# NEWSLETTER

August 2025
Volume 5

GENI

CENTER FOR GASTROENTEROLOGY, ENDOCRINOLOGY, & NUTRITION INNOVATION

## In This Issue



## *From Our Director...*

I am delighted to share these updates from the GENI Center. In this issue, we highlight two new GENI members, Biplab Dasgupta, PhD, and Jason Matthews, PhD, who bring considerable experience in the study of tumor metabolism, and gut mucosal dysfunction, respectfully. GENI events kick off with a Research in Progress talk from Lisa Staimez, PhD, MPH in August. We are excited that GENI will also be hosting two external speakers in the coming months, Desiree Wanders, PhD, Chair, Department of Nutrition at Georgia State University, and Corby Martin, PhD, Director of the Ingestive Behavior, Weight Management & Health Promotion Laboratory and Director of the Human Phenotyping Core for the Nutrition Obesity Research Center at the Pennington Biomedical Research Center, Louisiana State University. GENI also welcomes the return of Parmi Suchdev, MD, MPH, FAAP from a sabbatical in Guatemala, where he served as the lead epidemiologist for the CDC Central America Office. In addition to impactful work in global health, Dr. Suchdev is an expert on childhood nutrition and micronutrient deficiencies. Pediatric obesity/metabolism-related research often involves the measurements of metabolites or metabolic pathways. I would like to call your attention to the recent re-launch of the Biomarkers Core as the Pediatrics Metabolomics & Biomarkers Core (PMBC), under the direction of Joshua Chandler, PhD. The PMBC will offer an expanded list of services. For translational research using animal models, I want to remind investigators of the availability of metabolic cages as part of the Department of Pediatrics Animal Physiology Core. Please also note the recent Accomplishments from the Feeding Lab and GENI Members. Finally, although these are particularly challenging times for biomedical researchers, I would like to remind GENI members that Obesity, Heart Disease, Diabetes, and Chronic Disease (all core GENI research themes) remain priority areas in the proposed US Department of Health & Human Services budget. Your innovative work to address the epidemic of childhood and adult obesity will continue to resonate with stakeholders for funding from Federal, State, Private and Industry sources.

~Paul


## NEW GENI MEMBER SPOTLIGHT

## Biplab Dasgupta, PhD

Dr. Biplab Dasgupta is a Professor of Pediatrics at the Aflac Cancer and Blood Disorder Center and Winship Cancer Institute. Dr. Dasgupta's laboratory is interested in understanding the mechanisms of cancer development and progression. His lab works at the interface of nutrient and energy sensing, signaling and tumor metabolism to examine genes and environment that regulate cancer development. He is also interested in molecular circuits in diabetes, obesity, and cancer.

## Jason Matthews, PhD

Dr. Jason Matthew is an assistant professor in the division of Gatroenterology, Hepatology and Nutrition. His research focuses on the molecular cell biology of inflammatory bowel disease and the factors (i.e., diet, environment, stress, and microbiome) that contribute to mucosal dysfunction. To this end, he uses a variety of molecular, biochemical, and microscopy techniques to dissect the function of the intestinal epithelium and stromal compartments.

# GENI Accomplishments

## *Distinguished Awards*

Dr. **Venkat Narayan**, GENI member and executive director of the Emory Global Diabetes Research Center, was the recipient of the *2025 Distinguished International Service in the Cause of Diabetes* awarded by the American Diabetes Association (ADA). This prestigious award recognizes his transformative global contributions to diabetes prevention and care.

GENI member Dr. **Andrew Muir** received the *2025 Outstanding Mentor Award* from the Pediatric Endocrine Society. This annual award acknowledges extraordinary skill, dedication, and years of service as a Mentor to PES junior faculty and trainees.

## *2025 National Doctor's Day*

Honorees exemplify outstanding faculty of Emory SOM who go above and beyond and are recognized for their dedication to improving the health and well-being of their patients through the care they provide, the research they conduct, and their efforts to teach and inspire learners - 3 GENI members

Dr. **Michael Gambello** - outstanding care to patients with genetic conditions.

Dr. **Barbara McElhanon** - pediatric gastroenterologist known for her exceptional bedside manner and expertise.

Dr. **Laurence Sperling** - exemplifies the art of medicine and is a model for the future generation of physicians.

## *2025 "Top Doctors" in Atlanta magazine*

Recognizes excellence in patient care - 4 GENI members

Dr. **Holly Gooding** was listed in Atlanta magazine's 2025 'Top Doctors' issue in the area of adolescent medicine.

