School of Medicine Greenville
UNIVERSITY OF SOUTH CAROLINA

8TH ANNUAL STUDENT RESEARCH SYMPOSIUM

NOVEMBER 20, 2026

SCHEDULE OF EVENTS

Lunch and Opening Remarks ..... 12:30 PM - 1 PM
C. Dan Adams Lecture Hall

Phyllis MacGilvray, MD, FAAFP, DipABLM
Dean, University of South Carolina School of Medicine Greenville
Professor of Family Medicine

John M. Brooks, PhD
South Carolina SmartState Endowed Chair
Director, Center for Effectiveness Research in Orthopaedics
Professor of Health Services Policy and Management, Arnold School of Public Health

Oral Session I..... 1 PM - 2 PM
C. Dan Adams Lecture Hall

Poster Session I..... 2 PM - 3 PM
SOMG 1st Floor Corridor

Break..... 3 PM - 3:15 PM
Rotunda

Poster Session II ..... 3:15 PM - 4:15 PM
SOMG 1st Floor Corridor

Oral Session II .....4:15 PM - 5 PM
C. Dan Adams Lecture Hall

Awards and Closing Ceremony..... 5 PM - 5:45 PM
C. Dan Adams Lecture Hall

Shanu N. Kothari, MD, FACS, FASMBS
Clinical Chair of Surgery, University of South Carolina School of Medicine Greenville
Professor of Surgery

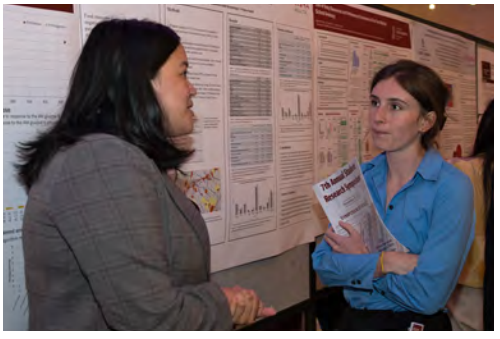
Sudha Garimella, MD
Interim Associate Dean for Research
Associate Professor, University of South Carolina School of Medicine Greenville
Medical Director, Division of Pediatric Nephrology and Hypertension, Prisma Health











SCAN FOR ABSTRACT

POSTER SESSION 1

2 PM - 3 PM (SOMG 1st Floor Corridor)

Chantel Aguirre, BA — **Abstract 20**
Language concordant diabetes education in pregnancy and its effects on health outcomes

Leah C. Andrews, MS — **Abstract 96**
Modeling H3K27M Diffuse Midline GliomaÐMicroglia Interactions in 2D and 3D Coculture Systems

Halle Bailey, BS — **Abstract 63**
Knee Disarticulation in Patients with Tibial Deficiency: A Multicenter Review of Functional and Surgical Outcomes

Kasey Battle, BS — **Abstract 109**
Association between comprehensive case management and ED utilization among postpartum women with substance use disorders

Bsmla Berber, BA; Caitlin Ulmer — **Abstract 75**
Cefoxitin Compared with Standard Antibiotic Therapy for Maternal Fever Duration in Pregnant Patients with Clinical Chorioamnionitis

Madalyn Bergman, BA — **Abstract 81**
Investigation of Sex-Stratified Neuroanatomical Connectivity in ParkinsonÕs Disease using DTI-based Tractography

Thomas Bessmer, BS — **Abstract 69**
Assessing the Impact of Pulmonary Embolism Thrombectomy Before and After the Implementation of a PE Response Team (PERT)

Camryn Briggs — **Abstract 77**
Genotype Positive Non-Ischemic Cardiomyopathy: A Single-Center Retrospective Cohort of 205 Adults with Pathogenic or Likely Pathogenic Variants

Amber Carr, BS; Paige Novota — **Abstract 36**
Aspirin Recommendation for Preeclampsia Prevention in a Diverse Cohort: Disparities and Opportunities

Sofia Chavez, BS; Taylor Keogh, BS — **Abstract 21**
Ivermectin and Cancer: A Survey of Patient Awareness, Perceptions, and UseÉ

Hannah Chelli, BS — **Abstract 112**
A Systematic Review of the Measures used to Evaluate Medical-Legal Partnerships

Tamia Cobb MS — **Abstract 45**
*How Participation Takes Shape: A Scoping Review of Governance Structures and Practices in Community Based Participatory Research_*

