Division Photo


Division Data Summary

Research and Training Details

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<table>
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<tbody>
<tr>
<td>Number of Faculty</td>
<td>25</td>
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<tr>
<td>Number of Joint Appointment Faculty</td>
<td>2</td>
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<td>Number of Support Personnel</td>
<td>79</td>
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<td>Direct Annual Grant Support</td>
<td>$1,085,841</td>
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<td>Direct Annual Industry Support</td>
<td>$38,760</td>
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<td>Peer Reviewed Publications</td>
<td>73</td>
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Clinical Activities and Training

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<tr>
<td>Number of Clinical Staff</td>
<td>2</td>
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<tr>
<td>Number of Clinical Fellows</td>
<td>10</td>
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<tr>
<td>Inpatient Encounters</td>
<td>2005</td>
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<tr>
<td>Outpatient Encounters</td>
<td>11,212</td>
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Division Highlights

Anderson


(National presentation at the Section on Cardiology and Cardiac Surgery of the American Academy of Pediatrics National Conference and Exhibition, Boston, MA, 2008, 1st Place Young Investigator Competition)

Marino


(National presentation at the 7th Pediatric Cardiac Intensive Care Symposium, Miami, FL, 2008, Awarded Outstanding Abstract for Poster Presentation)

**Faculty Members**

**Towbin Jeffrey, MD, FAAP, FACC, FAHA,** Professor; *Executive Co-Director, The Heart Institute; Director and Chief, Division of Cardiology*

**Research Interests:** Cardiomyopathy and Genetics

**Robert Beekman, MD,** Professor; *Co-Medical Director, Cardiology*

**Research Interests:** Cardiac Catheterization & Intervention, Quality Improvement, Coarctation of the Aorta

**D. Woodrow Benson, MD, PhD,** Professor; *Director, Cardiovascular Genetics*

**Research Interests:** Cardiovascular Genetics

**Randal Claytor, PhD,** Adjunct Associate Professor

**James F. Cnota, MD,** Associate Professor Clinical

**Research Interests:** Fetal Cardiology

**Linda H. Cripe, MD,** Associate Professor Clinical

**Research Interests:** Cardiomyopathies, Neuromuscular Disorders, Echocardiography

**Richard Czosek, MD,** Assistant Professor

**Research Interests:** Cardiac pacing devices in pediatric and congenital heart disease patients and arrhythmia risk stratification in the pediatric population

**William Gottliebson, MD,** Assistant Professor Clinical; *Director, MRI Cardiology*

**Research Interests:** Cardiac MRI techniques to evaluate myocardial function, synchrony, and energetics.

**Haleh Heydarian, MD,** Instructor Clinical

**Research Interests:** Echocardiography synchrony/strain imaging

**Robert B. Hinton, MD,** Assistant Professor

**Research Interests:** Cardiovascular Genetics & Developmental Biology

**Russel Hirsch, MD,** Associate Professor Clinical; *Director, Cardiac Catheterization Lab*

**Research Interests:** Cardiac Catheterization & Intervention, Device Development

**Kan Hor, MD,** Assistant Professor Clinical

**Research Interests:** MRI technology to diagnose and follow heart disease, in particular DMD cardiomyopathy.

**Holly M. Ippisch, MD,** Instructor Clinical

**Research Interests:** Echocardiography, preventative cardiology and pediatric obesity.

**Thomas R. Kimball, MD,** Professor; *Co-Medical Director, Cardiology; Director, Cardiac Ultrasound; Director, Cardiovascular Imaging Core Research Lab*

**Research Interests:** Echocardiography, Ventricular function, Cardiovascular Effects of Obesity and Type II Diabetes.

**Shelley Kirk, PhD, RD, LD,** Assistant Professor Clinical

**Research Interests:** The efficacy, safety and feasibility of interventions for the management of pediatric obesity.

**Timothy Knilans, MD,** Associate Professor Clinical; *Director, Electrophysiology & Pacing*

**Research Interests:** Identification and risk stratification of causes of sudden death.

**Catherine Krawczeski, MD,** Associate Professor Clinical; *Director, CICU*

**Research Interests:** The effects of cardiopulmonary bypass and postoperative physiology on extra-cardiac organ systems in the pediatric cardiac surgical patient.

