

Division Summary

RESEARCH AND TRAINING DETAILS

Number of Faculty	49
Number of Joint Appointment Faculty	23
Number of Research Fellows	1
Number of Research Students	13
Number of Support Personnel	58
Direct Annual Grant Support	\$3,051,779
Direct Annual Industry Support	\$8,730
Peer Reviewed Publications	137

CLINICAL ACTIVITIES AND TRAINING

Number of Clinical Staff	236
Number of Staff Physicians	10
Number of Clinical Fellows	12
Number of Other Students	63
Inpatient Encounters	51,752
Outpatient Encounters	149,478

Division Photo



Row 1: L Wang, J Tkach, U Nagaraj, S O'Hara
 Row 2: J Racadio, M Aquino, A Oestreich, S Kraus, R Fleck, E Crotty
 Row 3: S Holland, A Towbin, C Merrow, M Patel, N Johnson, M Gelfand
 Row 4: D Wallihan, C Dumoulin, G Lee, A Brody, J Leach, B Coley

Significant Accomplishments

Leadership in Patient Safety

The Department of Radiology continues to lead efforts in quality improvement and operational excellence. Our "Right Patient, Right Exam" initiative prevented more than 490 patient care errors in 2014, achieving 5-sigma process reliability.

In radiography and fluoroscopy, doses have been reduced as much as 75 percent from standard practices. Our interventional radiology team, physicists, and industry partners have created techniques that reduce radiation exposure up to 95 percent during complex and lengthy interventional radiology cases, while obtaining high-quality images.

Patients with scoliosis often need repeat whole spine radiographs. We have recently installed a specialized digital slot scanning system that allows image acquisition with up to a 90 percent reduction in radiation exposure for these patients.

Expanding Capabilities in Imaging Technology

This year, with the Imaging Research Center (IRC), we invested in infrastructure and capabilities to ensure that researchers throughout the medical center have access to the latest technologies.

We installed a 1.5 Tesla MR system used by the interventional laboratory for research into multi-modality interventions. The system's Sonalleve™ high-intensity focused ultrasound (HIFU) system is the only one in a

preclinical research facility in the country. Our 7 Tesla MR imaging system was upgraded to enable faster scanning with new imaging capabilities.

On the clinical side, we added a new 3T system in Radiology and a new 1.5T system for cardiac imaging in the Heart Institute. Both systems allow state-of-the-art clinical research and advances in imaging evaluation for our patients.

Expanding our Imaging Research Center (IRC)

We expanded the breadth and depth of research by installing a 1.5T Philips MRI and hyperpolarizers for ^3He and ^{129}Xe MR imaging, and upgrading our 7T system. The IRC won a “Taking on Tomorrow Award” from Boston Children’s Hospital for our NICU MRI, to continue our work in making this modality accessible to our most fragile patients.

Our NICU MRI capabilities, our hyperpolarized gas capabilities, and the collaborative relationships between Radiology, Pulmonology, the Perinatal Institute, and Developmental Biology resulted in an abstract entitled “Pulmonary MRI in Neonatal Medicine.” The project was recognized as one of the most significant abstracts at an international radiology meeting this year.

Zackary Cleveland, PhD, joined the faculty in Radiology and Pulmonary Medicine as an assistant professor; his knowledge of hyperpolarized gas imaging adds significant expertise to our growing pulmonary MR imaging program.

Pediatric Neuroimaging Research Consortium (PNRC)

C-MIND (Cincinnati MR Imaging of NeuroDevelopment) is an NICHD-sponsored project, led by the PNRC, to provide a database of brain structural, functional, and perfusion MRI. The database includes structural and functional neuroimaging data and neurocognitive assessments for nearly 200 healthy, normally developing children from infancy to 18 years. The database was recently released for public use, and is available for download at <https://research.cchmc.org/c-mind/>.

Research Highlights

Patient Safety – Primum Non Nocere

The Department of Radiology continues to be a leader in quality improvement and operational excellence. Our “Right Patient, Right Exam” initiative is designed to decrease inappropriate imaging from order entry errors, and prevented more than 490 errors from reaching patients in fiscal 2014, achieving a 5-sigma process reliability.

Our leadership in minimizing pediatric imaging radiation exposure continues with radiography and fluoroscopy, where doses have been reduced up to 75% from standard practices. Work with our interventional radiology team, department physicists, and industry partners have created new techniques that allow up to 95% reduction in radiation exposure during complex and lengthy interventional radiology cases, while still obtaining high quality images.

Patients with scoliosis (curvature of the spine) often need repeated whole spine radiographs as part of their treatment monitoring. The Department has recently installed a specialized digital slot scanning system that allows image acquisition with up to a 90% reduction in radiation exposure for these patients.

Imaging Technology – Expanding Capabilities

New discovery in imaging requires high quality state of the art equipment in a field that is always advancing.

This year the Department of Radiology and Imaging Research Center (IRC) made significant investments in infrastructure and capabilities to ensure that departmental researchers, and researchers from the entire Cincinnati Children's enterprise, have access to the equipment and technologies that they need.

Among many improvements was the installation of a wide-bore 1.5 Tesla MR system for preclinical and clinical research in the IRC. The system was installed adjacent to the research interventional lab and is being used for research into multi-modality interventions. This system also contains the Sonalleve™ high-intensity focused ultrasound (HIFU) system, the only one in a preclinical research facility in the country. Our seven Tesla MR imaging system received a major upgrade to its electronic components. This upgrade included new pulse sequencing hardware and three additional receive channels, enabling faster scanning with new imaging capabilities.

On the clinical side, we added a new 3T system in the main department and a new 1.5T system for cardiac imaging located in the Heart Institute on A6. Both systems allow state of the art clinical research and give us the ability to bring the most current advances in imaging evaluation to our patients.

Imaging Research Center (IRC) (<https://irc.cchmc.org>)

Significant expansion in the breadth and depth of research capabilities has occurred with the installation of a new 1.5T Philips MRI, the installation of hyperpolarizers for ^3He and ^{129}Xe MR imaging, and the upgrade of our 7T system. In recognition of our NICU MRI program, the IRC won a "Taking on Tomorrow Award" from Boston Children's Hospital to continue our work in making this important modality accessible to our most fragile patients.

The combination of our NICU MRI capabilities, our hyperpolarized gas capabilities, and the excellent collaborative relationships between Radiology, Pulmonology, the Perinatal Institute, and Developmental Biology resulted in an abstract entitled "Pulmonary MRI in Neonatal Medicine." Presented at the ISMRM in Milan, this project was recognized as one of the most interesting and significant abstracts at this worldwide meeting. Further strengthening this program, Zackary Cleveland, PhD, joined the faculty in Radiology and Pulmonary Medicine as an assistant professor from Duke University; his knowledge of hyperpolarized gas imaging adds significant expertise to our growing pulmonary MR imaging program.

Pediatric Neuroimaging Research Consortium (PNRC) (<https://pnrc.cchmc.org>)

The C-MIND project (Cincinnati MR Imaging of NeuroDevelopment), an NICHD-sponsored contract to provide a normative database of brain structural, functional, and perfusion MRI. Lead by the PNRC, with the partnership of the University of Cincinnati, The Brain Mapping Center at UCLA, The [Laboratory of Neuroimaging \(LONI\) at USC](#), Children's Hospital of Pittsburgh, and The Functional MRI Laboratory University of Michigan, the database now includes structural and functional neuroimaging data and neurocognitive assessments in nearly 200 healthy, normally developing children from infancy to 18 years. This data base was recently released for public use, and data is available for download at <https://research.cchmc.org/c-mind/> along with user manuals, variable dictionaries, documentation of methods and quality assurance, and standard processing pipelines. Extensive neuropsychological assessment data is also available on each participant, through the database. Additionally, three year longitudinal subsamples of children (ages 0-3 years and 7-9 years) are available for developmental studies.

Faculty Honors and Awards:

Scott Holland, PhD: Excellence in Doctoral Mentoring Award from the University of Cincinnati

Carl Merrow, MD: Elected to membership in the International Society for the Study of Vascular Anomalies

Interventional Radiology Section (Todd Abruzzo, MD, Neil Johnson, MD, Kamlesh Kukreja, MD, Manish Patel, DO, John Racadio, MD): Cincinnati Children's Hospital Medical Center Faculty Team Award

Tal Laor, MD: Jack Haller Award for Excellence in Education from the Society for Pediatric Radiology

Alex Towbin, MD: Harold B. Spitz, MD Resident Teaching Award from the Department of Radiology, University of Cincinnati College of Medicine; Election as Fellow of the International Cancer Imaging Society

Brian Coley, MD: Election as Fellow of the American College of Radiology

Significant Publications

Greiner MV, Richards TJ, Care MM, **Leach JL**. Prevalence of subdural collections in children with macrocrania. *AJNR Am J Neuroradiol*. 2013 34(12):2373-8.

While children with unexpected subdural collections should still cause concern for abusive head trauma, 3.6% of children with macrocrania may have such collections in the absence of such injury.

Holland SK, Altaye M, Robertson S, Byars AW, Plante E, Szaflarski JP. Data on the safety of repeated MRI in healthy children. *Neuroimage Clin*. 2014 9;4:526-30.

This paper provides the first empirical evidence that shows repeated MRI exposure during development does not have deleterious effects on IQ or BMI.

Goske MJ, **Strauss KJ**, Coombs LP, Mandel KE, Towbin AJ, Larson DB, Callahan MJ, Darge K, **Podberesky DJ**, Frush DP, Westra SJ, Prince JS. Diagnostic reference ranges for pediatric abdominal CT. *Radiology*. 2013 268(1):208-18.

The concept of diagnostic reference ranges addresses the balance between the patient's risk (radiation dose) and benefit (diagnostic image quality). Calculation of reference doses provides a tool to help develop site-specific CT protocols that help manage pediatric patient radiation doses.

