

Emory+Children's Pediatric Research Center

An Atlanta-based research alliance



Center for Clinical and Translational Research Newsletter

Volume I, Issue I

December 2014



Director's Welcome: Cynthia Wetmore, MD, PhD

Welcome to the inaugural newsletter for the Center for Clinical and Translational Research (CCTR)! We would like to extend a very warm welcome to all investigators, clinical staff, friends and collaborators as we celebrate the opening of our new Clinical Research Office on the Scottish Rite campus! We would like to thank all of the individuals across our Emory + Children's campuses who have worked to make this happen. We celebrated the official opening with a ribbon cutting, food and fellowship on November 6, 2014 (photos on next page). We are waiting for the installation of the workstations in the Research

Office and for the informational screen that will be posted outside the Medical Library. We hope to have everything in place by early January and have regular "office hours" for staff with expertise in clinical research, biostatistics, IRB submissions and regulatory questions.

CCTR is part of a multi-institutional research partnership among Emory, Children's Healthcare of Atlanta, Georgia Tech and Morehouse School of Medicine. We are a new Center and are putting in place infrastructure to help facilitate and support clinical research across all campuses. The next year will bring several new initiatives to the Scottish Rite campus including Research Grand Rounds, spotlights on researchers, visiting professors and, we hope, an interactive research community. We are excited to guide you to our website (www.pedsresearch.org) that will serve to inform you of new initiatives and also act as a resource for funding, clinical research support and answer questions. Please take a look and let us know what you feel is working and what may need improvement.

We look forward to working together across scientific disciplines to bring innovation to the care of our patients. Please feel free to contact Kristen Herzegh (kcoshau@emory.edu) if you have questions or would like to learn more about CCTR.

Congratulations 2015 Friends Grant Recipients

Principal Investigators	Title
Jeffery Lewis, MD	Fecal Microbiota Therapy in Children with Recurrent Clostridium Difficile Infection
Susan Palasis, MD	Advanced MRI Evaluation of Early Radiation Damage to Normal Brain in Pediatric Tumor Patients
Silvia Bunting, MD	A Novel Automated Nanoimmunoassay for PI3K/Akt/mTOR Pathway Activation and Biomarker Discovery in Pediatric Acute Lymphoblastic Leukemia
Senthil Ramamurthy, MS	Multi-planar Registration of Echocardiographic Images Using an Electromagnetic Tracking System for Determination of Aortic Wall Shear Stress

Scottish Rite Research Office

The Scottish Rite Research Office celebrated the inaugural grand opening on November 6th. The Research Office at Scottish Rite supports child health investigators throughout the planning and implantation of their research. Led by Dr. Cynthia Wetmore (Director of the Center for Clinical and Translational Research) the office provides individual consultations, biostatistical support, IRB guidance, and Study Coordinator support. The office, located on the ground floor within the medical library, is accessible to investigators around the clock. Computers and workstations are available.



To Schedule a Research Office Appointment:

Appointments may be made to meet with:

- Dr. Cynthia Wetmore
- Biostatisticians
- Research Coordinators
- IRB Staff



To make an appointment, please use the intake form located on

www.pedsresearch.org within [CCTR Center page](#)

Save the Dates: Scottish Rite Research Grand Rounds

We are excited to announce the launch of Research Grand Rounds at Scottish Rite. Please save the below dates. Details pertaining to the topics and additional logistical information will be published prior to the dates. All Rounds will run from 7:30am—8:30am in the main auditorium.

March 17	June 16	Aug 18	Nov 17
May 19	July 21	Oct 20	Dec 15



The Research Grand Rounds will provide an opportunity for Scottish Rite investigators to present results of ongoing, planned, and completed clinical and translational research. If you would like to like to present, please email Kristen Herzegh at kcoshau@emory.edu for additional details.

Ravi Patel, MD



The Center for Clinical and Translational Research proudly supports Dr. Ravi Patel by co-sponsoring his KL2 award, which funds his research project titled, "Transfusion Related Necrotizing Enterocolitis in Premature Infants." "The fellowship allowed me to move from basic to clinical research." Dr. Patel, an Emory graduate and Atlanta native, is devoted to the smallest patients. "The field of neonatology is relatively new. There are still many unknowns and opportunities for clinical research. There is great potential to continue advancements within neonatal care. Every decade the survival rates increase by a week."

Dr. Patel's broad long-term research goal is to identify and develop therapeutic interventions to decrease devastating complications of prematurity. His current research efforts are focused on two areas: 1) Identifying how optimizing caffeine therapy can improve neonatal outcomes and 2) enhancing our understanding of the epidemiology and pathophysiology of necrotizing enterocolitis (NEC).