Emiliano Costilla — **Abstract 24**
Management of Severe Lung Disease Post-Transfusion with Venovenous (VV) Extracorporeal Mechanical Oxygenation (ECMO): A Case Report

Austin Dang, BS — **Abstract 88**
Clinical Factors Associated With Thrombolysis in Acute Ischemic Stroke by Prior Stroke History

Andy Davis, BS; JQ Armstrong, IV, MBA — **Abstract 46**
Perceived and experienced pain/anxiety before and after vasectomy

Andy Davis, BS; JQ Armstrong, IV, MBA — **Abstract 30**
The Utility of Routine Scrotal Ultrasound in the Evaluation of Azoospermia

Hope Dominique, BS — **Abstract 49**
Improving Diabetic Retinopathy Screening Rates in Family Medicine Residency Clinics

Ariana Faraci, BS — **Abstract 67**
Surgical Site Infection Following Cefoxitin Versus Traditional Antimicrobial Therapy for Intra-amniotic Infection in Cesarean Deliveries: A Retrospective Cohort Study

Luke Fisher, BS — **Abstract 103**
Parameters That Influence The Development of Adjacent Segment Disease (ASD) Following Cervical Realignment Surgery

Emma Godwin, BA, MPH — **Abstract 7**
Weight-based versus non-weight-based diltiazem dosing for atrial fibrillation with rapid ventricular response: a meta-analysis

Annabelle Harris, BS — **Abstract 107**
Matrix Metalloproteinase Upregulation at the Cusp of Oral Premalignancy/Malignancy.

Sean Holden-Kapshuck, MBS — **Abstract 89**
Sex-Specific Clinical Profiles in Patients With Acute Ischemic Stroke and Chronic Kidney Disease

Sean Holden-Kapshuck, MBS — **Abstract 85**
Papillary Meningioma: A Single Institution Case Series and Literature Review

Liza Hopper, BS; Maddi Clark, BS — **Abstract 31**
Hemodynamic and Clinical Outcomes of Baroreflex Activation Therapy (BAT) in Patients with Heart Failure Across Multiple Remote Patient Monitoring Platforms

Olivia Longsworth, BS — **Abstract 68**
Improving Referral Rates for Evidence-Based Lifestyle Medicine Programs for Patients with Hypertension

William McCamy, BS — **Abstract 33**
Age-Related Outcomes Following Reverse Total Shoulder Arthroplasty: A Comparison of Patients Younger and Older than 65-Years

Misbaah Muqri — **Abstract 91**
Systematic Review of Respiratory Syncytial Virus (RSV) Severity Scoring Methods

Trinity Myers — **Abstract 16**
Adrenal Vein Sampling: From Lateralization to Targeted Treatment in Primary Aldosteronism

Jacob Nichols — **Abstract 15**
Real World Evaluation of Concordance with Guideline-Specific Biomarkers in Non-Small Cell Lung Cancer

Sophia Pavento — **Abstract 2**
Prevalence and Detection of Cytomegalovirus in Pediatric Patients with Hematological Malignancies

Emma Ruth Pedersen, BS — **Abstract 39**
Hiding in Plain Sight: Metastatic Breast Cancer Presenting in the Gastrointestinal Tract

Dina Qiryaqoz, BS, MBS — **Abstract 94**
Beyond Fascial Closure: Long-Term Patient-Reported and Surgical Outcomes Following Partial Fascial Closure During Open Abdomen Therapy

Caleb Rogers, BS — **Abstract 37**
Development of a patient-facing infographic and FAQ document using input from Patient Experts for an Implementation Facilitation study

Rae Schiess, BS — **Abstract 115**
Preoperative Nerve Blocks and Prolonged Opioid Use Following Lower Extremity Amputation in Patients With Vascular Disease

Christopher Scott, BS, EMT — **Abstract 12**
Not Staying Put: Reasons for Transport Following a Prehospital Treat-in-Place Program

Veronica Scott, BS — **Abstract 70**
Mild/Incomplete Lymphocytic Colitis on Colon Biopsy: Diagnosis, Treatment, and Disease Progression

Daryna Shnitser, BS — **Abstract 108**
Robotic ventral hernia repair series: evaluating long-term outcomes

Zac Simpson, BS — **Abstract 110**
Systematic Review of Pediatric Respiratory Syncytial Virus (RSV) Severity Scoring Methodology and Effectiveness