Serai SD, **Laor T**, Dwek JR, Zbojniewicz AM, Carl M. Feasibility of ultrashort TE (UTE) imaging of children at 1.5 T. *Pediatr Radiol*. 2014;44(1):103-8.

Ultrashort TE (UTE) is a relatively new MRI technique that allows for the visualization of tissue structures with short T2 components that show little or no signal on conventional MR imaging sequences. Not used previously in children, this technique will allow more detailed imaging of structures in many pediatric conditions.

Serai SD, Wallihan DB, Venkatesh SK, Ehman RL, Campbell KM, Sticka J, Marino BS, **Podberesky DJ**. Magnetic Resonance Elastography of the Liver in Patients Status-Post Fontan Procedure: Feasibility and Preliminary Results. *Congenit Heart Dis*. 2014 9(1):7-14.

Patients with chronically elevated right heart pressures develop hepatic dysfunction from chronic congestion and fibrosis, now quantifiable and trackable non-invasively with this technique.

Division Publications

1. Adaletli I, Towbin AJ, Ozbayrak M, Madazli R. **Anterior mediastinal lymphangioma: pre- and postnatal sonographic findings**. *J Clin Ultrasound*. 2013; 41:383-5.
2. American Institute of Ultrasound in M, American College of R, Society of Radiologists in U. **AIUM practice guideline for the performance of neurosonography in neonates and infants**. *J Ultrasound Med*. 2014; 33:1103-10.
3. Balter S, Strauss KJ. **To grid or not to grid**. *Catheter Cardiovasc Interv*. 2013; 82:58.
4. Bebeko G, Bertocci MA, Fournier JC, Hinze AK, Bonar L, Almeida JR, Perlman SB, Versace A, Schirda C,

- Travis M, Gill MK, Demeter C, Diwadkar VA, Ciuffetelli G, Rodriguez E, Olino T, Forbes E, Sunshine JL, Holland SK, Kowatch RA, Birmaher B, Axelson D, Horwitz SM, Arnold LE, Fristad MA, Youngstrom EA, Findling RL, Phillips ML. **Parsing Dimensional vs Diagnostic Category-Related Patterns of Reward Circuitry Function in Behaviorally and Emotionally Dysregulated Youth in the Longitudinal Assessment of Manic Symptoms Study.** *JAMA Psychiatry.* 2014; 71:71-80.
5. Bishop MW, Yin H, Shimada H, Towbin AJ, Miethke A, Weiss B. **Management of Stage 4S Composite Neuroblastoma With a MYCN-amplified Nodule.** *J Pediatr Hematol Oncol.* 2014; 36:e31-5.
 6. Bouchoux G, Shivashankar R, Abruzzo TA, Holland CK. **In silico Study of Low-Frequency Transcranial Ultrasound Fields in Acute Ischemic Stroke Patients.** *Ultrasound Med Biol.* 2014; 40:1154-66.
 7. Callahan MJ, Servaes S, Lee EY, Towbin AJ, Westra SJ, Frush DP. **Practice Patterns for the Use of Iodinated IV Contrast Media for Pediatric CT Studies: A Survey of the Society for Pediatric Radiology.** *AJR Am J Roentgenol.* 2014; 202:872-9.
 8. Calvo-Garcia MA, Lim FY, Stanek J, Bitters C, Kline-Fath BM. **Congenital peribronchial myofibroblastic tumor: prenatal imaging clues to differentiate from other fetal chest lesions.** *Pediatr Radiol.* 2014; 44:479-83.
 9. Cancelliere A, Mangano FT, Air EL, Jones BV, Altaye M, Rajagopal A, Holland SK, Hertzler DA, 2nd, Yuan W. **DTI Values in Key White Matter Tracts from Infancy through Adolescence.** *AJNR Am J Neuroradiol.* 2013; 34:1443-9.
 10. Cecil KM. **Use of MRS in inborn errors of metabolism Canavan's disease, MRS in differential diagnosis.** In: C Stagg, D Rothman, eds. *Magnetic Resonance Spectroscopy: Tools for Neuroscience Research and Emerging Clinical Applications.* San Diego, CA: Academic Press; 2014:196-221.
 11. Cecil KM. **Proton magnetic resonance spectroscopy: technique for the neuroradiologist.** *Neuroimaging Clin N Am.* 2013; 23:381-92.
 12. Chandra RV, Meyers PM, Hirsch JA, Abruzzo T, Eskey CJ, Hussain MS, Lee SK, Narayanan S, Bulsara KR, Gandhi CD, Do HM, Prestigiacomo CJ, Albuquerque FC, Frei D, Kelly ME, Mack WJ, Pride GL, Jayaraman MV. **Vertebral augmentation: report of the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery.** *J Neurointerv Surg.* 2013; 6:7-15.
 13. Chapple CL, Fransson A, Homolka P, McLean ID, Strauss KJ. **Dosimetry in diagnostic radiology for paediatric patients.** Vienna; International Atomic Energy Agency.
 14. Chicoine LG, Montgomery CL, Bremer WG, Shontz KM, Griffin DA, Heller KN, Lewis S, Malik V, Grose WE, Shilling CJ, Campbell KJ, Preston TJ, Coley BD, Martin PT, Walker CM, Clark KR, Sahenk Z, Mendell JR, Rodino-Klapac LR. **Plasmapheresis eliminates the negative impact of AAV antibodies on microdystrophin gene expression following vascular delivery.** *Mol Ther.* 2014; 22:338-47.
 15. Chicoine LG, Rodino-Klapac LR, Shao G, Xu R, Bremer WG, Camboni M, Golden B, Montgomery CL, Shontz K, Heller KN, Griffin DA, Lewis S, Coley BD, Walker CM, Clark KR, Sahenk Z, Mendell JR, Martin PT. **Vascular Delivery of rAAVrh74.MCK.GALGT2 to the Gastrocnemius Muscle of the Rhesus Macaque Stimulates the Expression of Dystrophin and Laminin alpha2 Surrogates.** *Mol Ther.* 2014; 22:713-24.
 16. Coleman A, Kline-Fath B, Keswani S, Lim FY. **Prenatal solid tumor volume index: novel prenatal predictor of adverse outcome in sacrococcygeal teratoma.** *J Surg Res.* 2013; 184:330-6.
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21. DiFrancesco MW, Robertson SA, Karunanayaka P, Holland SK. **BOLD fMRI in infants under sedation: Comparing the impact of pentobarbital and propofol on auditory and language activation.** *J Magn Reson Imaging.* 2013; 38:1184-95.
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44. Horowitz-Kraus T, Vannest JJ, Holland SK. **Overlapping neural circuitry for narrative comprehension and proficient reading in children and adolescents.** *Neuropsychologia*. 2013; 51:2651-62.
45. John SD, Moore QT, Herrmann T, Don S, Powers K, Smith SN, Morrison G, Charkot E, Mills TT, Rutz L, Goske MJ. **The Image Gently Pediatric Digital Radiography Safety Checklist: Tools for Improving Pediatric Radiography.** *J Am Coll Radiol*. 2013; 10:781-788.
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- spectroscopy.** *Pediatr Radiol.* 2014; 44:149-57.
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- response narrative comprehension in adolescents.** *Brain Connect.* 2014; 4:273-85.
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Faculty, Staff, and Trainees

Faculty Members

Brian D. Coley, MD, Professor

Leadership Director and Radiologist-in-Chief; Endowed Chair, The Frederic N. Silverman Chair for Pediatric Radiology

Research Interests Ultrasound, imaging care delivery

Bernadette L. Koch, M.D., Professor

Leadership Associate Chief, Academic Affairs

Research Interests Imaging the pediatric head and neck

Blaise V. Jones, MD, Professor

Leadership Associate Chief, Clinical Operations; Division Chief, Neuroradiology; Division Co-Chief, MRI

Research Interests Pediatric neuroradiology, neuro-oncology and cerebrovascular diseases

Todd A. Abruzzo, MD, Associate Professor

Leadership Chief, Pediatric Interventional Neuroradiology

Research Interests Cerebrovascular disease, childhood stroke, aneurysms, intra-arterial chemotherapies, vascular malformations, neurovascular interventions

Christopher G. Anton, MD, Assistant Professor

Leadership Associate Director, Radiology Residency Program; Chief Division of Radiography

Research Interests Musculoskeletal diseases

Diane S. Babcock, MD, Professor Emerita

William S Ball, MD, Professor

Research Interests Pediatric Neuroradiology

Alan S. Brody, MD, Professor

Leadership Associate Director, Clinical Radiology Research; Chief, Division of Thoracic Imaging

Research Interests Imaging of the chest in cystic fibrosis and in childhood diffuse lung disease. He directs the Center for Diagnostic Imaging of the Therapeutic Development Network

Maria A. Calvo-Garcia, MD, Assistant Professor

Research Interests Fetal development and malformations including cloaca and other ano-rectal malformations, obstructive uropathy, skeletal dysplasias, vascular birthmarks, etc.

Marquerite M. Care, MD, Assistant Professor

Research Interests Traumatic brain injury, child abuse, CT neuroimaging

Kim M. Cecil, PhD, Professor

Research Interests Application of MR spectroscopy and imaging in several populations by characterizing the features of inborn errors in metabolism, attention-deficit hyperactivity disorder (ADHD), traumatic brain injury, and evaluating the effects of environmental neurotoxicants.

