

# 2023 Faculty and Student Research Conference

Mercer University
Atlanta Campus
Administration & Conference Center

Saturday, April 15th, 2023 10am - 3pm

Sponsored By:

The Office of the Provost

The College of Professional Advancement



Welcome to the 13th annual Atlanta Faculty and Student Research Conference. In this program, you will find information about the different research projects and presenters, including presentation times and locations.

With 100+ presenters representing various colleges and disciplines across our campuses, we are proud to showcase the great research happening throughout the University!

### **Conference Schedule Overview**

<u>Time</u> 9:30-10:00	Session Type Registration
10:00-10:55	Awards & Opening Address
10:55-11:30	Poster Session 1
11:40-12:10	Lecture Session 1 (15 & 30 minute talks)
12:10-12:45	Lunch
12:50-1:20	Poster Session 2
1:30-2:00	Lecture Session 2 (15 & 30 minute talks)
2:00-2:40	Poster Session 3

## OPENING REMARKS, SWILLEY LIBRARY RESEARCH AWARDS & OPENING ADDRESS 10:00 - 10:55

#### 2<sup>nd</sup> Floor Auditorium

 Opening Remarks. Welcome and thank you to all presenters and attendees.

**Presiding.** Dr. Cameron Miller, Conference Planning Committee Chair, Associate Professor of Psychology, College of Professional Advancement.

**Welcome.** Dr. Priscilla Danheiser, Dean, College of Professional Advancement.

2. 2023 Swilley Library Student Research Awards Presentation.

**Presenter:** Kim Eccles, Associate Professor and Assistant Dean for Research Services, Swilley Library.

Winner: Sharon Vijayanand, College of Pharmacy. Combination Vaccine for COVID-19 and Influenza Administered Using Non-Invasive Oral Dissolving Films.

Runner Up: Tanvi Karve, College of Pharmacy. Exploration of Physical and Chemical Enhancement Strategies for Transdermal Delivery of Linagliptin.

3. Opening Address. Research at Mercer: The Importance of Scholarship Among Faculty and Students. Dr. Wayne Glasgow, Senior Vice Provost for Research, Mercer University.

#### POSTER SESSION 1 10:55 – 11:30

- 1. PA School Applicant Perception of Virtual Interviews. Shannon Jackson, Damian Bedoya, Joy Moverley, Anuradha Mathur, Amy Vu, Kristen Grippe, & Corinne Alois, College of Health Professions.
- 2. A Clinical Overview of Pulmonary Hypertension. Bailey Wilson & Catherine Sadowski, College of Health Professions.
- 3. The Disconnect Between Lumbar MRI Findings and Low Back Pain: A Case Report. Madison Lackey & Jeannette Anderson, College of Health Professions.
- 4. The Importance of a Neurologic Screen in an Individual post-MVA: A Reflection. Shea Duckworth & Jeannette Anderson, College of Health Professions.
- 5. Updates in the Diagnosis and Treatment of Gonococcal Arthritis. Emily Muliero & Suzanne Nelson, College of Health Professions.
- 6. The Impact of Recurrent Headaches on Academic Performance in College Students: A Survey Study. Austin Granger, College of Health Professions.
- 7. Pembrolizumab (Keytruda) for the Primary Care Physician Assistant. Karlyn Suggs & Erin Lepp, College of Health Professions.
- 8. Does Poor Quality of Sleep Negatively Affect the Mental Health in Collegiate Athletes?: CAT. Taylor Rain & Rachel Le, College of Health Professions.
- 9. Concussion History Affects Psychological Outcomes: A Critically Appraised Topic. Marcus Gonzalez & Rachel Le, College of Health Professions.
- 10. The Effects of Pre-operative Rehabilitation on Anterior Cruciate Ligament Recovery: A Critically App. Tanner Hamby & Rachel Le, College of Health Professions.
- 11. The Effects of Anterior Cruciate Ligament Injuries on Psychological Outcomes: A CAT. Titania Lester & Rachel Le, College of Health Professions.

