



Children'sSM
Healthcare of Atlanta



EMORY
UNIVERSITY

8th Annual Pediatric Early Career Researcher Conference

Friday, May 15, 2026

**Children's Healthcare of Atlanta Support Center
Atlanta, Georgia**

**Conference
Program &
Schedule**



Sponsored by the Atlanta Pediatric Scholars Program (K12 HD072245)

WELCOME FROM OUR CO-CHAIRS

Dear Colleagues,

Welcome to the 8th Annual Pediatric Early Career Researcher Conference. We are excited to have you join us for a day dedicated to showcasing the incredible scope of child-health research taking place across Emory University, Children's Healthcare of Atlanta, and our partner institutions.

This year marks an important milestone for the conference as we partner for the first time with Residents and Fellows Research Days, further strengthening the connection between our clinical and research communities. We are also proud to host the conference for the first time at Children's Healthcare of Atlanta, reflecting the continued growth and collaboration across our pediatric research and clinical spaces.

We received a record 118 abstracts representing all stages of training and early career development, from undergraduate students to assistant professors. These projects span the full spectrum of child-health research, including basic science, translational, clinical, outcomes, community-engaged, data science, and population health research. Throughout the day, attendees will have the opportunity to engage with 10 oral presentations, 34 rapid-fire presentations, and 104 poster presentations highlighting the innovation and dedication of our early career researchers.

We are honored to welcome Dr. Shari Barkin as this year's keynote speaker. Dr. Barkin is a board-certified pediatrician, internationally recognized researcher, and leader in community-engaged pediatric research. Her work has focused on behavioral interventions, health equity, and improving child health outcomes through partnerships with families and communities. She currently serves as Pediatrician-in-Chief at Children's Healthcare of Atlanta and George W. Brumley Jr. Professor and Chair of the Department of Pediatrics at Emory University School of Medicine.

In addition to the scientific sessions, we encourage everyone to participate in the networking and poster sessions throughout the day. Your engagement, questions, and encouragement are invaluable in supporting our trainees, fellows, residents, students, and junior faculty as they develop their careers in child-health research.

Thank you for being part of this important event and for supporting the future of pediatric research. We hope you leave inspired by the science, collaboration, and community represented throughout today's conference.



Satheesh Chonat, MD

Conference Co-Chair

*Associate Professor of Pediatrics,
Hematology*

*Director, RBC Disorders and
Thrombotic Microangiopathies
Program*

*Emory University School of
Medicine*

Children's Healthcare of Atlanta



Stacy Heilman, PhD

Conference Co-Chair

*Associate Professor
Vice Chair for Research
Operations*

Department of Pediatrics

*Emory University School of
Medicine*

*Children's Healthcare of
Atlanta*



Claudia Morris, MD, FAAP

Conference Co-Chair

*Professor of Pediatrics and
Emergency Medicine*

*The Wilbur Fisk Glenn Jr.
Distinguished Faculty Chair for
Clinical & Translational Research*

*Research Director, Division of
Pediatric Emergency Medicine*

*Director, Center for Clinical and
Translational Research*

Emory University School of Medicine

Children's Healthcare of Atlanta



Patricia Zerra, MD

Conference Co-Chair

*Assistant Professor,
Pathology/Laboratory Medicine
and Pediatrics*

*Emory University School of
Medicine*

*Assistant Medical Director, Emory
Special Coagulation Laboratory*

*Attending Physician, Aflac Cancer
& Blood Disorders Center*

Children's Healthcare of Atlanta

ABOUT OUR KEYNOTE SPEAKER



Shari Barkin, MD, MSHS

*Pediatrician-in-Chief
Children's Healthcare of Atlanta
George W. Brumley Jr. Professor and
Chair of the Department of Pediatrics
Emory University School of Medicine*

Shari Barkin, MD, MSHS, serves as Pediatrician-in-Chief for Children's Healthcare of Atlanta and George W. Brumley Jr. Professor and Chair of the Department of Pediatrics at Emory University School of Medicine and Executive Director of the Pediatric Institute. In her multiple roles, Dr. Barkin drives clinical excellence and innovation for medical specialty programs and guides Children's academic missions of research and teaching. She directs division chiefs at Children's who oversee more than 22 medical specialties and guides more than 45 pediatric physician training programs.

Dr. Barkin is a board-certified pediatrician specializing in academic general pediatrics and health services research. In 2021, she was elected to the National Academy of Medicine. She is an international expert in the field of behavioral interventions and community-engaged pragmatic randomized controlled trial (RCT) research. She completed the longest pediatric obesity prevention pragmatic randomized controlled trial for underserved preschool age children. In 2008, she founded the Nashville Collaborative, an academic-community partnership to develop and test two generation obesity prevention and treatment strategies. More than twenty studies have been launched through this partnership since its inception.

Over the past 20 years, her studies have demonstrated that behavior change appears to be non-linear and works differently for different sub-groups. She examines the interaction of genetics, behavior, and environment at sensitive periods of childhood development. She developed one of the only community behavioral interventions for Latinx preschool-age overweight/obese children that effectively reduced BMI, a program now implemented in recreation centers nationally. Her success was due to the novel integration of the science of social networks as an integral part of her behavior change interventions. Her findings challenge conventional wisdom regarding obesity prevention in underserved populations, paving the way for new directions to address this complex issue that disproportionately affects under-represented minority populations.

