

# 6th Annual Student Research Symposium

January 10, 2025

## SYMPOSIUM SCHEDULE

**Welcome and Opening Remarks** ..... 8:30 AM – 9:00 AM  
Main Ballroom

Anna Blenda, PhD  
Director of Research Strategy and Operations  
*University of South Carolina School of Medicine Greenville*

Phylis MacGilvray, MD, FAAFP, Dip ABLM  
Dean  
*University of South Carolina School of Medicine Greenville*

Alain H. Litwin, MD  
Chief Scientific Officer  
*Prisma Health*  
Professor of Medicine  
*University of South Carolina School of Medicine Greenville*

**Oral Presentations** ..... 9:00 AM – 10:30 AM  
Main Ballroom

**Coffee Break** ..... 10:30 AM – 10:45 AM

**Poster Session 1** ..... 10:45 AM – 12:00 PM  
Carolina Ballroom

**Lunch and Recognition of Student Mentors** ..... 12:00 PM – 12:45 PM  
Atrium

**Poster Session 2** ..... 12:45 PM – 2:00 PM  
Carolina Ballroom

**Awards Ceremony** ..... 2:10 PM – 3:00 PM  
Main Ballroom

**Adjournment**



Abstract

Find the Abstract Book on our website at  
<https://qrco.de/bffHPQ>

# POSTER SESSION 1

10:45 AM - 12:00 PM  
Carolina Ballroom

**Rachel Adickes - Abstract #47**

*Clinical Nutrition Collaborative*

**Brittany Austin - Abstract #99**

*Racial Realities: Breast Cancer Through Different Lenses*

**Louise Averitt - Abstract #51**

*Burnout in Medical Students Involved in Community Outreach*

**Anna Bazell - Abstract #35**

*Applications of Commercially Available Human Amniotic Membrane (hAM)-Derived Products in Peripheral Nerve Repair: A Current Literature Review*

**Sarah Brown - Abstract #59**

*The Role of Social Determinants of Health on Patient Outcomes Using Lifestyle Medicine Interventions*

**Victoria Callicott - Abstract #105**

*Prehospital Buprenorphine Programs in the United States: A Scoping Review*

**Sabrina Carrel - Abstract #112**

*Research Ready: Meeting Student Needs at USC/SOMG*

**Makayla Cook - Abstract #34**

*Patient Education and Preferences on A1C Testing: POC vs Venipuncture*

**Haven Curtis - Abstract #126**

*Hybrid Academic/Community Cellular Therapy (CT) Program, Adverse Events and Outcomes Post CAR-T in Hematological Malignancies Including Outpatient Experience: A Retrospective Chart Review*

**Austin D'Addario - Abstract #110**

*Prevena Negative Pressure Wound Therapy on Surgical Site Occurrences Following Open Femoral Access in Vascular Surgery*

**Jared Dawson - Abstract #76**

*Cultural Humility in Action: Clinician Strategies for Approaching Lifestyle Medicine Interventions Across Cultural Barriers*

**Rachel Donaldson - Abstract #53**

*Quantifying Plastic and Reconstructive Surgery Engagement in the Evolution of ICD-10 Codes*

**Andrew Doty - Abstract #83**

*Preliminary Evidence of Effectiveness of Frequency Modulated Tumor Treating Fields in the Treatment of Glioblastoma Multiforme in vitro*

**Erin Dozier - Abstract #7**

*Radial Scars: To Excise or Not to Excise*

**Emily Duckworth - Abstract #2**

*Breast Reduction as a Catalyst for Positive Lifestyle Change: A Retrospective Survey Analysis*

**Ashleigh Farmer - Abstract #103**

*Retrospective Analysis of Radiation Dose Savings Among Patients Undergoing UAE, PAE, and TIPS Procedures*

**Nathan Faulstich - Abstract #101**

*Sex Differences in Clinical Risk Factors for Alzheimer's Disease Patients with Early-Onset and Late-Onset*

**Delaney Foster - Abstract #32**

*Sex-Dependent Nutritional Impacts on Puberty Onset*

**Andre Gagliano - Abstract #44**

*Defining Medication Reconciliation Practices and Needs at GMH: A Pilot Qualitative QI Exploration*

