

# Emory+Children's Pediatric Research Center

## Update September 2012

### Research Resources:

The resources to the right are available to all investigators affiliated with Children's Healthcare of Atlanta (CHOA), including medical staff, Emory Department of Pediatrics (DOP) faculty and staff, and those outside of the DOP and CHOA who are members of our research centers. We encourage involvement of all those interested in research throughout our system, and provide this as a guide to resources along with our research website [www.pedsresearch.org](http://www.pedsresearch.org). Our goals are to build infrastructure and programs that serve a broad community of scientists and clinicians engaged in pediatric research, and provide training in grant writing and grant opportunities that enhance our extramural funding for all child health investigators affiliated with Children's Healthcare of Atlanta. For suggestions and comments on any of the initiatives and resources, please contact Paul Spearman, MD ([paul.spearman@emory.edu](mailto:paul.spearman@emory.edu)).

### Research Resources

#### Grant and Manuscript Support

➤ **Stacy Heilman, PhD, Grants Advocate** (404-727-4819, [stacy.heilman@emory.edu](mailto:stacy.heilman@emory.edu))

- Assistance with finding grant opportunities and connecting to collaborators
- Core laboratory assistance, supervision

#### Grants & Manuscript Editing

- Prioritized for extramural funding opportunities, program projects
- Experienced at program project management, grant and scientific paper editing
- Request form on [pedsresearch.org](http://pedsresearch.org); send to Stacy Heilman.

#### Biostatistics Core

➤ **Traci Leong, PhD, Statistician and Courtney McCracken, MS, PhD, (ABD) Data analyst/database assistance**

**Procedure:** Request form on [pedsresearch.org](http://pedsresearch.org); send to Stacy Heilman

**Priorities:** analysis for grant submission, analysis for publication, analysis for other purposes

#### Clinical studies/ coordinators

➤ **Kris Rogers, Director, Clinical Research:** (404-785-1215, [kristine.rogers@choa.org](mailto:kristine.rogers@choa.org))

➤ **Manager, Egleston campus:** **Allison Wellons** (404-785-6459, [Allison.wellons@choa.org](mailto:Allison.wellons@choa.org))

➤ **Manager, Hughes Spalding/Scottish Rite campuses:** **Beena Desai** (404-785-2269, [beena.desai@choa.org](mailto:beena.desai@choa.org))

➤ **Nurse Manager, Pediatric Research Unit (Egleston):** Nancy Ferzola ([nancy.ferzola@choa.org](mailto:nancy.ferzola@choa.org)) (404-785-0400-main number)

➤ **Medical Director, Pediatric Research Unit (Egleston):** **Howard Katzenstein** ([howard.katzenstein@choa.org](mailto:howard.katzenstein@choa.org))

**Services:** *The Research Department manages clinical coordinators and research nurses centrally, and provides training in research procedures and compliance. As needs grow or new grants are obtained, new personnel are hired who report to Kris Rogers and to the natural supervisor (grant PI, service line chief, division director).*

#### Common Equipment/ Specimen Processing Core

**2<sup>nd</sup> floor ECC 260 lab:**  
**Technical Director:**  
 ➤ **Katie Casper** ([kcasper@emory.edu](mailto:kcasper@emory.edu))

**Equipment:** Biosafety cabinet, incubators, clinical centrifuge, real-time PCR machine, standard PCR machine, multilabel plate reader, gel documentation system on order