Dr. Barkin has authored more than 130 manuscripts and has been consistently grant funded for more than 25 years. Over the course of her career, she has mentored more than 100 mentees and has been recognized with a number of honors and awards—including serving on the Institute of Medicine's Board of Children Youth and Families (2010-2017) and being selected as Pediatrician of the Year in Tennessee (2018) and the National Research Award from the Academic Pediatric Association (2019). She was nominated by the Secretary of Health and Human Services to serve on the National Institutes of Health (NIH) National Advisory Child Health and Human Development Council from 2020-2024. She serves as President of the Board of Trustees for the International Pediatric Research Foundation (2024-2026) and is Past-President of the Society of Pediatric Research (2016-2017).

Prior to joining Children's Healthcare of Atlanta, Dr. Barkin served as the Division Chief of Academic General Pediatrics at Vanderbilt University Medical Center and then served as Physician in Chief of the Children's Hospital of Richmond at Virginia Commonwealth University (VCU) and Chair of the Department of Pediatrics at VCU School of Medicine. She enjoys music, dance and yoga, and spending time with her family.

MORNING AGENDA

Time and Location	Presentation
7:15 am	Conference Arrival & Check-In
	Morning Poster Session & Continental Breakfast
<p data-bbox="164 436 354 464">8:00 - 9:00 am</p> <p data-bbox="164 499 342 527">Rooms: Multiple</p>	<p data-bbox="488 436 634 464">Room: TBD</p> <p data-bbox="488 489 1122 516">Research Area: Cardiac Bioengineering & Platforms</p> <ol data-bbox="488 541 1433 1108" style="list-style-type: none"> <li data-bbox="488 541 1328 604">1. <i>SLC25A1 Loss Alters the Cardiac Proteome During Postnatal Metabolic Maturation</i> Nahum Arefeayne, BS (MD/PhD Student) <li data-bbox="488 627 1433 690">2. <i>Very High Donor-Derived Cell-Free DNA in Pediatric Heart Transplant Recipients</i> Temitope Elutilo-Ayoola, BA, MD (Medical Resident) <li data-bbox="488 714 1406 810">3. <i>Outcomes of Allosensitized Pediatric Patients Supported by Ventricular Assist Devices: A Single-Center Retrospective Study</i> Mats Steffi Jennifer Masilamani, MD (Medical Fellow) <li data-bbox="488 833 1369 930">4. <i>Isolated Polyvalvular Heart Disease Associated with a TAB2 Variant: Expanding the Phenotypic Spectrum of TAB2-Related Cardiovascular Disease</i> Paula Patel, MD (Medical Resident) <li data-bbox="488 953 1433 1016">5. <i>Identifying gaps in prenatal counseling of single ventricle disease</i> Brenda Shen, MD (Medical Resident) <li data-bbox="488 1039 1409 1102">6. <i>Evaluation of Intermediate Cardiac MRI Findings in Children and Young Adults with Acute Myocarditis</i> Karin Videlefsky, MD (Medical Resident) <p data-bbox="488 1167 1084 1194">Research Area: Gastrointestinal, Hepatic & Renal</p> <ol data-bbox="488 1220 1422 1971" style="list-style-type: none"> <li data-bbox="488 1220 1382 1316">7. <i>Successful JAK Inhibition Treatment of Very Early Onset Inflammatory Bowel Disease Associated with A De Novo Monogenic Mutation in CUL3</i> Caitlin Diefendorf, BS, MD (Medical Resident) <li data-bbox="488 1339 1422 1436">8. <i>Glycogen Storage Diseases Type X (GSDX): A New Case and Comprehensive Literature Review of Clinical, Biochemical, and Molecular Features</i> Yutaka Furuta, MD (Medical Fellow) <li data-bbox="488 1459 1422 1556">9. <i>SEMMA Study: Stress Microbiome and Metabolome in Inflammatory Bowel Disease, A Preliminary Analysis of Longitudinal Psychological Data in Patients with IBD</i> Meghana Gaini, MD (Medical Fellow) <li data-bbox="488 1579 1373 1642">10. <i>Imaging Phenotypes of Pediatric MASLD Using Quantitative MRI</i> Gregory Jordan, MD (Junior Faculty) <li data-bbox="488 1665 1360 1761">11. <i>Chronic Feeding Disorder in Patients with Eosinophilic Esophagitis: A Descriptive Study of a Novel Population</i> Annalyse Kohley, BA, MD (Medical Fellow) <li data-bbox="488 1785 1312 1848">12. <i>Acute Kidney Injury and Demographic Differences in Pediatric Acute Gastroenteritis</i> Daniel Rose, MD (Medical Resident) <li data-bbox="488 1871 1390 1967">13. <i>Depression, Anxiety and Stress Among Caregivers of Children with Chronic Kidney Disease and its Impact on Kidney Failure Treatment Decisions: A Cross-Sectional Survey Study</i> Abigail Schnaith, MD (Medical Fellow)

14. Autoimmune Hepatitis and Rheumatologic Disease: An Underrecognized Challenge to Remission? Kristen Solomon, MD (Medical Fellow)

15. Contrast-enhanced Colosonography for Evaluation of Anorectal Malformations in Children Hongmin Xu, MD (Medical Fellow)