**Bricen Ghent - Abstract #87**

*Investigating Patient-Reported Outcomes Measurement Information System Scores (PROMIS) and Skeletal Muscle Mitochondrial Function in Breast or Gynecologic Cancer Patients Undergoing Chemotherapy*

**Hanes Grafe - Abstract #49**

*Impact of Various Adaptive Sports on Depression and Quality of Life in Persons with Disabilities*

**Patricia Greene - Abstract #30**

*Unveiling Opioid Prescribing Patterns Following Outpatient Anorectal Surgery*

**Shannon Harold - Abstract #55**

*Decoding Disparities: How Genetic Mutations Impact Breast Cancer Across Racial Groups*

**Jayda Hart - Abstract #114**

*Epigenetic Profiling of Cell-Free DNA in IVF Embryos*

**Samuel Horkey - Abstract #10**

*Percutaneous Cholecystostomy*

**Kyle Jardim - Abstract #95**

*Intersection of Stress, Sex & Gender, and Coronary Artery Disease*

**Conner Johnson - Abstract #57**

*Impact of the COVID-19 Pandemic on Emergency Department Utilization of Initial Fibrinolysis for the Treatment of ST-Segment Elevation Myocardial Infarction*

**Nabeeha Khan - Abstract #14**

*GRASP Dynamic Contrast Enhanced MRI Can Be Used to Monitor Response to Stereotactic Radio-surgery in Head and Neck Paragangliomas*

**John Kurtz - Abstract #90**

*AI Decision Support Tool for Detecting Stressful Events and Characterizing Neurological Biomarkers to Understand Burnout in Emergency Physicians*

**Ronnie Keel - Abstract #67**

*The Impact of Community-based Adaptive Sports on Depression and Quality of Life in Persons with Disabilities*

**Sammy Khalil - Abstract #116**

*Exploring Motivation and Barriers in Weight Loss Adherence*

**Megan McFarland - Abstract #40**

*Non-Traumatic Rhabdomyolysis in the Setting of COVID-19 Infection*

**Gina McKay - Abstract #36**

*Impact of Social Determinates of Health on Access to Private Duty Nursing Services for Children with Tracheostomy tubes in South Carolina Communities*

**Katherine Morgan - Abstract #120**

*Alertness, Effort Perception, and Performance: A Case Study*

**Jakayla Moses - Abstract #42**

*Exploring targeted mass spectrometry use with conditioned media from IVF-embryos as a screening tool for apoptotic protein presence*

**Alicia Moylan - Abstract #124**

*Addressing Lifestyle Medicine Components of the Female Athlete Triad: Expanding the Definition for Sex and Gender*

**Kenny Nguyen - Abstract #108**

*Enhancing Systematic Review Efficiency with Artificial Intelligence: Developing a Severity Scoring Tool for Pediatric RSV*

**Connor O'Brien - Abstract #97**

*Sex Differences in Clinical Risk Factors for Dementia Patients with and without Encephalopathy*

**Maria Gabriela Pita - Abstract #69**

*Beyond Fitness: Revolutionizing Women's Health Monitoring with INCORA - The Ear-Inserted Wearable Changing Disease Prevention*

**Sergiy Pustogarov - Abstract #21**

*Understanding the relationship between aspects of clinical encounters and overall satisfaction in an LGBTQ+ primary care clinic*

**Ryleigh Rawson - Abstract #78**

*Diversity in Healthcare Website Images: a visual content analysis of Australian massage therapists' and general practitioners' website pages.*

**Emilie Russell - Abstract #61**

*Lifestyle Medicine in Practice: Lifestyle Medicine Provider Methods and Impact on Patient Outcomes within Prisma Health*

**Bailey Schneider - Abstract #12**

*Ectrodactyly: System Wide Treatment Strategies and Outcomes in a Pediatric Orthopaedic Hospital Healthcare System*

**Emma Sherman - Abstract #38**

*The implementation and utilization of a new supplementary resource between first- and second-year medical students.*