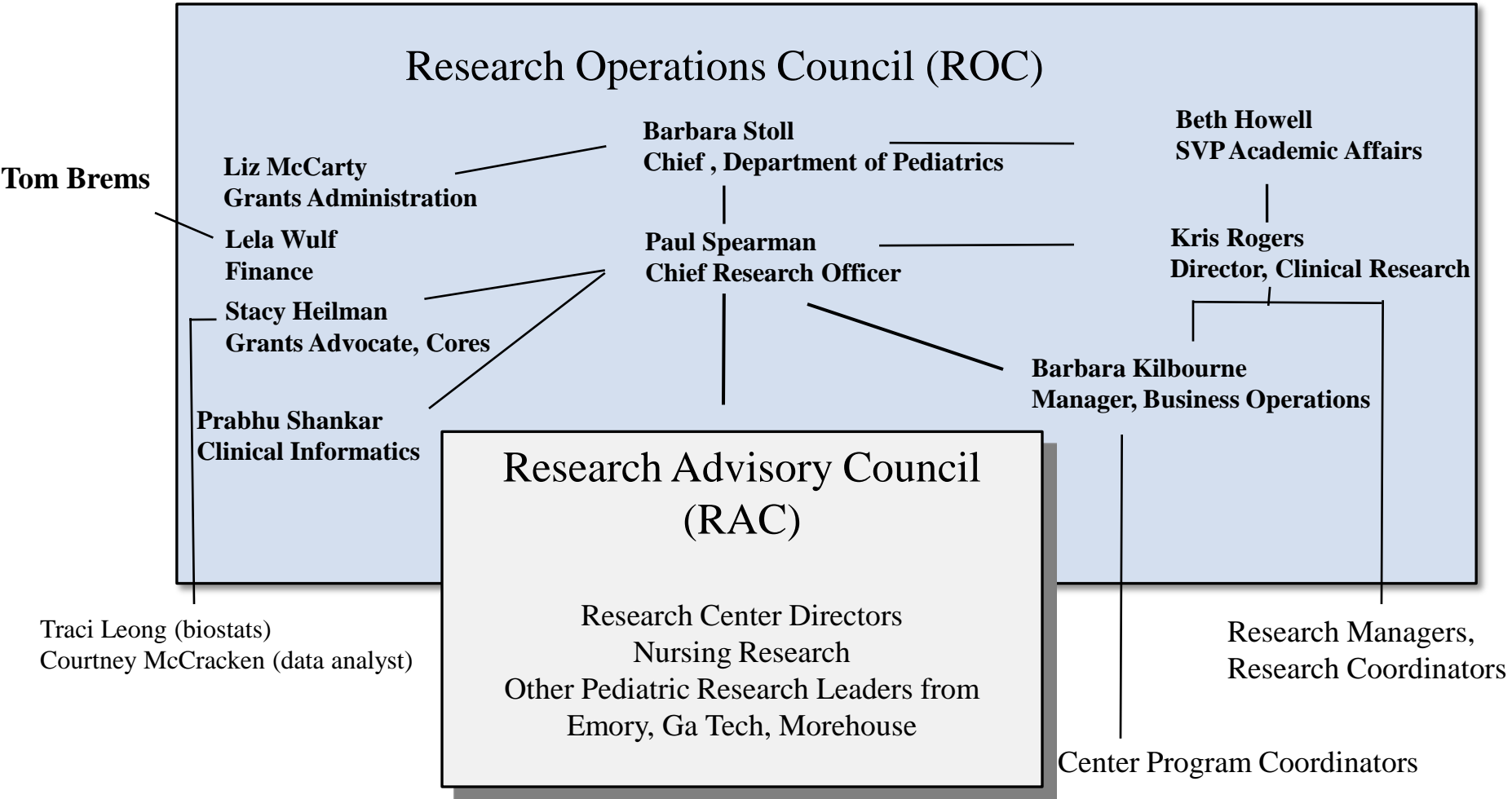
**Services:** this core provides common equipment for investigator's use, including access to benchtop space and hood space, centrifuges for clinical specimen processing

