Radiology

Division Photo


Division Data Summary

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<th>Research and Training Details</th>
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<tr>
<td>Number of Faculty</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>Peer Reviewed Publications</td>
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<th>Clinical Activities and Training</th>
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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>Number of Other Students</td>
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<tr>
<td>Inpatient Encounters</td>
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<td>Outpatient Encounters</td>
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Division Collaboration

Collaboration with PNRC; Biostatistics and Epidemiology; Neurology; Biomedical Informatics; Imaging Research Center

Collaborating Faculty: Scott Holland, PhD; Vince Schmithorst, PhD; Jennifer Vannest, PhD; Jerzy Szafarski, MD, PhD; Akila Rajagopal, MS; Sara Robertson, BS; Amanda Huber, MA; Meghan O'Connell, BA; Mekibib Altaye, PhD; Anna Byars, PhD, Milena Korostenskaja, PhD; Michael Wagner, PhD; Andrew Rupert; Nicholas Felicelli; Christopher Hearn, BS/BA

Pediatric Functional Neuroimaging Research Network

Collaboration with PNRC; Otolaryngology; Audiology; Radiology; Biostatistic & Epidemiology;
Neuropsychologist
Collaborating Faculty: Scott Holland, PhD; Vince Schmithorst, PhD; Akila Rajagopal, Sara Robertson; Dan Choo, MD; John Grienwald, MD; David Brown, PhD; Marguerite Care, MD; Mekibib Altaye, PhD; Anna Byars, PhD
fMRI, Genes and Outcomes of Cochlear Implants in Infants
Collaboration with PNRC; Radiology; Neurology; Biostatistics and Epidemiology
Collaborating Faculty: Scott Holland, PhD; Jennifer Vannest, PhD; Amanda Huber; James Leach, MD; Anna Byars PhD; Mark Schapiro, MD; Mekibib Altaye, PhD
fMRI of Normal Language Development on children
Collaboration with PNRC; Pediatric Neurosurgery
Collaborating Faculty: Scott Holland, PhD; Weihong Yuan, PhD; David Henkel; Francesco Mangano, DO
The McLaurin Faculty Development Scholarship in Pediatric Brain Imaging and Functional Neurosurgery
Collaboration with PNRC; Otolaryngology
Collaborating Faculty: Vince Schmithorst, PhD; Sara Robertson; Edith Eads, MA
Cortical Reorganization in Children with Unilateral Sensorineural Hearing Loss
Collaboration with PNRC; Neurosurgery; Biostatistics and Epidemiology
Collaborating Faculty: Weihong Yuan, PhD; Scott Holland, PhD; David Henkel; Francesco Mangano, DO; Mekibib Altaye, PhD
Longitudinal DT Study in Children Tested for congenital Hydrocephalus
Collaboration with PNRC; Child Psychiatry
Enhancing Treatment of Obsessive Compulsive Disorder with Repetitive Transcranial Magnetic Stimulation
Collaboration with PNRC; Child Psychiatry
Collaborating Faculty: Scott Holland, PhD; Mark Difrancesco, PhD; Robert Kowatch, MD; Elana Harris, MD, PhD; Jennifer Combs, Judy Depew
Longitudinal Assessment of manic symptoms Competing Renewal
Collaboration with PNRC; Neurology
Collaborating Faculty: Scott Holland PhD; Jing Xiang, MD, PhD; Ton deGrauw, MD, PhD; Mark Schapiro, MD
High-Frequency Neuromagnetic Signals: A New Window for Analysis of Brain Function
Collaboration with PNRC; Behavioral Medicine and Clinical Psychology; Neurology
Collaborating Faculty: Mark Difrancesco, PhD; Scott Holland, PhD; Dean Beebe, PhD; Jeffrey Epstein, PhD; Douglas Rose, MD
Effect of Adolescent Sleep Restriction on Neural & Neurobehavioral Functioning
Collaboration with PNRC; Rheumatology; Behavior Medicine & Clinical Psychology
Collaborating Faculty: Mark Difrancesco, PhD; David Glass, MD; Hermine Brunner, MD, MSc; Jamie Meyers-Eaton, BS; Shannen Nelson, RN, BSN; Dean Beebe, PhD
Improved Diagnostics and advanced magnetic Resonance Imaging for pediatric NPSLE
Collaboration with PNRC; Pulmonary Medicine
Collaborating Faculty: Mark Difrancesco, PhD; Raouf Amin, Md
Blood Pressure Control and the Brain
Collaboration with PNRC; Hematology/Oncology; Radiology; Imaging Research Center; Planning & Business Development; Behavioral medicine & Clinical Psychology; Adolescent Medicine; Center for Chronic Disease
Collaboration with Imaging Research Center; Psychiatry and Behavior Neuroscience
Collaborating Faculty: Mark Difrancesco, PhD; Scott Holland, PhD; Tom Ford; Maryam Fouladi, MD, MSc; Alan Brody, MD; Michael Gelfand, MD; Charles Dumoulin, PhD; Dee Ellingwood, MA; Lori Stark, PhD; Maria Britto, MD, MPH; Marsha Cunningham
Proton therapy Task Forch
Collaboration with Imaging Research Center; Environmental Health
Collaborating Faculty: Kim Cecil, PhD; Kim Dietrich, PhD
Early lead Exposure, ADAH and Persistent Ciminality: Role of Genes and Environment
Collaboration with Imaging Research Center; Psychiatry and Behavior Neuroscience
Collaborating Faculty: Kim Cecil, PhD; Stephen Strakowski, MD
Bipolar Disorder Imaging & Treatment Research Center
Collaboration with Imaging Research Center; Psychiatry & Behavior Neuroscience;
Collaborating Faculty: Diana Lindquist, PhD; richard Komoroski, PhD
Estimating intracellular Lithium in Brain in Vivo by 7Li
Collaboration with Radiology; Gastroenterology, Hepatology, & Nutrition
Collaborating Faculty: Charles Dumoulin; James Heubi, MD
Clinical Translational and Science Award (CTSA) from the NIH for the University of Cincinnati and Cincinnati Children's Hospital Medical Center
Collaboration with Radiology; General & Community Pediatrics
Collaborating Faculty: Tai Laor MD; Heidi Kalkwarf PhD
Bone Mineral Density in Childhood Study Clinical Center
Collaboration with Imaging Research Center; Pediatric Neurosurgery
Collaborating Faculty: Kim Cecil, PhD; Todd Maugans, MD
Pediatric Cerebral Concussion: A MRI Analysis