15B. TNF- α and IFN- γ Disrupt Epithelial Cell Mitochondrial Function and GLUT1 Localization During Active Crohn's Disease Irina Geiculescu, MD (Medical Fellow)

Research Area: Neurodevelopment & Autism Interventions

16. Exploring VB-MAPP Skill Profiles as Predictors of Speech Generating Device Proficiency in Autistic Children Caitlin Callahan, BS, MS

17. Adapting a Caregiver Well-Being and Behavioral Intervention for Autistic Children in Western Kenya: Development of a mHealth Peer-Delivered Program Kristin Fautleroy-Love, MBBS (Junior Faculty)

18. Understanding the Implementation Challenges and Strategies of EarliPoint in an Integrated Primary Care Service Setting Alexa Gonzalez Laca, MPH (Clinical Research Coordinator)

19. Evaluation of Georgia's ECHO Autism: Primary Care Early Diagnosis Training Model Justin Kim, BS (Predoctoral Fellow)

20. Anxiety-Related Differences in the Assessment of Autism Symptomatology Alexander Kolios, BS (Predoctoral Fellow)

21. An Evaluation of Backward Chaining to Teach a Mand Topography Using a Speech Generating Device (SGD) to a Child on the Autism Spectrum Kristin OGuinn, PhD (Junior Faculty)

22. Visual Memory Strengths and Verbal Recall Challenges in Children: Insights from EPMLT Mitchell Tuey (Undergraduate Student)

Research Area: Oncology & Cellular Therapy

23. Symptom Profiles and Associated Biopsychosocial Risk Factors during Pediatric Cellular Therapy: A Secondary Analysis Mays Basha, PhD (Postdoctoral Fellow)

24. Single Institution Analysis of Structural Variants of Multifocal Wilms Tumor Shana Burstein, MD (Medical Fellow)

25. Eculizumab as a Therapeutic Strategy for Severe Hyperhemolysis and Organ Dysfunction in Sickle Cell Disease Ronak Dave, MD (Medical Fellow)

26. Association Between BMI at Diagnosis and Development of Anorexia in Children Undergoing Treatment for Acute Lymphoblastic Leukemia Rebecca Haber, BA, DO (Medical Resident)

27. Patterns of Clinical Trial Availability and Enrollment in Adolescents and Young Adults with Hodgkin Lymphoma at Affiliated Pediatric and Adult Cancer Centers Joshua Muniz, MD (Medical Fellow)

28. Utilizing PTK7-directed CAR gamma delta T cells to target T-cell acute lymphoblastic leukemia Austre Schiaffino Bustamante, BS (PhD Student)

29. Patterns of Neuropathy Trajectory During Therapy for Childhood Acute Lymphoblastic Leukemia **Tyler Vajdic, MD, MS** (Medical Resident)

30. Procedural Sedation Outside the Operating Room in Pediatric Hematopoietic Stem Cell Transplant Patients **Heather Xiao, MD** (Medical Resident)

Room: TBD

Research Area: Pulmonary, Respiratory Support & Cystic Fibrosis

31. SARS-CoV-2 Priming Exacerbates Influenza Severity and Mortality **Meenakshi Kar, PhD** (Postdoctoral Fellow)

32. Signaling Modulation in *M. tuberculosis*-Infected Human Macrophages: A Comparison of Standard and Airway-Conditioned Models **Nola Pickering** (Undergraduate Student)

33. Characterization of Ventilator-Associated Tracheitis and Ventilator-Associated Pneumonia in Mechanically Ventilated Infants in a Level IV NICU **Grace Shin, BA, MD** (Medical Resident)

34. Making sense out of nonsense: Rescuing cystic fibrosis-causing variants lost in translation **Ashlyn Winters, BS** (Research Specialist)

Research Area: Public Health, Equity & Care Delivery

35. Increasing Utilization of the General Movements Assessment in the NICU for Early Identification of Abnormal Movement Patterns: A Quality Improvement Initiative **Rachel Botbyl, MD, MSCR** (Medical Resident)

36. Pediatric Bag Mask Ventilation Teaching Using Artificial Intelligence for Simulation and Debriefing: Feasibility Study **Jenna Gorbatkin, MD, MEd** (Medical Fellow)

37. Pediatric Abscess Management: Who Gets Poked? **Paul Menk, MD** (Medical Fellow)

38. Pulmonary Artery Pulsatility Index Score in the Adult Congenital Heart Disease Population: A Hemodynamic Marker of Significance? **Arslan Zahid, MD** (Medical Resident)

39. School-Based Mental and Behavioral Health Referrals to the Pediatric Emergency Department **Hannah Zwiebel, MD, MPH** (Medical Resident)

40. Improving Bystander CPR Self-Efficacy in Under-resourced Communities Through Experiential Training of Aspiring URiM Health Care Trainees **Ingrid Frydson, MD, FAAP** (Medical Fellow)

41. Complement Inhibition in Pediatrics: A Comprehensive Single-Center Analysis **Sara Graciaa, MSN** (Pediatric Nurse Practitioner)

42. Lockboxes for Little Lives: Implementing Firearm Screening for Families of Toddlers in the Pediatric Inpatient Setting **Heather Hirsch, MD, MPH** (Medical Fellow)