**Laboratory Specimen Processing: Egleston**

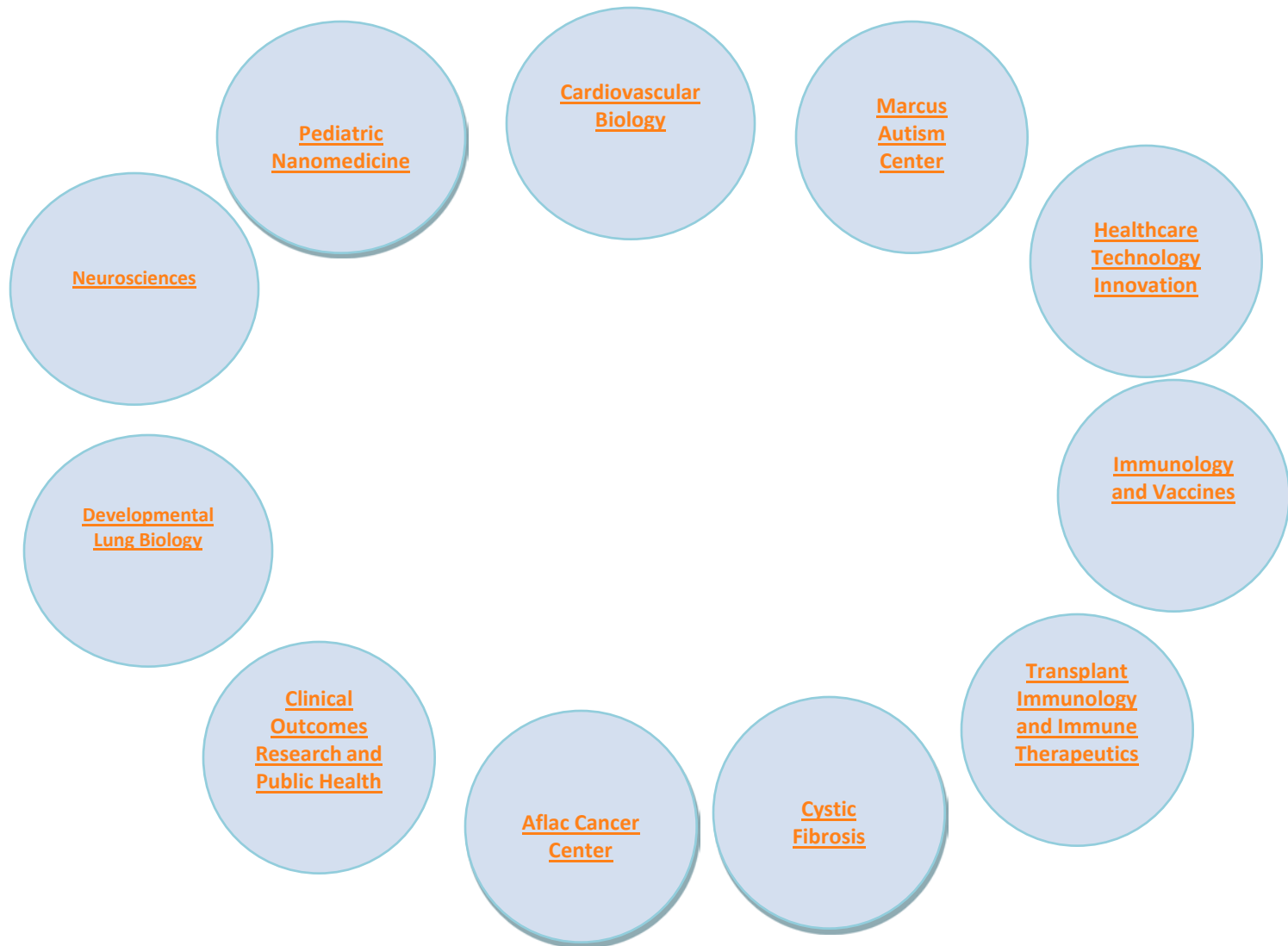
**Manager:** Diana Worthington-White (404-785-1721, [diana.worthington-white@choa.org](mailto:diana.worthington-white@choa.org))

- Clinical trials specimen processing, shipping, limited storage
- ACTSI processing lab
- Laboratory inventory management system (LIMS) available

# Research Leadership:



# Emory+Children's Pediatric Research Centers\*



\*For more information, please see center WebPages

# New Centers in Development for 2012/2013:

## Drug Discovery

Ray Schinazi, PhD, Director

The focus of the Center is on the discovery of new drugs for infectious diseases afflicting children, inflammatory conditions of childhood, and childhood cancers and blood disorders. The Vision for the Center is being drafted at present, along with more detailed plans for developing a world-class drug discovery endeavor.

## Clinical/Translational Research Center

(New leader to be recruited)

- Organize pediatric clinical research units, ACTSI relationship, research nurse/coordinator pool, and support for multicenter trials networks
- NIH and other extramural funding emphasized, as for all sponsored activities
- **Mission:** This Center will engage those clinical investigators who perform interventional clinical research, including trials of drugs, devices, and vaccines. The Clinical/Translational Research Center will be the research “home” for clinical investigators throughout the system who are not primarily epidemiologists/outcomes researchers. We envision the leader of this center leading and organizing further the central clinical research resources, including the distribution of research coordinators, managers, and data analysts. Clinical informatics will be a key part of this Center, shared with the Outcomes/Wellness Center.

# Emory+Children's Pediatric Research Center Contacts

## Center Directors:

### **Aflac Cancer and Blood Disorders Center**

**Center Director: Bill Woods, MD**

[william.woods@choa.org](mailto:william.woods@choa.org)

Program Coordinator: Linda Campbell  
[linda.campbell@emory.edu](mailto:linda.campbell@emory.edu)

### **Center for Cardiovascular Biology**

**Center Director: Mary Wagner, PhD**

[mbwagne@emory.edu](mailto:mbwagne@emory.edu)

Program Coordinator: Shantisa Fulgham  
[shantisa.fulgham@choa.org](mailto:shantisa.fulgham@choa.org)

### **Children's Center for Clinical and Translational Research**

**Center Director: TBN**

Program Coordinator: Jennifer Kenny  
[jennifer.kenny@choa.org](mailto:jennifer.kenny@choa.org)

### **Center for Cystic Fibrosis Research**

**Center Director: Nael McCarty, PhD**

[namccar@emory.edu](mailto:namccar@emory.edu)

Program Coordinator: TBN

### **Center for Developmental Lung Biology**

**Center Director: Lou Ann Brown, PhD**

[lbrow03@emory.edu](mailto:lbrow03@emory.edu)