Collaboration with Radiology; Behavioral Medicine & Clinical Psychology
Collaborating Faculty: Alan Brody, MD; Scott powers, PhD, ABPP
HRCT & Growth in Preschoolers Receiving Behavioral TX

Collaboration with Imaging Research Center; Perinatal Institute
Collaborating Faculty: Charles Dumoulin, PhD; Jeffrey Whitsett, MD; James Greenburg, MD
This collaboration seeks to develop a new generation of MR scanners that will be cited in Neonatal Intensive Care units. The first of these scanners is planned for CCHMC RCNIC.

Collaboration with Imaging Research Center; Pulmonary Medicine
Collaborating Faculty: Charles Dumoulin, PhD; Raouf Amin, MD; Ravy Elliru, MD
This collaboration is to further MR imaging of lung anatomy and physiology.

Collaboration with Imaging Research Center; The Heart Institute
Collaborating Faculty: Charles Dumoulin, PhD; Jeffrey Towbin, MD; Michael Taylor, MD
This collaboration will develop new techniques for diagnosis and therapy of the heart.

Collaboration with Imaging Research Center; Nephrology
Collaborating Faculty: Charles Dumoulin PhD; Yu Li, PhD; Janaka Wansapura, PhD; John Bissler, MD
This collaboration is developing novel ways to treat myoangiolipomas associated with tuberous sclerosis.

Collaboration with Imaging Research Center; Endocrinology
Collaborating Faculty: Charles Dumoulin, PhD; Janaka Wanspura, PhD; Larry Dolan, MD
The result of this joint effort between Endo and IRC was a grant proposal to NIH to develop high intensity ultrasound ablation of visceral fat for the treatment of metabolic syndrome associated with type 2 diabetes.

