CF-AIR Online:
Research resources and communication for the CF-AIR community

Karen Kennedy, PhD
Program Coordinator & Cores Administrator
Pediatric Research Alliance

Center for Cystic Fibrosis and Airways Disease Research
Advancing Wellness in Patients Through Research

Children’s Healthcare of Atlanta

Emory University
Pediatric Research Alliance Website

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

• Online home to CF-AIR (and CF@LANTA and the activities of the RDP)

• Also found here:
  – 10 other pediatric research centers as well as affiliated extramurally funded programs
Centers of the Pediatric Research Alliance

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<th>Centers</th>
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<tr>
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<td>CENTER FOR CHILDHOOD INFECTIONS AND VACCINES (CCIV)</td>
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<td>CENTER FOR CLINICAL AND TRANSLATIONAL RESEARCH (CCTR)</td>
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<td>CHILDREN’S HEART RESEARCH AND OUTCOMES CENTER (HERO)</td>
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<td>PEDIATRIC TECHNOLOGY CENTER (PTC)</td>
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<td>EXTRAMURALLY FUNDED PROGRAMS</td>
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  - 14 cores specifically designed for supporting child health related research (and links to other Emory and GT cores)
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<td>BIOSTATISTICS CORE</td>
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<td>CARDIOVASCULAR IMAGING RESEARCH CORE</td>
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<td>INTEGRATED CELLULAR IMAGING CORE</td>
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<td>LABORATORY AND PATHOLOGY CLINICAL RESEARCH CORE</td>
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<td>EMORY INTEGRATED CORE FACILITIES</td>
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  - Plentiful tools and resources for all levels of researchers— from undergrads to seasoned faculty
Research Resources of the Pediatric Research Alliance

What's happening in research?
Find out in our center and department newsletters.
Overview

The Center for Cystic Fibrosis and Airways Disease Research (CF-AIR) is the home for two research programs, one focused on cystic fibrosis (CF), and one focused on asthma. Research in other airway diseases, such as COPD and non-CF bronchiectasis, also is of interest.

Weekly Digest
Your source for the latest announcements, news and upcoming events. Click here to get in your inbox each week.

View upcoming CF-AIR sponsored events here.

Please click "Meet Our Investigators" in the left navigator column to view a summary of each member's research interests and collaborations.

www.pedsresearch.org/research/centers/cf-air
CF-AIR’s homepage

• What to find here:
  – Information about reoccurring event series
  – News: Weekly Digest and back issues of the center newsletter
  – Information about foci of the center in both CF and Asthma
  – List of center members

• If you want to know something about CF research in Atlanta, this is the place to start!
Where do I find...

- **Upcoming events**
  - [http://www.pedsresearch.org/calendar/6](http://www.pedsresearch.org/calendar/6) is the specific CF-AIR calendar
  - CF-AIR Workshop and CF-TR Joint Lab Meeting details
Upcoming Events / CF-AIR

Search Events

Browse by Category  Browse by Date

CF-AIR Workshop 1/24/18
JANUARY 24, 2018 / 4:00 pm - 5:09 pm
Weekly CF-AIR Workshop
January 24, 2018: Karen Kennedy, PhD

CF-AIR Joint Lab Meeting 2/6/18
FEBRUARY 06, 2018 / 12:00 pm - 8:00 pm
CF-TR Joint Lab Meeting
February 6, 2018: Eric Sorscher, PhD

CF-AIR Workshop 2/7/18
FEBRUARY 07, 2018 / 4:00 pm - 5:00 pm
Weekly CF-AIR Workshop
February 7, 2018: Strategize & Social

NEWS & EVENTS
Calendar
News
Newsletters
Conferences
Recordings/Slides

CF-AIR-specific calendar
Where do I find...

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• RDP information
Overview

Emory University, Children’s Healthcare of Atlanta, and Georgia Tech – the key components of Atlanta’s comprehensive CF research program – have been awarded a grant from the Cystic Fibrosis Foundation (CFF) to establish the Atlanta CF Research and Development Program (CF@LANTA RDP Program). Nael McCarty, PhD, Marcus Professor of Cystic Fibrosis and Director of the CF Center of Excellence, is the Principal Investigator. The $1.8 million, four-year, renewable grant will enable the partner institutions and our investigators to expand our currently funded CF research programs and translate the results more effectively to patients. The RDP mechanism will enable us to leverage the investments already made by Emory and Children’s into a comprehensive CF research center.