Eric J. Crotty, MD, Assistant Professor

Leadership Director, Pediatric Radiology Fellowship Program

Research Interests Cardiothoracic radiology, specifically childhood interstitial lung disease and also resident education

Mark DiFrancesco, PhD, Assistant Professor

Leadership Assistant Director, Pediatric Neuroimaging Research Consortium

Research Interests Imaging structure and function of brain networks impacted by behavioral and disease-related challenges

Charles L. Dumoulin, PhD, Professor

Leadership Scientific Director, Imaging Research Center

Research Interests Physics and engineering of Magnetic Resonance, MRI of neonates, MR-guided vascular interventions, and MR-guided Focused Ultrasound Therapy

Kathleen H. Emery, MD, Professor

Leadership Division Co-Chief. Musculoskeletal Imaging

Research Interests Musculoskeletal imaging and sports medicine

Robert J. Fleck, MD, Assistant Professor

Leadership Division Chief, Cardiac MRI

Research Interests CT and MR of the cardiopulmonary system.

Michael J. Gelfand, MD, Professor

Leadership Division Chief, Nuclear Medicine

Research Interests New applications of hybrid imaging (PET/CT, SPECT/CT, PET/MRI) in pediatrics, and radiation dose reduction in nuclear medicine and hybrid imaging

Randy O. Giaquinto, , Instructor

Research Interests MR coil engineering

Marilyn J. Goske, MD, Professor

Leadership Chair, Educational Council

Research Interests Radiation protection for children, communication, education for radiologists, technologists and fellows.

Kathy J. Helton-Skally, MD, Assistant Professor

Scott Holland, PhD, Professor

Leadership Director, Pediatric Neuroimaging Research Consortium; Director, Communication Sciences Research Center

Research Interests Advanced neuroimaging applications of MRI in pediatrics with a concentration on functional MRI of language, hearing and computational models of neural connectivity

Tzipi Horowitz-Kraus, z, Professor

Leadership Program Director, Reading and Literacy Discovery Center

Research Interests Neuroimaging: written language; oral language development

Neil D. Johnson, MD, Professor

Leadership Endowed Chair, The Neil D. Johnson Chair for Radiology Informatics; Medical Director, Vascular Access

Research Interests Interventional percutaneous image guided treatment of benign bone tumors such as Aneurysmal Bone Cyst and Osteoid Osteoma

Hee Kyung Kim, MD, Assistant Professor

Research Interests Advanced MR techniques in pediatric MR studies, neuromuscular disease, and cartilage image

Beth M. Kline-Fath, MD, Associate Professor

Leadership Division Chief, Fetal Imaging

Research Interests Fetal MRI, fetal ultrasound and neuroimaging

Steven J. Kraus, MD, Associate Professor

Leadership Division Chief, Fluoroscopy

Research Interests Gastrointestinal malformations

Tal Laor, MD, Professor

Leadership Division Co-Chief Musculoskeletal Imaging; Endowed Chair, The William S. Ball Chair for Radiology Research

Research Interests Skeletal injuries to the child, congenital abnormalities, and normal and abnormal bone growth and development

James L. Leach, MD, Associate Professor

Research Interests Epilepsy, functional MRI, neoplasms, cerebrovascular disease, brain perfusion imaging, diffusion imaging and image fusion

Greg Lee, PhD, Assistant Professor

Research Interests High-speed MR imaging

Diana Lindquist, PhD, Associate Professor

Research Interests Metabolic effects of drugs used to treat psychiatric illness

Yu Li, PhD, Assistant Professor

Research Interests Technological development and clinical applications of high speed MR imaging and spectroscopy including RF coil array technology for clinical MRI

Carl (Arnold) Merrow, Jr, M.D., Assistant Professor

Research Interests Pediatric musculoskeletal and fetal imaging including musculoskeletal neoplasms and vascular lesions, and rheumatologic imaging

Michael P. Nasser, MD, Assistant Professor

Alan E. Oestreich, MD, Professor Emeritus

Research Interests Musculoskeletal plain imaging; bone dysplasias; metabolic bone disease; umbilical vein catheterization; postgastric magnetopathy; sequential perception

Sara M. O'Hara, MD, Professor

Leadership Division Chief, Ultrasound

Research Interests Cutting edge ultrasound techniques and equipment, genitourinary imaging, and newborn imaging

Manish N. Patel, MD, Associate Professor

Research Interests Diagnosis and treatment of vascular malformation, pediatric PICC placement, and pre-operative evaluation of patient with anorectal malformation

Daniel J. Podberesky, MD, Assistant Professor

Leadership Division Chief, Thoraco-Abdominal Imaging

Research Interests Optimization of CT radiation dose and image quality, advanced CT and MR gastrointestinal tract

John M. Racadio, MD, Professor

Leadership Division Chief, Interventional Radiology; Director IR Research Lab

Research Interests Viral oncolytic therapy, 3D image fusion and intervention and radiation safety

Mantosh Rattan, MD, Assistant Professor

Research Interests Thoracic imaging, neonatal abdominal MRI

Vincernt J. Schmithorst, PhD, Assistant Professor

Research Interests Specialties: Cortical Reorganization in children with unilateral sensorineural hearing loss

using functional magnetic resonance imaging (fMRI); the development of language function in children using fMRI; white matter maturation in children

Susan E. Sharp, MD, Assistant Professor

Research Interests Pediatric nuclear medicine, focusing on SPECT/CT and PET/CT.

Suraj Serai, PhD, Assistant Professor

Research Interests MR physics; t2 mapping; spectroscopy; diffusion; fMRI; optimization of MR imaging protocols for enhanced image quality and better diagnosis

Keith Strauss, , Assistant Professor

Leadership Clinical Imaging Physicist

Research Interests Radiation dose reduction, image optimization

Jean Tkach, PhD, Associate Professor

Research Interests Development, implementation and optimization of neonatal MRI acquisition techniques

Alexander J. Towbin, MD, Associate Professor

Leadership Director, Radiology Informatics

Research Interests Radiology informatics; cancer imaging and abdominal imaging

Andrew Trout, MD, Assistant Professor

Research Interests Nuclear medicine; advanced body CT and MR imaging

Daniel B. Wallihan, MD, Assistant Professor

Research Interests Cardiovascular imaging and education

Janaka Wansapura, PhD, Associate Professor

Research Interests MR imaging of familial cardiomyopathy in human and in transgenic animal models; vascular compliance, MR guided thermo-therapy and fat/water decomposition

Patrick Winter, PhD, Assistant Professor

Research Interests Molecular imaging of cancer and cardiovascular disease, multi-nuclear imaging and spectroscopy, tracking USPIO labeled cell migration, and activatable MRI contrast agents

Jason C Woods, PhD, Professor

Leadership Director, Center for Pulmonary Imaging Research

Research Interests Hyperpolarized gas; pulmonary MRI; translational studies; image-guided pulmonary interventions

Weihong Yuan, PhD, Assistant Professor

Research Interests Diffusion tensor imaging in clinical and experimental hydrocephalus and application of various imaging techniques in children with traumatic brain injury, epilepsy and other neurological disorders

Andrew M. Zbojniewicz, MD, Assistant Professor

Research Interests Musculoskeletal imaging, US-guided therapy

Trainees

- **Reem Awwad, MD**, PL6, University of Cincinnati College of Medicine
- **Alisa Kanfi, MD**, PL7, Yale New Haven Hospital
- **George Koberlein, MD**, PL6, Oakwood Hospital & Medical Center
- **.Luke Linscott, MD**, PL7, Mallinckrodt Institute of Radiology

- **Matthew Lungren, MD**, PL7, Duke University Medical Center
- **Janice McDaniel, MD**, PL7, University of Cincinnati College of Medicine
- **Tracey Mehlman, MD**, PL6, Cleveland Clinic Foundation
- **Sara Ortiz-Romero, MD**, PL6, Beth Israel Medical Center
- **Allison Person, MD**, PL6, MetroHealth Medical Center
- **Rupa Radhakrishnan, MD**, PL6, University of Cincinnati College of Medicine
- **Michael Reiter, MD**, PL6, Naval Medical Center San Diego
- **Jason Tobler, MD**, PL6, University of Cincinnati College of Medicine

Division Collaboration

Evaluate the radiology findings in children with hemophagocytic lymphohistiocytosis (Rupa Radhakrishnan, MD; Alex Towbin, MD)

Bone Marrow Transplant and Immune Deficiency » Alexandra Filipovich, MD

Prenatal diagnosis of variants of the exstrophy-epispadias complex (covered cloacal exstrophy variants) (Maria Calvo-Garcia, MD; Beth Kline-Fath, MD)

General and Thoracic Surgery » Andrea Bischoff, MD

Urology » Pramod Reddy, MD

fMRI in Pediatric Epilepsy Surgery (James Leach, MD; Craig Hansen)

General and Thoracic Surgery » Andrea Bischoff

Urology » Pramod Reddy, MD

CT Imaging of Pulmonary Parenchymal Nodules in Patients with Solid Organ Tumors: (Daniel Podberesky MD; Judy Squires MD; Alex Towbin MD; Andrew Trout MD)

General and Thoracic Surgery » Anusua Dasgupta, MD, Nathalie Kremer, and Daniel von Allmen, MD

Oncology » James Geller, MD and Lars Wagner, MD

Timing of the Development of Syringomyelia in Infants born with Myelomeningoceles (Beth Kline-Fath, MD)

Neurosurgery » Karin Bierbrauer, MD

Urology » Danesh Bansal

PAP and UTE MRI with CT (Alan Brody, MD; Suraj Serai, PhD)

Pulmonary Medicine » David Roach, MD, Bruce Tarnell, MD, and Jason Woods, MD

Biostatistics & Epidemiology » James Decker and Rhonda Szczesniak

Elbow coil development (Christopher Anton, MD; Elizabeth Bippus; Sherry Dearth; Kathleen Emery, MD; Darin England; Carl Merrow, MD; Suraj Serai, PhD; Julie Young; Brynne Williams; Andrew Zbojnowicz, MD)

Radiology Imaging Research Center » Charles Dumoulin, PhD, Randy Giaguinto, John Lanier, Lacey Sickinger, Kansie Somers, Jean Tkach, PhD, Lisa Tully, and Wolfgang Loew