Dr. Patel is using data recently collected from a prospective multicenter birth cohort study of almost 600 very low birth weight infants born in Atlanta to investigate the role of severe anemia and red blood cell transfusion on the pathogenesis of NEC. He is also collaborating with researchers at the Duke Clinical Research Institute and leveraging data from a large national cohort that includes 1 in 4 infants cared for in intensive care units in the US to study the use of caffeine therapy. He has benefitted from the invaluable mentorship of Dr. Cassandra Josephson, who is a Professor of Pathology and Laboratory Medicine and Pediatrics at Emory University and also the medical director of Children's Healthcare of Atlanta's Blood, Tissue, and Apheresis Services. Dr. Patel, a NIH KL2 scholar, is supported by the Atlanta Clinical and Translational Research Institute with additional support from the Emory+Children's Center for Clinical and Translational Research.

He is also leading efforts at Emory, as site principal investigator, on a multicenter randomized trial comparing the effect of a liberal versus conservative transfusion strategy on long-term survival without neurologic injury in extremely preterm infants. This trial is being conducted by the NICHD Neonatal Research Network, which Emory has been an integral part of for almost 25 years under the leadership of Dr. Barbara Stoll.



Collaboration with Georgia Tech

In December 2011 Children's Healthcare of Atlanta and the Georgia Institute of Technology established a formal relationship, backed by a joint investment of \$20 million. The goal of the relationship is to facilitate collaboration between clinicians, doctors, and researchers conducting fundamental and translational research to advance children's health and delivery of pediatric services in a broad range of research areas. The partnership combines the technological strengths of the Georgia Institute of Technology with

the clinical expertise of the nation's largest pediatric healthcare provider (Children's) and the clinical research strengths of a leading academic medical center (Emory University Department of Pediatrics).

To date three Centers of excellence have been created, including the [Center for Pediatric Nanomedicine](#), the [Center for Pediatric Innovation](#), and the [Center for Transformational Pediatric Healthcare Delivery](#). Funding of research and development activities is provided through seed grants and the Quick Wins program.

For more information please contact:

Sherry N. Farrugia

Director, Georgia Institute of Technology &
Children's Healthcare of Atlanta Partnership

sherry.farrugia@gatech.edu

or

Leanne West

Chief, Pediatric Technologies

leanne.west@gtri.gatech.edu

Funding Opportunities!! Quick Wins

Are you frustrated with a device that you use? Is there a clinical process you see that needs improvement? Do you have a brilliant idea for a system, device, or program that would make life better "For the Kids"?

Quick Wins project proposals must be submitted by teams comprised of individuals from each organization, Children's and Georgia Tech (may include academic and/or GTRI assets). The proposals must address a project that provides an answer to an unmet business or clinical need as identified by a clinician, technologist, or Children's leader. The project must be capable of delivering a workable solution (at minimum a validated "prototype") into the hands of a clinician or team within 18 months from the receipt of funds and project start. For more information, [click here](#).

Nursing Research



"It's the best job in the world." You don't need to spend all afternoon with Linda Riley, PhD, RN to understand that she's passionate about her career. As the Director of Nursing Research and Evidence Based Practice, Dr. Riley educates and mentors nurses on their critical role within research. Nursing research and evidence based practice is an exciting hands-on way for nurses to become involved in research that may directly improve outcomes for all pediatric patients. Under her guidance, nurses throughout Children's are not just providing top care to their patients, but taking their dedication to the next level. "It's rewarding to see our nurses fully engaged in all aspects of patient care. They think beyond the patient they're treating that day. They're continually focused on improving patient care for every child." Currently there are 14 active studies with nurse or allied health professionals serving as the Principal Investigator.

Dr. Riley joined Children's in 2009, just as Children's strategic roadmap highlighted the need to focus on three key areas: research, teaching, and wellness. The Nursing Strategy fosters a culture of inquiry that directly drives outstanding care. Since this time Nursing Research has executed over 50 research studies. The scope of nursing research is broad including both clinical and nonclinical studies. "The benefits of Nursing Research extend beyond the patient. We know that nursing morale and retention rates improve when the organization encourages nurses to participate in research and evidence based practice." The investment that has Children's made in Nursing Research truly represents the organization's focus on patient and employee satisfaction.