Room: TBD

Research Area: Reproductive, Adolescent & Women's Health

43. *Aprepitant versus Traditional Anti-Emetic and Adjunctive Therapies for Cannabinoid Hyperemesis Syndrome in Adolescents* **Rebecca Durham, MD** (Medical Resident)

44. *Mapping the Evidence on GLP-1 Receptor Agonists for the Treatment and Prophylaxis of Metabolic Adverse Effects of Antipsychotics in Youth With Psychiatric and Neurodevelopmental Disorders: A Scoping Review* **Jessica Klein, BS** (Medical Student)

45. *The Effects of Hair-Related Care Products on Adverse Pregnancy Outcomes* **Ogugua Nwaise, BS** (Master's Student)

46. *To Study the Prevalence and Risk Factors for Prehypertension and Hypertension among Adolescents (18-19 years) at Entry Level of Professional Course* **Amrutha Reshi, MBBS**

47. *Performance of the Adnexal Torsion Prediction Score in the Pediatric Population* **Andrew Scott, MD** (Medical Resident)

48. *Ultrasound Impact on Diagnosis of Ovarian Torsion* **Andrew Scott, MD** (Medical Resident)

49. *Heart Rate Variability and Quality of Life Outcomes Following a Biofeedback-Enhanced CBT Intervention for Adolescents with IBD* **Swathi Shivaram, BS** (Clinical Research Coordinator)

50. *Emotional Abuse and Neglect as Predictors of Emotion Regulation Difficulties and Depressive Symptoms in Adolescents* **Katharine Torrey, BA** (Medical Student)

Research Area: Data Science, Methods & Biomarkers

51. *Analysis of Difficult Airway Clinical Decision Support for Pediatric Inpatient Providers* **Harrison Cowart, MD** (Medical Resident)

53. *Ventilator Data Downloads in Children and Young Adults with Central Hypoventilation Syndromes* **Niketa Raj, MD** (Medical Resident)

9:00 - 9:15 am

Break / Transition Time

Please proceed to rooms A148, A152, and A156

Time and Location	Presentation	
Welcome and Opening Remarks		
9:15 - 9:20 am Room: A148, A152, A156		Kristy Murray, DVM, PhD Chief Research Officer, Children's Healthcare of Atlanta Executive Vice Chair for Research and Professor, Department of Pediatrics, Emory University Shary and Matt Price Endowed Chair for Pediatric Research, College of Engineering, Georgia Tech
Career Development and Resources in Pediatrics		
9:20 - 9:45 am Room: A148, A152, A156		Ann Chahroudi, MD, PhD Barbara Stoll-Raymond Schinazi Distinguished Professor Vice Chair for Basic Research and Career Development Department of Pediatrics, Division of Infectious Diseases, Emory School of Medicine
Rapid-Fire (Mini) Presentations		
9:45 - 10:15 am Room: A148, A152, A156	Group 1 <ol style="list-style-type: none"> 1. Waitman Aumann, MD (Poster Session: 4:45-5:45 pm, Poster Number 79) <i>A Small Molecule Inhibitor of EYA2 Impairs Proliferation of SIX1-expressing Pediatric Leukemias and prolongs survival leukemic mice</i> 2. Brittney Baumert, PhD, MPH (Poster Session: 4:45-5:45 pm, Poster Number 63) <i>Per- and polyfluoroalkyl Substances and Temporal Changes in the Metabolome among Adolescents following Bariatric Surgery</i> 3. Tanisha Chanda, BS (Poster Session: 4:45-5:45 pm, Poster Number 86) <i>Uncovering Phenotypic Convergence Across High-Risk Autism Genes Using Forebrain Assembloids</i> 4. Afshin Heidari, MD (Poster Session: 4:45-5:45 pm, Poster Number 100) <i>Transfusion Practice Variations in Children with Sickle Cell Disease</i> 5. Ruiying Liu, PhD (Poster Session: 4:45-5:45 pm, Poster Number 68) <i>Language-Guided Infant Subcortical Segmentation with Pseudo-Supervision and Anatomical-Linguistic Discrimination</i> 6. Shilu Malakar, PhD (Poster Session: 4:45-5:45 pm, Poster Number 75) <i>Human Cortical Organoid as a Model for West Nile Virus Infection</i> 7. Karli Okeson, DO (Poster Session: 4:45-5:45 pm, Poster Number 96) <i>Utilization of a Therapy Referral Process for Adverse Childhood Experiences (ACEs) in Pediatric Emergency Department (PED) Patients</i> 8. Luke Shoemaker, BS (Poster Session: 4:45-5:45 pm, Poster Number 57) <i>A model multi-systems approach for understanding the role of the PIX pathway in cardiac muscle and dilated cardiomyopathy</i> 	

9. **Sijia Tang, PhD** (Poster Session: 4:45-5:45 pm, Poster Number 82)
The function of LBX1 in Wilms tumor
10. **Wenhao Zhang, PhD** (Poster Session: 4:45-5:45 pm, Poster Number 61)
Identifying Cardioprotective Compounds Against Carfilzomib-Induced Cardiotoxicity through High-Throughput Screening