Developmental Venous Anomalies: Incidence in children with CNS tumors (Blaise Jones MD; James Leach, MD; Luke Linscott, MD)

Division of Oncology » Trent Hummel, MD

To learn as much as possible about Smith-Lemli-Opitz Syndrome (SLOS) by following a large group of individuals with SLOS over a period of time (Blaise Jones, MD)

Gastroenterology » James Heubi, MD

Radiology Imaging Research Center » William Ball, MD and Kim Cecil, PhD

Clinical Translational Research Center » Donna Buckley and Suzanne Summer

DDBP - Psychology » Nicole Bing

Clinical Translational Research Center » Jennifer Hunt

Speech-Language Pathology » Claire Miller

Retrospective review of abdominal MRI scans on patients with Gaucher disease (Daniel Podberesky, MD; Suraj Serai, PhD; Alexander Towbin, MD)

Human Genetics » Laurie Bailey, Thomas Burrow, MD, Rohit Kohli, and Carlos Prada

Gastroenterology, Hepatology & Nutrition » Rohit Kohli, MD and Stavra Xanthakos, MD

Fetal MRI findings in malformations of the brain (Maria Calvo-Garcia, MD; Beth Kline-Fath, MD)

Cancer and Blood Diseases Institute » Stephanie Dixon, MD

Arachnoid cysts diagnosed in prenatal and young children: Is there an increased need for surgical intervention? (Maria Calvo-Garcia, MD; Beth Kline-Fath, MD)

Cancer and Blood Diseases Institute » Stephanie Dixon, MD

Neurosurgery » Karin Bierbrauer, MD

CT Enterography in Pediatric and Adolescent Crohn Disease Patients (Daniel Podberesky, MD; Alexander Towbin, MD; Daniel Wallihan, MD)

Gastroenterology, Hepatology & Nutrition » Lee Denson, MD and Dana Dykes, MD

Liver Magnetic Resonance Elastography –Clinical Study in Children (Daniel Podberesky, MD; Suraj Serai, PhD)

Gastroenterology, Hepatology & Nutrition » Rohit Kohli, MD and Stavra Xanthakos, MD

Automated Segmentation and Derivation of Normal Values for Dynamic Modeling of the Trachea in Health and Disease (Robert Fleck, MD; Sarah Halula; Daniel Podberesky, MD; Robert Thomen)

Radiology Imaging Research Center » Robert Thomen

Otolaryngology » Robin Cotton, MD and Ravindhra Elluru

Pulmonary Medicine - Clinical » Robert Wood, MD and Jason Woods, MD

Imaging findings in phalangeal microgeodic syndrome (Kathleen Emery, MD; Arnold Mellow, MD; Rupa Radhakrishnan, MD)

Rheumatology » Rina Mina, MD

MR predictors of infection, inflammation, and structural lung damage in CF (Alan Brody, MD; Robert Fleck, MD; Suraj Serai, PhD)

Pulmonary Medicine - Clinical » Raouf Amin, MD, Megan Bushman, RN, John Clancy, MD, Lorrie Duan; Delana Terrill, and Kelly Thornton; Jason Woods, MD

Biostatistics & Epidemiology » Mathew Fenchel and Rhonda Szczesniak

Radiology Imaging Research Center » Erin Brockman

Biomedical Informatics » Long Lu, MD

Pilot study of Cardiac MRI to assess pulmonary perfusion and pulmonary hemodynamics in patients with CF (Alan Brody, MD; Robert Fleck, MD; Suraj Serai, PhD)

Pulmonary Medicine - Clinical » Raouf Amin, MD, Megan Bushman, RN, John Clancy, MD, Lorrie Duan, Jennifer Jeffries, RN, and Jason Woods, MD

Radiology Imaging Research Center » Erin Brockman and Janaka Wansapura, PhD

The Image Kids Study (Daniel Podberesky, MD)

Gastroenterology, Hepatology & Nutrition » Ramona Bezold, RN, Lee Denson, MD, Dana Dykes, MD, Kathleen Lakes, and Shehzad Saeed, MD

MRI muscle in Duchenne Muscular Dystrophy (Hee Kyung, MD; Tal Laor, MD; Suraj Serai, PhD)

Neurology » James Collines, MD, Paul Horn, MD, and Brenda Wong, MD

Radiology Imaging Research Center » Diana Lindquist, PhD and Kansie Somers

Spectrum of Imaging Findings of Complete Tracheal Rings (Congenital Tracheal Stenosis) (Robert Fleck, MD; Rupa Radhakrishnan, MD)

Otolaryngology » Michael Rutter, MD

Dose Reduction in Follow-Up PET/CT Imaging of Lymphoma: When Does Localization CT Actually Provide Additional Diagnostic Information? (Michael Gelfand, MD; Susan Sharp, MD)

Oncology » Michael Absalon, MD

NANT 2001-02 (Michael Gelfand, MD; Susan Sharp, MD)

Cancer and Blood Diseases Institute » Donna Jackson, Sonata Jodele, and Brian Weiss, MD

Oncology » Michael Absalon, MD, Denise Adams, MD, Lori Backus, Michelle Bierman, RN, Courtney Blank, Karen Burns, MD, Lionel Chow, MD, Stacey Crane, RN, Mariko Dewire, MD, Renee Doughman, Laura Fossett, MD, Maryam Fouladi, MD, James Geller, MD, Laurie Jane Grimme, Trent Hummel, MD, Jenavieve Kirkendall, Jenifer Mangino, MD, Julie McDonald, Erin Mcguire, Dinah Meister, RN, Rajaram Nagarajan, MD, Maureen O'Brien, MD, Christine Phillips, MD, Julie Plummer, Lane Satterthwaite, Siri Steiner, Beth Ann Stockman, RN, Jenny Thomas-Quinn, Marianne Torontali, Brian Turpin, MD, Cara Wilburn, and Jordan Wright

Bone Marrow Transplantation & Immune Deficiency » Sharat Chandra, MD, Stella Davies, MD, Michael Grimley, MD, and Parinda Mehta, MD

A5C Inpatient Unit - Heme/Onc » Renee Fischesser, RN

Cancer and Blood Diseases Institute » Donna Jackson and Sonata Jodele, MD

NDP MIBG IND -Gain more information about acute and late toxicity of 131I-MIBG therapy for patients with refractory neuroblastoma, pheochromocytoma, or paraganglioma (Michael Gelfand MD; Susan Sharp, MD)

Cancer and Blood Institute » Brian Weiss, MD

Oncology » Michael Absalon, MD, Denise Adams, MD, Lori Backus, Michaelle Bierman, RN, Courtney Blank, Karen Burns, MD, Lionel Chow, MD, Stacey Crane, RN, Mariko Dewire, MD, Renee Doughman, Jonathan Fisk, Laura Fossett, MD, Maryam Fouladi, MD, James Geller, MD, Laurie Jean Grimme, Adrienne Hammill, Trent Hummel, MD, Donna Jackson, Jenavieve Kirkendall, Jennifer Mangino, MD, Julie McDonald, Erin McGuire, Lori Miller, Benjamin Mizukawa, MD, Rajaram Nagarajan, MD, Maureen O'Brien, MD, Christine

Phillips, MD, Julie Plummer, Lane Satterthwaite, Siri Steiner, Beth Ann Stockman, RN, Mary Suhre, RN, Jenny Thomas-Quinn, Marianne Torontali, Brian Turpin, MD, Norma Woolum, Cara Wilburn, and Jordan Wright

A5C Inpatient Unit - Heme/Onc » Andrea Fischesser, RN

Gastroenterology, Hepatology & Nutrition » Andrea Ferris

Drug and Poison Information Center » Laura Stoutenborough, RN

NANT 2007-03-- This phase I study therefore combines 131I-MIBG with vorinostat to attempt to improve upon the efficacy of 131I-MIBG monotherapy. (Michael Gelfand MD; Susan Sharp, MD)

Cancer and Blood Diseases Institute » Brian Weiss, MD

Oncology » Michael Absalon, MD, Denise Adams, MD, Lori Backus, Michaelle Bierman, RN, Courtney Blank, Karen Burns, MD, Lionel Chow, MD, Stacey Crane, RN, Mariko Dewire, MD, Renee Doughman, Jonathan Fisk, Laura Fossett, MD, Maryam Fouladi, MD, James Geller, MD, Laurie Jean Grimme, Adrienne Hammill, MD, Trent Hummel, MD, Donna Jackson, Jenavieve Kirkendall, Jennifer Mangino, MD, Julie McDonald, Erin McGuire, Dinah Meister, Lori Miller, Benjamin Mizukawa, MD, Rajaram Nagarajan, MD, Maureen O'Brien, MD, Christine Phillips, MD, Julie Plummer, Lane Satterthwaite, Siri Steiner, Beth Ann Stockman, RN, Mary Suhre, Jenny Thomas-Quinn, Marianne Torontali, Brian Turpin, MD, Cara Wilburn, Norma Woolum, and Jordan Wright

A5C Inpatient Unit - Heme/Onc » Renee Fischesser, RN

HSV 1716 –A PHASE I DOSE ESCALATION STUDY OF INTRATUMORAL OR INTRAVENOUS HERPES SIMPLEX VIRUS-1 MUTANT HSV1716 IN PATIENTS WITH REFRACTORY NON-CENTRAL NERVOUS SYSTEM (NON-CNS) SOLID TUMORS (Neil Johnson, MD; Manish Patel, MD; John Racadio, MD; Alexander Towbin, MD)

Cancer and Blood Disease Institute » James Geller, MD

Oncology » Michael Absalon, MD, Dennis Adams, MD, Lori Backus, Courtney Blank, Karen Burns, MD, Stacey Crane, RN, Mariko Dewire, MD, Renee Doughman, RN, Jonathan Fisk, Maryam Fouladi, MD, Laura Fossett, MD, Trent Hummel, MD, Jenavieve Kirkendall, Jennifer Mangino, MD, Julie McDonald, Erin McGuire, Rajaram Nagarajan, MD, Lane Satterthwaite, Beth Ann Stockman, RN, Mary Suhre, Marianne Torontali, Brian Weiss, MD, and Jordan Wright