"Effect of Vibration on Pain Response to Heel Sticks on the NICU"



Kate McGinnis, Eileen Murray, and Brooke Cherven are proud recipients of 2014 Dudley Moore Research funding. "Research empowers you as a nurse," Eileen shared. "We know, as a result of evidence based science, that heel sticks are traumatic for newborns. Babies in the NICU may require multiple sticks a day. As nurses, we want to minimize discomfort. We want to do better." The randomized control trial aims to determine if placing a small vibrator behind the infant's knee while performing the heel stick will reduce pain responses. All the babies will be swaddled and provided sucrose, as the standard protocol of care. While Kate performs the heel stick, Eileen assigns a score using the Neonatal Pain Agitation Sedation Scale. From the monitor she also observes the physiological responses that indicate pain levels. In addition, IS&T staff will provide them with minute by minute vital sign data. The readings will establish the precise time it takes

for the infant's heart and respiratory rates to return to their baseline levels.

Eileen views research as a way to solve every problem. "Heel sticks are something that nurses do every day. How we do them is something we have direct control over. This research will provide a nursing solution to a nursing problem." The study, which will complete enrollment in early 2015, may change the standard protocol of care. At \$10 per vibrator the possibility that ever heel stick will be accompanied by soothing vibrations is on the horizon.

Funding Opportunity!! Dudley Moore Nursing and Allied Health Research Fund

The Dudley Moore fund provides grant funding for research proposals that will enhance patient care.

Funding Limit-\$15,000

Application Deadline- Spring: May 1, 2015 Fall: October 2, 2015

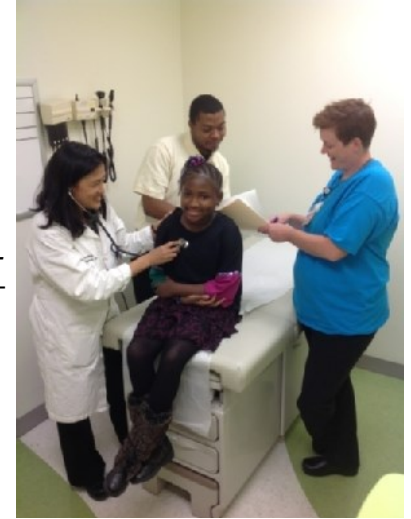
Eligibility-all Children's nursing and allied health staff who provide services at one of Children's locations are eligible; Projects must have an impact on enhanced patient care, priority is given to projects that will provide evidence to change practice

For more information, please email Linda.Riley@choa.org or [click here](#)

Research Studies by a General Pediatrician & Pediatric Infectious Disease Specialist at Hughes Spalding Children's Hospital



Lilly Immergluck, MD, MS is a general pediatrician and pediatric infectious disease specialist, who practices general pediatrics at the Hughes Spalding Children's Hospital and is Associate Professor at Morehouse School of Medicine. Dr. Immergluck's research interests are tied primarily to addressing health disparities which affect children living in urban communities. Specifically, she has been the principal investigator of a number of studies to elucidate the host immune and bacterial virulence factors which have contributed to the high numbers of community acquired antibiotic resistant *Staphylococcus aureus* (MRSA) infections seen in the US: Most of these studies are T2 translational projects and include an NIH funded multi center randomized study to look at treatment/management of children and adults who develop uncomplicated skin and soft tissue infections caused by MRSA. This four year study involves six sites across the US. Due to the strong collaborations between Morehouse, CHOA, and Emory researchers, along with resources available through Atlanta's Clinical Translational Science Institute (ACTSI), Atlanta has remained the leader in recruiting eligible study participants for all of 2013 and thus far in 2014.



Another major area of research focus has been associated with vaccine preventable conditions. Dr. Immergluck has worked with emergency medicine physicians at Emory and Pediatric Emergency Medicine Associates (PEMA) to enroll infants and children presenting to any of the three CHOA hospitals with symptoms of acute gastroenteritis. This three year study funded by the Centers for Disease Control and Prevention has demonstrated the high impact of rotavirus vaccination on decreasing rates of diarrhea and improving the outcomes (less severe diarrhea) among children who have received either complete or incomplete series of vaccinations against rotavirus.

Most recently, in order to address the growing concern on improving the safety of medical devices, Dr. Immergluck partnered with inventor and pediatric emergency room physician, Dr. Joseph Schultz to look through a series of T1 translational studies at how to reduce bloodstream infections through an intravenous line connector invented by Dr. Schultz. This device was developed to reduce the risk of 'touch contamination,' which can occur with accessing intravenous lines. This study has received funding from Georgia Tech Research Institute and recently, they are part of a multiple institution PI pilot grant awarded by ACTSI. (Dr. Immergluck is the Morehouse PI, Dr. Jesse Jacob is the Emory PI and Mr. James Rains is the Georgia Tech PI). Currently, the study is planning to observe nurses accessing these lines in a variety of different settings, including the emergency rooms at all three campuses, cardiac intensive care unit at Egleston, and intensive care unit at Emory-Midtown.

Funding Opportunity!! Atlantic Pediatric Device Consortium (APDC)

The APDC is pleased to announce its 4th annual Pediatric Device Innovation Competition. This seed grant competition is an opportunity to develop and commercialize a pediatric medical device.