To learn more about other aspects of CF and airways disease research, check out the CF-AIR center page.
Cores supported by the RDP


- **CF Analytics Core**
  - Presence at GT and Emory
  - Provides subsidy funding for CF-related projects in the Biomarkers Core

- **Clinical and Translational Core**: integrated with CF Discovery Core

- **Experimental Models Core**

- **Research Training Core**
Where do I find...

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- **RDP information**

- **Education information**
  - Training Opportunities
  - CF Scholars
Other Resources on www.pedsresearch.org

- BiRD
- K-Club (Career Development)
- Grant Application Tools
- Research IT Resources
- Clinical Research Resources
- Presentation Templates
- Lab Pages
- Faculty Directory & Profiles
Bringing In The Research Dollars! (BiRD)

AHA Transformational Project Award
- Deadline: January 23, 2018
- Amount: $100,000 a year for 3 years, including indirect costs

This American Heart Association award is to support highly innovative, high-impact projects that build on work in progress that could ultimately lead to critical discoveries or major advancements that will accelerate the field of cardiovascular and stroke research. [More info](http://professional.heart.org/professional/ResearchPrograms/UCML_497208_Transformational/ProjectAward.jsp)

Improvement of Animal Models for Stem Cell-Based Regenerative Medicine (R24) - upcoming deadline
- Deadline: January 31, 2018
- Amount: Application budgets are not limited but need to reflect the actual needs of the proposed project. Maximum award period is...
Career Development

K-Club

The Pediatric K-Club was established in the fall of 2009. The objective of this program is to provide an educational forum to assist fellows and faculty with developing successful career development award applications. With support from the Emory Department of Pediatrics and Children’s Healthcare of Atlanta and our co-sponsors the Emory Department of Medicine, the Georgia Clinical & Translational Science Alliance (Georgia CTSA), and CFAR, monthly lunchtime seminars on the second Monday of each month are held during the academic year. Various topics pertaining to the conception, development, submission, and post-award process related to career development awards are addressed. The format of meetings consists of an introductory presentation, followed by a panel or group discussion, with input and active participation by attendees. Sessions are carefully designed to convey valuable information and support a lively discussion among invited speakers and attendees.

The K-Club thrives on the support of faculty contributors and young investigator participants. Sessions are open to all with an interest in acquiring funding for research via career development awards and other related funding mechanisms. Typical attendance includes on average 80 faculty, fellows and other interested research staff.

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>QUICK FACTS</th>
<th>VIDEOS &amp; SLIDES</th>
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<tr>
<td>Navigating the NIH and Extramural Research Funding</td>
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  • Funding Opportunity Announcements (FOA’s): Formulating & Organizing Grant Applications |
  • Navigating the NIH |
  • NIH Study Sections & Review Processes |
  • Inside Look at Study Sections & the Scientific Review Process |
  • Revisions and Summary Statements |
  • The Non-Ks of K-Club: Non-NIH Career Development Funding Mechanisms |
Grant Application Resources

We have many grant application resources to help you with your applications. Once you are ready to submit your application, check out the [Getting Started page](#) to view Intent to Submit forms.

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<td>BOILERPLATE DOCUMENTS AND APPLICATION LIBRARY</td>
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<tr>
<td>PEDIATRIC BIOSTATISTICAL CORE</td>
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<tr>
<td>GRANT EDITING CORE (GEMS)</td>
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<tr>
<td>CAREER DEVELOPMENT-SPECIFIC RESOURCES</td>
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<tr>
<td>NIH BIOSKETCH</td>
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<td>EARLY STAGE &amp; EARLY ESTABLISHED INVESTIGATORS</td>
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# Research IT Resources

Research IT resources includes tools and electronic infrastructure to facilitate high quality research.

The Pediatric Research Alliance works at the intersection of multiple institutions in Atlanta. While this affords a number of resources for use by researchers, navigating and accessing resources between institutions, or choosing between duplicated items, can be confusing. This section guides child health-related researchers in navigating the options, while exposing them to the wide selection of options.