Radiology Imaging Research Center » Kim Cecil, PhD

Infectious Diseases » David Bernstein, MD

A5C Inpatient Unit - Heme/Onc » Renee Fischesser, RN

Group Investigational Pharmacy » Denise Lagory

NANT 1999-01 (Michael Gelfand, MD; Susan Sharp, MD)

Cancer and Blood Diseases » Donna Jackson and Brian Weiss, MD

Oncology » Michael Absalon, MD, Denise Adams, MD, Lori Backus, Courtney Blank, Karen Burns, MD, Lionel Chow, MD, Stacey Crane, RN, Mariko Dewire, MD, Renee Doughman, RN, Laura Fossett, MD, Maryam Fouladi, MD, James Geller, MD, Laurie Jean Grimme, Adrienne Hammill, MD, Trent Hummel, MD, Jenavieve Kirkendall, Jennifer Mangino, MD, Julie McDonald, Erin McGuire, Dinah Meister, RN, Benjamin Mizukawa, MD, Rogeram Nagarajan, MD, Maureen O'Brian, MD, Christine Philips, MD, Julie Plummer, Lane Satterthwaite, Siri Steiner, Beth Ann Stockman, RN, Mary Suhre, RN, Jenny Thomas-Quinn, Marianne Torontali, Brian Turpin, MD, Cara Wilburn, Norma Woolum, and Jordan Wright

Bone Marrow Transplantation & Immune Deficiency » Sharat Chandra, MD, Stella Davies, Michael Grimley, MD, Sonata Jodele, Md, and Parinda Mehta, MD

HGG-01 – To determine the toxicities and feasibility of the proposed treatment regimen in patients with high-grade glioma and diffuse intrinsic brainstem glioma (Blaise Jones, MD; James Leach, MD)

Oncology » Michael Absalon, MD, Denise Adams, MD, Lori Backus, Michelle Bierman, RN, Courtney Blank, Mariko Dewire, MD, Renee Doughman, RN, Rachid Drissi, MD, Jonathan Fisk, Laura Fossett, MD, Maryam Fouladi, MD, James Geller, MD, Laurie Jean Grimme, Adrienne Hammill, MD, Trent Hummel, MD, Donna Jackson, Jenaviewe Kirkendall, Jennifer Mangino, MD, Julie McDonald, Erin Mcguire, Lori Miller, Benjamin Mizukawa, MD, Rajaram Nagarajaqn, MD, Maureen O'Brien, MD, Christine Phillips, MD, Julie Plummer, Lane Satterthwaite, Siri Steiner, Beth Ann Stockman, RN, Laura Stoutenborough, Mary Suhre, Jenny Thomas-Quinn, Marianne Torentali, Brian Turpin, MD, Brian Weiss, MD, Megan Westendorf, Cara Wilburn, Norma Woolum, and Jordan Wright

Biomedical Informatics » Bruce Aronow, MD

A5C CBDI Outpatient Clinic » Kristine Feld, RN, Dawn Jack, RN, and Heather Ward, RN

A5C Inpatient Unit - Heme/Onc » Renee Fischesser, RN

Cancer and Blood Diseases Institute » Adam Lane

Physical Medicine and Rehabilitation » David Pruitt, MD

Occupational Therapy and Physical Therapy » Mariann Strenk, PT, DPT, MHS

Neurology » Mary Sutton, MD

Expanded Access MIBG - I-MIBG therapy has significant anti-tumor activity against refractory neuroblastoma as well as pheochromocytoma and paraganglioma. This protocol provides a mechanism to deliver this therapy and collect data that can be provided to the FDA. (Michael Gelfand, MD; Susan Sharp, MD)

Cancer and Blood Disease Institute » Courtney Blank, Karen Burns, MD, Laurie Jean Grimme, Maureen O'Brien, MD, Christine Phillips, MD, Lars Wagner, MD, Brian Weiss, MD, and Megan Westendorf

Imaging Findings in Radiation Treated Pediatric Ewing Sarcoma – review to catalogue FDG-PET/CT and MRI findings in patients with unresected skeletal Ewing Sarcoma with the aim of defining end of therapy imaging findings that portend a low risk of negative outcome (recurrence, progression, etc.) (Andrew Trout, MD; Andrew Zbojnowicz, MD)

Oncology » Brian Turpin, MD

Radiation Oncology » Luke Pater

Retrospective Clinical Review of Children with Rare Diffuse Lung Diseases (Alan Brody, MD; Eric Crotty, MD)

Pulmonary Medicine » Lorrie Duan, RN and Katharine Sebastian

To determine if an educational intervention improves health literacy in parents'/guardians' whose child will be undergoing a fluoroscopic study. (Marilyn Goske, MD; Diane Hater; Steven Kraus, MD; Catherine Leopard)

Emergency Department » Lisa Vaughn, MD

There are limited data regarding the biology of diffuse intrinsic pontine gliomas (DIPG). This project provides the infrastructure for acquisition of biological specimens, imaging and correlative clinical data to facilitate biology studies in this group (Blaise Jones, MD; James Leach, MD)

Oncology » Maryam Fouladi, MD and Siri Steiner

Pathology » Lili Miles, MD

Neurology » Mary Sutton, MD

Evaluation of normal ovarian and uterine sizes (Andrew Trout, MD; Alexander Towbin, MD)

Gynecology » Lesley Breech, MD

High-Resolution Computed Tomography and Growth in Preschoolers with Cystic Fibrosis Receiving Behavioral and Nutrition Treatment: A Sub-Study to a Randomized Clinical Trial (Alan Brody, MD)

Behavioral Med-Clin Psychology » Leigh Ann Chamberlin, RD, MEd, Scott Powers, PhD, ABPP, Joseph Rausch, PhD, and Stephanie Sullivan

Pulmonary Medicine - Clinical » Gary McPHail, MD

Determination of Liver Stiffness in Chronic Liver Disease Patients by Acoustic Radiation Force Imaging (ARFI US) (Brian Coley, MD ; Sara O'Hara, MD; Dan Podberesky, MD; Andrew Trout, MD)

Imaging Research Center » Erin Brockman and Lisa Tully

Gastroenterology, Hepatology & Nutrition » Rohi Kohli, MD, Garrett Sprague, and Stavra Xanthakos, MD

Quantitative Evaluation of the cartilage cap of osteochondromas: T2 relaxation time mapping and pathologic correlation (Hee Kim, MD; Tal Laor, MD)

Pathology » Kevin Bove, MD

Sequence Development and Optimization on Clinical MR Scanners (Alan Brody, MD; Robert Fleck, MD; Hee Kim, MD; Daniel Podberesky, MD; Suraj Serai, PhD; Alex Towbin, MD)

Imaging Research Center » Kim Cecil, PhD and Charles Dumoulin, PhD

Cardiology Clinic » Joshua Sticka, MD and Michael Taylor, MD

FDG PET in Langerhans Cell Histiocytosis (Michael Gelfand, MD; Susan Sharp, MD)

Hematology » Joseph Palumbo, MD

Imaging Biomarkers of Arteriopathy in Pediatric Stroke (Todd Abruzzo, MD; Gabriel De Vela, MD; James Leach, MD)

Neurology » John Michael Taylor, MD

Neurosurgery » Sudhakar Vadivelu, MD

Phenotypes among Children with Intracranial Arterial Aneurysms. (Todd Abruzzo, MD; Blaise Jones, MD; James Leach, MD)

Neurosurgery » Francesco Mangano, MD

Comparison of the Toshiba Aplio Scanner to the Siemens Acuson Sequoia Scanner for Transcranial Doppler Ultrasonographic Detection of Cerebral Blood Flow Velocities. (Janet Adams; David Dow, MD; Sara O'Hara, MD)

Hematology » Charles Quinn, MD

Imaging of Fractures in Children with Hepatoblastoma (Daniel Podberesky, MD; Alexander Towbin, MD)

Oncology » James Geller, MD

Pathology » Anita Gupta, MD and Amy Sheil, MD

Orthopaedics » Joel Sorger, MD

General and Thoracic Surgery » Gregory Tiao, MD

Use of gadoxetate disodium in the diagnosis of pediatric hepatic lesions (Daniel Podberesky, MD; Alexander Towbin, MD)

Oncology » James Geller, MD

FDG PET in Translocation Renal Cell Carcinoma (Andrew Trout, MD)

Oncology » James Geller, MD

Computed Tomography induced DNA double-strand breaks formation and subsequent repair as a marker of radiation sensitivity (Alan Brody, MD)

Bone Marrow Transplantation & Immune Deficiency » Stella Davies, MD, Stephanie Edwards, Alexandra Filipovich, MD, Richard Harris, MD, and Kasiani Myers, MD

Exp. Hem. & Cancer Bio. - Stem Cell Biology » Hartmut Geiger, PhD

Cardiology Clinic » Russel Hirsch, MD

Advanced Practice Nurses » Robin Mueller, RN, ANP

Oncology » Christine Phillips, MD

Multimodal Neuroimaging of Language Networks in Childhood (James Leach, MD)

Neurology » Hisako Fujiwara, Darren Kadis, MD, Douglas Rose, MD, and Jennifer Vannest, Ph.D

Neuroimaging Research Consortium » Scott Holland, PhD

Brain Imaging Analysis in Pediatric Epilepsy: Detection of Abnormal Cortex in Surgically Treated Patients (James Leach, MD)

Neurology » Hansel Greiner, MD, Douglas Rose, MD, and Leonid Rozhkov

Neurosurgery » Francesco Mangano, MD

Neuroimaging Research Consortium » Scott Holland, PhD

Imaging - pathology correlations in pediatric epilepsy (Michael Gelfand, MD; Marcia Komlos, MD; James Leach, MD)