Christina Sims, BA — **Abstract 62**
Comprehensive Scoping Review Related to Meeting the Neurodevelopmental Needs of Children with Autism Spectrum Disorders Accessing Emergency Care

Caroline Smith, BS — **Abstract 22**
Mitochondrial Gene Expression in Embryonic Cell Populations and Blastocoel Fluid Reflects Maternal Age and Implantation Outcome

Eliza Stojkov, BS — **Abstract 32**
Treatment Engagement in the Magdalene Clinic: A Retrospective Review of Pregnant Individuals with Substance Use Disorders

Eva T. Sundquist, MS — **Abstract 64**
Tusi and other pink psychoactive powders: A scoping review of toxicological compositions, use patterns, polysubstance use, and clinical effects

Ethan Sudsberry, BS — **Abstract 55**
Weight-based versus non-weight-based diltiazem dosing for atrial fibrillation with rapid ventricular response: a meta-analysis

Karoline Surdyk, BS — **Abstract 86**
A Pediatric Adaptation of the Function in Sitting Test for Children with Cerebral Palsy

Zachary Theodossiou, BS; David Mahaffey, BS — **Abstract 43**
Alcohol Control Policies Across Major North American Sports Stadiums: A Cross-Sectional Analysis

Preston Tuttle — **Abstract 44**
Distribution of lifestyle psychiatry education across psychiatry learning phases: a scoping review

Eli Verdin, BS — **Abstract 28**
The Role of Gender in tPA Exclusion Among Acute Ischemic Stroke Patients on Antihypertensive Medication

Zack Verdin, BS, Ryan Hill, BS — **Abstract 29**
Cost-Effectiveness_of_GLP_1Dbased_therapy_in_Patients with_Psoriatic Arthritis_and_Obesity

Evan Walker, BS — **Abstract 48**
Breaking Barriers to Thrombolysis: tPA Decision-Making in Acute Ischemic Stroke Patients with Coronary Artery Disease

Sarah Walker — **Abstract 53**
Factors Associated with Ischemic Stroke Severity Among Patients with Depression

POSTER SESSION 2

3:15 PM - 4:15 PM
(SOMG 1st Floor Corridor)

Leah C. Andrews, MS — **Abstract 60**
Timing of Ventriculosubgaleal Shunt Placement and Conversion to Permanent Ventriculoperitoneal Shunt in Neonates: A Systematic Review

Kylie Artosky, BA — **Abstract 18**
Sex-specific risk factor profiles among patients with acute ischemic stroke and peripheral vascular disease.

Caroline Bailey — **Abstract 54**
Comparison of Talonavicular Fusion with and Without Lateral Column Procedures for Planovalgus Deformity in Cerebral Palsy

Palmer Ball, MS — **Abstract 14**
Hypernasal Speech and Cervical Adenopathy in a 6-year-old Boy

Jada Banks, MBS — **Abstract 83**
Objective Physical Activity Assessment in a Clinic-to-Community Exercise Referral Program: A Pilot Study

Allison Beiter, BS — **Abstract 102**
Retrospective Comparison of Irrigation Management Systems during Endoscopic Enucleation of the Prostate

Madalyn Bergman, BA — **Abstract 78**
A Socially Accountable Approach to Improving Food Literacy Among Recently Housed Individuals in Greenville, South Carolina

Hunter Bielicki, BS — **Abstract 57**
Feeding Beyond the Threshold: Outcomes of Expanded Home NGT Eligibility

Marge Bilokin, BS — **Abstract 92**
Analyzing the Representativeness and Characteristics of Menstrual Tracking Apps in Relation to the United States Female Population

Khushi Bimbrahw, BS — **Abstract 79**
Looking Between the Spines: Ultrasound Assessment of Gravid Sea Urchins

Isabella Chartier — **Abstract 65**
Fc Receptors and Antibody Interactions on Sperm: Implications for Male Infertility

Maddi Clark, BS; Liza Hopper BS; Jason Guichard MDPhD — **Abstract 71**
Hemodynamic and Clinical Outcomes of Baroreflex Activation Therapy (BAT) in Patients with Heart Failure Across Multiple Remote Patient Monitoring Platforms

Christian Comas — **Abstract 112**
Management of Severe Lung Disease Post-Transfusion with Hydroxychloroquine-associated Neuromyotoxicity in a Patient with Undifferentiated Connective Tissue Disease

Emiliano Costilla — **Abstract 25**
Management of Severe Lung Disease Post-Transfusion with Venovenous (VV) Extracorporeal Mechanical Oxygenation (ECMO): A Case Report

Austin Dang, BS — **Abstract 90**
Can BMI and Albumin Be Used as Surrogate Markers for Sarcopenia to Assess Post Operative Outcomes?

