



Children'sSM
Healthcare of Atlanta



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2021 Pediatric Research and
Career Development
Symposium

Tuesday, October 5, 2021

9:00 am – 5:00 pm

Program Guide

**Sponsored by the NICHD supported
Atlanta Pediatric Scholars Program, K12HD072245**

WELCOME

Dear Colleagues,

We would like to officially welcome you to our third Pediatric Research and Career Development Symposium!

Last year we expanded this early career scientist symposium to include both clinical research and basic science research. This year, we have planned for the morning session to feature basic science research, and the afternoon will highlight clinical and outcomes research. We are delighted to have our own Dr. Shannon Meeks, a pediatric hematologist/oncologist, present the keynote presentation “*Developing a Personal Playbook for Addressing Unanswered Questions in Your Field,*” which will be an inspirational presentation for clinical and basic scientists alike.

Throughout the day you will get to hear oral presentations, watch poster blitz presentations, and visit with poster presenters. We are excited to host our event this year mostly in person, with adherence to Emory’s masking and social distancing policies. We hope you enjoy learning about the exciting clinical, basic, and translational research being carried out by our emerging pediatric research talent at Emory and Children’s Healthcare of Atlanta.

Sincerely,



Clinton Joiner, MD, PhD

Symposium Co-Chair

Vice Chair for Research, Department of Pediatrics

Aflac Children’s Chair for Hematology Director, Section of Hematology, Aflac Cancer and Blood Disorders Center/Children’s Healthcare of Atlanta

Professor of Pediatrics, Emory University School of Medicine



Claudia R. Morris, MD, FAAP

Symposium 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

Co-Director, Center for Clinical and Translational Research

Emory University School of Medicine



Stacy Heilman, PhD

Symposium Co-Chair

Assistant Professor

Associate Vice Chair for Research

Emory University Dept of Pediatrics & Children’s Healthcare of Atlanta



Shannon L. Meeks, MD

Symposium Co-Chair

Pediatric Hematologist/Oncologist

Program Medical Director of Hemostasis/Thrombosis

Aflac Cancer & Blood Disorders Center

Children’s Healthcare of Atlanta

Professor of Pediatrics

Emory University School of Medicine

KEYNOTE SPEAKER



Shannon L. Meeks, MD

*Pediatric Hematologist/Oncologist,
Program Medical Director of
Hemostasis/Thrombosis,
Aflac Cancer & Blood Disorders Center
Children's Healthcare of Atlanta
Professor of Pediatrics,
Emory University School of Medicine*

Dr. Meeks is a Professor of Pediatrics, Division of Hematology/Oncology, Emory School of Medicine and the Program Director for Hemostasis/Thrombosis within the Aflac Cancer and Blood Disorders of Children's Healthcare of Atlanta. Dr. Meeks has a clinical, translational, and basic science research interest in the immune response to factor VIII in hemophilia A.

Dr. Meeks graduated with a B.S. in Mathematics from Duke University where she was selected for Phi Beta Kappa. She received her M.D. from The University of Mississippi School of Medicine where she was selected for Alpha Omega Alpha. She did her general pediatrics training at the University of Virginia before coming to Emory University for her fellowship in Pediatric Hematology/Oncology.

Dr. Meeks' research focuses on the B-cell response to the factor VIII protein. Her NIH funded lab made key observations linking the epitopes recognized by anti-factor VIII antibodies and the response to treatment. She also is investigating the mechanisms underlying the initial immune response to factor VIII. She currently leads the administrative core for the NHLBI U54 Centers to Investigate the Factor VIII Immune Response to factor VIII.

In addition to her local roles, Dr. Meeks holds or has held many roles in her field on the national and international level. She was the "Theme Leader for Hemophilia and Rare Bleeding Disorders" at the recent 2021 International Society on Thrombosis and Haemostasis Annual Meeting and finished her term as Chair of the Scientific Committee on Hemostasis of the American Society of Hematology in 2020. She is currently on the Medical and Scientific Advisory Board of the National Hemophilia Foundation and is President-Elect of the Hemostasis and Thrombosis Research Society.

MORNING PROGRAM AGENDA

Time	Presentation
9:00 - 9:15 am	Welcome - Lucky Jain, MD, MBA; Clinton Joiner, MD, PhD; Stacy Heilman, PhD
9:15 - 9:30 am	Current and Previous K12 Scholars and Accomplishments - Stacy Heilman, PhD
Basic Science Oral Presentations	
9:30 - 9:45 am	 Christina Caruso, MD B-1. Stiff Erythrocyte Subpopulations Biomechanically Induce Endothelial Inflammation in Sickle Cell Disease
9:45 - 10:00 am	 Wait Aumann, MD, MS B-2. Impaired CALM-AF10 Leukemia Cell Proliferation by a SIX1/EYA2 Inhibitor
10:00 - 10:15 am	BREAK
10:15 - 11:00 am	Basic Science Poster Session/BLITZ <i>10 Poster Presentations (3-minute presentations)</i>
Basic Science Oral Presentations (continued)	
11:00 - 11:15 am	 Maria Barbian, MD B-3. Antenatal Butyrate Supplementation Reduces Postnatal Gastrointestinal Injury in a Murine Model of Colitis
11:15 - 11:30 am	 Seema Patel, PhD B-4. Differences in Non-Major Histocompatibility Complex and F8 Genes Influence the B Cell Response to Factor VIII