Neurology » Hansel Greiner, MD and Leonid Rozhkov

Pediatric Neurosurgery » Francesco Mangano, MD

Pathology » Lili Miles, MD

Anatomical Variants of the Duodenum and their Clinical Implications (Steve Kraus, MD; Sara Ortiz-Romero, MD; Alexander Towbin, MD)

Gastroenterology, Hepatology & Nutrition » Ethan Mezoff, MD and Shehzad Saeed, MD

Pediatric General and Thoracic Surgery » Teresa Pestian

Prenatal Diagnosis of Vascular Birthmarks: Soft Tissue Vascular Tumors and Malformations. (Constance Bitters; Maria Calvo-Garcia, MD; Beth Kline-Fath, MD; Tal Laor, MD)

Oncology » Denise Adams, MD

Pathology » Anita Gupta, MD

Pediatric General and Thoracic Surgery » Foong-Yen Lim, MD

Prenatal evaluation of fetal lower urinary tract obstruction: imaging findings to define underlying etiology. (Constance Bitters; Maria Calvo-Garcia, MD; Beth Kline-Fath, MD)

General and Thoracic Surgery » Foong-Yen-Lim, MD

Percutaneous treatment of Deep Venous Thrombosis (DVT) in children (Jay Gollamudi, MD; Kamlesh Kukreja, MD; Matthew Lungren, MD; Manish Patel, MD)

Hematology » Ralph Gruppo, MD and Cristina Tarango, MD

Palliative Care » Junzi Shi

Retrospective Comparison of T2* and Ferriscan Analysis Methods for Estimating Liver Iron Content (Robert Fleck, MD; Daniel Podberesky, MD; Suraj Serai, PhD; Rhonda Strunk)

Hematology » Charles Quinn, MD

Biostatistics & Epidemiology » Mathew Fenchel, MS and Bin Zhang, PhD

Feasibility Assessment of the Use of MRI in the Evaluation of Acute Appendicitis (Daniel Podberesky, MD; Alexander Towbin, MD; Andrew Trout, MD; Daniel Wallihan, MD)

Emergency Department » Holly Brodzinski, MD, Alison Damon, Jenna Gilb, Andrea Kachelmeyer, Cassie Lampe, Nicole McClanahan, Carolin Reilly, Venita Robinson, Lara Stone, Daniel Von allmen, and John Witry

Pediatric General and Thoracic Surgery » Daniel Von allmen, MD

Diagnostic tools for detecting pneumonia in children (Diane Babcock, MD; Alan Brody, MD; Brian Coley, MD; Sara O'Hara, MD; Mantosh Ratan, MD)

Hospital Medicine » Lilliam Ambroggio, PhD, Caitlin Clohessy, Samir Shah, MD, and Daniel Weiser

Global Child Health Center » Mark Steinhoff, MD

Biostatistics & Epidemiology » Maurizio Macaluso, MD

Detection of Malignant Peripheral Nerve Sheath Tumor (MPNST) by 2-fluoro-2-deoxyglucose (FDG) PET in Patients with Neurofibromatosis Type 1 (NF1) (Christopher Anton, MD; Michael Gelfand, MD; Susan Sharp, MD)

Oncology » Brian Weiss, MD

Marrow stimulatory effects of granulocyte colony stimulating factors and their effect on PET scans (Michael Gelfand, MD; Susan Sharp, MD; Andrew Trout, MD)

Oncology » Brian Turpin, MD

Pediatric CT enterography with dose reduction techniques (Daniel Podberesky, MD; Alex Towbin, MD; Daniel Wallihan, MD)

Biostatistics & Epidemiology » Lee Denson, MD and Bin Zhang, PhD

Combining clinical and imaging findings of acute appendicitis (Alexander Towbin, MD; Andrew Trout, MD)

Biostatistics & Epidemiology » Bin Zhang, PhD

To describe the prevalence of polymicrogyria in a well-defined population of individuals with 22q11.2 deletion syndrome

Cardiology » Robert Hinton, MD, Ashley Parrott, and Amy Shikany

Developmental and Behavioral Pediatrics » Julia Anixt, MD

Neurology » Mark Schapiro, MD

Radiology » Lily Wang, MD

Clinical Protocol for Female Lower Quadrant Abdominal Pain (Sara O'Hara, MD)

Emergency Medicine » Alison Damon, Jonathan Gagai, Andrea Kachelmeyer, Nicole McClanhan, Jarrod Peebles, Jennifer Reed, MD, Richard Thomas Strait, MD, and Regina Taylor

Nephrology » Michael Bennett, PhD

Biostatistics and Epidemiology » Chen Chen, PhD and Bin Huang, PhD

Surgery » Sundeep Keswani, MD and Alice King, MD

Adolescent Gynecology » Beth Schwartz, MD

TCD with Transfusions Changing to Hydroxyurea (TWITCH): A Phase III Randomized Clinical Trial to Compare Standard Therapy (erythrocyte Transfusions) with Alternative Therapy (Hydroxyurea) for the Maintenance of Lowered TCD velocities in Pediatric Subjects with Sickle Cell Anemia and Abnormal Pre-Treatment TCD Velocities (Janet Adams; Robert Fleck, MD; Sara O'Hara, MD; Suraj Serai, PhD)

Cancer and Blood Diseases Institute » Theodosia Kalfa, MD

Hematology » Lynn Amend, Adriane Hausfeld, RN, Karen Kalinyak, MD, Ludmila Kisielewska, Eric Mullins, MD, Tamara Nordheim, RN, Charles Quinn, MD, Amy Shova, Cristina Tarango, MD, and Kelly Thueneman, RN

Advance Practice Nurses » Peggy Kaiser, APN, Darice Morgan, APN, and Kathy Schibler, APN

Normograms for common bile duct diameter in the pediatric population (Albert Feng; Sara O'Hara, MD)

Gastroenterology » Tom Lin, MD

3-dimensional Assessment of Glenohumeral Dysplasia Following Neonatal Plexus Palsy: a Magnetic Resonance Imaging Study (Tal Laor, MD)

Orthopedics » Roger Cornwall, MD and Emily Eismann

Glenohumeral Abduction Deformity Study (Tal Laor, MD)

Orthopedics » Roger Cornwall, MD, Emily Eismann, and Kevin Little, MD

MRI of Epiphyseal and Non-epiphyseal ends of long bones of the hands and feet in children (Tal Laor, MD; Kathleen Emery, MD)

Orthopedics » Kevin Little, MD

»

Buckle Fracture Misdiagnosis (Tal Laor MD)

Orthopedics » Kevin Little, MD, Emily Eismann, Roger Cornwall, MD, and Bernardus Terre-Blanche

Retro vs Trans-articular Drilling RCT for OCD (Tal Laor, MD; Andy Zbojnowicz, MD)

Orthopedics » Eric Wall, MD, Emily Eismann, Cara Meder, and J. Miller

Sports Medicine » Greg Myer, PhD

Occupational and Physical Therapy » Mark Paterno, PhD

Osteochondritis Dissecans Classification (Tal Laor, MD; Andy Zbojnowicz, MD)

Orthopedics » Eric Wall, MD, Emily Eismann, Cara Meeder, and Julie Miller

Sports Medicine » Greg Myer, PhD and Stacie Thomas

Occupational and Physical Therapy » Mark Paterno, PhD

Capitellum Ossification (Tal Laor, MD)

Orthopedics » Kevin Little, MD, Roger Cornwall, MD, and Emily Eismann

General Pediatrics » Lauren Fader

Sentinel Lymph Node Biopsy (Michael Gelfand, MD; Tal Laor, MD; Susan Sharp, MD)

Oncology/CBDI » R. Doughman, RN, L Fossett, J. Fisk, E. McGuire, D. Jackson, B. Poole, R. Nagarajan, MD, L. Satterthwaite, B. Turpin, MD, C. Wilburn, and N. Woolum

Surgery » A. Dasgupta, MD, G. Tiao, MD, D. von Allmen, MD, and N. Kremer, MD

Orthopedics » J. Sorger, MD

Multi-Center Knee OCD Registry (T. Laor, MD; A. Zbojniewicz, MD)

Orthopedics » E. Wall, MD, A. Pohlman, and J. Miller

Sports Medicine » G. Myer, PhD

Occupational and Physical Therapy » M. Paterno, PhD

All epiphyseal ACL MRI Evaluation (T. Laor, MD; A Zbojniewicz, MD)

Orthopedics » E. Wall, MD, E. Eismann, and S. Yang, MD

Temporal Evolution and Outcomes of Cystic Ovarian Masses in Pediatric Patients (A. Trout, MD; A. Towbin, MD)

Gynecology » L. Breech, MD and B. Schwartz, MD

Oncology » J. Geller, MD and B. Dasgupta, MD

Neuroblastoma Volume Response (A. Trout, MD; A. Towbin, MD)

Division of Pediatric General and Thoracic Surgery » D. vonAllmen, MD

Division of Oncology » B. Weiss, MD

HU Prevent (James Leach, MD)

Cancer and Blood Diseases Institute » Charles Quinn, MD

Hematology » Adriane Hausfeld, RN, Theodosia Kalfa, MD, PhD, Courtney Little, RN, Kelly Thueheman, RN, and Karen Kalinyak, MD

Neurology » Marielle Kabbouche, MD

Anesthesia » Mohamed Mahmoud, MD

EHCB Hem Gene Therapy Program » Punam Malik, MD

Behavioral Med-Clin Psychology » Monica Johnson Mitchell, PhD

Pediatric Nonconvulsive Status Epilepticus (James Leach, MD)

Neurology » Hansel Greiner, MD, Andrew Hershey, MD, PhD, and Douglas Rose, MD

DIPG Registry and Repository (Blaise Jones, MD; James Leach, MD)