10:15 - 10:30 am

Break

Time and Location

Presentation

Morning Oral Presentations

10:30 - 10:45 am

Room: A148, A152, A156



Erica Browne, BS

HDAC11 Inhibition as a New Therapeutic Approach to Treating Cystic Fibrosis

10:45 - 11:00 am

Room: A148, A152, A156



Hananeh Fonoudi, PhD

Cardiac Organoid Model of Left Ventricular Non-Compaction Cardiomyopathy

11:00 - 11:15 am

Room: A148, A152, A156



Jairo Fonseca, MD

Quality and Quantity: Immune Determinants of Post-Treatment SIV Control in Early-Treated Infant Macaques

11:15 - 11:30 am

Room: A148, A152, A156



Anthony Gacasan, BS

Beneficial Microbe Driven Rewiring of Metabolic Pathways in the Gut and Liver

11:30 - 11:45 am

Room: A148, A152, A156




Deborah Luessen, PhD

Developing Circuits, Lasting Consequences: Adolescent Drug Exposure and Memory

Time and Location	Activity
	Career Development Hour (Lunch with the Experts)
<p>11:45 am - 12:45 pm</p> <p>Room: A148, A152, A156</p>	<p>Early Career Grant Opportunities</p> <p>Ann Chahroudi, MD, PhD <i>Professor and Vice Chair for Basic Science, Emory University</i></p> <p>Julie Hawk, PhD <i>Director, Pediatric Research Development Core, Emory University</i></p> <p>Stacy Heilman, PhD <i>Associate Professor and Vice Chair for Research Operations, Emory Pediatrics</i></p> <p>Sarah Marie Huban, MS <i>Director, Clinical Trials, Emory University</i></p> <p>Claudia Morris, MD <i>Professor and Director of the Center for Clinical and Translational Research, Emory University</i></p> <p>Finding Collaborators and Subject Matter Experts</p> <p>Janae Brown, PhD <i>Chief Operating Officer, Connectogen</i></p> <p>Mark Mai, MD <i>Clinical Informatics, Children's Healthcare of Atlanta</i></p> <p>Stephanie Meisner, RN, BSN, CCRP <i>Director, Clinical Research, Children's Healthcare of Atlanta</i></p> <p>Katherine Pickard, PhD <i>Associate Professor, Pediatric Mentoring Committee, Emory University</i></p> <p>Jennifer Shipp, CCRP <i>Research Education Manager, Children's Healthcare of Atlanta</i></p> <p>Amanda Simpson, JD <i>Director, Research Administration, Children's Healthcare of Atlanta</i></p> <p>Manuscript Pitching, Writing, and Publishing</p> <p>Satheesh Chonat, MD <i>Associate Professor and Director, RBC Disorders and Thrombotic Microangiopathies Program, Emory University</i></p> <p>Kathryn Oliver, PhD <i>Assistant Professor, Pulmonology, Asthma, Cystic Fibrosis, and Sleep and Co-Director, CF Scholars Program, Emory University</i></p> <p>Megan Vallowe, PhD <i>Associate Director, Pediatric Research Development Core and Coordinated Pediatric Pathway Planning Office, Emory University</i></p> <p>Patty Zerra, MD <i>Assistant Professor, Pathology/Laboratory Medicine and Pediatrics and Assistant Medical Director, Emory Special Coagulation Laboratory, Emory University</i></p>

AFTERNOON AGENDA


Time and Location	Presentation
12:45 - 1:45 pm Room: A148, A152, A156	Keynote Presentation
	<p><i>“Everything all together, across time: Career vision meets scientific exploration”</i></p> <p>Shari Barkin, MD, MSHS Pediatrician-in-Chief Children’s Healthcare of Atlanta George W. Brumley Jr. Professor and Chair of the Department of Pediatrics Emory University School of Medicine</p>
Time and Location	Presentation
1:45 - 2:15 pm Room: A148, A152, A156	Rapid-Fire (Mini) Presentations
	<p>Group 2</p> <ol style="list-style-type: none"> 1. Kaitlin Hannan, MD (Poster Session: 4:45-5:45 pm, Poster Number: 65) <i>Discrepancy Between Recommended and Actual Dietary Intake For Preterm Infants Born Before 28 Weeks Gestation</i> 2. Emma Bernstein (Poster Session: 4:45-5:45 pm, Poster Number 94) <i>Opt-Out, Step Up: Transforming Adolescent HIV Screening in Emergency Care</i> 3. Austin Leach, BS (Poster Session: 4:45-5:45 pm, Poster Number: 73) <i>Antibodies produced after infection with WNV-1 have reduced neutralizing ability against WNV-2</i> 4. Maya Maarouf, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 102) <i>Sex and Age Effects on Complement Activity in Sickle Cell Disease</i> 5. Christina Michalski, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 76) <i>22q11.2 deletion syndrome is characterized by an inflammatory plasma profile and CD4 T cells skewing towards Th1/Th17</i> 6. Aiden Ford, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 90) <i>Characterizing the Effects of Sociodemographic Indicators on Caregiver Interactive Behaviors in Dyads with Infants Across the Autism Spectrum</i> 7. Martha Stewart, MD (Poster Session: 4:45-5:45 pm, Poster Number: 81) <i>Medulloblastoma Circulating Tumor Cells Differ from Primary Brain Tumor Cells</i> 8. Unnati Upadhyay (Poster Session: 4:45-5:45 pm, Poster Number: 104) <i>As a participant, you are an expert: Experiences of an integrative treatment program for teens living with sickle cell disease and chronic pain and their caregivers</i>