Program Coordinator: TBN

### **Center for Drug Discovery**

**Center Director: Raymond Schinazi, PhD, DSc**

[raymond.schinazi@emory.edu](mailto:raymond.schinazi@emory.edu)

### **Center for Immunology and Vaccines**

**Center Directors: Paul Spearman, MD**

[paul.spearman@emory.edu](mailto:paul.spearman@emory.edu)

Program Coordinator: Shantisa Fulgham  
[shantisa.fulgham@choa.org](mailto:shantisa.fulgham@choa.org)

### **Center for Neurosciences Research**

**Center Director: Ton deGrauw, MD, PhD**

Program Coordinator: Jennifer Kenny  
[jennifer.kenny@choa.org](mailto:jennifer.kenny@choa.org)

### **Center for Pediatric Healthcare Technology Innovation**

**Center Director: Barbara Boyan, PhD**

[barbara.boyan@bme.gatech.edu](mailto:barbara.boyan@bme.gatech.edu)

Program Coordinator: Maribel Baker  
[maribel.baker@bme.gatech.edu](mailto:maribel.baker@bme.gatech.edu)

### **Center for Pediatric Nanomedicine**

**Center Director: Gang Bao, PhD**

[gang.bao@bme.gatech.edu](mailto:gang.bao@bme.gatech.edu)

Senior Manager: Amy Tang

[amy.tang@bme.gatech.edu](mailto:amy.tang@bme.gatech.edu)

Program Coordinator: Erin Kirshtein  
[Erin.kirshtein@bme.gatech.edu](mailto:Erin.kirshtein@bme.gatech.edu)

### **Children's Transplant Immunology and Immune Therapeutics Center**

**Center Directors: Leslie Kean, MD, PhD and Allan Kirk, MD, PhD**

[leslie.kean@choa.org](mailto:leslie.kean@choa.org) and  
[adkirk@emory.edu](mailto:adkirk@emory.edu)

Program Coordinator: Jennifer Kenny

[jennifer.kenny@choa.org](mailto:jennifer.kenny@choa.org)

### **Clinical Outcomes**

### **Research and Public Health**

**Center Director: Ann Mertens, PhD**

[Ann.mertens@choa.org](mailto:Ann.mertens@choa.org) or  
[amerten@emory.edu](mailto:amerten@emory.edu)

Program Coordinator: Shantisa Fulgham

[shantisa.fulgham@choa.org](mailto:shantisa.fulgham@choa.org)

### **Marcus Autism Center**

**Center Director: Ami Klin, PhD**

**Director of Research: Warren Jones, PhD**  
[ami.klin@emory.edu](mailto:ami.klin@emory.edu) or

[ami.klin@choa.org](mailto:ami.klin@choa.org) or

[warren.r.jones@choa.org](mailto:warren.r.jones@choa.org)

## Research Center Administration:

### **Barbara J. Stoll, MD**

George W. Brumley, Jr., Professor and Chair  
Department of Pediatrics, Emory University  
President and CEO, Emory-Children's Center  
[barbara\\_stoll@oz.ped.emory.edu](mailto:barbara_stoll@oz.ped.emory.edu)

### **Paul Spearman, MD**

Nahmias-Schinazi Professor and Chief, Pediatric Infectious Diseases  
Chief Research Officer, Children's Healthcare of Atlanta  
Vice Chair for Research, Department of Pediatrics, Emory University  
[paul.spearman@emory.edu](mailto:paul.spearman@emory.edu)

### **Beth Howell**

SVP, Academic Administration  
Children's Healthcare of Atlanta  
[beth.howell@choa.org](mailto:beth.howell@choa.org)

### **Kris Rogers, RN**

Director of Research & Graduate Medical Education  
Children's Healthcare of Atlanta  
[kristine.rogers@choa.org](mailto:kristine.rogers@choa.org)

### **Liz McCarty**

Department Administrator  
Department of Pediatrics, Emory University  
[mmccar2@emory.edu](mailto:mmccar2@emory.edu)

### **Lela Wulf**

Director of Finance, Academic Administration  
Children's Healthcare of Atlanta  
[lela.wulf@choa.org](mailto:lela.wulf@choa.org)

### **Stacy S. Heilman, PhD**

Director of Programs & Grants Advocate  
Department of Pediatrics, Emory University & Children's Healthcare of Atlanta  
[stacy.heilman@emory.edu](mailto:stacy.heilman@emory.edu)

### **Barbara W. Kilbourne, RN, MPH**

Manager, Business Operations  
Research Strategy Leadership  
Children's Healthcare of Atlanta  
[barbara.kilbourne@choa.org](mailto:barbara.kilbourne@choa.org)