Cancer and Blood Diseases Institute » Maryam Fouladi, MD

Oncology » Michael Absalon, MD, Karen Burns, MD, Denise Adams, MD, Lionel Chow, MD, PhD, Mariko Dewire, MD, Stacey Crane, RN, James Geller, MD, Adrienne Hammill, MD, PhD, Trent Hummel, MD, Benjamin Mizukawa, Rajaram Nagarajan, MD, Maureen O'Brien, MD, John Perentesis, MD, Beth Ann Stockman, RN, Mary Suhre, RN, Brian Weiss, MD, and Jordan Wright, MD

A1CBDI and A5DH » Kristine Feld, RN

Pathology » Lili Miles, MD

Neurology » Mary Sutton, MD

HGG-01 (Blaise Jones, MD; James Leach, MD)

Cancer and Blood Diseases Institute » Maryam Fouladi, MD and Adam Lane

Oncology » Michael Absalon, MD, Denise Adams, MD, Christina Bean, RN, Michelle Bieman, RN, Karen Burns, MD, Lionel Chow, MD, Stacey Crane, RN, Mariko DeWire, MD, Rachid Drissi, James Geller, MD, Adrienne Hammill, MD, Trent Hummel, MD, Jennifer Mangino, MD, Benjamin Mizukawa, MD, Rajaram Nagarajan, MD, Maureen O'Brien, MD, John Perentesis, MD, Christine Phillips, MD, Brian Weiss, MD, Brian Turpin, MD, and Jordan Wright, MD

Biomedical Informatics » Bruce Aronow

A1CBDI and A5DH » Kristine Feld, RN and Heather Ward, RN

Physical Medicine and Rehab » David Pruitt, MD

Occupational and Physical Therapy » Mariann Strenk

Neurology » Mary Sutton, MD

Pediatric Functional Neuroimaging Research Network (James Leach, MD)

Neurology » Jennifer Vannest, PhD, Anna Weber Byars, PhD, Darren Kadis, Katrina Peariso, Mark Schapiro, MD, and Jeffrey Tenney, MD

Biostatistics and epidemiology » Mekibib Altaye

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD, Scott Holland, PhD, Gregory Lee, PhD, Akila Rajagopal, and Wiehong Yuan, PhD

Communication Sciences Research Center » Andrew Dimitrijevic, Rola Farah, and Tzipi Horowitz-Kraus

Biomedical Informatics » Nicholas Felicelli, Andrew Rupert, and Michael Wagner

Imaging Research Center » Elveda Gozdas

Anesthesia » Yifei Jiang

Neonatology and Pulmonary biology » Stephanie Merhar, MD

Pain Management professional » Vanessa Olbrecht, MD

CPE Research and Evidence Base Prac » Nautiah Robinson

Seizures Database (James Leach, MD)

Neurology » Katherine Holland Bouley, MD, MD, PhD, Todd Arthur, MD, Ravindra Arya, MD, Anna Weber Byars, PhD, Hisako Fujiwara, Tracy Glauser, MD, Barbara Hallinan, MD, PhD, Hansel Greiner, MD, Paul Horn, Diego Morita, MD, Douglas Rose, MD, Leonid Rozhkov, Jeffrey Tenney, MD, PhD, and Shannon Standridge, DO, MPH

Biomedical Informatics » Brian Connolly and Robert Faist

Ambulatory Services Neurology » Nicole Inman, RN, Michele Rodgers, RN, and Elizabeth Skulas, RN

Neurosurgery » Francesco Mangano, MD

Pathology » Lili Miles, MD

Advanced Practice Nurses » Sally Monahan, CPN, Michele Turner, CNP, Cindy Wesolowski, CNP, and Naomi Van Horn, CPN

Human Genetics » Krista Qualmann and Christine Spaeth

IARB1 (Blaise Jones, MD; James Leach, MD)

Cancer and Blood Diseases Institute » James Geller, MD, Carrye Cost, and Kathleen Dorris

Oncology » Michael Absalon, MD, Denise Adams, MD, Michelle Bierman, RN, Karen Burns, MD, Lionel Chow, MD, PhD, Mariko DeWire, MD, Maryam Fouladi, MD, Adrienne Hammill, MD, PhD, Trent Hummel, MD, Jennifer Mangio, MD, Benjamin Mizukawa, MD, Rajaram Nagarajan, MD, John Perentesis, MD, Maureen O'Brien, MD, Christine Phillips, MD, Beth Ann Stockman, RN, Mary Suhre, RN, Brian Turpin, MD, and Brian Weiss, MD

Advance Practice Nurses » Angel Faulhaber, CPN, Maureen Gallagher, CPN, and Elizabeth Gilger, CPN

Ophthalmology » Constance West, MD

Proton Beam Radiotherapy Chart Review (Blaise Jones, MD; James Leach, MD)

Cancer and Blood Disease Institute » Mariko DeWire, MD

COM Radiation Oncology » John Breneman, MD

Oncology » Maryam Fouladi, MD, David Gass, and Trent Hummel, MD

Pathology » Lili Miles, MD

Neurology » Mary Sutton, MD

HGG-DIPG Bevacizumba chart review (James Leach, MD)

Cancer and Blood Diseases Insitute » Mariko DeWire, MD and Ralph Salloum

Oncology » Maryam Fouladi, MD and David Gass

Retrosig Bone Removal

COM Otolaryngology Head and Neck Surgery » Justin Golub and Ravi Samy, MD

Radiology » James Leach, MD

fMRI Study of Language Development (James Leach, MD)

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD and Akila Rajagopal

Neurology » Anna Weber Byars, PhD, Darren Kadis, Mark Schapiro, MD, Jennifer Vannest, PhD, and Yingying Wang, PhD

COM Radiology Pediatrics » Vincent Schmithorst, PhD

PBTR (Blaise Jones, MD; James Leach, MD)

Cancer and Blood Diseases Institue » Mariko DeWire, MD

Oncology » Lionel Chow, MD, PhD, Maryam Fouladi, MD, and James Geller, MD

Imaging Research Center » Charles Dumoulin, PhD

EH and Can Bio - Exp Hem » Qing Lu

Pathology » Lili Miles, MD

NCSE in AHT (Marguerite Care, MD; James Leach, MD)

Safe and Healthy Children » Mary Greiner, MD

Neurology » Hansel Greiner, MD

CD in Intractable Epilepsy (James Leach, MD)

Pathology » Lili Miles, MD and Hua Tang Tang

Neurology » Anna Weber Byars, PhD, Katherine Holland Bouley, MD, Jing Xiang, Jeffrey Tenney, MD, PhD, Michael Miles, and Paul Horn

Neurosurgery » Francesco Mangano, MD

Radiation Necrosis Chart Review (James Leach, MD)

Cancer and Blood Diseases Institute » Trent Hummel, MD

Oncology » Maryam Fouladi, MD

Pathology » Lili Miles, MD

Neurology » Mary Sutton, MD

AIM Imaging Study (James Leach, MD)

Physical Medicine and Rehabilitation » Shari Wade, PhD

Pediatric Neuroimaging Research Consortium » Thomas Maloney, MD and Weihong Yuan, PhD

Behavioral Med Clin Psychology » Megan Narad

Physical Medicine and Rehab » Julia Smith, Nicolay Chertkoff Walz, PhD, and Leanne Tamm, PhD

HPV in FCD (James Leach, MD)

Neurology » Katherine Holland Bouley, MD, Ravindra Arya, MD, Hansel Greiner, MD, Paul Horn, Douglas Rose, MD, and Jeffrey Tenney, MD

Neurosurgery » Francesco Mangano, MD

Pathology » Lili Miles, MD

DTI Study in Tuberous Sclerosis (James Leach, MD)

Pediatric Neuroimaging Research Consortium » Weihong Yuan, PhD and Tiffany Nash

Neurology » David Franz, MD and Katherine Holland Bouley, MD

Neurosurgery » Francesco Mangano, MD

fMRI and outcomes in brain injury (Beth Kline-Fath, MD; James Leach, MD)

Neonatology and Pulmonary Biology » Stephanie Merhar, MD

Imaging Research Center » Jean Tkach, PhD

Pediatric Neuroimaging Research Consortium » Weihong Yuan, PhD

IAC Imaging Study

Physical Medicine and Rehab » Shari Wade, PhD and Julia Smith

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD

A & S Psychology » Chistine Karver

infectious Disease » Mary Staat, MD

Behavioral Med Clin Psychology » Nicolay Walz, PhD

Multimodal Neuroimaging of Language Networks in Childhood

Neurology » Darren Kadis, Hisako Fujiwara, Douglas Rose, MD, Yingying Wang, PhD, and Jennifer Vannest, PhD

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD

Radiology » James Leach, MD

Concussion Device

Sports Medicine » Gregory Myer, MD

COM Psychiatry Central Clinic » James Eliassen

Radiology » James Leach, MD, Dan Podberesky, MD, and Suraj Serai, PhD

FIRST study: Functional Imaging of Rolandic Spikes and Treatment (James Leach, MD)

Neurology » Jennifer Vannest, PhD, Anna Weber Byars, MD, Tracy Glauser, MD, Peggy Clark, RN, Katherine Holland Bouley, Morita Diego, Darren Kadis, and Jeffrey Tenney, MD

Biostatistics and Epidemiology » Mekibib Altaye, PhD

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD and Thomas Maloney, PhD

Advance Practice Nurses » Sally Monahan, CPN, Michele Turner, CPN, and Cindy Wesolowski, CPN

Ambulatory Services Neurology » Michelle Rodgers, RN

COM Neurology » Jerzy Szaflarski, PhD

Hippocampal Malrotation in Pediatric Epilepsy (James Leach, MD; Reem Awwad, MD)