#### POSTER SESSION 1 (cont.)

- 12. Breathe On: Cystic Fibrosis Across the Lifespan. Andrew Summers & Suzanne Nelson, College of Health Professions.
- 13. Cervical Muscle Trigger Points in College Students with and without Regular Headaches. Matthew Wild, Austin Granger, Nick Orton, Tim McMahon, & Ann Lucado, College of Health Professions.
- 14. Library Website Accessibility for Students with Disabilities in Higher Education. Kim Eccles, Tift College of Education.
- 15. Gonococci Microparticulate Microneedle Vaccine Induces Immune Response in Mice. Priyal Bagwe, Amarae Ferguson, Lotika Bajaj, Rikhav Gala, Susu Zughaier, & Martin D'Souza, College of Pharmacy.
- 16. Microfluidics-assisted Nanoprecipitation of Oxytocin-loaded BSA Nanoparticles. Emmanuel Adediran, Sharon Vijayanand, Akanksha Kale, Andrew Escayg, & Martin D'Souza, College of Pharmacy.
- 17. Indole-3 Acetic Acid Induces Vasodilation by Stimulating Endothelial Nitric Oxide Production. Raisa Iqbal, Sreelakshmi Menon, Farzana Zerin, Emmanuella Ezewudo, Taufiq Rahman, & Raquibul Hasan, College of Pharmacy.
- 18. The Antiepileptic Effects of N, N-Dipropyltryptamine in a Mice Model of Fragile X Syndrome. Richa Tyagi, College of Pharmacy.
- 19. Advancing Pharmaco-EEG for Fragile X Syndrome: Effects of FPT on EEG in Fragile X Mice. Tanishka Saraf & Clinton Canal, College of Pharmacy.
- 20. Neflamapimod Inhibits LPS-induced Endothelium Activation and Vascular Inflammation. Sreelakshmi Menon, Morgan Daniel, Farzana Zerin, Ajay Pandey, & Raquibul Hasan, College of Pharmacy.
- 21. Discovery of a Novel Inhibitor of the Endothelin System. Nimi Pullenkunnel Simon, Sreelakshmi Menon, Farzana Zerin, Emmanuella Ezewudo, Nader Moniri, Taufiq Rahman, & Raquibul Hasan, College of Pharmacy.
- 22. Indole-3 Acetic Acid Inhibits Vascular Dysfunction and Hypertension. Emmanuella Ezewudo, Farzana Zerin, Sreelakshmi Menon, Tro Nguyen, Mahavir Chougule, Taufiq Rahman, & Raquibul Hasan, College of Pharmacy.

#### POSTER SESSION 1 (cont.)

- 23. How Does Yoga Impact Those with Anxiety Disorders? Lauren Walsh, College of Professional Advancement.
- 24. Effects of Post Traumatic Stress Disorder on Overall Life Satisfaction. Necole Gonsahn & Merrin Oliver, College of Professional Advancement.
- 25. Efficacy of a Quality Improvement Initiative for Self-Directed Learning. Misty Graham, College of Professional Advancement.
- 26. Assessment of the Newly Implemented Epic EHRs at the AHF Lithonia facility. Sandy Thai Lu & Awatef Ben Ramadan, College of Professional Advancement.
- 27. The Effect of a Modification to the Computerized Provider Order Entry (CPOE) to Identify Patients at Risk of Severe COVID-19 Based on Smoking Status. Mohammad Alkhatib & Awatef Ben Ramadan, College of Professional Advancement.
- 28. Long-term Effects of Covid-19 on the Cardiovascular System. Melissa Shupe, Devi Hawkins-Prather, Tamesha McGill, Karen Mitchell, & Sabrina Walthall, College of Professional Advancement.

#### LECTURE SESSION 1 11:40 – 12:10

#### 30 minute talks:

ACC 175 (11:40-12:10)

The Medical Problem with Smith County Georgia. Henry Heard, College of Health Professions.

ACC 555 (11:40-12:10)

Rehabilitation of a Recreational Golfer Following Tumor Excision and Radiation to the Thigh. Nathan Arnett, Jeffrey Lewandowski, Kenneth Wessel, & Ann Lucado, College of Health Professions.

ACC 240 (11:40-12:10)

Serious Mental Illness and the Counseling Student: Too Serious to Teach? Hanna Cespedes, College of Professional Advancement.

