Presenter: **Javier Palacios**
Faculty Mentor: Dr. Brian Moore
Kennesaw State University

How Does Online Learning Differ During a Pandemic?

Presenter: **Laurel Genova**
Faculty Mentor: Dr. Kathryn Kloepper
Mercer University

Human Rights & the Economy: Analyzing the Impacts of Manufacturing FDI on Labor Standards

Presenters: **Ayah Abdelwahab and Buket Urgan**
Faculty Mentor: Dr. K. Chad Clay
University of Georgia

Virtual Human Rights Education: Best Practices in Teaching and Engaging with Human Rights Online

Presenter: **Mennah Abdelwahab**
Faculty Mentor: Dr. K. Chad Clay
University of Georgia

Motion Aftereffects Influence Memory Representations

Presenter: **Jonathan Kroeger**

Faculty Mentor: Dr. Ralph Hale
University of North Georgia

Impact of Musical Presentation on Memory of Novel Linguistic

Presenter: **Alexandra Negru**
Faculty Mentor: Dr. Ralph Hale
University of North Georgia

Effect of Coloring and Mindfulness on Test Anxiety Among College Students

Presenters: **Marjorie Hernandez and Abigail Kelley**
Faculty Mentor: Dr. Stephen Smith
University of North Georgia

Juror Decision Making: Race & Gender Orientation

Presenters: **Allyson Porras, Connie Ringger, and Kaden Wlosko**
Faculty Mentor: Dr. Connie Ringger
University of North Georgia

Child Suicides: The Correlation Between Technology and Increased Suicides Among Adolescents

Presenter: **Aaliyah Carter**
Faculty Mentor: Dr. Cassandra Bolar
University of West Georgia

Peach State Poison

Presenter: **Erin Nalley**
Faculty Mentor: Dr. J. Salvador Peralta
University of West Georgia

The Impact of COVID-19 on Young Children's Social and Emotional Development: Resources for Educators and Families

Presenter: **Gabriel Dickson**
Faculty Mentor: Dr. Chelsea T. Morris
University of West Georgia

Educational Marketing - Experiential Service Learning

Presenters: **Ty McDowell, Brandon Pham, and Olivia Rosener**
Faculty Mentor: Dr. Colin Walker
Valdosta State University

Arts and Humanities:

<https://www.youtube.com/playlist?list=PLkURt7EtE9m0HN8RRWyjEx3qEq2K5zYU4>

Politeness and Requests in StackExchange and StackOverflow Forums

Presenter: **Madelienne Skinner**

Faculty Mentor: Dr. Jack Hardy
Emory University

William Carlos Williams: Physician Poet Scrawls Theory of Medical Humanities Throughout Prescription Pad

**Best Poster Award, GURC 2020*

Presenter: **Audrey Ruan**
Faculty Mentor: Dr. Sarah Higinbotham
Emory University

A Descriptive Study of Special Olympics Programming in the State of Georgia

Presenter: **Katherine Brashear**
Faculty Mentor: Dr. Jeff Turner
Georgia College and State University

Information Design on a College Campus during a Pandemic

Presenter: **Brenna Salverson**
Faculty Mentor: Dr. Joanna Schreiber
Georgia Southern University

Babe with a Mobility Aid - Creating Vintage Inspired Fashion Accessible to Individuals with Limited Mobility

Presenter: **Mackenzie Miller**
Faculty Mentor: Dr. Addie Martindale
Georgia Southern University

The Effects of COVID-19 on Language Use in U.S. News: A Corpus-Based Analysis

Presenters: **Sophia Rice and Moyang Xu**
Faculty Mentor: Dr. Jack Hardy
Oxford College of Emory University

Nationwide Anti-mosque Activity: How Muslim Communities Protect Their Right to Religious Exercise Under the Religious Land Use and Institutionalized Persons Act (RLUIPA)

Presenter: **Stewart Zelnick**
Faculty Mentor: Dr. Florian Pohl
Oxford College of Emory University

Using Viewpoints to Influence Scenic Design

Presenter: **Kathalina Thorpe**
Faculty Mentor: Ruth Brandvik
Valdosta State University

Okefenokee National Wildlife Refuge Wayfinding Mural

Presenter: **Logan Lott**
Faculty Mentor: Evelyn Davis Walker
Valdosta State University