



Children's  
of Alabama®

**UAB** MEDICINE  
PEDIATRICS

# 2017

## Residency and Fellowship Academic Annual Report

Dear Friends and Colleagues,

We are excited and honored this year to include a brief overview of some of the research initiatives of our Pediatric Residency Program as well as the Pediatric Subspecialty Programs. We are working to expand our programs across the board. We have not only grown by the number of residents and the number of patients, but we have also experienced great academic growth. We have been able to give our learners many opportunities to not only see incredible patients who teach them every day and to walk alongside exceptional faculty and staff who challenge and encourage them, but also to engage in research whether it be focused on clinical projects, quality improvement and safety initiatives or traditional bench type research. Our students, residents and fellows are seeking ways to make this world an even more wonderful place for children by being part of the change and the push to be better.

The following research reports from both our Pediatric Residency Program and our Pediatric Subspecialty Programs highlight some of the interest groups and events, educational initiatives and research accomplishments of our learners. We are fortunate to be a part of a Department of Pediatrics that values learners who want to go the extra mile to explore how they can be part of the clinical advances and research discoveries. The Founders' Fund, established in 2004 to recognize and honor the lifetime achievements of three three Pediatric Pillars of our Department – Dr. John W. (Bill) Benton, Dr. Paul A. Palmisano and Dr. Ralph Tiller – has provided excellent avenues for our residents and fellows to have a start-up fund for research, with many of these focused on quality improvement. Each year, eight to 12 projects are selected as Founders' Fund Awardees, which enables our residents and fellows to work toward improving the medical care and quality of life for our children as well as improve the education of our future pediatricians and pediatric specialists.

Our Pediatric Residency and Fellowship educational programs are fortunate to have strong support for research from the Department of Pediatrics. Our faculty is eager to plant the research seed in our learners, to work side by side with our students, residents and fellows, and to share some of their very own ideas and projects. Our faculty and staff serve as outstanding role models and mentors for our learners, and give them opportunities to experience what research is about. From their collaborative work, our residents and fellows have had the privilege of presenting their research and representing UAB on local, regional and national levels. It is such an exciting time to see a number of our residents and fellows take off and truly excel in the research arena.

Sincerely,

A handwritten signature in black ink that reads "Michele Holloway Nichols, M.D." The signature is written in a cursive, flowing style.

Michele Holloway Nichols, M.D.  
Professor of Pediatrics  
Vice Chair of Education  
Director, Pediatric Residency Program  
The Frederick W. Renneker, III, Endowed Chair in Pediatric Education

## Pediatric Education Programs



## Pediatric Residency Program

The UAB Pediatric Residency Program represents 67 pediatric residents who participate in scholarly efforts. We have three combined programs that also participate in research. Our programs include: Combined Internal Medicine/Pediatric Program (16 residents), Child Neurology (2 residents) and Combined Medical Genetics/Pediatrics (3 residents).

Research is an important part of our resident's education and is encouraged and supported by the program. While research is not a requirement of our Pediatric Residency Program, the majority of our residents have either ongoing research projects, extensive involvement in Quality Improvement projects, and/or experience in clinical case presentations. For the past 10 years, 50% of our graduates have continued into academic fellowships.

The program offers multiple opportunities for the residents to participate in research during their residency. Some of these include:

- o Pediatric Research Academic Program: research interest group that meets monthly to discuss basic research topics, set monthly goals, and network with each other as well as faculty.
- o Senior Talks: Every PGY 3 Pediatric and PGY 4 MedPeds and Peds/Genetics resident presents a 30-minute research topic at a Noon Conference throughout the year. Below are examples of topics that have been presented in 2017.
  - "Health Disparities and Your Practice" -Dr. Shannon Booker
  - "Genetic Testing in Pediatrics" -Dr. Megan Boothe
  - "Medicaid and Health Care Reform" -Dr. Mary Silverberg
  - "Pediatric Depression" -Dr. Anna White
  - "An Overview of GERD for Primary Care Provider" -Dr. Rob Sellers
  - "Inborn Errors of Metabolism" -Dr. Joy Dean
  - "So You Think You Have a Penicillin Allergy" -Dr. Baani Bawa
  - "Beyond the Language Barrier: Embodying Cultural Humility" -Dr. Andrea Wolf
  - "The Heart of a Champion: Screening for Cardiovascular Disease in Young Adults" -Dr. Stephen Clark
  - "Breastfeeding-What a Pediatrician Needs to Know" -Dr. Jamie Powell
  - "Functional Abdominal Pain" -Dr. Carter Wallace
  - "The Deuce is Loose: Chronic Diarrhea in Pediatrics" -Dr. Taylor Woodfin

