Division Data Summary

**Research and Training Details**

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<tr>
<td>Number of Faculty</td>
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<td>Number of Joint Appointment Faculty</td>
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<td>Number of Research Fellows</td>
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<td>Number of Research Students</td>
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<td>Number of Support Personnel</td>
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<td>Direct Annual Grant Support</td>
<td>$1,323,429</td>
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<td>Direct Annual Industry Support</td>
<td>$20,114</td>
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<td>Peer Reviewed Publications</td>
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**Clinical Activities and Training**

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<td>Number of Clinical Staff</td>
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<td>Number of Clinical Fellows</td>
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<td>Inpatient Encounters</td>
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<tr>
<td>Outpatient Encounters</td>
<td>12,684</td>
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Division Collaboration

Collaboration with Division of Radiology
Collaborating Faculty: Bill Gottliebson, MD; Robert Fleck, MD; Janaka Wansapura, PhD
Co-Investigators/co-authors on clinical cardiac MRI research studies, including 2 grant applications.

Collaboration with Division of Nephrology & Hypertension
Collaborating Faculty: Catherine D. Krawczeski, MD; Prasad Devarajan, MD
Research protocols and grants

Collaboration with Division of Human Genetics
Collaborating Faculty: Bradley Tinkle, PhD; Richard Meyer, MD
Screening Marfan patients

Collaboration with Division of Pulmonary Medicine
Collaborating Faculty: Raouf Amin, MD; Richard Meyer, MD
Assessing sleep apnea on the effect of aortic dilation

Collaboration with Department of Anesthesia
Collaborating Faculty: Erik Michelfelder, MD; Senthil Sadhasivam, MD; Pornswan Ngamprasertwong, MD
Fetal sheep study examining effects of different maternal anesthetic regimens on fetal cardiovascular function during fetal surgery. Collaborating investigator on Foundation for Anesthesia Education and Research grant.

Collaboration with Department of Surgery
Collaborating Faculty: Erik Michelfelder, MD; Timothy Crombleholme, MD; Foong-Yen Lim, MD; Mourina Habli, MD
Multiple studies related to fetal cardiac function in Twin-twin transvusions syndrome, fetal tumors, and Congenital Cystic Adenomatous Malformations

Collaboration with Division of Endocrinology
Collaborating Faculty: Elaine Urbina, MD; Lawrence Dolan, MD
Co-investigator on grant exploring CV effects of diabetes

Collaboration with Division of Nephrology
Collaborating Faculty: Mark Mitsnefes, MD; Elaine Urbina, MD
Co-director of hypertension clinic

Collaboration with Division of Pulmonary Medicine
Collaborating Faculty: Raouf Amin, MD; Elaine Urbina, MD
Collaboration on study of vascular effects of sleep disorders

Collaboration with Biostatistics and Epidemiology
Collaborating Faculty: Jane Khoury; Elaine Urbina, MD
Collaboration on study of vascular effects of gestational diabetes

Collaboration with Division of Pediatric and Thoracic Surgery
Collaborating Faculty: Elaine Urbina, MD; Tom Inge, MD
Collaboration on study of CV effects of bariatric surgery

Collaboration with Division of Cardiovascular Biology
Collaborating Faculty: Tom Kimball, MD; Jeff Robbins, PhD; Katherine Yutzey, PhD; Jeff Molkentin, PhD
Aminals (mice, rats, fetal mice, fetal rats)

Collaboration with Division of Nephrology Cardiac/Vascular
Collaborating Faculty: Tom Kimball, MD; Mark Mitsnefes, MD
Chronic kidney disease in Children's Cohort Study (national multi-site Core reading Lab)

Collaboration with Division of Pulmonary Medicine
Collaborating Faculty: Tom Kimball, MD; Raouf Amin, MD
Cardiac/Vascular function

Collaboration with Division of Human Genetics
Collaborating Faculty: Tom Kimball, MD; Robert Hopkins
Cardcore/Field (Fabry pts) Genetics Lysosomal Disease Center. Sponsor: Genzyme Corporation

Collaboration with Division of Human Genetics
Collaborating Faculty: Tom Kimball, MD; Andrew Burrow, MD
Encord Studay (Evaluation Cerezyme vs. a new substrate reduction therapy in 18-65 year old adults with Gaucher Disease)

Collaboration with Division of Molecular Genetics
Collaborating Faculty: Tom Kimball, MD; Punam Malik, MD
Zileuton Study (A Phase I Trail of Zileuton CR in children and adults with Sickle Cell Disease)

Collaboration with Division of Endocrinology
Collaborating Faculty: Tom Kimball, MD; Lawrence Dolan, MD; Elaine Urbina, MD
SEARCH/Sub Clinical Cardiovascular Disease

Collaboration with Division of Endocrinology
Collaborating Faculty: William Gottliebson, MD; Phillipe Backeljauw, MD; Iris Little, MD
Co-investigators/co-authors on combined clinical cardiac MRI/endocrinology research study
Collaboration with Division of Experimental Hematology

Collaborating Faculty: Punam Malik, MD; William Gottliebson, MD
Co-investigators/co-authors on combined clinical cardiac MRI/experimental hematology research studies, including 2 grant applications