**Dylan Singhi - Abstract #9**

*Deleterious Impact of Plasminogen Activator Inhibitor-1 (PAI-1) on Podocyte Morphology and Function*

**Alexandra Smith - Abstract #80**

*Macro and Micro Level Artificial Intelligence Analysis of Prostate Cancer TNM Staging from Electronic Health Records*

**Adaya Sturkey - Abstract #63**

*Racial/Ethnic and Sex Disparities in Pediatric Primary Hypertension: A Systematic Review*

**Whitney Sussman - Abstract #28**

*Medication Adherence to sodium-glucose cotransporter-2 (SGLT2) inhibitors versus glucagon-like peptide-1 (GLP-1) receptor agonists: a meta-analysis*

**Rorie Vander Ploeg - Abstract #72**

*Treatment of Atorvastatin leads to multidrug resistance in colorectal cancer cells*

**Yash Verma - Abstract #92**

*Transcriptional Responses to Necrotizing Fasciitis-causing *Acinetobacter baumannii* Infection in Human Macrophages*

**Hampton Warner - Abstract #18**

*Robotic vs. Laparoscopic excision of gastrointestinal stromal tumors: The experience of a regional institution*

**Cameron Whitacre - Abstract #65**

*Efficacy of Platelet-Rich Plasma Injections in the Management of Large-Joint Osteoarthritis: A Review*

**Joshua Wiggins - Abstract #74**

*Dissecting the Impact of Robotics: An Investigation of Nontechnical Skills in Robotic-Assisted Surgery*

**Campbell Yates - Abstract #122**

*Putting Our Foot Down on Opioid Dependency: Reduction in Postoperative Opioid Use Following Lower Extremity Amputation Performed with a Nerve Block*

# POSTER SESSION 2

12:45 PM - 2:00 PM  
Carolina Ballroom

**Veronica Able-Thomas - Abstract #71**

*Diversity, Equity, Inclusion: Understanding the Patient Experience Through Assessment of Health Literacy and Identification of Patient Preferences When Receiving Health Information*

**Chase Abshier - Abstract #118**

*Partial Fundoplication vs TIF: A Retrospective Review*

**David Arnold - Abstract #50**

*Exploring the Impact of Genetic Mutations on Treatment Efficacy in Colon Cancer*

**Vanessa Bartholomew - Abstract #6**

*Primary leiomyosarcoma of the inferior vena cava: a case series*

**Brionna Bennett - Abstract #13**

*Improving the Diagnosis of Infectious Endophthalmitis and Keratitis via Next Generation Sequencing and Rapid NanoString Based Pathogen Detection*

**Ellie Bisese - Abstract #31**

*Sex Differences in Associations Between Various Dietary Interventions and the Prevention and Management of Hypertension*

**David Bu - Abstract #121**

*Time to Discontinuation of AEDs when started for AWS*

**Rowan Burns - Abstract #11**

*Decreasing 72-hour Readmissions in Sepsis and Pyelonephritis Patients*

**Rachel Donaldson - Abstract #3**

*Non-Occlusive Airway Balloon Dilator Analysis in the Treatment of Laryngotracheal Stenosis*

**Abigail Donato - Abstract #33**

*ED Utilization in a Primary Care Clinic*

**Andrew Doty - Abstract #85**

*Clinical Correlations of Vectors of Neoplastic Spread in Patients with Pituitary Adenoma*

**Raj Dwivedi - Abstract #62**

*A case of concurrent Immune Checkpoint Inhibitor Associated Necrotizing Myopathy and Acute Inflammatory Demyelinating Polyneuropathy associated with Pembrolizumab therapy for Metastatic Renal Cell Carcinoma*

**Sameer Ebrahim - Abstract #125**

*Is a spring plate for a posterior wall acetabular fracture a harbinger of eventually needing total hip arthroplasty?*

**Ryan Ellis - Abstract #123**

*Effectiveness of Cycloheximide and Spermine Inhibition in *Cryptococcus neoformans**

**Keith Epps - Abstract #93**

*Overview of sex-related differences in sleep patterns and its association with the development and regulation of type 2 diabetes.*