	<p>9. Emily Wright, MD (Poster Session: 4:45-5:45 pm, Poster Number: 98) <i>Evaluating Disparities in Pediatric Cochlear Implantation through Social Deprivation Index</i></p> <p>10. Erin Yoo (Poster Session: 4:45-5:45 pm, Poster Number: 77) <i>Ptpn11 mutations dysregulate trained immunity response in bone marrow-derived macrophages</i></p> <p>11. Justin Yoo, MD, MS (Poster Session: 4:45-5:45 pm, Poster Number: 105) <i>Optimization of stem cell fitness and mobilization using moderate transfusion and an oral anti-sickling agent in the sickle mouse model</i></p>
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2:15 - 2:30 pm	Break
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Time and Location	Presentation
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	Afternoon Oral Presentations
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<p>2:30 - 2:45 pm</p> <p>Room: A148, A152, A156</p>	 <p>Noor Alzraikat, MD <i>Secretory Phospholipase A₂ (sPLA₂): Novel Biomarker of Acute Chest Syndrome (ACS) in Sickle Cell Disease (SCD)</i></p>
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<p>2:45 - 3:00 pm</p> <p>Room: A148, A152, A156</p>	 <p>Chase Floyd, MD <i>Improving Recognition of Acute Kidney Injury in the Neonatal Intensive Care Unit</i></p>
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<p>3:00 - 3:15 pm</p> <p>Room: A148, A152, A156</p>	 <p>Kathleen Krause, PhD, MSc <i>Transforming Behavioral and Mental Health Care through Implementation Science</i></p>
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<p>3:15 - 3:30 pm</p> <p>Room: A148, A152, A156</p>	 <p>Sarah Myers, BS <i>Windows of Opportunity: Implications of Infant Twin Research on Intervention Timing</i></p>
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<p>3:30 - 3:45 pm</p> <p>Room: A148, A152, A156</p>	 <p>Nabil Saleem, MD <i>Engineering Chemotherapy-Resistant CAR T Cells for Acute Myeloid Leukemia</i></p>
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3:45 - 4:00 pm	Break
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Time and Location	Presentation
	Rapid-Fire (Mini Presentations)
<p>4:00 - 4:30 pm</p> <p>Room: A148, A152, A156</p>	<p>Group 3</p> <ol style="list-style-type: none"> 1. Dunia Hatabah, MD (Poster Session: 4:45-5:45 pm, Poster Number: 99) <i>Acute Chest Syndrome (ACS) in Children with Sickle Cell Disease (SCD) Hospitalized for Acute Pain</i> 2. Alora Colvin (Poster Session: 4:45-5:45 pm, Poster Number: 71) <i>Experimental CD8 cell depletion induces viral reactivation in ART-suppressed SIV-infected rhesus macaque infants</i> 3. Nasab Ghazal, MS (Poster Session: 4:45-5:45 pm, Poster Number 54) <i>Meclizine rescues cardiac function and mitochondrial ultrastructure by ATP- and glycolysis-independent mechanisms in a genetic model of mitochondrial energy dysfunction</i> 4. Zahra Naseh, MD (Poster Session 4:45-5:45 pm, Poster Number 103) <i>Storage-induced microerythrocyte content in red blood cell (RBC) units transfused to patients with sickle cell disease</i> 5. Carlotta Onnis, MD (Poster Session: 4:45-5:45 pm, Poster Number 69) <i>Low-Dose Chest CT Accurately Detects Airway Foreign Bodies in Children: A Retrospective Diagnostic Accuracy Study</i> 6. Young Hoon Son, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 58) <i>Photo-Driven Tissue Editing Creates In Vitro Microstructural Arrhythmia Substrates in Pediatric Cardiac Tissue</i> 7. Vani Sridhar, MS (Poster Session: 4:45-5:45 pm, Poster Number: 59) <i>A Vascularized 3D-Bioprinted Myocardial Platform for Recapitulating Pediatric Congenital Heart Disease</i> 8. Jihee Won, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 60) <i>Source-Sink Microtissues Orchestrate Cardiac Rhythm via Tuned Ion-Channel Balance in 2D and 3D Constructs</i> 9. Ran Xiao, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 93) <i>EEG Foundation Modeling for Early Prediction of Infant Motor Development</i> 10. Xinliu Zhong, BEng, MEng (Poster Session: 4:45-5:45 pm, Poster Number 70) <i>Orientation-Aware Diffusion Super-Resolution for 3T-Like Fetal MRI from Routine 1.5T Scans</i> 11. Ashley Zhou, BS (Poster Session: 4:45-5:45 pm, Poster Number: 62) <i>Circulating Extracellular Vesicle miRNA Signatures as Noninvasive Biomarkers to Predict Fontan-Associated Liver Disease in Ovine Models</i> 12. Yiyang (Tommy) Zhou, PhD (Poster Session: 4:45-5:45 pm, Poster Number: 78) <i>NGS Guided Pan Coronavirus Primer Set and top-down strategy for viral diagnostic toolkit development</i>