<p>11:30 am - 12:15 pm</p>	<p>Basic Science In-Person Poster Session</p> <hr/> <p>B-5. A 3D Bioprinted In Vitro Model of Pulmonary Artery Atresia to Evaluate Endothelial Cell Response to Microenvironment Holly Bauser-Heaton, MD, PhD</p> <p>B-6. Epigenetic Regulation of Lung-recruited Pathological Neutrophils in Cystic Fibrosis Alexandre Cammarata-Mouchtouris, PhD</p> <p>B-7. Pharmacokinetics of an Anti-Env Monoclonal Antibody Cocktail in SIV-infected ART-suppressed Rhesus Macaques Treated with the SMAC mimetic AZD5582 Amir Dashti, PhD</p> <p>B-8. T Follicular Helper Cell Expansion and Chronic T Cell Activation are Characteristic Immune Anomalies in Evans Syndrome Deepak Kumar, PhD</p> <p>B-9. Chronic Inflammation Promotes Hepatic Liver Injury in a Humanized Mouse Model of Sickle Cell Disease Adeola Michael, PhD</p> <p>B-10. Metabolic Profiling reveals Differential Platelet Mitochondrial Bioenergetics in Children with Chronic Kidney Disease Loretta Reyes, MD</p> <p>B-11. LIN28B and LIN28B-networks Regulate Growth and Metastasis in Group 3 Medulloblastoma Shubin Shahab, MD, PhD (WILL NOT BE ABLE TO ATTEND IN PERSON)</p> <p>B-12. YAP Suppresses HRK To Promote Therapy Resistance Under Tumor Environmental Stress in Neuroblastoma Jenny Shim, MD</p> <p>B-13. Enhanced Expression of MicroRNA 494 (Mir-494) Induces Fetal Hemoglobin but Diminishes Hemoglobin Production During Erythropoiesis Aisha Walker, PhD, MPH</p> <p>B-14. F5-Atlanta: A novel mutation in F5 associated with enhanced East Texas splicing and FV-short production Karen Zimowski, MD (WILL NOT BE ABLE TO ATTEND IN PERSON)</p>
<p>12:15 - 12:55 pm</p>	<p>Lunch Break – Box lunches served in tent outside of HSRB</p>
<p>12:55 - 1:00 pm</p>	<p>Announce winners for Best Basic Science Oral and Poster Presenters</p>
<p>1:00 - 2:00 pm</p>	<p>Keynote Presentation</p>
	<p><i>“Developing a Personal Playbook for Addressing Unanswered Questions in Your Field”</i></p> <p>Shannon L. Meeks, MD Pediatric Hematologist/Oncologist, Program Medical Director of Hemostasis/Thrombosis, Aflac Cancer & Blood Disorders Center Children’s Healthcare of Atlanta Professor of Pediatrics, Emory University School of Medicine</p>

AFTERNOON PROGRAM AGENDA

Time	Presentation
2:00 - 2:15 pm	Current and Previous K12 Scholars and Accomplishments - Stacy Heilman, PhD
Clinical & Outcomes Research Oral Presentations	
2:15 - 2:30 pm	 Patricia Zerra, MD C-1. Complement in Pediatric COVID-19 Infection and Multisystem Inflammatory Syndrome in Children (MIS-C)
2:30 - 2:45 pm	 Justin Yoo, MD C-2. Complement Activation during Vaso-Occlusive PainCrisis in Pediatric Sickle Cell Disease
2:45 - 3:00 pm	BREAK
3:00 - 3:30 pm	Clinical & Outcomes Research Poster Session/BLITZ <i>7 Poster Presentations (3-minute presentations)</i>
Clinical & Outcomes Research Oral Presentations (continued)	
3:30 - 3:45 pm	 Swati Bhasin, PhD C-3. Single Cell Transcriptomics Analysis Of Paired Pediatric T-ALL Samples Collected At Diagnosis And Following End Of Induction Therapy Reveals an MRD-Associated Stem Cell Signature.
3:45 - 4:00 pm	 Rachel Krieger, DO, MS C-4. Risk of Nitrous Oxide Gas Use in Children With Sickle Cell Disease and B12 Deficiency
4:00 - 4:45 pm	Clinical & Outcomes Research In-Person Poster Session <hr/> C-5. Predictors and Outcomes of Immunoglobulin Supplementation in Children with B-Cell Acute Lymphoblastic Leukemia Holly Eddington, MD C-6. Establishing Conditioned Reinforcers for Minimally Verbal Children with Autism Spectrum Disorder Kristina Gerencser, PhD, BCBA-D and Rachel Yosick, PhD C-7. Examining Intersectional and HIV-related Stigma Among Youth Living with HIV in Atlanta, Georgia Madeleine Goldstein, DO C-8. Feasibility of the Virtual Reality (VR) based Pediatric Display Enhanced Testing for Cognitive Impairment (PeDETECT) and mild Traumatic Brain Injury (TBI) tool to assess concussion in the pediatric emergency department (ED) Robert Grell, MD

	<p>C-9. Mental Health Needs in Parents of Children with Cancer: A Claims-based Analysis Ji Xu, PhD</p> <p>C-10. Clinical and Serological Responses to COVID-19 Vaccination in Children with History of MIS-C Kristy Rostad, MD</p> <p>C-11. Comprehensive Genomic Profiling of High-Risk Pediatric Cancer Patients has a Measurable Impact on Clinical Care Ryan Summers, MD, FAAP</p>
4:45 - 4:50 pm	Announce winners for Best Clinical & Outcomes Research Oral and Poster Presenters
4:50 pm	Closing Remarks

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Shannon Meeks, MD
Claudia Morris, MD, FAAP

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Tracy Willoughby
Karen Zimowski, MD



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THANK YOU

Thanks to every one of our presenters, attendees, and partners who made this year's event a truly special one!

Please take about five minutes to complete our [Feedback Survey](#). We look forward to your input.



We'll see you next year!