Dr. **Andrew Muir** was listed in Atlanta magazine's 2025 'Top Doctors' issue in the area of pediatric endocrinology.

Dr. **Barbara McElhanon** was listed in Atlanta magazine's 2025 'Top Doctors' issue in the area of pediatric gastroenterology.

Dr. **Roshan George** was listed in Atlanta magazine's 2025 'Top Doctors' issue in the area of pediatric nephrology.

## *Foundation Grant Awarded*

GENI member Dr. **Jessica Alvarez** and her colleague were awarded a new foundation grant from the Cystic Fibrosis Foundation entitled *CF Exposome* to explore how the environment affects the health of people with cystic fibrosis (CF). The investigators will study different factors like nutrition, metabolism, toxins, and genetics to understand how they contribute to CF complications.

## *Publications*

Kolachala, V.L., Maddipatla, S.C…**Matthews, J.D**., and **Kugathasan, S**. Altered inflammatory mucosal signatures within their spatial and cellular context during active ileal Crohn's disease. *JCI Insight*, 2025 Mar;10(5):e171783. https://insight.jci.org/articles/view/171783.

Dr. **Jason Matthews** and Dr. **Subra Kugathasan** lead a project that looked at diseased ileal tissue from patients diagnosed with Crohn's disease and using state-of-the-art spatial transcriptomics and single cell RNA sequencing in conjunction with techniques in immunofluorescence and molecular cell biology, have identified mechanisms taking place in the intestinal epithelial cells of the ileal mucosa during inflammation.

Getting back on track to meet global anaemia reduction targets. *Lancet Haematology Commission* (accepted May 2025). Dr. **Parmi Suchdev** served as a Lead commissioner on the Lancet Haematology Commission. Amid escalating global health, nutrition, and climate crises, this Lancet Haematology Commission issues a timely call to action to revitalize global efforts to control anaemia. By addressing critical gaps in data quality, scientific understanding, implementation, and governance, the Commission aims to reshape the global response through a coordinated, multidisciplinary effort across more than 20 countries.

Reevaluating vitamin A for measles management in high-income settings. *The Lancet Regional Health Americas* (accepted June 2025). Dr. **Parmi Suchdev** is first author of this commentary that examines the current guidance on vitamin A supplementation in children with measles, focusing on its risks, benefits, and limitations in the context of high-income countries, particularly the United States. This submission is especially timely given the ongoing measles outbreaks across multiple U.S. states and increasing misinformation regarding vitamin A use in treatment. Our goal is to provide clear, evidence-based guidance for clinicians and public health professionals navigating these issues during outbreak response.

SAVE THE DATE

# GENI Events


## GENI Research in Progress

**Lisa R. Staimez, PhD, MPH**
Rollins School of Public Health, Emory University

*Population Patterns and Pancreatic Mechanisms: A Translational Lens on Type 2 Diabetes*

**Thursday, August 21, 2025 2:00 PM**
HSRB I E260 and Zoom  Register **HERE**

## GENI Seminar

**Desiree Wanders, PhD**
Associate Professor and Chair, Department of Nutrition
Byrdine F. Lewis College of Nursing & Health Professions
Georgia State University

*Obesity Treatment Today: Progress, Gaps, and Future Directions*

**Thursday, October 16, 2025 2:00 PM**
HSRB I E260 and Zoom  Register **HERE**

## GENI Seminar

**Corby Martin, PhD**
Professor
Ingestive Behavior
Pennington Biomedical Research Center
**Thursday, December 11, 2025 2:00 PM**
HSRB I E260 and Zoom

***GENI Research in Progress seminars:***
September 11, HSRB I E260, 2:00pm - TBD
November 13, HSRB I E260, 2:00pm - TBD

In case you missed the last GENI RIP seminar by Helaina Huneault:
4/17/2025 GENI Research in Progress - Huneault

# Back from Sabbatical

## Parminder Suchdev, MD, MPH, FAAP

GENI member, Dr. **Parmi Suchdev**, has recently returned to Emory from sabbatical in Guatemala. Dr. Suchdev is a professor in the Department of Pediatrics at the School of Medicine, Hubert Department of Global Health at the Rollins School of Public Health, and the Nutrition Health Sciences Program at the Laney Graduate School. He is also a practicing pediatric hospitalist at Children's Healthcare of Atlanta (Hughes-Spalding).