Proposal submission deadline: **January 5, 2015.**

For eligibility details and additional information, please [click here](#).

Save the Date

The Beer Core: Fermenting Collaboration

January 30th from 5:00pm—6:30pm

Sponsored by: Center for Clinical and Translational Research

AND

Children's Center for Neurosciences Research



Pediatric Research Center (PRC)



PRC nurses Michelle and Jessica support Cape Day

Located at our Egleston hospital, our [Pediatric Research Center](#) (PRC) is the pediatric clinical interaction research site of the Atlanta Clinical and Translational Science Institute (ACTSI), a multi institutional partnership established to effectively translate scientific discoveries into the clinical setting.

It was collaboratively developed through a grant award from the National Institute of Health (NIH) by Emory University School of Medicine, Children's Healthcare of Atlanta, Georgia Institute of Technology and Morehouse School of Medicine. The center improves the ability of pediatric researchers to perform innovative research while providing patients and their families with increased access to leading-edge clinical trials.

The Children's Pediatric Research Center is designed to provide the necessary infrastructure for investigators to conduct pediatric clinical research. The facilities and services include:

- | | | |
|------------------------------------|---------------------------|-------------------------------|
| -Four-bed outpatient research unit | -Nursing services | -Core research lab |
| -Research pharmacy | -Bionutrition services | -Protocol design consultation |
| -Safety oversight | -Recruitment core support | -Web based scheduling |

The PRC also includes access to all of Children's clinical services and departments including radiology, cardiology, clinical laboratory, vascular access team and sedation services.

If you would like to use the PRC: please follow the [protocol submission guidelines](#) or contact:

[Stephanie Meisner, R.N., B.S.N., C.C.R.P.](#)

Funding Opportunities!! Atlanta Clinical and Translational Science Institute (ACTSI)



Pilot funding through the [Pilot Grants](#) program, [Research Technologies](#) program and [Community Engagement Research Program](#)

[Education funding](#) through Research Education, Training & Career Development (RETCD)

Featured Opportunities

[Division of Environmental Biology \(Core Programs\) \(DEB\)-Due January 23](#)

[NIAID: Non-Traditional Therapeutics That Limit Antibacterial Resistance \(R21/R33\)-LOI Due January 23](#)

[Stem Cell-Derived Blood Products for Therapeutic Use \(R01\)-LOI Due January 20](#)

[Emory University Research Committee-ACTSI Awards](#)

[Pediatric Device Innovation Competition](#)

[Short-Term Research Education Program to Increase Diversity in Health-Related Research \(R25\)](#)

[BRAIN Initiative: Planning for Next Generation Human Brain Imaging \(R24\)-Due March 18](#)

Institutional Review Board (IRB)

All research activities involving human subjects must be reviewed and approved by an IRB unless the IRB can prospectively determine that the research falls into a category of exemption established by federal regulation.

Studies that go to Emory: Collaborative research that is conducted under the supervision of a PI who is employed by Emory, excluding CHOA research (see below).

To contact the Emory IRB email irb@emory.edu or call 404-712-0720. <http://www.irb.emory.edu>

Studies that go to Children's: Collaborative Research in which the research is limited to the review of Children's medical records or collaborative research in which the research is conducted under the supervision of a PI who is solely employed by Children's, but involves the participation of other Emory-employed study personnel.

To contact Children's IRB staff: irb@choa.org or 404-785-7477. You may also [click here](#) for more information.

Georgia Tech "Office of Research Integrity Assurance" encompasses all protocol compliance information, including IRB and IACUC. To contact: <http://researchintegrity.gatech.edu/>.

**Save the Date: 2015 Pediatric Research Conference
June 22, 2015**



**Inflammation in Pediatric Health:
Improving care through innovation and technology**

June 22, 2015
Emory Conference Center Hotel

Hosted by



Information In – Results Out: How Informationists Can Guide Your Research Journey

Informationists at Children's Healthcare of Atlanta can assist researchers with the following:

- Developing strategies for literature reviews and providing interlibrary loans for hard-to-find articles
- Background literature searches for grant applications and institutional review boards
- Identifying specialized information resources or databases for research proposals
- Providing knowledge management solutions and guidance to better organized electronic information so that it can be shared easily

All electronic resources can be accessed on Careforce Connection under "Departments." Click on "Clinical Support Services" and then "Library Services." Then click on "Online Resources."

For more information on specific resources and capabilities, contact:

Kate Daniels, Scottish Rite and Egleston – 404-785-2157; Elaine Harbin (SR) 404-785-2154; Emily Lawson (Egleston) 404-785-1481