#### 15 minute talks:

ACC 181 (11:40-11:55)

Physical Therapy Management of an Individual with Ehlers-Danlos Syndrome and Bilateral Hand Pain. Haley Robb & Beth Collier, College of Health Professions.

ACC 181 (11:55-12:10)

The Importance of Physical Therapy Treatment for a 40-year-old Individual with an Acute Diagnosis of a Diffuse Intrinsic Pontine Glioma (DIPG). Emma Thompson & Niamh Tunney, College of Health Professions.

ACC 182 (11:40-11:55)

Applied Practice Experience: Community Health Worker (CHW) Training Curriculum. Stacia Wilson & Vasantha Kasinathan, College of Health Professions.

ACC 182 (11:55-12:10)

Parenting Style and Patterns of Racial Socialization Practices. Gail Kemp, College of Health Professions.

ACC 243 (11:40-11:55)

South Asian Mental Health in the US. Hibbah Agha, College of Professional Advancement.

ACC 243 (11:55-12:10)

Supervision Issues Related to Telehealth. Christy Waters & Michelle Shlafman, College of Professional Advancement.

ACC 280 (11:40-11:55)

PEGCAPPSULE Application Development Project for Aging and Special Patient Populations. Kimberly Lancaster & Awatef Ben Ramadan, College of Professional Advancement.

ACC 280 (11:55-12:10)

Healthcare Education: Are Exit Exams Meaningful? Amanda Price, Tift College of Education.

LUNCH 12:10 - 12:45

#### POSTER SESSION 2 12:50 – 1:20

- 1. Alcohol Use Disorder and the Aftermath of the COVID-19 Pandemic. Emma Smith & Jill Mattingly, College of Health Professions.
- 2. A Review of Hormonal Intrauterine Devices and Associated Complications. Parker Pounds & Shannon Jackson, College of Health Professions.
- 3. How Injection Drug Use is Changing the Face of Infective Endocarditis. Christine Rardin & Henry Heard, College of Health Professions.
- 4. **Pre-eclampsia: A Review for Clinicians.** Caroline Cuentro & Arlene Salmon, College of Health Professions.
- 5. How to Recognize and Appropriately Manage ADHD in Children and Adolescents. Katherine Kennedy, College of Health Professions.
- 6. Using Lipophilic Statins for Primary Prevention of Thromboembolic Events: Are They Worth the Risk? Sarah Wishon & Jill Mattingly, College of Health Professions.
- 7. Sport-Related Concussion: A Practical Guide for Clinicians. Stephen Shugart & Henry Heard, College of Health Professions.
- 8. Racial Socializations Ability to Moderate the Relationship Between Parenting Style & Child Behavior. Chelse Hall & Elesia Robinson, College of Health Professions.
- 9. Policy Proposal to Improve Policies to Support the use of Postpartum Care for Up to a Year. Vasantha Kasinathan, Mellanese Cobb, Tatyana Gardner, Carly Johnson, Cathony Reid, & Desiree Smith, College of Health Professions.
- 10. The Resurgence of a Once Almost Eradicated Disease: Syphilis. Patrick Monroe & Erin Lepp, College of Health Professions.
- 11. A Titrated Approach to Dizziness. Hannah Francis & Lisa Dickerson, College of Health Professions.