# Research-sponsored events/meetings:

(This is an overview, for specific dates/events, go to: <http://www.pedsresearch.org/calendar> )

MONDAYS	TUESDAYS	WEDNESDAYS	THURSDAYS	FRIDAYS	VARIOUS DAYS
<p>Research Operations Council (ROC) meetings: occurs weekly at the Marcus Autism Center. Designed for central team to discuss detailed operations and issues.</p>				<p>PeRCS: 10 AM coffee social every Friday, usually held 3<sup>rd</sup> floor break area, E-CC</p>	
<p>K club: Monthly discussions/lectures for K award training, other grants training/education. Typically 2<sup>nd</sup> Monday, September to May, Contact Stacy Heilman (<a href="mailto:Stacy.heilman@emory.edu">Stacy.heilman@emory.edu</a>) for more information.</p>		<p>Research Brainstorming Sessions: Typically, 2<sup>nd</sup> Wed. To allow development and exploration of special research topics. For suggested topic nominations, contact (<a href="mailto:Stacy.heilman@emory.edu">Stacy.heilman@emory.edu</a>)</p>		<p>Research Seminars: Fridays (Egleston Classrooms). Contact Barbara Kilbourne for suggestions or needs (<a href="mailto:barbara.kilbourne@choa.org">barbara.kilbourne@choa.org</a>) Including:</p> <ul style="list-style-type: none"> <li>✓Neurosciences seminar series, 2<sup>nd</sup> Friday of each month, Egleston classrooms. Contact Jennifer Kenny <a href="mailto:jkenny@emory.edu">jkenny@emory.edu</a> for more information.</li> <li>✓CORPH (Clinical Outcomes Research and Public Health): interest group has monthly meetings scheduled for the 3<sup>rd</sup> Friday of each month. Contact Shantisa Fulgham <a href="mailto:shantisa.fulgham@choa.org">shantisa.fulgham@choa.org</a> for more information.</li> </ul>	<p>Research Advisory Council (RAC) meetings: once monthly; restricted to RAC membership, contact Paul Spearman for inquiries or suggestions <a href="mailto:paul.spearman@emory.edu">paul.spearman@emory.edu</a></p>
		<p>Research Grand Rounds: 3<sup>rd</sup> Wednesday of month, Egleston, 7:30 AM</p>			<p>Invited speakers through seminar series sponsored by centers; contact Center Directors or Barbara Kilbourne at <a href="mailto:barbara.kilbourne@choa.org">barbara.kilbourne@choa.org</a> if interested in upcoming events. Center Directors are listed on <a href="http://pedsresearch.org">pedsresearch.org</a> website.</p>

# Specialized Research Equipment/Service Cores:

CORE	SCIENTIFIC DIRECTOR	TECHNICAL DIRECTOR/CONTACT	EQUIPMENT	LOCATION	SERVICES
<a href="#"><u>Animal Physiology Core</u></a>	Mary Wagner <a href="mailto:mary.wagner@emory.edu">mary.wagner@emory.edu</a> 404-727-1336	Rong Jiang <a href="mailto:rjiang2@emory.edu">rjiang2@emory.edu</a>	Small animal surgical equipment	Emory-Children's Center, 3 <sup>rd</sup> Floor Lab	This core assists with and provides the surgical expertise and equipment for small animal survival surgery, including IACUC protocol assistance. Currently, the core offers pulmonary banding, aortic banding, coronary ligation and intramyocardial injections for mice, rats and rabbits and is available for development of other surgical procedures.
<a href="#"><u>Biomarkers Core</u></a>	Lou Ann Brown <a href="mailto:lou.ann.brown@emory.edu">lou.ann.brown@emory.edu</a> 404-727-5739	Mojgan Zavareh <a href="mailto:mojgan.zavareh@emory.edu">mojgan.zavareh@emory.edu</a>	Agilent gas chromatography/mass spectrometer and Waters high performance HPLC with fluorescence detector	Emory-Children's Center, 3 <sup>rd</sup> Floor Lab	This core analyzes markers of oxidative stress and markers of alcohol exposure. Speak to Scientific Director about other chromatography/mass spec assays available.
<a href="#"><u>Cardiovascular Imaging Research Core (CIRC)</u></a>	Will Border, MBChB, MPH <a href="mailto:borderw@kidsheart.com">borderw@kidsheart.com</a> 404-785-6255	Carey K. Lamphier, RN, BSN, CCRC <a href="mailto:Carey.lamphier@choa.org">Carey.lamphier@choa.org</a>	-Echocardiograms - Flow Doppler -3-D Imaging -Upright Bicycle -VO2 Analysis -Electrocardiogram -Cardiac MRI Nursing Services	Outpatient Cardiac Services, 2 <sup>nd</sup> Floor, Tower 1	This core provides non-invasive cardiac support for investigators involved in clinical research involving infants, children and adolescents. The CIRC has dedicated space, equipment and staff to provide you with quality cardiovascular imaging data that is collected in a meticulous, systematic, detail-orientated manner. Because of our unique set-up, we are able to utilize state-of-the-art imaging modalities not typically seen in the clinical setting.
<a href="#"><u>Cell Imaging</u></a>	Lou Ann Brown <a href="mailto:lou.ann.brown@emory.edu">lou.ann.brown@emory.edu</a> 404-727-5739	Nimita Fifadara, PhD <a href="mailto:nfifada@emory.edu">nfifada@emory.edu</a>	Olympus laser scanning confocal, TIRF microscopy	Emory-Children's Center, 3 <sup>rd</sup> Floor Lab	This core provides training and access to advanced cellular imaging systems, including confocal and TIRF microscopy.