Collaboration with Imaging Research Center; The Cancer Institute
Collaborating Faculty: Charles Dumoulin, PhD; Mark DiFrancesco, PhD; John Prentesis
This collaboration is to explore technical, clinical and market potential for a proton therapy center for CCHMC and the greater Cincinnati area.

Collaboration with Imaging Research Center; General Pediatrics
Collaborating Faculty: Kim Cecil, PhD; Kim Yolton, MD
Lead Exposure

Collaboration with Imaging Research Center; Developmental Biology
Collaborating Faculty: Diana Lindquist, PhD; Alex Kuan, PhD
RAC GTPase in the mammalian brain development.

Collaboration with Imaging Research Center; Developmental Biology
Collaborating Faculty: Diana Lindquist, PhD; Alex Kuan, PhD
Therapy for perinatal cerebral hypoxia-ischemia.

Collaboration with Imaging Research Center; Neurology
Collaborating Faculty: Diana Linquist, PhD; Kim Cecil, PhD; Michael Williams, MD
Effect of lead, manganese and stress during development.

Collaboration with Imaging Research Center; Cardiology
Collaborating Faculty: Janaka Wansapura, PhD; William Gottliebson, MD
Advanced cardiac MR imaging.

Collaboration with Imaging Research Center; Heart Institute
Collaborating Faculty: Janaka Wansapura, PhD; Jeffrey Towbin, MD; Woody Benson, MD
Cardiac structure and function in early familial cardiomyopathy.

Collaboration with Image Research Center; Experimental Hematology
Collaborating Faculty: Diana Lindquist, PhD; Nancy Ratner, MD
Neurofibromatosis.

Faculty Members

Lane F. Donnelly, MD, Professor; Director and Radiologist-in-Chief
Todd A. Abruzzo, MD, Assistant Professor
Christopher G. Anton, MD, Assistant Professor; Division Co-Chief CT; Associate Director, Radiology Residency Program
Diane S. Babcock, MD, Professor Emeritus
Williams S. Ball, MD, Professor
Alan S. Brody, MD, Professor; Associate Director, Radiology Research
Maria A. Calvo, MD, Assistant Professor
Marquerite M. Care, MD, Assistant Professor
Kim M. Cecil, PhD, Research Professor
Eric J. Crotty, MD, Assistant Professor; Director, Pediatric Radiology Fellowship Program
Mark DiFrancesco, PhD, Research Assistant Professor; Assistant Director, Pediatric Neuroimaging Research Consortium
Charles L. Dumoulin, PhD, Research Professor; IRC Scientific Director, Imaging Research Center
John C. Egelhoff, DO, Professor; Division Co-Chief, CT
Kathleen H. Emery, MD, Professor; Division Co-Chief, MRI; Division Co-Chief, Musculoskeletal Imaging
Robert J. Fleck, MD, Assistant Professor; Division Chief, Cardiac MRI
Michael J. Gelfand, MD, Professor; Division Chief, Nuclear Medicine
Marilyn J. Goske, MD, Professor; Chair, Educational Council
Carolina Guimaraes, MD, Instructor
Kathy J. Helton-Skally, MD, Assistant Professor
Scott Holland, PhD, Research Professor; Director, Pediatric Neuroimaging Research Consortium
Neil D. Johnson, MD, Professor
Blaise V. Jones, MD, Associate Professor; Director of Clinical Services; Division Chief, Neuroradiology; Division Co-Chief, MRI
Beth M. Kline-Fath, MD, Associate Professor; Division Chief, Fetal Imaging
Bernadette L. Koch, MD, Associate Professor; Associate Director, Physician Services and Education
Steven J. Kraus, MD, Associate Professor; Division Chief, Radiography and Fluoroscopy
Kamlesh U. Kukreja, MD, Instructor
David Larson, MD, Assistant Professor; Chief, Quality Improvement
Tal Laor, MD, Professor; Division Co-Chief Musculoskeletal Imaging
James L. Leach, MD, Associate Professor
Diana Lindquist, PhD, Research Assistant Professor
Yu Li, PhD, Research Assistant Professor
Michael P. Nasser, MD, Assistant Professor
Alan E. Oestreich, MD, Professor
Sara M. O'Hara, MD, Associate Professor; Division Chief, Ultrasound
Manish N. Patel, MD, Assistant Professor
Daniel J. Podberesky, MD, Assistant Professor; Division Chief, Thoraco-Abdominal Imaging
John M. Racadio, MD, Associate Professor; Division Chief, Interventional Radiology
Eva I. Rubio, MD, Assistant Professor
Susan E. Sharp, MD, Assistant Professor
Janet L. Strife, MD, Professor Emeritus
Vincent J. Schmithorst, PhD, Assistant Professor
Alexander J. Towbin, MD, Assistant Professor; Director, Radiology Informatics
Jennifer Vannest, PhD, Assistant Professor
Janaka Wansapura, PhD, Assistant Professor
Weihong Yuan, PhD, Assistant Professor
Andrew M. Zbojniewicz, MD, Assistant Professor