**Shiloh Eyabi - Abstract #96**

*Drivers of Inequity in Colorectal Cancer Screening Among Minority and Underserved Groups and Proposed Interventions to Bridge Gaps*

**Kathleen Fallon - Abstract #39**

*Investigating Diagnostic Technology Use and Adoption in the Workflow of Sepsis Diagnosis and Treatment in the Emergency Department*

**Jillian Florez-Bhandari - Abstract #81**

*Evaluating Fatigue and the Effects of Chemotherapy Regimens on Skeletal Muscle Mitochondrial Function in Breast and Gynecological Cancer Patients using Near-Infrared Spectroscopy*

**Burns Gaskins - Abstract #54**

*A Novel AI-Based Solution for Streamlining Prostate Cancer Documentation in Electronic Health Records*

**Kendall Gassman - Abstract #15**

*SARS-CoV-1 Non-Structural Protein 1 Mutagenesis for the Investigation of Coronavirus Immune Inhibition Mechanisms*

**Sarah Goncher - Abstract #19**

*Stroke Outcome Optimization Project - Comparing Patient Demographics and Language Outcomes*

**Melfry Gonzalez - Abstract #98**

*Respiratory Syncytial Virus (RSV) and SARS-CoV-2 in Pediatric Patients and its Relationships with Social Determinants of Health*

**Evan Gossett - Abstract #79**

*Castleman's Disease: a single institution's experience and review of the literature*

**Jasmine Hawkins - Abstract #60**

*Baseline Sunscreen Habits and Awareness Among Medical Students*

**Savannah Heitmann - Abstract #104**

*An Investigation into Deprescribing Proton Pump Inhibitors*

**Tatiana Joseph - Abstract #115**

*A Comparative Exploration of Tools for Measuring Fc Receptor Expression on Human Sperm.*

**Zechariah Karsana - Abstract #68**

*Investigating *Aspergillus fumigatus* Physiology in Polymicrobial Infections via Reverse Genetics*

**Himashreya Katti - Abstract #100**

*The importance of person-to-person interaction in promoting conversation and engagement with vaccine information within the community*

**Brittany Kothari - Abstract #23**

*Robotic extended-view totally extraperitoneal ventral hernia repair: Single-center experience with 2-year follow-up*

**Sean Lippincott - Abstract #43**

*Supervised machine learning and predictive analytics to determine the optimal allocation of resources for pediatric surgical patients in the United States - A pilot project*

**Sydney Long - Abstract #1**

*Examining the benefits of a medical education-focused clinical anatomy elective for fourth-year medical students*

**Julia Lunt - Abstract #107**

*The Impact of High Value Care Education on First Year Medical Students*

**Lily Moore - Abstract #20**

*Influence of the Six Pillars of Lifestyle Medicine on Breast Cancer with Consideration of Sex and Gender: A Systematic Review*

**Luke Morcos - Abstract #73**

*Establishing a PPI Deprescription Algorithm*

**Reagan Musselman - Abstract #8**

*Pre-hospital Bacterial Resistance Surveillance in Greenville, SC, USA*

**Sarah Noonan - Abstract #75**

*Analyzing the Impact of Supplemental Continuous Glucose Monitoring and Foodshare Programs on Glycemic Control Among Women With Diabetes Mellitus.*

**Timi Ojo - Abstract #45**

*Exploratory observational study of shift work exposure and arterial stiffness*

**Sammy Omar - Abstract #89**

*Sex and Gender Differences in Alzheimer's Disease: The Preventative Potential of Lifestyle Medicine*

**Tina-Nhung Pham - Abstract #66**

*Prehospital Buprenorphine Programs in the United States: A Scoping Review*

**Madeline Reilly - Abstract #113**

*Does Sternal Talon Plating Increase Healing in Sternal Nonunion After Cardiac Surgery?*

**Luis Rivero - Abstract #86**

*Identifying Differentially Expressed Genes during *Acinetobacter baumannii* Infection of Human Cell Lines Using RNA Sequencing*

**Maegan Rudolph - Abstract #17**

*Validation of Temperature, Heart Rate, and Blood Oxygen Saturation Measurements from Incora Earrings Wearable Technology for Monitoring of Menstrual Cycle and Fertility*