#### POSTER SESSION 2 (cont.)

- 12. Underdiagnosed, Underrepresented, Untreated: ADHD in Girls and Women of Color. Sina Copeland & Jennifer de la Cruz, College of Health Professions.
- **13**. **Hide and Seek: Where is the Melanoma?** Valery Dinh & Catherine Sadowski, College of Health Professions.
- 14. Attached at the Hip: A look into Attachment Theories use in Higher Education Teaching. Hanna Cespedes, College of Professional Advancement.
- **15**. **Graduate Student Academic Anxiety**. Michele Carmichael, Hayley Lovelace, & Raven Scott, College of Professional Advancement.
- **16.** BDSM/Kink Counselor Competence Scale. Oriema Ewo & Deondra Curry, College of Professional Advancement.
- 17. Development of a Multicultural Wellness Enhancement Research Lab: A Mentorship Approach. Brittany Prioleau, Michelle Shlafman, & Khaleedah Dickerson, College of Professional Advancement.
- 18. Career Development in Underserved Youth: A Wellness Roadmap for Success. Laetitia Tokplo, College of Professional Advancement.
- 19. Using the Multicultural and Social Justice Counseling Competencies in Eating Disorder Treatment. Hayley Lovelace & Adriana Labarta, College of Professional Advancement.
- 20. Cash Choice and the Financial Behaviors in Adulthood. Jasna Marker & Craig Marker, Stetson-Hatcher School of Business.
- 21. Gender & Academic Supports Impact on H.S. Chemistry Self-Efficacy & Scientific Identity. Erica Peddi, Tift College of Education.
- 22. Transdermal Delivery Enhancement of Prodrug of Acetaminophen-4 Acetoxyacetanilide for Pediatric Use. Nisha Shrestha, Deepal Vora, Lori Ramirez, & Ajay Banga, College of Pharmacy.

#### POSTER SESSION 2 (cont.)

- 23. Neuroprotective Effects of Free Fatty Acid Receptor Agonism in a Parkinson's Disease Model. Andrea Green, Kalyn Rambacher, Kevin Murnane, & Nader Moniri, College of Pharmacy.
- 24. Formulation and Optimization of Gelatin Nanoparticles Formulation Using the Quality by Design (QbD). Arun Kumar Kotha, Kendall Johnson, Rama Kashikar, Ha Nguyen Trinh, & Mahavir Bhupal Chougule, College of Pharmacy.
- 25. Formulation of Polymeric Nanoparticles of Lurasidone for Transdermal Delivery to Treat Schizophrenia. Ariana Radmard & Ajay Banga, College of Pharmacy.
- 26. Pain-free Administration of an Inactivated Zika Virus Vaccine. Sarthak Shah, Parth Patel, Akansha Kale, Priyal Bagwe, Sharon Vijayanand, Smital Patil, M. Nasir Uddin, & Martin D'Souza, College of Pharmacy.
- 27. Skin Microporation Approaches for N-acetylcysteine Delivery as an Antidote for Arsenical Injury. Sharvari Kshirsagar, Amruta Dandekar, Ritesh Kumar Srivastava, Mohammad Athar, & Ajay Banga, College of Pharmacy.
- 28. Enhancing Transdermal Delivery of Lamotrigine for Improved Epilepsy Treatment. Meheli Ghosh & Ajay Banga, College of Pharmacy.

#### LECTURE SESSION 2 1:30 - 2:00

#### 30 minute talks:

ACC 175 (1:30-2:00)

Utilizing CBT Strategies to Promote Anti-Racism Ally Persistence: A Proof of Concept. Gail Kemp, College of Health Professions.

ACC 280 (1:30-2:00)

Am I Worthy to Wear White? Stained by Stigma as a Disabled Upcoming Medical Student. Kimberly Lancaster, College of Professional Advancement.

#### LECTURE SESSION 2 1:30 - 2:00

#### 30 minute talks:

ACC 555 (1:30-2:00)

Discovering One's (Inter) Cultural Identity. Arla Bernstein, College of Professional Advancement.

ACC 240 (1:30-2:00)

Physical Therapy Management of Conversion Disorder in the Intensive Care Unit: A Case Report. Austin Granger & Leslie Taylor, College of Health Professions.

#### 15 minute talks:

ACC 181 (1:30-1:45)

De-converted: Navigating Religious Disaffiliation in Today's Younger People. V. Alexander Ayvazian, College of Professional Advancement.

ACC 181 (1:45-2:00)

Risk Factors for Suicidality in LGBQT+ Adolescents. Rocio Garcia, College of Professional Advancement.

ACC 182 (1:30-1:45)

The Effect of COVID-19 Pandemic on the Use of Health Information Technology Such as Telehealth. Aqsa Arshad & Awatef Ben Ramadan, College of Professional Advancement.

ACC 182 (1:45-2:00)

A Foucauldian Discourse Analysis of Educator Certification in Georgia. Caleb Land, Tift College of Education.

ACC 243 (1:30-1:45)

To Test or Not to Test? SAT/ACT Scores as a Predictor of Student Success. John Wilson Gordon, Tift College of Education.