Collaboration with CTSA, Community Component

Collaborating Faculty: Robert Siegel, MD; James Heubi, MD; Monica Mitchell, PhD
Helping link the CTSA with pediatricians in community

Collaboration with Center of Health Policy, Healthy Kids Ohio

Collaborating Faculty: Robert Siegel, MD; Carole Lannon
Faculty Advisor

Collaboration with General and Community Pediatrics, The Cincinnati Pediatric Research Group

Collaborating Faculty: Robert Siegel, MD; Tom Dewitt, MD; Bill Brinkman, MD; Jessica Valenzuela, PhD
Medical Director of the CPRG

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: Timothy Knilans, MD; Raouf S. Amin, MD; Abu Shamsuzzaman
Study looking at sleep study and neurologic abnormalities associated with the congenital prolonged QT syndrome

Collaboration with Center for Acute Nephrology Care

Collaborating Faculty: Stuart Goldstein, MD; Catherine Krawczeski, MD
Research in AKI

Collaboration with Division of Nephrology-Hypertension

Collaborating Faculty: Catherine Krawczeski, MD; Prasad Devarajan, MD
Research in AKI

Collaboration with Center for Acute Nephrology Care

Collaborating Faculty: Jeffrey Towbin, MD; Stuart Goldstein, MD; Prasad Devarajan, MD
Acute kidney injury in patients with cardiomyopathy and heart transplants

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: Jeffrey Towbin, MD; Raouf Amin, MD
Neuromuscular disease associated with cardiovascular and pulmonary disease

Collaboration with Division of Human Genetics

Collaborating Faculty: Jeffrey Towbin, MD; Stephanie Ware, MD
The association of genetic causes, metabolic disease and genetic syndromes in children with cardiomyopathy and cardiovascular genetic disorders

Collaboration with Division of Neurology

Collaborating Faculty: Jeffrey Towbin, MD; Brenda Wong, MD
Neuromuscular patients with cardiovascular disease

Collaboration with Cancer and Blood Disease Institute

Collaborating Faculty: Jeffrey Towbin, MD; James Geller, MD; Raj Nagarajan, MD; Punam Malik, MD
Mechanistic studies on cardiovascular effect in sickle cell and in children treated with Adriamycin

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

Arnold Strauss, MD, Professor; BK Rachford Professor and Chair, Department of Pediatrics, University of Cincinnati College of Medicine; Director, Cincinnati Children's Research Foundation; Chief Medical Officer, Cincinnati Children's Hospital Medical Center

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
Significant Accomplishments
Cardiology’s as part of the Heart Institute Accomplishments submitted by Carolyn Lipchik

Division Publications

1. :

Grants, Contracts, and Industry Agreements

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<th>Grant and Contract Awards</th>
<th>Annual Direct / Project Period Direct</th>
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| Benson, D  
Genetic Mechanisms of Cardiac Disease in the Young  
National Institutes of Health  
K24 HL 069712  
06/01/06 - 05/31/11  
$161,893 / $808,223 |
| Preoperative Therapy for Prevention of Postoperative Low Cardiac Output Syndrome  
National Institutes of Health  
U01 HL 085057  
09/04/06 - 08/31/11  
$194,200 / $976,800 |
| Pediatric Heart Disease Clinical Research Network  
The New England Research Institute (National Institutes of Health)  
U01 HL 68270  
12/01/06 - 12/31/12  
$46,354 / $46,354 |
| Benson  
Trial of Beta Blocker vs Angiotensin Receptor Blocker  
36,190 |
| Krawczeski  
Single Ventricle Reconstruction Extension Study (SVR II)  
3,080 |
| Krawczeski  
Single Ventricle Reconstruction Study (SVR I)  
7,084 |
| Musculoskeletal Ancillary Study  
The Johns Hopkins University (National Marfan Foundation)  
01/01/08 - 06/30/12  
$1,250 / $18,750 |
| Hinton Jr., R  
Genetic & Developmental Basis of Pediatric Aortic Valve  
National Institutes of Health  
K23 HL 085122  
08/03/06 - 04/30/11  
$122,831 / $614,420 |
| Ippisch, H  
Effects of Dietary Fat on Post-Prandial Vascular Function  
National Institutes of Health  
K23 HL 091174  
09/01/08 - 07/31/13  
$126,007 / $627,746 |
| Kimball, T  
Chronic Kidney Disease in Children |
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<th>Project Title</th>
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<th>End Date</th>
<th>Award Amount</th>
<th>Current Year Direct Receipts</th>
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<td>Duke University</td>
<td>U01 AG 022132</td>
<td>09/30/09</td>
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<td>Pediatric Cardiomyopathy Specimen Repository</td>
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<td>RO1 HL 087000</td>
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<td>Mechanisms of Vascular Dysfunction in Obesity &amp; the Metabolic Syndrome</td>
<td>National Institutes of Health</td>
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<td>Modifying Dietary Behavior in Adolescents with Elevated Blood Pressure</td>
<td>University of Cincinnati</td>
<td>R01 HL 088567</td>
<td>02/01/08</td>
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<td>Healthworks! Steps Out</td>
<td>Saucony Run for Good Foundation</td>
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