Clinical Staff Members
- Hee Kyung Kim, MD
- Marcia Komlos, MD

Trainees
- Kevin M. Garrett, MD, PL6, University of Tennessee/Methodist Healthcare
Significant Accomplishments

Imaging research
Our faculty authored or co-authored 94 peer reviewed publications, the largest number ever and a 65 percent increase over last year. Our researchers also received significant funding. Primary investigators in imaging received $9.1 million in new direct and indirect grant funding this year, adding to the $11.6 million in imaging grants and $4.9 million in imaging support of other research projects. Additionally, we have been notified of $9.4 million in grant funding likely to be awarded in the coming fiscal year.

Honors and awards
Our faculty and staff received several honors in the past fiscal year:

2010 Caffey Award for Best Clinical Paper Presentation at Society for Pediatric Radiology Meeting. Tal Laor MD, Eric Wall MD; Andrew M Zbojniewicz MD. Juvenile Osteochondritis Dissecans (JOCD): Is It a Growth Disturbance of the Secondary Physis of the Epiphysis?

2010 Society for Pediatric Radiology Gold Medal - Janet L. Strife MD

2010 Society for Pediatric Radiology President - Neil D. Johnson MD

2010 Magna Cum Laude Award for Electronic Scientific Exhibit - American Society of Neuroradiology. Leach JL, Guimaraes C, Jones BV. Trainee Misinterpretations on Pediatric Neuroimaging Studies: Classification, Imaging Analysis, and Outcome Assessment.


2009 Best Scientific Paper Award, Institute for Healthcare Improvement (IHI). Muething SE, Donnelly LF, Goodfriend MA, Anderson JM, Kotagal UR. "A Program to Reduce Serious Safety Events Throughout an Academic Hospital."

2010 CHCA (Children's Hospital Corporation of America) Race for Results Competition Co-Winner. Muething SE, Donnelly LF, Goodfriend MA, Anderson JM, Kotagal UR."A Program to Reduce Serious Safety Events at an Academic Hospital."

2009 Invited Publication in Radiographics, Quality Improvement Storyboard Poster, Radiologic Society of North America. Donnelly LF, Gessner KE, Dickerson JM, Lehkamp TW, Moskovitz JA, Koch BL. Driving Imaging Delivery Performance via a Department Scorecard: Review of a 7-year Experience