ACC 243 (1:45-2:00)

Cross-strain Specific Non-invasive Vaccination Strategies Against SARS-CoV-2. Smital Rajan Patil, Sharon Vijayanad, Tanisha Arte, & Martin D'Souza, College of Pharmacy.

#### POSTER SESSION 3 2:00 – 2:40

- 1. How Perinatal Pregnancy Loss Affects the Mental Health of Women in Subsequent Pregnancies: A Systema. Victoria Hatchett & Tasia Blair, College of Health Professions.
- 2. Continuous Glucose Monitoring: Optimizing Diabetes Care. Rachael Peacock & Erin Lepp, College of Health Professions.
- 3. Effects of IPC Devices on Reducing DOMS as Compared to Compression Garments After Exercise: A C.A.T. Madison Turner & Rachel Le, College of Health Professions.
- 4. Potential Implications of SARS-CoV-2 on Fertility in the Male and Female Reproductive System. Xavier Beltre, Cesia Maldonado, Alexia Vega, & Sabrina Walthall, College of Professional Advancement.
- 5. The Effects of Covid-19 on the Urinary System. LaKisha Headley, Charles Norris, Stephanie Pelayo, & Sabrina Walthall, College of Professional Advancement.
- 6. Effects of the Covid 19 Pandemic on the Gastrointestinal Tract. Sandra Phillips Batista, Jakini Hill, Rebecca Tapia, & Sabrina Walthall, College of Professional Advancement.
- 7. Early Sepsis Detection and Treatment: The Use of Biomarkers in Hospital Settings. Cayley Merritt & Leanne Martinelli, College of Health Professions.
- 8. The Psychological Impact of Type 1 Diabetes: Disturbed Eating Behaviors in Female Adolescents. Reagan Balog & Arlene Salmon, College of Health Professions.
- 9. How Food Deserts and Shortages Impact Infant Nutrition. Vasantha Kasinathan, Kirsten Beasley, JaNee Demery, & Stacia Wilson, College of Health Professions.

#### POSTER SESSION 3 (cont.)

- 10. Disparities and Social Determinants of Health Visualization in Columbus, Georgia. Mandana Malyani, Mikeisha Oldson, Vyjayanti Kasinathan, Mary Catherine Bertulfo, & Kirsten Beasley, College of Health Professions.
- 11. The Effects of Adult Learners Balancing School and Work Life. Whyeethia Respress, Julia Meltinord, & Kala Thompson, College of Professional Advancement.
- 12. The Effects of Food Insecurity in Middle Georgia Households. Christina Stump & Rosalind Davis, College of Professional Advancement.
- 13. Impact of Adopting Children in the State of Georgia. Juanquita Greene, Mekesha Williams, & Donna Deane, College of Professional Advancement.
- 14. How Does the Transition from Military to Civilian Life Affect the Rate of Homelessness Among Veterans in Atlanta, GA? Freddie W. Pelzer III, Kathy Taylor, Crystal Jackson, & Rachel Dunn, College of Professional Advancement.
- 15. The Effects of Rehabilitation for Substance Addiction on Young Adults. Mercy Ogbo, College of Professional Advancement.
- 16. Coaches Perspective to Supporting Student-Athlete Mental Wellness. Scott Bassett & Deana Ford, Tift College of Education.
- 17. Effects of Keeping a Reading Log on Reading Comprehension and Motivation. Jessica Jang, Tift College of Education.
- 18. Sand Tray Therapy for Adults with Down Syndrome: Processing Emotional Distress. Madeleine Lawson, Mercer School of Medicine.
- 19. Combination Vaccine for COVID-19 and Influenza Administered Using Non-Invasive Oral Dissolving Films. Sharon Vijayanand, Revanth Singh, Smital Patil, Devyani Joshi, & Martin D'Souza, College of Pharmacy.