- o Quality Improvement Projects: Every resident must participate in a QI project during their residency. They are able to join projects that have already been started by previous residents or create a new one. Below is a sampling of resident QI projects.
  - "Back to Boot Camp: Procedural Competence of Pediatric Residents"
  - "Adolescent Depression Screening in Primary Care"
  - "Improving Firearm Safety Counseling in Primary Care Clinic"
  - "Increasing the Delivery of Optimal Asthma Care in PCC"
  - "Infant Safe Sleep: A Medical Student Focused Educational Intervention"
  - "Out of Sight, Out of Mind: Reduction of Viral Respiratory Panels Ordered in Patients Admitted with Bronchitis"
  - "Reducing Referrals to Heme/Onc Clinic for Mid to Moderate Thrombocytopenia"
  - "Smoking Cessation Counseling: A Simulated Enhanced Curriculum for Residents to Promote Smoking Cessation Counseling"
- o Annual UAB Pediatric Science Day: Pediatric Residents can attend or present at this all-day department conference.
- o RIME (Research and Innovation in Medical Education): A 3-day long program at UAB where residents have the opportunity to present their research.
- o Founders' Fund Grant: \$1,000 research grants awarded annually to peer selected projects to help residents accomplish research goals. Below is a list of grants awarded this year.
  - "Use of Mental Health Simulation to Improve Pediatric Primary Care, Resident Reflection on Suicide Prevention and Development of Support Group"
  - "Procedural Competence of Pediatric Residents"
  - "Utilizing the Validated Pediatric Delirium Scale to Monitor Intubated and Sedated Patients in Pediatric Intensive Care Unit"
  - "Augmented Cardiac Teaching During Simulations through the Use of 3-D Printed Model of Congenital Heart Disease"
- o Attendance at national and regional meetings is supported by the Department of Pediatrics throughout the year. Below is a list of conferences our residents have attended this year.
  - Southern Society for Pediatric Research (SSPR) - 25 residents presented at last year's conference.
  - Pediatric Academic Society (PAS)
  - American Academy of Pediatrics National Conference and Exhibition (AAP-NCE)
  - North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN)
  - American Society of Hematology (ASH)
  - Pediatric Critical Care Colloquium
  - American Society of Clinical Oncology
  - Crohn's and Colitis Congress
  - Vermont Oxford Network Quality Congress

We are very proud of the research accomplishments of our Pediatric Residents. We are very grateful to the Department of Pediatrics faculty and fellows who have mentored and inspired their work.

## Pediatric Fellowship Programs



The UAB pediatric fellowship programs encompass 18 fellowship programs (16 ACGME and 2 non-ACGME programs). This represents over 60 pediatric fellows who participate in scholarly efforts.

Research and research scholarship are of utmost importance to our pediatric fellowship programs. Research activities are a requirement of the American Board of Pediatrics (ABP) as well as the Accreditation Council for Graduate Medical Education (ACGME), but many of our fellows perform at a level well above the minimum expected requirements. These efforts during fellowship are further supported by the fact that approximately 80% of our pediatric fellowship graduates go into academic medicine or seek additional training, while 20% go into private practice or other areas of interest (i.e., CDC, International Missions, etc.).