**Equity, Epidemiology, and Diplomacy: Reflections on a Transformative Sabbatical in Guatemala**

From 2022 to 2025, I had the distinct honor of serving as the lead epidemiologist for the CDC Central America Office based in Guatemala. This sabbatical was a unique opportunity to deepen my commitment to public health science, health equity, global partnerships, and diplomacy—while also experiencing immense personal growth for both me and my family.

At the heart of this work was the mission of CDC Central America which I was proud to help shape:
"To strengthen public health systems and advance global health security through strong partnerships and scientific innovation. Our vision is a healthier, safer world where Americans and people worldwide can effectively prevent and respond to public health threats."

This mission shaped every facet of my work, from research and capacity building to interagency diplomacy. The experience was both professionally enriching and personally meaningful. Here are four major pillars of my time in Guatemala:

**Advancing Health Equity Across the Region**

I led the development of the CDC Central America Health Equity Strategic Plan, a framework to ensure public health programs better serve all populations, especially the most vulnerable. This included launching an Indigenous Health Equity Webinar Series to amplify community voices and improve engagement in U.S. government–supported health efforts. As a founding member of the U.S. Embassy Guatemala DEIA Council, I helped foster equity-centered collaboration across U.S. agencies. These efforts were recognized with multiple honors, including the CDC Shepard Science Award for the top paper in Health Equity Science, the CDC Global Health Center Director's Award for Building DEIA Collaborations, and the U.S. Department of State Meritorious Honor Award for strengthening COVID-19 vaccination efforts in underserved areas.

**Mentorship and Local Capacity Building**

Investing in people was central to my mission. I supervised five locally employed CDC epidemiologists and mentored multiple fellows, trainees, and Ministry of Health staff. This helped build lasting technical capacity within Guatemala's public health system. I was humbled to receive a second U.S. Department of State Meritorious Honor Award, recognizing my scientific leadership and dedication to mentorship—a role I hope to continue back at Emory. *(continued on next page)*

# Back from Sabbatical (*cont'd*)

## Parminder Suchdev, MD, MPH, FAAP

**Academic and Research Leadership**

Despite being based in the field, I remained highly engaged in research and scholarship while also returning to Atlanta quarterly for clinical work. I secured nearly $3 million in external grant funding, was appointed a lead Commissioner for the Lancet Haematology Commission on Anemia, delivered presentations on global health security in both scientific and policy forums, and contributed to several high-impact publications, including a chapter in the CDC Yellow Book. These efforts reinforced the value of field-based experience in supporting academic rigor and extending one's impact beyond the walls of academia or the hospital to influence global policy and practice.

**Building Skills in Health Diplomacy**

My sabbatical also provided a crash course in diplomacy and interagency leadership. I participated in U.S. Embassy Guatemala country team leadership meetings, contributed to national policymaking as a member of Guatemala's Immunization Advisory Committee (CONAPI), and collaborated closely with the Ministry of Health on COVID-19 and routine vaccination guidance. I also had the opportunity to serve as a Guatemalan elections observer during a contentious election that marked a major political shift in the country and a renewed national commitment to health and public trust. These experiences sharpened my skills in health diplomacy and cross-sector collaboration—skills I will carry forward in future global health leadership roles.

**A Family Adventure—and a Stark Reminder of the Challenging Environment We Are In**

Beyond work, this was an unforgettable time for my family. My children became fluent in Spanish. My wife continued her impactful work with CDC. Together, we climbed volcanoes, played weekly ultimate frisbee, adopted a puppy, and made enduring friendships with diplomatic families from around the world. These personal milestones enriched our lives immeasurably. However, it would be remiss not to acknowledge the increasingly difficult working environment over the past several months. The cumulative effects of stop work orders, funding pauses, communication and travel restrictions, DEI policy rollbacks, and workforce reductions have created a climate of uncertainty and stress. These policy shifts not only disrupted morale and cohesion—they undermined our ability to fulfill CDC's mission in the region. The impact was personal, too, as my wife lost her job as a result of these changes, and I ultimately resigned from my position.

**Looking Ahead: Opportunities at Emory and GENI**

Now back at Emory, I am eager to build on this experience through research and mentorship, especially in partnership with colleagues in GENI working on nutrition. My future interests include collaborative research on anemia, maternal and child nutrition, and the integration of nutrition with infectious disease surveillance—both globally and domestically using electronic health records, remnant samples, and primary data collection. Through strategic collaborations, we can close data gaps in micronutrient status, evaluate the role of undernutrition in chronic disease, and optimize micronutrient interventions to improve child health outcomes and reduce health disparities. I remain deeply committed to mentorship and to supporting the next generation of global health trainees, particularly in pediatrics and public health. I welcome opportunities to collaborate with GENI members to shape the next wave of equity-driven global health scholarship and impact.