4:30 - 4:45 pm Room: A148, A152, A156	Announcement of Oral Presentation Award Recipients Break / Please proceed to the 16th Floor for the Afternoon Poster Session and Reception.
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Time and Location	Presentation
	Afternoon Poster Session & Reception
4:45 - 5:45 pm Rooms: Multiple	<p>Room: TBD</p> <p>Research Area: Cardiac Bioengineering & Platforms</p> <p>54. <i>Meclizine rescues cardiac function and mitochondrial ultrastructure by ATP- and glycolysis-independent mechanisms in a genetic model of mitochondrial energy dysfunction</i> Nasab Ghazal, MS (PhD Student)</p> <p>55. <i>Associations Between the Gut Microbiome and Hemodynamic Parameters in Neonates with Congenital Heart Disease</i> Anna Miele, BA (Medical Student)</p> <p>56. <i>Human iPSC-Derived Cardiac Models Enable Predictive Assessment of Tyrosine Kinase Inhibitor-Induced Cardiotoxicity</i> Gayatri Patel, MS (PhD Student)</p> <p>57. <i>A model multi-systems approach for understanding the role of the PIX pathway in cardiac muscle and dilated cardiomyopathy</i> Luke Shoemaker, BS (PhD Student)</p> <p>58. <i>Photo-Driven Tissue Editing Creates In Vitro Microstructural Arrhythmia Substrates in Pediatric Cardiac Tissue</i> Young Hoon Son, PhD (Postdoctoral Fellow)</p> <p>59. <i>A Vascularized 3D-Bioprinted Myocardial Platform for Recapitulating Pediatric Congenital Heart Disease</i> Vani Sridhar, MS (PhD Student)</p> <p>60. <i>Source-Sink Microtissues Orchestrate Cardiac Rhythm via Tuned Ion-Channel Balance in 2D and 3D Constructs</i> Jihee Won, PhD (Postdoctoral Fellow)</p> <p>61. <i>Identifying Cardioprotective Compounds Against Carfilzomib-Induced Cardiotoxicity Using 2D High-Throughput Screening and 3D Human Cardiac Spheroids</i> Wenhao Zhang, PhD (Postdoctoral Fellow)</p> <p>62. <i>Circulating Extracellular Vesicle miRNA Signatures as Noninvasive Biomarkers to Predict Fontan-Associated Liver Disease in Ovine Models</i> Ashley Zhou, BS</p> <p>Research Area: Gastrointestinal, Hepatic & Renal</p> <p>63. <i>Per- and polyfluoroalkyl Substances and Temporal Changes in the Metabolome among Adolescents following Bariatric Surgery</i> Brittney Baumert, PhD, MPH (Junior Faculty)</p> <p>65. <i>Discrepancy Between Recommended and Actual Dietary Intake For Preterm Infants Born Before 28 Weeks Gestation</i> Kaitlin Hannan, MD (Medical Fellow)</p> <p>66. <i>Exploring the Relationship Between Imaging-Related Radiation Exposure and the Gut Microbiome in Neonates with Congenital Heart Disease</i> Allison Murphy, BA (Medical Student)</p>

Research Area: Imaging & Diagnostic Tools

68. *Language-Guided Infant Subcortical Segmentation with Pseudo-Supervision and Anatomical-Linguistic Discrimination* **Ruiying Liu, PhD** (Postdoctoral Fellow)

69. *Low-Dose Chest CT Accurately Detects Airway Foreign Bodies in Children: A Retrospective Diagnostic Accuracy Study* **Carlotta Onnis, MD** (Medical Fellow)

70. *Orientation-Aware Diffusion Super-Resolution for 3T-Like Fetal MRI from Routine 1.5T Scans* **Xinliu Zhong, BEng, MEng** (PhD Student)

Research Area: Infectious Disease & Immune Dysregulation

71. *Experimental CD8 cell depletion induces viral reactivation in ART-suppressed SIV-infected rhesus macaque infants* **Alora Colvin, BS**

72. *Pediatric TB Disease Severity in the State of Georgia: A Fifteen Year Retrospective Review* **Collin Dubick, MD** (Medical Fellow)

73. *Antibodies produced after infection with WNV-1 have reduced neutralizing ability against WNV-2* **Austin Leach, BS** (PhD Student)

74. *Effects of Nirmatrelvir-Resistant Mutations in SARS-CoV-2 Mpro on Activity and Drug Efficacy* **Rachel Lee, BS** (Research Specialist)

75. *Human Cortical Organoid as a Model for West Nile Virus Infection* **Shilu Malakar, PhD** (Postdoctoral Fellow)

76. *22q11.2 deletion syndrome is characterized by an inflammatory plasma profile and CD4 T cells skewing towards Th1/Th17* **Christina Michalski, PhD** (Postdoctoral Fellow)

77. *Ptpn11 mutations dysregulate trained immunity response in bone marrow-derived macrophages* **Erin Yoo** (Undergraduate Student)

78. *NGS Guided Pan Coronavirus Primer Set and top-down strategy for viral diagnostic toolkit development* **Yiyang (Tommy) Zhou, PhD** (Research Scientist)

Research Area: Oncology & Cellular Therapy

79. *A Small Molecule Inhibitor of EYA2 Impairs Proliferation of SIX1-expressing Pediatric Leukemias and prolongs survival leukemic mice* **Waitman Aumann, MD** (Junior Faculty)

80. *Health Related Quality of Life of Pediatric Brain Tumor Survivors with a History of Hydrocephalus* **Rebekah Mekonnen, BS** (Predoctoral Fellow)