## Electronic Research Systems & Programs

## Big Data Resources & Tools

## Research IT Information & Exchange Series

## From the Research IT Toolbox

### ELECTRONIC RESEARCH SYSTEMS & PROGRAMS

### BIG DATA RESOURCES & TOOLS

### COMPUTER PROGRAMS & SERVICES

### SPONSORED ACCOUNTS

### INFORMATION & EXCHANGE SERIES ARCHIVE
Clinical Research Resources (and more)

CLINICAL RESEARCH RESOURCES

- Research Coordinator Resources
- Regulatory and Compliance
- Institution Fact Sheets and Rates
- Research at Hughes Spalding
- Electronic Clinical Research Systems

CLINICAL RESEARCH COMPLIANCE
- CONFLICT OF INTEREST (COI)
- INVESTIGATIONAL NEW DRUG (IND) APPLICATION GUIDANCE
- INSTITUTIONAL REVIEW BOARD (IRB)
- REGULATORY GUIDANCE

Institution Fact Sheets and Rates

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Presentation, Poster and Publication Guidelines

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<tr>
<td>POWERPOINT TEMPLATES</td>
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<td>POSTER GUIDELINES</td>
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<td>AUTHOR AFFILIATION GUIDELINES</td>
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<tr>
<td>ACKNOWLEDGING CORES</td>
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Our laboratory is interested in identifying viral and cellular factors that mediate reovirus infection. Mammalian reovirus is a nonenveloped, dsRNA virus isolated from respiratory secretions and stool of young children. Although humans are seropositive by age five, reovirus rarely causes disease. Due to its preferential infection of epithelial cells, reovirus is currently in Phase I/II clinical trials to test its efficacy as viral oncolytic for various types of cancer. Our current focus is on understanding how reovirus interacts with normal and cancer cells in the gut and genetically engineering reovirus as a viral oncolytic with enhanced antitumor activity.

**Focus 1. To identify how reovirus infection of eukaryotic cells is altered by bacterial components.**

Efficient reovirus infection of the gut requires the presence of bacteria, but how bacteria promote infection is not known. We are investigating how bacteria or specific bacterial membrane components interact with reovirus to convey enhanced infectivity of eukaryotic cells. We are working to assess whether this interaction affects virion stability, engagement of cell-surface receptors, uptake, and replication.
# Faculty Directory

/ Center for Cystic Fibrosis and Airways Disease Research (CF-AIR)

## Primary Faculty | Affiliated Faculty

### Primary Faculty

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION(S)</th>
<th>CONTACT</th>
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<tbody>
<tr>
<td>Timothy Beaty, MD, MSc</td>
<td>Assistant Professor&lt;br&gt;Emory University School of Medicine&lt;br&gt;Department of Pediatrics&lt;br&gt;Division of Pulmonology, Allergy/Immunology, Cystic Fibrosis, and Sleep</td>
<td>p: 404-600-2786&lt;br&gt;e: <a href="mailto:tbeaty2@emory.edu">tbeaty2@emory.edu</a></td>
</tr>
<tr>
<td>Lou Ann S. Brown, PhD</td>
<td>Professor&lt;br&gt;Department of Pediatrics&lt;br&gt;Emory University School of Medicine&lt;br&gt;Goddard Neonatology Scholar&lt;br&gt;Scientific Director - Emory Alcohol and Lung Biology Center&lt;br&gt;Associate Director for NIAAA-Funded T32 Department of Pediatrics</td>
<td>p: 404-727-5739&lt;br&gt;e: <a href="mailto:lbrown03@emory.edu">lbrown03@emory.edu</a></td>
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Faculty Directory

Nael A. McCarty, PhD

Research
In the McCarty lab, we focus on the molecular physiology of ion channels and receptors, with emphasis on epithelial chloride channels. Our specific focus is the pathophysiology of Cystic Fibrosis. Including the structure/function of CFTR and its many roles in the airway. We pioneered the use of peptide toxins as probes of chloride channels. We also have projects that study the functional consequences of heterodimerization among GPCRs, the role of CFTR in regulation of sweat composition, and the molecular ecology of predator-prey interactions in the marine environment. Our translational research in CF targets: (a) the mechanism by which the expression of mutant CFTR in airway epithelial cells impacts the development of CF-related diabetes; and (b) identification of biomarkers of acute pulmonary exacerbations in CF along with development of a novel device for their detection in the home.

The goal of the Center for Cystic Fibrosis Research is to engage Atlanta researchers in basic and translational research that will lead to a better understanding of the pathophysiology of this disease and/or generate new devices and treatments to increase the length and quality of life for CF patients.

The novel theme for these research activities is ‘The Systems Biology of the CF Lung’.
Connect

• Visit www.pedsresearch.org

• Listserv
  – CF-AIR
  – CF-AIR trainees
  – Pediatric Research

• Social Media
  – @ATLpedsresearch on Twitter
  – https://www.facebook.com/ATLpedsresearch
  – CF-AIR specific – coming soon

• Questions: email at kmurra5@emory.edu
What do you need to succeed?
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