# Feeding Lab

## (GENI Special Interest Group)

Corner

Our manuscript investigating the long-term outcomes for patients who received intensive multidisciplinary intervention for chronic food refusal and feeding tube dependence was accepted for publication in the *Journal of Pediatric Gastroenterology and Nutrition - Reports*. It is a follow-up study from our prior work documenting the benefits of intensive intervention (Intensive multidisciplinary intervention for patients with feeding tube dependence and chronic food refusal: An electronic health record review. *J Pediatr* 2020;223:73-80). In the current study, we investigated the status of the patients an average of 6 years following discharge from the program. Our survey methodology provides provisional evidence that the majority of patients who completed the intensive program maintain their tube wean. Most caregivers also described their child's relationship with food as "good"; only one patient continued to participate in feeding therapy. We frame the discussion to highlight the need to build upon this work through prospective, longitudinal research to better document outcomes associated with feeding intervention.

# Pediatric Metabolomics & Biomarkers Core

The Pediatric Metabolomics and Biomarkers Core provides innovative approaches to accomplish unbiased, highly sensitive, and biologically meaningful evaluation of metabolites and metabolic pathways in a wide range of sample types. Techniques offered include high-resolution and polytargeted metabolomics, isotope tracing and fluxomics, fully quantitative targeted analysis, and metabolomic imaging. Unique to Emory's facilities, the core supports hypothesis-driven research to investigate specific biomarkers of interest and corresponding metabolomic pathways, thus supporting research in disease diagnostics, drug development, and personalized medicine.

**Subsidy Policy:** The PMBC core offers services to all researchers, but additional subsidies are available for investigators who are actively engaging in child health research. For 2025, the maximum subsidy per investigator is capped at $5,000.

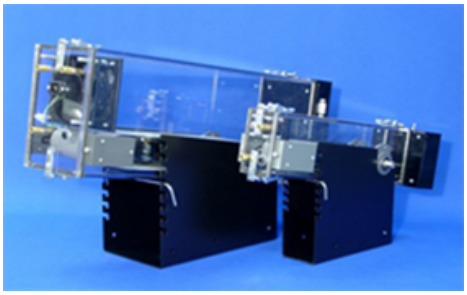
Please see the PBMC website for more information or contact GENI member Dr. **Joshua Chandler** at joshua.chandler@emory.edu for project-related inquiries and subsidy eligibility.

# Animal Physiology Core and GENI Metabolic Cages now available!

## Columbus Instruments CLAMS

## Features .....

- **Activity**
  X,Y & Z axis monitoring
- **Feeding**
  Mass monitoring
- **Drinking**
  Volume Monitoring
- **Body Mass**
  Resolves 0.1g
- **Running Wheel**
  Rotation Monitoring
- **Sleep Detection**
  Scores Events and Duration
- **Food Access Control**
  Mass & Event monitoring
- **Environmental Control**
  of Temperature and Lighting
- **Calorimetric Assessment**
  by Oxymax
- **Environmental Monitoring**
  of Temperature



**These cages are now available to researchers for a subsidized rate ($892/week/6-cage experiment). Questions? Please email rebeccah.wood@emory.edu.**

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# Resources

## GENI and Children's Publication Citation

Publications and research posters related to GENI and/or that benefitted from Pediatric Research Alliance resources should include "Children's Healthcare of Atlanta" in the Affiliations portion of the citation (appearing under the author line of the article or poster).

The proper affiliation citation is: **Center for Gastroenterology, Endocrinology, & Nutrition Innovation (GENI) of Children's Healthcare of Atlanta and Emory University Department of Pediatrics, Atlanta, GA USA**. Other examples of acceptable formats for citation are available here.

This requirement is vital to ensure recognition of our work by both Emory and Children's and applies to all Center members, whether lab-based or non-lab based. Children's has been a significant supporter of the research operations that make all of our work possible and should be acknowledged.