# Specialized Research Equipment/Service Cores (continued)

CORE	SCIENTIFIC DIRECTOR	TECHNICAL DIRECTOR/C ONTACT	EQUIPMENT	LOCATION	SERVICES
<a href="#">Flow Cytometry/ Cell Sorting</a>	David Archer <a href="mailto:darcher@emory.edu">darcher@emory.edu</a>	Aaron Rae <a href="mailto:aaron.j.rae@emory.edu">aaron.j.rae@emory.edu</a>	FACSCanto, LSRII, FACSAria, AutoMACS	Emory-Children's Center, Room 560	This core offers access to several state of the art analytical flow cytometers as well as high-speed cell sorting. We also offer training as well as expert help to enable our users to improve the quality and scope of their research.
<a href="#">Immunology Core</a>	Larry Anderson <a href="mailto:larry.anderson@emory.edu">larry.anderson@emory.edu</a> 404-712-6604	Katie Casper <a href="mailto:kcasper@emory.edu">kcasper@emory.edu</a>	Specimen processing (hood, centrifuges, Coulter counter), Zeiss ELISPOT reader, ELISAs, assay design for intracellular cytokine staining (ICS), luminex 200 assays for protein quantitation, real-time PCR	Emory-Children's Center, Room 510	This core provides equipment and technical expertise for the performance of immunologic assays and diagnostic assays for infectious pathogens. Our mission is to enhance the ability of investigators at Children's and affiliated institutions to perform research in the areas of immunology, vaccine testing, and infectious diseases.
<a href="#">Radiology Core</a>	<a href="#">Radiologists</a> at Children's are board certified with additional training in pediatric imaging and are available for consultation upon request. This operation also includes <a href="#">physicists with imaging expertise and other staff experts</a> .	Melinda Dobbs, RN, BSN, CCRC <a href="mailto:melinda.dobbs@choa.org">melinda.dobbs@choa.org</a>	<ul style="list-style-type: none"> <li>• Access to clinical CT (4), PET (1), Bone Densitometry (2), Fluoroscopy (8), Nuclear Medicine (4), Ultrasound (9) and X-ray.</li> <li>• Access to 6 clinical MRI scanners including a 1.0T intraoperative, 1.5T and 3T systems.</li> <li>• Access to 2 fMRI systems.</li> <li>• Sedation Services</li> <li>• Access to radiology investigators specializing in radiology, neuroradiology and interventional radiology.</li> <li>• Access to MRI physicists (3).</li> <li>• Access to research professionals including administrators and research coordinators.</li> <li>• Administrative services including scheduling, archival of images</li> </ul>		The is an interdisciplinary research core that recognizes the importance of medical imaging in the diagnosis and treatment of diseases in children and young adults. PIRC provides investigators with modern imaging technology and collaborating imaging researchers to achieve research goals. Our team consults with investigators to enhance their research through access to state-of-the-art technology and enables the conduct of standard imaging associated with large clinical trials. Services include MRI, CT, PET, Bone Densitometry, Fluoroscopy, Nuclear Medicine, Ultrasound and X-ray.

CORE in Development	EQUIPMENT/LOCATION	DESCRIPTION
<a href="#">Specimen Repository</a> (which will enhance the Specimen Processing Core)	LIMS, freezers (-80, LN2) Sync with freezer space in new building; temporary space until then being identified	The specimen repository will offer organized storage of blood and body fluids and nucleic acids in 2012. Tissue repository services are under further discussion. Specimen processing can be coordinated to link with the specimen repository. Bar-coded standard vial storage and a dedicated LIMS will offer automated tracking and organized retrieval of specimens.