In the UAB Department of Pediatrics, we offer some innovative opportunities and programs to assist our fellows to perform at high levels of research during their fellowship training. A few highlights include:

- Annual Pediatric Science Day – Daylong conference with invited guest grand rounds speaker and moderator. Pediatric fellows, residents and medical students present their ongoing research and case presentation in platform and poster format.
- RIME (Research and Innovation in Medical Education) – A 3-day long program at UAB including invited speakers, poster presentation by residents and fellows, and a one-day educational session just for fellows.
- Dixon Fellows – A program initiated in 1988, aimed at supporting and preparing selected fellows for careers in academia. Since its inception this program has aided in the training and research efforts of 68 fellows, with 28 of these remaining as active faculty at UAB.
- T-32 Fellowship Positions – The ability to support our strongest research fellows on training grants, including, for example, most recently in the divisions of Pediatric Nephrology and Pediatric Infectious Disease.
- CHIF (Child Health Investigative Forum (CHIF) – A twice monthly conference to allow presentation of on-going research and research-related topics across all pediatric divisions. Fellows take active part in these conferences, presenting at up to 50% of the meetings.
- Fellow's Core Educational Series – A two-year curriculum for all pediatric fellowship programs with an entire year devoted to research techniques and research related topics.

Nationally and regionally our fellows present at scientific conferences including Southern Society for Pediatric Research (SSPR), American Academy of Pediatrics National Conference and Exhibition (AAP-NCE), Pediatric Academic Society (PAS) just to name a few.

Highlighting some of the grants and awards received by our Pediatric Fellows:

- Founders' Fund Grant for multiple fellows (i.e. Child Neurology and Pediatric Emergency Medicine)
- Hemostasis and Thrombosis Research Society Mentored Research Award (Pediatric Hematology & Oncology)
- St. Baldrick's Fellow Award (Pediatric Hematology & Oncology)

To give you an idea about some of the specific projects our Pediatric Fellows are involved in, below you will see some selected recent publications with the fellow's name and project title bolded:

- **Rao S**, Walters KB, Wilson L, Chen B, Bolisetty S, Graves D, Barnes S, Agarwal A, Kabarowski JH. **Early Lipid Changes in Acute Kidney Injury Using SWATH Lipidomics Coupled with MALDI Tissue Imaging.** *American Journal of Physiology- Renal Physiology.* 2016 May 15. 310(10): F1136-1147.
- Carlo WA, **Travers CP. Maternal and Neonatal mortality: Time to Act.** *Journal of Pediatrics (Rio J).* 2016 Nov – Dec. 92(6): 543-545.
- **Stoops C**, Sims B, Griffin R, Askenazi DJ. **Neonatal Acute Kidney Injury and the Risk of Interventricular Hemorrhage in the Very Low Birth Weight Infant.** *Neonatology.* 2016. 110(4): 307-312.
- Koneru A, Jolly PE, **Blakemore S**, McCree R, Lisovicz NF, Aris EA, Mtesigwq T, Yuma S, Mwaiselage JD. **Acceptance of Peer Navigators to Reduce Barriers to Cervical Cancer Screening and Treatment Among Women with HIV infection in Tanzania.** *Int Journal Gynaecol Obstet.* 2017 July. 138(1): 53-61.
- Walker MM, Novak L, **Widener R, Grubbs JA**, King J, Ochs MM, Myers LE, Briles DE, Deshane J. **PcpA Promotes Higher Levels of Infection and Modulates Recruitment of Myeloid-Derived Suppressor Cells during Pneumococcal Pneumonia.** *Journal of Immunology.* 2016 March 1. 196(5): 2239-2248.
- **Schmit, E, Poole, C, Diaz F, Hutto C. Group C and G Streptococcal Septic Shock in Two Pediatric Patients.** *Ann Pediatr Child Health.* 2017. 5(2):1128.
- **Richard KR**, Lowvorn JJ, **Oliver SE**, Ross SA, Benner KW, Kong MY. **Chromobacterium Violaceum Sepsis: Rethinking Conventional Therapy to Improve Outcome.** *American Journal of Case Reports.* 2015 Oct 19. 16:740-744.

### ACGME – APPROVED PEDIATRIC FELLOWSHIP PROGRAMS

Adolescent Medicine	Allergy-Immunology
Cardiology	Child Neurology
Critical Care	Emergency Medicine
Endocrinology	Gastroenterology
Hematology-Oncology	Hospice-Palliative Care
Infectious Disease	Neonatology
Nephrology	Pulmonary
Rheumatology	Sleep Medicine

### NON-ACGME – APPROVED PEDIATRIC FELLOWSHIP PROGRAMS

Cardiac Critical Care	Hospital Medicine
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