Rhea Desai, BS — **Abstract 106**
The Presence of Psychiatric Identifiers in Patient Photographs in the Electronic Health Record as a Source of Physician Bias: A Retrospective Study in the Emergency Department at Prisma Health

Shiloh Eyabi, BS — **Abstract 3**
Near-Peer Teaching in Clerkships: The Impact of 4th Year Medical Student Chiefs on the OBGYN Clerkship

Maya Fiore, BA — **Abstract 111**
Understanding Emergency Department Utilization Among Individuals Experiencing Homelessness in Greenville, South Carolina: Drivers, Patterns, and Opportunities for Street Medicine

Samantha Fritsch, BS — **Abstract 38**
Lifestyle Medicine Education in Psychiatry Training: A Scoping Review of Current Curriculum

David Gayle — **Abstract 117**
Sex-Specific Outcomes of Lifestyle Interventions in Coronary Heart Disease: A Qualitative Systematic Review

Henrietta Gifford, BS — **Abstract 4**
Sex-Specific Clinical Profiles Associated With Prior Cholesterol-Lowering Therapy Among Patients With Acute Ischemic Stroke

Ainsley Hartman, BS — **Abstract 82**
Robotic ventral hernia repair series: Evaluating long-term outcomes

Skyler Hays, BS — **Abstract 34**
Lifestyle Medicine Education in U.S. Health Professions Institutions: A National Assessment of Curriculum Integration and Resource Utilization

Sean Holden-Kapshuck, MBS — **Abstract 87**
Persistent Bilateral Sciatic Artery Aneurysms: A Case Report and Review of Reported Bilateral Cases

Allison Hyde, BS — **Abstract 72**
Opposing stress responses reveal distinct roles for CDC42/CDC420 and Septins in Cryptococcus Neoformans

Allison Jordan, BS — **Abstract 50**
Structure Without Rigidity: Behavioral Patterns Linked to Medical Student Resilience

Allie Karges, BS — **Abstract 19**
Placental and Developmental Gene Expression in Blastocoel Fluid-Conditioned Media Differs by Maternal Age

Morgan Locklear, BS; Ashley Watson — **Abstract 95**
Behavioral and Psychosocial Interventions to Support SUD Treatment Retention in Postpartum Women With Substance Use Disorders: A Scoping Review

Rose Luna, BS — **Abstract 101**
SARS-CoV-1 Nsp1-Mediated Regulation of Stress Granule Formation

Gillian Marshall, BS — **Abstract 93**
Neonatal hyperbilirubinemia following maternal treatment of intraamniotic infection with cefoxitin versus standard therapy.

Brenna Matthews — **Abstract 10**
When trauma is not the whole story: persistent abdominal pain after a blunt trauma in a pediatric patient

Gracelyn Metts, BS — **Abstract 9**
Management of Tracheostomal Hemorrhage Complicated by Obstructing Clot in a Post-Laryngectomy Patient Presenting to a Rural Emergency Department

Reese Mohesky, BS — **Abstract 99**
Synchronous Presentation of Primary Pancreatic and Primary Lung Adenocarcinoma

Trinity Myers; Noelle Forcier; Ashley Watson — **Abstract 17**
Metabolic impact of insulin-like growth factor 1 (IGF-1) and growth hormone (hGH) on an in vitro model of Phelan-McDermid syndrome.

Caitlyn Owen, BS — **Abstract 13**
Maternal Age-Associated Expression of Placental Development Genes in Blastocoel Fluid-Conditioned Media from Human IVF Embryos

Avery Phelps, BS — **Abstract 51**
Robotic ventral hernia repair series: Evaluating long-term outcomes

Brandon Phillips, BS — **Abstract 42**
Does Surgical Pathology Correlate with Completion of Key Pancreatic CT Criteria in Patients Undergoing Pancreaticoduodenectomy?