#### POSTER SESSION 3 (cont.)

- 20. Formulation and Characterization of MPI8-loaded Pegylated Nanoliposomes Using Ionizable Lipid. Rama Kashikar, Arun Kumar Kotha, Shiqing Xu, Wenshe Liu, & Mahavir Chougule, College of Pharmacy.
- 21. Novel Mechanism of Mesenteric Artery Vasodilation by Statins and its Significance in Hypertension. Farzana Zerin, Sreelakshmi Menon, Ahasanul Hasan, Taufiq Rahman, & Raquibul Hasan, College of Pharmacy.
- 22. G Protein Selectivity of Agonist Induced Free-Fatty Acid Receptor-4 Phosphorylation. Razan Teyani & Nader Moniri, College of Pharmacy.
- 23. Integrating Assessment Mapping & Feedback Reports to Support Learning Outcomes in a Pharmacy Course. Taylor Justice, Renee Hayslett, & Reid Proctor, College of Pharmacy.
- 24. Receptor Targeted mTOR siRNA Delivery by Bioreducible Poly(amino ethers) Polymer for the Treatment of Lung Cancer. Arun Kumar Kotha, Nishant Gandhi, Sudhakar Godeshala, Dana-Lynn Koomoa-Lange, Bhavana Miryala, Kaushal Rege, & Mahavir Chougule, College of Pharmacy.
- 25. Exploration of Physical and Chemical Enhancement Strategies for Transdermal Delivery of Linagliptin. Tanvi Karve & Ajay Banga, College of Pharmacy.
- 26. Recognizing PTSD in Refugee Youth and Addressing Barriers to Care. Salma Mohamed & Jill Mattingly, College of Health Professions.
- 27. COVID-19 Impact on Breast Cancer Patients. Ashley Mathieson, Samantha Meadows, & Justice McCray, Georgia Baptist School of Nursing.

Thank you for attending the 2023 Atlanta Research Conference!



Thank you to all of the presenters and volunteers who helped make this a great event. Thank you to Jeff Waldrop, Vice Provost for the University Libraries, for his support of the annual Research Award; to College of Professional Advancement's Dean Danheiser; and finally to the Senior Vice Provost for Research, Dr. Wayne Glasgow, for his support of this Conference!

I'd also like to extend a special thank you to several people who volunteered their time to review submissions and support the event in some capacity. This year's conference planning committee included: Dr. Erin Lepp in the College of Health Professions, Dr. Nadar Moniri in the College of Pharmacy, Dr. Rob Helfenbein in the Tift College of Education, Prof. Florence Tang with the Swilley Library, Dr. Arnab Nayak with the Stetson-Hatcher School of Business, Dr. Sonique Sailsman with the Georgia Baptist School of Nursing; and Dr. Suneetha Manyam, Dr. Awatef Ben Ramadan, Dr. Stephen Ruegger, and Prof. Ming Hii, in the College of Professional Advancement.

Cameron A. Miller, Ph.D.
Chair, Department of Human Services and Psychology
College of Professional Advancement



Thank you for joining other students and faculty members from all of the colleges and schools on the Atlanta campus and Regional Academic Centers for the Mercer Atlanta Research Conference. Each of our faculty members strives to encourage scholarly development of our students that will prepare them for lives of meaning and for informed, ethical leadership in their chosen fields.

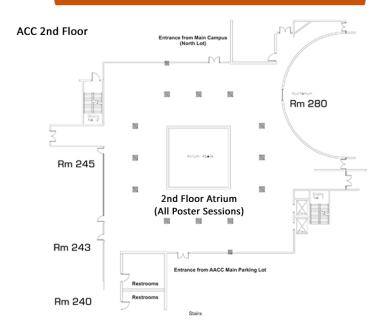
We believe that honing our students' capacities for inquiry, critical thinking, analysis, synthesis, collaboration, and problem solving is critical to achievement of this outcome. To that end, we offer this conference to showcase these capacities, to provide a venue for the practice of these capacities, and to celebrate our students' and our faculty's scholarly work. I want to express my sincere appreciation to Dr. Cameron Miller, Chair of the Department of Human Services and Psychology and Associate Professor of Psychology, for his leadership of this conference.

Priscilla R. Danheiser, Ph.D.
Dean, College of Professional Advancement

#### ACC Building: 1st and 2nd Floor Plans with Room Numbers



Thank You for attending the 2023 Faculty and Student Research Conference!



Note: Internal stairs do not connect 1st and 2nd floors; only the elevator and external stairs do.