**Ryan Leahy, MD,** Instructor Clinical

**Angela Lorts, MD,** Assistant Professor Clinical

**Research Interests:** Heart failure and myocardial remodeling
Bradley S. Marino, MD, MPP, MSCE, Associate Professor; Director, Heart Institute Research Core
Research Interests: Outcomes Research

Richard A. Meyer, MD, Adjunct Professor
Research Interests: Adult Congenital Heart Disease and Marfan/EDS

Erik Michelfelder, MD, Associate Professor; Director, Fetal Cardiology
Research Interests: Fetal Cardiology and Echocardiography

Robert Spicer, MD, Professor; Co-Director Fellowship Program; Medical Director, Cardiac Transplantation Program
Research Interests: Heart Failure Transplant

Elaine Urbina, MD, Associate Professor
Research Interests: Relating non-invasive vascular measures of carotid ultrasound, arterial stiffness and endothelial function to conditions such as CV risk factors, obesity, diabetes, renal disease and sleep disorders.

Karen Uzark, PhD, Associate Professor; Director, Cardiac Process Improvement & Clinical Effectiveness
Research Interests: Heart Transplant, Quality of Life, Outcomes in Children with Heart Disease

Joint Appointment Faculty Members

Jeanne James, MD, Research Associate Professor
Molecular Cardiovascular Biology
Molecular cardiology and animal models of cardiac disease.

Ware Stephanie, MD, Assistant Professor
Human Genetics
Cardiovascular Genetics

Clinical Staff Members

Lisa Lee, MD

Trainees

Jeff Anderson, MD, PL7, UNC Hospital, Chapel Hill, NC
Allison Divanovic, MD, PL7, Cincinnati Children's Hospital/University of Cincinnati
Jamie Sutherell, MD, PL7, Washington University/St. Louis Children's, MO
John Hambrook, MD, PL6, Eastern Virginia Medical School, Norfolk, VA
David Crowley, MD, PL5, Barbara Bush Children's Hospital, Portland, ME
Sean Hagenbuck, MD, PL5, Baystate Medical Center, Springfield, MA
Steven Kindel, MD, PL5, Children's Memorial Hospital, Chicago, IL
Chike Madueme, MD, PL4, Cincinnati Children's Hospital/University of Cincinnati
Mark Norris, MD, PL6, Cincinnati Children's Hospital/University of Cincinnati
Matt Zussman, MD, PL4, UNC, Chapel Hill, NC

Significant Accomplishments

The Heart Institute Research Core (HIRC)

In the 2008-2009 Fiscal Year, The Heart Institute (HI) began strategic planning for the Heart Institute Research Core (HIRC).

The Vision of HIRC is "HIRC will accelerate innovative clinical and translational research to make the HI the world leader in improving outcomes for pediatric cardiovascular disease and disease risk".

The Mission of HIRC is "HIRC supports innovative clinical and translational science by facilitating the design of research processes, the implementation of research plans, the dissemination and application of findings and the development of research professionals".

The goals for HIRC include:

Increase productivity of high quality innovative research.
Develop national and international reputation for the Heart Institute.
Facilitate research that will ultimately improve patient outcomes and experiences. HIRC will become increasingly self supporting over time.

Develop a clearly defined research process that supports the education, development and productivity of HIRC professionals.

Develop guidelines, approved by Heart Institute research leadership, to equitably allocate resources.

Design and implement a dynamic infrastructure, including the identification of current and future space needs that facilitates the achievement of research and scholarly goals.

Facilitate collaboration among specialties within the HI, as well as across the medical center and pediatric community worldwide.

Develop the personnel both within HIRC and the HI who will provide teaching and education support for translational and clinical research.

HIRC’s organization design team is currently researching best practices with internal and external organizations to create a robust infrastructure for the conduct of pediatric cardiovascular research. HI investigators will have access to HIRC resources beginning Fall 2009.

The Development of the The Center for Better Health and Nutrition

The Center for Better Health and Nutrition is the comprehensive obesity treatment, management and prevention of arm of the Heart Institute at Cincinnati Children’s. The center will focus on patient care, education and research. Prior to the new center, overweight children were seen in several different clinics, including the Comprehensive Weight Management program, HealthWorks! and the Abnormal Weight Gain Clinic. All these services will now fall under the umbrella of the new center. It is planned to have clinics of the Center of Better and Nutrition at the satellite facilities of CCHMC to make the program more accessible. It is the goal to develop the Center for Better Health and Nutrition into a nationally recognized center for excellence in obesity management, clinical obesity research and education and clinical services for health and activity.