# Funding Opportunities:

Funding Opportunity	Funding Limit	Funding Term	Eligibility	Post Award Expectations	Additional Information
Friends	\$50,000	12-18 months	<ol style="list-style-type: none"> <li>Children's professional staff</li> <li>Must be for clinical research taking place in Children's facilities</li> </ol>	<ol style="list-style-type: none"> <li>Must provide annual and final reports</li> <li>Must be willing to present findings to Friends groups, Children's leadership, etc</li> </ol>	<ol style="list-style-type: none"> <li>Fund was originally created for non- Faculty who were not eligible for EECRC funding</li> <li>Fund does not provide for investigator salary support</li> </ol>
EECRC (Emory-Egleston Children's Research Center, Inc.)	\$50,000	12 months	<ol style="list-style-type: none"> <li>Regular faculty in clinical departments at Emory. Applicants outside of DoP must have clinical privileges at Children's.</li> <li>Must not have an active R01 or P01.</li> <li>Must provide agency and proposed date they will submit for extramural funding</li> </ol>	Must submit a grant to an extramural agency	\$25,000 of total award may be directed to investigator salary
H S I	\$50,000	1 year	Must include at least one Ga Tech collaborator from GTRI, College of Engineering or Computing and at least one collaborator from Children's.	Written quarterly reports	Commitment to this opportunity is made on a year to year basis depending on budget. Priority funding areas are agreed to on a yearly basis
Center Pilot Grants	Varies by Center	1 year	Varies by Center	Annual report	
Dudley Moore Nursing and Allied Health Research Fund	\$15,000	6-18 months	<ol style="list-style-type: none"> <li>All Children's nursing and allied health staff who provide services at one of Children's locations are eligible.</li> <li>Excludes those with regular faculty appointments or who are employed by Emory</li> <li>Projects must have an impact on enhanced patient care, priority is given to projects that will provide evidence to change practice.</li> </ol>	Must be willing to present findings by request.	Fund restricted by donor to support nursing and allied health research at Children's

# Additional Resources/Updates:

## Research listserv:

Contact [barbara.kilbourne@choa.org](mailto:barbara.kilbourne@choa.org) to be added to this listserv used to disseminate all pediatric research related announcements including seminars, funding opportunities, such as BiRD (Bringing in the Research Dollars), and the Weekly PREP (Pediatric Research Events and Programs)

## Website:

[www.pedsresearch.org](http://www.pedsresearch.org)

This is the central resource for research seminar info, contacts, cores, calendars, forms

## New Health Sciences Research Building:

Started construction: June 2011

Finish date: April 2013



190,000 ft<sup>2</sup>; 115,000 for pediatric research

Dry and wet lab research




Programming in progress; space for new recruits

Go to: <http://www.pedsresearch.org/about-us> for more info



# Research Recruitment Update:

NAME	PHOTO	CENTER	TITLE	START DATE	RECRUITED FROM	RESEARCH INTERESTS
Claudia Morris, MD		Center for Developmental Lung Biology	Associate Professor	September 2012	Attending Physician, Department of Emergency Medicine Clinical Research Scientist Director of Pediatric Emergency Medicine Fellowship Research Children's Hospital and Research Center at Oakland, Oakland, CA	Glutamine Therapy for Hemolysis-Associated Pulmonary Hypertension: This study is a phase II trial of L-glutamine in sickle cell disease and thalassemia patients. In particular the impact of this glutamine supplementation on arginine bioavailability, biomarkers of oxidative stress and hemolysis-associated pulmonary hypertension will be investigated. Pharmacokinetic studies will also be performed to determine the metabolic fate of glutamine supplementation in both plasma and within the sickle and thalassemia erythrocyte. AsthmaNet Clinical Center: The major goals are to serve as a clinical center participating in the conduct of NHLBI-supported multi-center clinical trials of asthma therapies in children and adults with asthma, and to conduct smaller, focused studies of mechanisms of action of asthma therapies, of novel treatments for severe asthma, and of concepts of asthma pathophysiology that could lead to the development of new asthma treatments.
Jens Wrammert, PhD		Children's Center for Immunology and Vaccines	Assistant Professor	August 2012	Assistant Professor, Research track Department of Microbiology and Immunology Emory University School of Medicine Atlanta, Georgia	An emerging leader in the analysis of human B cell responses following infection or vaccination. While in the Ahmed laboratory, he pioneered the use of plasmablast quantitation and sorting for the measurement of plasmablast responses and for the production of monoclonal antibodies representing early B cell responses. He has applied this to cloning of H1N1 influenza monoclonals and more recently to dengue virus monoclonals. He is now developing plasmablast technology for primate models of SIV/HIV pathogenesis.