# Research Wows

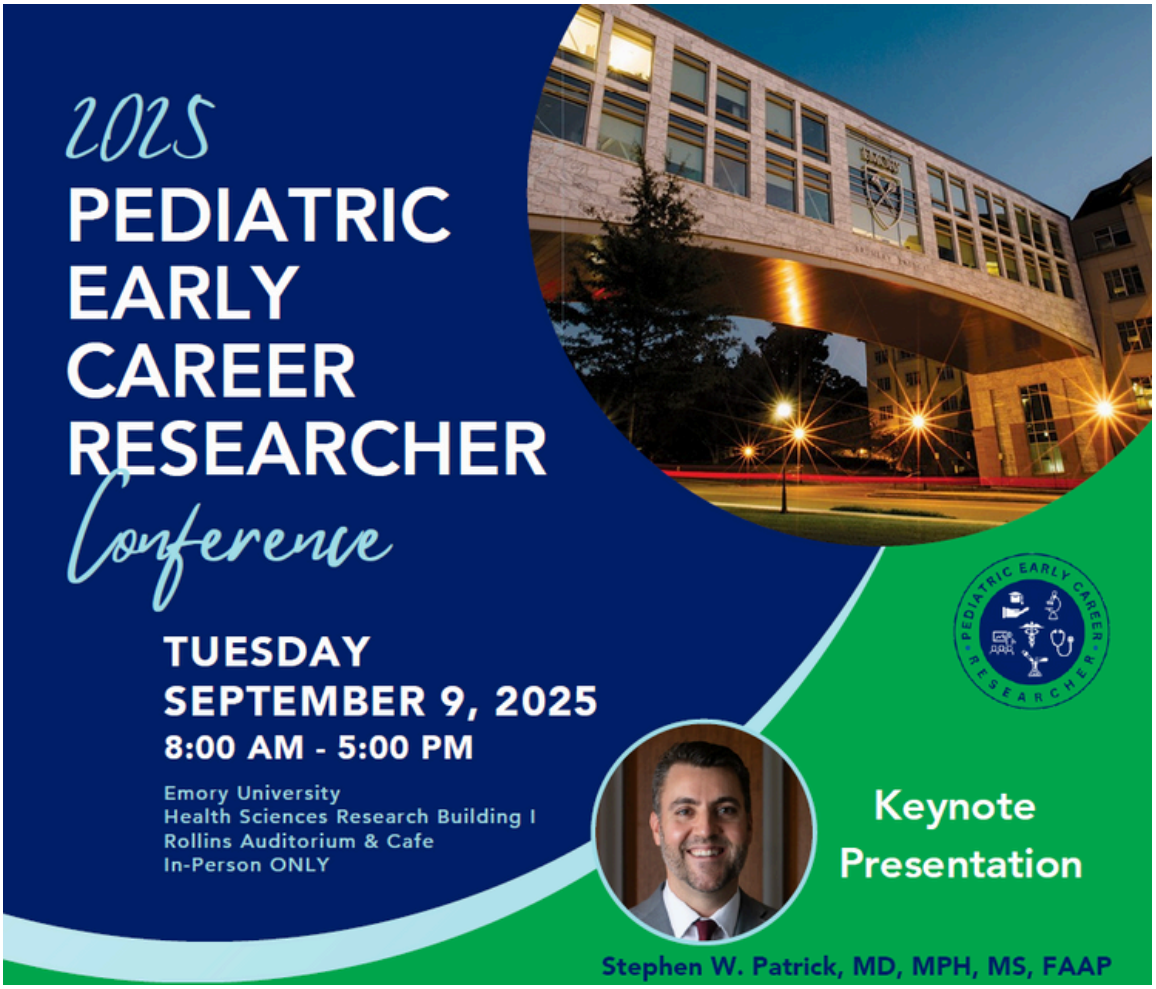

Don't forget to share your latest research achievements through our very brief "Research Wows" submission form. This information will be used for a) internal and external reporting on metrics and impact, and b) potential news and media coverage.

**"Research Wows" FAQ's:**

- ***What type of information should I share?***
  - Impactful publications that have been accepted or published
  - New, major grants that have been awarded
  - New, major professional/service awards, distinctions, or recognitions received
  - Other noteworthy research-related achievements (e.g., patents, IND, clinical trials)
- ***Who will receive this information?***
  - Pediatric research center Program Managers and Center Directors
  - Pediatric research leadership
  - Marketing and communications teams
- ***When should I share my "Research Wows"?***
  - As soon as possible! While we will accept your "Research Wows" at any time for purposes such as internal reporting, the following timing is important to keep in mind for news and media purposes:
    - Accepted for publication in a journal
    - About to receive a notice of award for funding
    - Research that has received funding and is about to start but no data has been collected yet

Click here to submit your "Research Wows": https://forms.office.com/r/Md9FCaYbTc or email Debra Hamilton, GENI Program Manager, at drhamil@emory.edu.