Division Publications

Grants, Contracts, and Industry Agreements

Grants, Contracts, and Industry Agreements

Grant and Contract Awards | Annual Direct / Project Period Direct

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<th>Researcher</th>
<th>Project Description</th>
<th>Institution</th>
<th>anticipating start date</th>
<th>completing date</th>
<th>Total Funding</th>
<th>Direct Cost</th>
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<td>Brody, A</td>
<td>Efficacy and Safety of PTC124 as an Oral Treatment for Nonsense-Mutation-Mediated</td>
<td>PTC Therapeutics, Inc.</td>
<td>12/01/09 - 11/30/11</td>
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<td>$8,085 / $34,790</td>
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<td>Cystic Fibrosis</td>
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<td>Therapeutic Development Center - TDN Imaging Core</td>
<td>Cystic Fibrosis Foundation</td>
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<td>Cecil, K</td>
<td>Bipolar Disorder Imaging &amp; Treatment Research Center</td>
<td>University of Cincinnati</td>
<td>07/01/07 - 06/30/12</td>
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<td>$95,654 / $425,878</td>
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<td>Early Lead Exposure, ADHD and Persistent Criminality: Role of Genes and Environment</td>
<td>University of Cincinnati</td>
<td>06/01/07 - 03/31/12</td>
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<td>$123,892 / $736,260</td>
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<td>Dumoulin, C.</td>
<td>MR Image Guided Focused Ultrasound for Treatment of Liver and Renal Cancer</td>
<td>Stanford University</td>
<td>04/01/09 - 03/31/11</td>
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<td>$66,667 / $100,000</td>
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<td>Cincinnati Center for Clinical Translational Sciences and Training - Imaging Research</td>
<td>University of Cincinnati</td>
<td>04/03/09 - 03/31/14</td>
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<td>$25,502 / $49,740</td>
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<td>Goske, M</td>
<td>Developing a 'Safe Practice' Registry for CT Scans in Children</td>
<td>RSNA Research &amp; Education Foundation</td>
<td>07/01/09 - 06/30/11</td>
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<td>$75,000 / $150,000</td>
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<td>CT Radiation Safety in Children: A Model for a National Web-Based Continuous</td>
<td>Society for Pediatric Radiology</td>
<td>08/01/08 - 07/31/10</td>
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<td>$40,000 / $40,000</td>
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<td>Holland, S</td>
<td>fMRI of Normal Language Development in Children</td>
<td>National Institutes of Health</td>
<td>08/01/06 - 06/30/11</td>
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<td>$142,737 / $722,434</td>
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<td>fMRI of Language Recovery Following Stroke in Adults</td>
<td>University of Cincinnati</td>
<td>09/30/08 - 07/31/13</td>
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<td>$33,542 / $146,204</td>
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<td>Pediatric Functional Neuroimaging Research Network</td>
<td>National Institutes of Health</td>
<td>09/28/09 - 09/27/14</td>
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<td>Kim, H</td>
<td>T2 Relaxation Time Mapping</td>
<td>Society of Pediatric Radiology</td>
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<td>$10,000 / $10,000</td>
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<td>Laor, T</td>
<td>Use of Thermal and 3D Surface Imaging to Quantify Arthritis</td>
<td>Children's Hospital of Pittsburgh</td>
<td>01/01/10 - 03/31/11</td>
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<td>$3,145 / $3,145</td>
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<td>Lindquist, D.</td>
<td>Estimating Intracellular Lithium in Brain in Vivo by 7Li MRS</td>
<td>University of Cincinnati</td>
<td>02/01/09 - 11/30/10</td>
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<td>$49,535 / $104,770</td>
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<td>Schmithorst, V</td>
<td><strong>Cortical Reorganization in Children with Unilateral Sensorineural Hearing Loss</strong></td>
<td>National Institutes of Health</td>
<td>K25 DC 008110</td>
<td>05/01/06 - 04/30/11</td>
<td>$129,495 / $618,842</td>
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<td>Wansapura, J</td>
<td><strong>Cardiac Structure and Function in Early Familial Cardiomyopathy</strong></td>
<td>National Institutes of Health</td>
<td>K25 HL102244</td>
<td>04/15/10 - 03/31/15</td>
<td>$129,917 / $656,535</td>
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<td>Yuan, W</td>
<td><strong>Longitudinal DT Study in Children Tested for Congenital Hydrocephalus</strong></td>
<td>National Institutes of Neurological Disorders &amp; Stroke</td>
<td>R01 NS 066932</td>
<td>09/30/09 - 06/30/13</td>
<td>$299,178 / $1,168,627</td>
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