New Programs

New programs have been developed in the Division of Cardiology including the Pediatric Cardiomyopathy and Heart Failure Service directed by Dr. Jeffrey Towbin, Cardiovascular Genetics Service co-Directed by Dr. Stephanie Ware and Dr. Towbin, and the Better Health and Nutrition Program directed by Dr. Bob Siegel. In addition, the Cardiovascular Diagnostic Laboratory, which will provide genetic testing for cardiovascular disease as well as viral genome testing of heart for myocarditis and transplant rejection, as well as other tissue and fluid specimens, has been developed under the direction of Drs. Towbin and Ware. Dr. Cong Liu has been recruited as Associate Scientific Director of this Laboratory.

Division Publications


## Grants, Contracts, and Industry Agreements

### Grant and Contract Awards

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<tr>
<th>Name</th>
<th>Project Title</th>
<th>Agency</th>
<th>Project Number</th>
<th>Start Date - End Date</th>
<th>Direct Costs / Total Costs</th>
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<tr>
<td>BENSON, W</td>
<td><strong>Genetic Mechanisms of Cardiac Disease in the Young</strong></td>
<td>National Institutes of Health</td>
<td>K24 HL 069712</td>
<td>06/01/06 - 05/31/11</td>
<td>$161,893 / $803,810</td>
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<td><strong>Preoperative Therapy for Prevention of Postoperative Low Cardiac Output Syndrome</strong></td>
<td>National Institutes of Health</td>
<td>U01 HL 085057</td>
<td>09/04/06 - 08/31/11</td>
<td>$194,200 / $1,000,000</td>
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<td><strong>Pediatric Heart Disease Clinical Research Network</strong></td>
<td>National Institutes of Health</td>
<td>U01 HL 68270</td>
<td>12/1/06 - 12/31/12</td>
<td>$52,942 / $52,942</td>
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<td></td>
<td><strong>Trial of Beta Blocker Therapy vs Angiotensin II Receptor Blocker Therapy in Individuals with Marfan Syndrome</strong></td>
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<td></td>
<td><strong>Single Ventricle Reconstruction Extension Study II</strong></td>
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<td></td>
<td><strong>Musculoskeletal Ancillary Study</strong></td>
<td>National Marfan Foundation</td>
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<td>01/01/09 - 12/31/09</td>
<td>$18,750 / $18,750</td>
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<td>HINTON, R</td>
<td><strong>Genetic and Developmental Basis of Pediatric Aortic Valve Disease Pathogenesis</strong></td>
<td>National Institutes of Health</td>
<td>K23 HL 085122</td>
<td>08/03/06 - 04/30/11</td>
<td>$122,815 / $618,000</td>
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<td>KIMBALL, T</td>
<td><strong>Chronic Renal Insufficiency in NAPRTCS Patients</strong></td>
<td>National Institutes of Health</td>
<td>U01 DK 066143</td>
<td>08/01/08 - 07/31/13</td>
<td>$55,222 / $276,110</td>
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<td>MARINO, B</td>
<td><strong>Testing in Pediatric Cardiac Quality of Life Inventory</strong></td>
<td>National Institutes of Health</td>
<td>K23 HD 048637</td>
<td>01/01/08 - 12/31/09</td>
<td>$148,400 / $434,449</td>
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<tr>
<td>IPPISCH, H</td>
<td><strong>Effects Dietary Fat on Post-Prandial Vascular Function</strong></td>
<td>National Institutes of Health</td>
<td>K23 HL 091174</td>
<td>09/01/08 - 07/31/13</td>
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<td>SCHMIDT, M</td>
<td><strong>CALERIE Phase II Study</strong></td>
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<td><strong>CALERIE Phase II Study</strong></td>
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<td>URBINA, E</td>
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<td>06/01/06 - 05/31/11</td>
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<td></td>
<td><strong>Modifying Dietary Behavior in Adolescents with Elevated Blood Pressure</strong></td>
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Current Year Direct | $1,085,841
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**Industry Contracts**

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<tr>
<th>Name</th>
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<td>Beekman, R</td>
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<td>Cripe, L</td>
<td>MedImmune Inc.</td>
<td>$14,365</td>
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<td>Hirsch, R</td>
<td>AGA Medical, LLC</td>
<td>$15,894</td>
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Current Year Direct Receipts | $38,760
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Total | $1,124,601