# Research Recruitment Update (continued):

NAME	PHOTO	CENTER	TITLE	START DATE	RECRUITED FROM	RESEARCH INTERESTS
Evan Anderson, MD		Center for Immunology and Vaccines	Assistant Professor	August 2012	Feinberg School of Medicine, Northwestern University, Departments of Medicine and Pediatrics	Research contributions focus on rotavirus infection of adults, an understudied area that appears to have considerable significance, and on vaccines and vaccine clinical trials. He has obtained industry funding for vaccine trials from Medimmune, Merck, and other industry sponsors.
Clint Joiner, MD, PhD		Aflac Cancer and Blood Disorders Center	Director of Hematology	August 2012	Director, Division of Hematology, Professor, University of Cincinnati Children's, Department of Pediatrics	Sickle cell disease and other hemoglobinopathies; red blood cell physiology; cation transport and volume regulation; hematological problems of the newborn
Iñaki Sanz, MD		Children's Transplant Immunology and Immune Therapeutics Center	Professor	March 2012	University of Rochester Medical Center	Research interests are focused on understanding the phenotypic and functional diversity of human B cells. In addition, specially interested in the regulation of human autoreactive B cells and the subversion of tolerance in autoimmunity. Studies employ a combination of multiparameter flow cytometry and in vitro studies (including antibody and cytokine production, proliferation assays and transcriptional profiling) to understand the function of finely discriminated B cell subsets and their homeostasis in healthy subjects and in a number of autoimmune diseases including SLE, RA, Sjögren's syndrome and more recently type 1 diabetes.

# Research Recruitment Update (continued):

NAME	PHOTO	CENTER	TITLE	START DATE	RECRUITED FROM	RESEARCH INTERESTS
Chunhui Xu, PhD		Center for Cardiovascular Biology	Acting Associate Director	January 2012	Geron Corporation	1) Establishment of induced pluripotent stem cells for cell therapy and disease modeling, taking advantage of the large pediatric cardiac population at CHOA, 2) Stem cell therapy by achieving stable generation of cardiomyocytes from human pluripotent stem cells, which would include comparing iPSCs to hESCs as well as characterization, limiting tumorigenicity, developing therapies for heart failure treatment and using tissue engineering approaches for cardiac reconstruction and 3) Cardioprotection and activation of endogenous stem cells which would use stem cells to discover therapies that prevent cardiac cell death or conditions that activate stem cells and thus could be therapeutically used for recruitment and migration of endogenous stem cells.
My Helms, PhD		Center for Developmental Lung Biology	Assistant Professor	January 2012	Department of Physiology, Emory University	Our studies suggest that O <sub>2</sub> <sup>-</sup> anions may have a permissive effect on Na reabsorption, and that model type 1 cells may produce more O <sub>2</sub> <sup>-</sup> anions than type 2 cells. In light of new evidence that shows that normal cells can regulate their redox state through Rac1 control of NADPH oxidase, we investigate the effect of redox signaling on lung epithelial sodium channels in order to gain a better understanding of how the alveoli maintains appropriate fluid levels. Using novel model systems developed in our laboratory, electrophysiological measurements, as well as standard biochemical assays; we can uniquely study all the cells that make up the alveoli. Therefore, we will be able to make novel comparisons between redox signaling and ENaC function in both alveolar type 1 and type 2 cells.

# Research Recruitment Update (continued):

NAME	PHOTO	CENTER	TITLE	START DATE	RECRUITED FROM	RESEARCH INTERESTS
Assem G. Ziady, PhD		Center for Cystic Fibrosis Research	Assistant Professor	October 2011	Case Western Reserve University	Inflammation in cystic fibrosis is excessive, and typically leads to lung damage and eventual lung failure. A number of studies have found that CF cells, especially airway epithelia produce elevated levels of proteins such as cytokines, transcription factors, kinases, and phosphatases implicated in their exaggerated response to inflammatory stimulus. Anti-inflammatory therapy with agents such as ibuprofen has been shown to be beneficial, slowing lung deterioration in patients. However, the origin of drug mechanisms involved in limiting this inflammatory response as well as the interplay between defects in cystic fibrosis transmembrane regulator (CFTR) and the inflammatory cascades are not well understood.
Astrid Kusters, PhD		Children's Transplant Immunology and Immune Therapeutics Center/GI Division	Instructor	October 2011	Baylor College of Medicine	Gene-specific alterations of hepatic gene expression by ligand activation or hepatocyte-selective inhibition of retinoid X receptor- $\alpha$ signalling during inflammation
Rabin Tirouvanziam, PhD		Center for Cystic Fibrosis Research	Assistant Professor, Dept. of Pediatrics, Emory	September 2011	Stanford University	My research is focused on the basic study of CF exacerbations (acute flares of disease) and to basic studies of other human pathologies, including chronic obstructive pulmonary disease (COPD) and asthma.