81. *Medulloblastoma Circulating Tumor Cells Differ from Primary Brain Tumor Cells* **Martha Stewart, MD** (Medical Fellow)

82. *The function of LBX1 in Wilms tumor* **Sijia Tang, PhD** (Postdoctoral Fellow)

Room: TBD

Research Area: Data Science, Methods & Biomarkers

83. *Assessing the Performance of Large Language Models for Diagnostic Reasoning for Primary Ciliary Dyskinesia in Pediatric Patients* **Kiri Diaz-Asper** (Undergraduate Student) on behalf of **Mary Ellen Fain, MD** (Medical Fellow)

84. *A Simple Approach Toward Quantifying Extracellular Vesicles From Various Cells of Origin in Complex Biofluids* **Advika Srinivasan, MS** (PhD Student)

Research Area: Pulmonary, Respiratory Support & Cystic Fibrosis

85. *Assessment of Handgrip Strength as a Potential Functional Marker of Musculoskeletal Health in Pediatric Cystic Fibrosis* **Neha Purohit** (Undergraduate Student)

Research Area: Neurodevelopment & Autism Interventions

86. *Uncovering Phenotypic Convergence Across High-Risk Autism Genes Using Forebrain Assembloids* **Tanisha Chanda** (Undergraduate Student)

87. *Aberrant microRNA Regulation and Cellular Stress in iPSC-Derived Microglia From 22q11.2 Deletion Syndrome* **Leah Cheng, BS** (Research Specialist)

88. *Establishing Developmentally Appropriate Benchmarks for Social Communication for Non-Autistic Preschoolers* **Paige Johnson, MS** (PhD Student)

89. *Evaluating Factors that Predict the Feasibility, Acceptability, and Appropriateness of Two School-based CBT Programs for Autistic Students* **Michelle Pu, BS** (Predoctoral Fellow)

90. *Characterizing the Effects of Sociodemographic Indicators on Caregiver Interactive Behaviors in Dyads with Infants Across the Autism Spectrum* **Aanya Ravichander** (Undergraduate Student)

91. *Features of Developing Saccade Control are Differentially Related to Maturation in Cortical White Matter Tracts* **Moura Saad, BA** (Predoctoral Fellow)

92. *Congenital Myasthenic Syndrome Due to Novel GFPT1 Variant Presenting with Head Drop and Visual Impairment: A Case Report* **Katharine Torrey, BA** (Medical Student)

93. *EEG Foundation Modeling for Early Prediction of Infant Motor Development* **Ran Xiao, PhD** (Junior Faculty)

Room: TBD

Research Area: Public Health, Equity & Care Delivery

94. *Opt-Out, Step Up: Transforming Adolescent HIV Screening in Emergency Care* **Emma Bernstein** (Undergraduate student)

95. *Evaluating How Interdisciplinary School Providers Preliminarily Deliver and Adapt Two Manualized Cognitive Behavior Therapy Programs for Autistic Students with Anxiety* **Nailah Islam, BS** (Research Coordinator)

96. Utilization of a Therapy Referral Process for Adverse Childhood Experiences (ACEs) in Pediatric Emergency Department (PED) Patients **Karli Okeson, DO** (Junior Faculty)

97. Language Justice for Non-English or Spanish Speaking Families on the Hospital Medicine Service **Andrew Potter, DO** (Medical Fellow)

98. Evaluating Disparities in Pediatric Cochlear Implantation through Social Deprivation Index **Emily Wright, BS, MD** (Medical Resident)

Research Area: Sickle Cell Disease & Transfusion Science

99. Acute Chest Syndrome (ACS) in Children with Sickle Cell Disease (SCD) Hospitalized for Acute Pain **Dunia Hatabah, MD** (Medical Resident)

100. Transfusion Practice Variations in Children with Sickle Cell Disease **Afshin Heidari, MD** (Postdoctoral Fellow / Clinical Research Coordinator)

101. Moving from Caregiver to Supporter: Exploring Parenting Practices and Healthcare Transition Knowledge, Needs, and Concerns Among Parents/Caregivers of Adolescents and Young Adults with Sickle Cell Disease (SCD) **David Kalter, PsyD** (Postdoctoral Fellow)

102. Sex and Age Effects on Complement Activity in Sickle Cell Disease **Maya Maarouf, PhD** (Postdoctoral Fellow)

103. Storage-induced microerythrocyte content in red blood cell (RBC) units transfused to patients with sickle cell disease **Zahra Naseh, MD** (Postdoctoral Fellow)

104. As a participant, you are an expert: Experiences of an integrative treatment program for teens living with sickle cell disease and chronic pain and their caregivers **Unnati Upadhyay, PsyD** (Postdoctoral Fellow)

105. Optimization of stem cell fitness and mobilization using moderate transfusion and an oral anti-sickling agent in the sickle mouse model **Justin Yoo, MD, MS** (Junior Faculty)

5:45 pm

Rooms: Pre-Function Area

Announcement of Poster Presentation Award Recipients / Closing Remarks

ABSTRACT BOOK

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ABSTRACT BOOK

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THANK YOU

We are extremely grateful for all our presenters, attendees, and partners who helped make this year's event an unforgettable experience! Thank you so much for being a part of it!

Please take about 5 minutes to complete our feedback survey by scanning the QR code below. We look forward to your input.

<https://bit.ly/2026-ECR-Survey>



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