# Upcoming Pediatrics Events




GENI member **Dr. Brittney Baumert** was selected to give an oral presentation titled *Per- and Polyfluoroalkyl Substances May Attenuate Improvement in Glucose Homeostasis Following Bariatric Surgery*. She will present at **11:00am**.

Our April GENI Research in Progress seminar presenter, **Dr. Helaina Huneault**, was selected to give a mini- (rapid-fire) presentation and poster entitled *Clinically Distinct Metabotypes of Pediatric Metabolic Dysfunction-Associated Steatotic Liver Disease: Unsupervised Machine Learning Analysis of Children Enrolled in NASH CRN Studies*. The mini- (rapid-fire) presentations will occur **2:30 - 4:00pm**, poster session is **4:00 - 5:00pm.**

Come cheer them on!

**REGISTER HERE**

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# Pediatric Core Services

***Offering the equipment, tools, and skilled professionals to make your research faster and more impactful. From imaging and data analysis to clinical trial support, our pediatric cores provide key resources and expert support to help researchers at every step.***

## Animal Models

- Animal Physiology Core: offers services & equipment for complex technical & surgical procedures in animals. Provides access to Sysmex XN-1000V (a fully automated 5-part differential veterinary hematology analyzer) and metabolic cages for simultaneous measurement of key metabolic parameters in mice.
- CF Animal Models Core: provides murine models relevant to cystic fibrosis researchers.

## Biorepositories & Clinical Research

- Children's Clinical and Translational Discovery Core: supports investigators with specimen processing, storage, and other services important to conducting clinical trials.
- CF Discovery Core and CF Biospecimen Repository (CF-BR): utilizes the CF-BR, a storage bank of several thousand biofluids collected from patients with cystic fibrosis at varying disease states.
- Laboratory and Pathology Clinical Research Core: provides clinical laboratory testing, specimen processing, histology services, and de-identified tumor bank specimens to investigators.
- Ian's Friends Foundation Brain Tumor Biorepository: collects, cultures, and distributes pediatric brain tumor biospecimen for research studies with Children's IRB approval and patient consent.

## Biostatistics

- Pediatric Biostatistics Core: provides comprehensive expertise in statistical methodology and advanced data analysis to support the design, execution, and dissemination of studies, including grant proposals and manuscripts.

## Clinical & Data Registry

- Pediatric Heart Diseases Data Registry Core: offers access to rich registry data from surgical, catheter-based and electrophysiologic studies and interventions for multiple pediatric heart diseases.
- Children's Health Informatics Core (CHIC): provides informatics expertise to access and leverage electronic health record data for funded research, multicenter collaboration, and interventions.

## General Equipment

- General Equipment Core: offers access to select laboratory equipment to support pediatric research.

## Imaging

- Animal Physiology Core: provides advanced ultrasound as part of its services related to animal models.
- Cardiovascular Imaging Research Core (CIRC): offers non-invasive cardiovascular imaging support for investigators involved in clinical research.
- Integrated Cellular Imaging Core: provides access to cutting-edge cellular imaging technologies and technical expertise to support pediatric research.
- Medical Imaging Resources: cross-disciplinary scientific, administrative, and educational home for imaging science through Emory Center for Systems Imaging (CSI) and Children's Pediatric Imaging Research Core (PIRC).

## Research Grant Development

- Pediatric Research Development Core: offers three arms of support services to optimize researcher careers: General Resources and Services, Education and Training, and Proposal Development.

## Sample Interrogation

- Biomarkers Core: offers state of the art equipment and up-to-date technology to provide high quality analysis of biological samples to support pediatric research.
- Pediatric/Winship Flow Cytometry Core: provides cytometry services for the analysis and sorting of cells, and expert consultation for experimental design and planning.
- ADJUST Laboratory: CLIA-certified, CAP-accredited lab for validating, implementing, and helping to develop new diagnostic technologies to be used from clinical laboratory to home, with focus on accessible, reliable, and affordable diagnostics for members of all communities and economic backgrounds.

***Questions?***

For more information about our cores and usage subsidies, please scan the QR code to visit our website at https://pedsresearch.org/cores, or contact Stacy Heilman, PhD, Vice Chair for Research Operations, at stacy.heilman@emory.edu. Links to other cores also available to pediatric researchers can be found on our website.