**Jennifer Rumsey - Abstract #77**

*Emergency Clinician log in frequency and EHR application loading speed differ across workstation types: a quantitative pilot study of Emergency Clinician:workstation interactions across technological transition*

**Sara Schmedding - Abstract #48**

*Sex and Gender Specific Impacts of Whole Food, Plant-Based Nutrition on Colorectal Cancer: A Review on Dietary Fiber and Risk Reduction*

**Adarsh Shidhaye - Abstract #29**

*A case of suspected Drug Induced Subcutaneous Lupus following IVIG therapy*

**Jason Smith - Abstract #58**

*The Impact of Sarcopenia on Pancreaticobiliary Cancer Prognosis*

**Ryan Stover - Abstract #56**

*The Impact of Community-based Adaptive Sports on Depression and Quality of Life in Persons with Disabilities*

**Karl Swiger - Abstract #111**

*Optimizing Dialysis Care: A Retrospective Analysis of Omentopexy's Impact on Catheter Function*

**Brooke Taylor - Abstract #102**

*Evaluating Outcomes and Complications of Inspire® Hypoglossal Nerve Stimulation for Obstructive Sleep Apnea: A Retrospective Analysis*

**Madeline Tedrick - Abstract #64**

*Pain Interference and Impaired Sleep in Breast Cancer Survivors Taking Estrogen Deprivation Therapy*

**Charlotte Vogel - Abstract #41**

*Effects of the subjective mystical experience on major depressive disorder in patients receiving intravenous ketamine*

**Emily Waters - Abstract #4**

*Ankle Range of Motion Following Surgical Correction of Early Relapse in Clubfoot*

**Victoria Wilson - Abstract #37**

*Lifestyle Interventions for Sarcopenia: An Investigation of Sex and Gender Differences*

**Caroline Wright - Abstract #109**

*Exercise is Medicine: Sex Differences in the Impact of Physical Activity on Depression*

# STUDENT ORAL PRESENTATION SCHEDULE

**9 AM - 10:30 AM | Main Ballroom**

**Vanessa Bartholomew - Abstract #5**

Preliminary Evidence of Effectiveness of Frequency Modulated Tumor Treating Fields in the Treatment of Glioblastoma Multiforme in vitro

**Kenan Delbridge - Abstract #88**

Assessing Physical Activity Behaviors and Skeletal Muscle Mitochondrial Oxidative Capacity in Patients undergoing Chemotherapy for Breast or Gynecologic Cancer

**Katherine Howey - Abstract #82**

Harnessing Artificial Intelligence for TNM Staging Extraction from Electronic Health Records: A Note-by-Note Analysis in Prostate Cancer Documentation

**Kayla Beth Jernigan - Abstract #94**

Addressing low osteoporosis screening rates in postmenopausal females younger than 65 years old

**Garrett Kaufman - Abstract #70**

Functional roles of afu-182 in azole response and pathobiology of *Aspergillus fumigatus*

**Aahil Merchant - Abstract #117**

Isolation and Differentiation of SVF Derived Adipocytes in a Murine Model of Insulin Mediated Pseudoacromegaly

**Samantha Morales - Abstract #27**

Efficacy and Cost Effectiveness of Trigger Finger Management and its Relation to A1c Levels

**Dylan Singhi - Abstract #9**

Deleterious Impact of Plasminogen Activator Inhibitor-1 (PAI-1) on Podocyte Morphology and Function

**Jack Stomberger - Abstract #26**

Balancing Depth and Simplicity: Faculty Experiences with the ScholarRx Digital Learning Platform

**Emily Thomas - Abstract #22**

Comparative Analysis of Laparoscopic and Robotic Appendectomy: A Multi-Hospital Retrospective Cohort Study

## ACKNOWLEDGEMENTS

The University of South Carolina School of Medicine Greenville would like to acknowledge all of the hard-working students that presented their research at this event and the exceptional mentorship provided by their research mentors.

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Student research efforts support the vision of the School of Medicine Greenville in empowering the next generation of physicians through cutting-edge technology, interprofessional collaboration, innovative teaching, and transformational research.

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