Q'May Qourters — **Abstract 52**
Closing the Gap: Community Paramedicine and Hepatitis C Treatment Success Following Emergency Department Screening

Dora Rice, BS — **Abstract 35**
Objectively Measured Physical Activity in a Chronic Disease Cohort: A Literature Review

Rae Schiess, BS — **Abstract 116**
Restructuring Medical Student Organizations Through a Coalition-Based Leadership Model: A Quality Improvement Initiative

Laramie Sellers, MBA — **Abstract 84**
Progressions of Operative Participation During HoLEP Training in and Endourolgy Felllowship

Ishika Sharma, BS — **Abstract 105**
Investigating Discrepancies in Brain Age Across Motor Subtypes of ParkinsonOs Disease

John M. Stevens, BS — **Abstract 74**
5 Year Minimum Follow-Up of Closed Reduction for Developmental Dysplasia of the Hip in Children Older Than 18 Months at Time of Treatment

Eva T. Sundquist, MS — **Abstract 97**
Evaluation of Multilevel Surgery Outcomes in Children with GMFCS Level III Cerebral Palsy

Fallon Tomlin, BS — **Abstract 73**
Assessing Healthcare Needs and Barriers to Care in Upstate South Carolina

Cady van Venrooy, BS — **Abstract 100**
Diagnostic Approaches in Early Rapidly Progressive Dementia: A Scoping Review of Anti-LGI1 Encephalitis, Anti-NMDA Receptor Encephalitis, and Sporadic Creutzfeldt - Jakob Disease

Aryan Verma, MS, BS — **Abstract 11**
Effects of Caffeine on Ventilatory Response and Arterial $PaCO_2$ During Hyperbaric Exercise Following Sleep Deprivation

Polina Vertegel, BS — **Abstract 27**
Grade 2 Meningiomas: Insights From an Institutional Cohort and the Current Literature

Waliya Waheed, BS — **Abstract 23**
Disparities in Health-Risk Behaviors and Adverse Childhood Experiences Among Cancer Survivors

Sarah Walker — **Abstract 113**
Time to Surgical Repair and Postoperative Infection in Isolated Open Mandibular Fractures: Background and Study Protocol

ORAL SESSIONS 1 & 2

S1: 1 PM - 2 PM
S2: 4:15 PM - 5 PM
(C. Dan Adams Lecture Hall)

ORAL SESSION 1

(by order of appearance)

Alanna Aga, BS — **Abstract 1**

Exploring Why Acanthamoeba Keratitis is More Common in Contact Lens Wearers

Katherine Fulmer, BS — **Abstract 8**

Beyond Survival: A Pilot Study of Remote Follow-up Feasibility and Evaluation of Psychosocial Factors in Long-Term Stroke Recovery

Carter Gentry, BS — **Abstract 41**

Assessing the Effects of a Quality Improvement Protocol on Pediatric Hypertension Referrals and Diagnostic Outcomes

Matthew Kim, BS, MBS; Chloe Everard, BS — **Abstract 56**

Age-Dependent Differences in ASES and SANE Scores After Rotator Cuff Repair: The Role of Preoperative Scores and Tear Size

Cooper Schneider, BS, BA — **Abstract 80**

Does Size Matter? A Matched Comparison of 400-µm and 600-µm Holmium Laser Fibers During HoLEP

ORAL SESSION 2

(by order of appearance)

Brooke Olin, BS — **Abstract 5**

Differential Risk Factor Profiles by Sex in Acute Ischemic Stroke Patients Receiving Dual Antiplatelet Therapy

Allison Phelps, BS — **Abstract 40**

Improving Menopause Care Through Resident Education: A Standardized Menopause Educational Module for Resident Trainees

William Phipps, MBA, BA — **Abstract 104**

H pylori-negative Chronic Active Gastritis: Pathologic Diagnosis, Etiology, Diagnostic Methods, and Follow-up

Nicole Sopala, BS — **Abstract 59**

Improving Conceptual Understanding in Immunology with AI-Generated Practice Questions: Development and Evaluation Study

Elizabeth Tamura, BS — **Abstract 66**

Thulio Versus Moses 2.0: A Single-Institution Comparison of Perioperative Outcomes in Endoscopic Enucleation of the Prostate

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.

We would also like to thank the Peabody Foundation, and all other donors for their generous support of our medical students.

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.

Special acknowledgements to all the amazing teams at SOMG, especially the SOMG Communications team, our student research representatives and the Symposium Organizing Committee.