Neurology » Hansel Greiner, MD and Jennifer Vannest, PhD

fMRI Genes & Outcomes of Cochlear Implants in Infants

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD and Akila Rajagopal

Biostatistics & Epidemiology » Mekibib Altaye, PhD

Otolaryngology » Dan Choo, MD and John Grienwald, MD

Neurology » Anna Byars, PhD

Radiology » Marguerite Care, MD

Using DTI with tractography to measure the treatment effect of everolimus in Tuberous Sclerosis Complex (TSC) patients with epilepsy: An EXIST-3 Sub-study analysis. (Novartis Pharmaceuticals research grant, PI: Krueger)

Pediatric Neuroimaging Research Consortium » Weihong Yuan, PhD

Neurology » Darcy Krueger, MD

Aerobic Training for Management of Post-Concussion Syndrome in Adolescents

Imaging Research Center » Kim Cecil, PhD

Pediatrics/Physical Medicine and Rehabilitation » Brad G. Kurowski, MD, PhD and Shari L. Wade, PhD

Anomalous Motor Physiology in ADHD

Imaging Research Center » Kim M. Cecil, PhD

Pediatrics/Neurology » Donald L. Gilbert, MD

Blood Pressure Control & the Brain

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD

Pulmonary Medicine » Raouf Amin, MD, Keith McConnell, and Abu Shamsuzzaman, PhD

Biostatistics and Epidemiology » Rhonda Szczesniak, PhD

Brain Function and connectivity following a neuroprotective intervention for preterms

Center for Pulmonary Imaging Research » Rita Pickler, PhD

Imaging Research Center » Jean Tkach, PhD

Neonatology and Pulmonary Biology » Stephanie Merhar, MD

Radiology » Beth Kline-Fath, MD

CCHMC Proctor Scholarship - Seizure Generator Location and Neurocognitive Defects in CAE

Pediatric Neuroimaging Research Consortium » Scott K. Holland, PhD

Neurology » Tracy Glauser, MD, Jennifer Vannest, PhD, Jeff Tenney, MD, PhD, and Doug Rose, MD

CCHMC/TRI, Enhancing Treatment of Obsessive Compulsive Disorder with Repetitive Transcranial Magnetic Stimulation

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD

Neurology » Donald Gilbert, MD and Steven Wu, MD

Psychiatry » Elana Harris, MD, PhD

CCTST Redesign Grant, Effect of Teen Sleep Restriction on Diet

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD

Behavioral Medicine & Clinical Psychology » Dean Beebe, PhD,, Joseph Rausch, PhD, and Julie Field

CCTST Research Innovation/Pilot Funding Program, Calibration of Resting-state fMRI to Predict Language Laterality in Children (James Leach, MD)

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD and Scott Holland, PhD

Anesthesiology » Mohamed Mahmoud, MD and John McAuliffe, MD

Imaging Research Center » Ken Eaton, PhD

Biostatistics & Epidemiology » Mekibib Altaye, PhD

Clinical Research Network in Non-Alcoholic Steatohepatitis (NASH-CRN)

Imaging Research Center » Kim M. Cecil, PhD

Pediatrics/Gastroenterology, Hepatology & Nutrition » Stavra Xanthakos, MD

Effect of Adolescent Sleep Restriction on Neural & Neurobehavioral Functioning

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD

Behavioral Medicine & Clinical Psychology » Dean Beebe, PhD and Jeffery Epstein, PhD

Neurology » Douglas Rose, MD

Everolimus (RAD 001) Therapy of Giant Cell Astrocytomas in Patients with Tuberous Sclerosis Complex

Imaging Research Center » Kim M. Cecil, PhD

Neurology » David N. Franz, MD and Darcy Krueger, MD

fMRI of Normal Language Development on Children

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD

Neurology » Mark Schapiro, MD, Jennifer Vannest, PhD, and Anna Byars, PhD

Biostatistics & Epidemiology » Mekibib Altaye, PhD

Radiology » James Leach, MD

Gerber Foundation - Intestinal Motility and Gastroschisis

Imaging Research Center » Jean Tkach, PhD and Kenneth Eaton, PhD

Neonatology and Pulmonary Biology » Andrew South, MD and Paul Kingma, MD

Radiology » Mantosh Rattan, MD

Imaging and modeling lung allograft rejection

Center for Pulmonary Imaging Research » Jason Woods, PhD and Laura Walkup, PhD

Pulmonary Medicine » Marc Schechter, MD and Christopher Towe, MD

Neonatology & Pulm Biology » Anne Karina Perl, PhD

Imaging and quantifying efficacy of whole-lung lavage for PAP (Robert Fleck, MD; Alan Brody, MD)

Center for Pulmonary Imaging Research » Jason Woods, PhD and David Roach, PhD

Pulmonary Medicine » Robert Wood, MD

Neonatology & Pulm Biology » Bruce Trapnell, MD

Imaging Lung disease in cystic fibrosis (Robert Fleck, MD; Alan Brody, MD)

Center for Pulmonary Imaging Research » Jason Woods, PhD and David Roach, PhD

Biostatistics » Rhonda Szezniak, PhD

Pulmonary Medicine » JP Clancy, MD

Imaging the Effect of Centrottemporal Spikes and Seizures on Language in Children

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD

Neurology » Anna Byars, PhD, Jennifer Vannest, PhD, Mark Schapiro, MD, Diego Morita, and Tracy Glauser, MD

Biostatistics & Epidemiology » Mekibib Altaye, PhD

Radiology » James Leach, MD

Imaging various neonatal lung abnormalities

Center for Pulmonary Imaging Research » Jason Woods, PhD, Zackary Cleveland, PhD, and Laura Walkup, PhD

Neonatology » Stephanie Merhar, MD, Alan Jobe, MD, Jeffrey Whitsett, MD, and Paul Kingma, MD, PhD

Pulmonary Medicine » Raouf Amin, MD

Imaging Research Center » Jean Tkach, PhD and Charles Dumoulin, PhD

Radiology » Robert Fleck, MD

Improved Diagnostics & Advanced Magnetic Resonance Imaging for Pediatric NPSLE

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD

Rheumatology » Hermine Brunner, MD, Shannen Nelson, Jamie Meyers-Eaton, and Daniel Lovell, MD

Behavioral Medicine & Clinical Psychology » Dean Beebe, PhD

Longitudinal Assessment of Manic Symptoms

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD

Psychiatry » Elana Harris, MD, PhD, Jennifer Combs, Jennifer Combs, Robert Kowatch, MD, and Judy Depew

Longitudinal DTI Study in Children Treated for Congenital Hydrocephalus (Blaise Jones, MD)

Pediatric Neuroimaging Research Consortium » Weihong Yuan, PhD and Scott Holland, PhD;

DDBP » Holly Barnard, PhD

Neurosurgery » Francesco Mangano, DO

Biostatistics & Epidemiology » Mekibib Altaye, PhD

Lupus Foundation of America, Imaging the Blood-Brain Barrier in Childhood-onset Neuropsychiatric Lupus

Pediatric Neuroimaging Research Consortium » Mark DiFrancesco, PhD and Gregory Lee, PhD
Behavioral Medicine & Clinical Psychology » Dean Beebe, PhD
Rheumatology » Hermine Brunner, MD and Jamie Meyers-Eaton
Biostatistics & Epidemiology » Mekibib Altaye, PhD

Magnetic Resonance Elastography in Infants (Daniel Podberesky, MD; Suraj Serai, PhD; Mantosh Rattan, MD)
Imaging Research Center » Charles Dumoulin, PhD and Jean Tkach, PhD
Neonatology and Pulmonary Biology » Stephanie Merhar, MD and Koryse Woodrooffe, MD
Gastroenterology » Conrad Cole, MD and Samuel Kocoshis, MD

MRI for Quantitative Measurement of Pulmonary and Cardiac Structure and Function in CDH infants (Robert Fleck, MD)

Pulmonary Medicine » Jason Woods, PhD, Alan Jobe, MD, and Raouf Amin, MD
Imaging Research Center » Jean Tkach, PhD
Imaging Research Center » Jean Tkach, PhD
Cardiology » Michael Taylor, MD
Neonatology and Pulmonary Biology » Paul Kingma, MD and Stephanie Merhar, MD

MRI for Quantitative Measurement of Pulmonary Growth and Development in Term and Extremely Pre-Term Babies (Robert Fleck, MD)

Pulmonary Medicine » Jason Woods, PhD, Raouf Amin, MD, and Alan Jobe, MD
Imaging Research Center » Jean Tkach, PhD
Cardiology » Michael Taylor, MD
Neonatology and Pulmonary Biology » Paul Kingma, MD and Stephanie Merhar, MD

MRI for Quantitative Measurement of Pulmonary Growth and Development in Term and Extremely Pre-Term Babies

Pulmonary Medicine » Jason Woods, PhD, Raouf Amin, MD, William Hardie, MD,, Karen McDowell, MD, and Alan Jobe, MD
Imaging Research Center » Jean Tkach, PhD
Neonatology and Pulmonary Biology » Stephanie Merhar, MD
Radiology » Robert Fleck, MD

Non-Invasive Examination of the Effects of Anesthesia in the Developing Human Brain

Imaging Research » Kim Cecil PhD
Anesthesia » Andreas Loepke, MD, PhD
Neonatology and Pulmonary Biology » Stephanie L. Merhar, MD, MS

Pediatric Functional Neuroimaging Research Network

Pediatric Neuroimaging Research Consortium » Scott Holland, PhD, Greg Lee, PhD, Mark DiFrancesco, PhD, Claire Sroka, Akila Rajagopal, and Weihong Yuan, PhD
Biostatistics & Epidemiology » Mekibib Altaye, PhD, Andrew Rupert, Michael Wagner, PhD, and Nicholas Felicelli
Neurology » Anna Byars, PhD and Jennifer Vannest, PhD
Pediatrics » Tzipi Horowitz-Kraus, PhD

Perinatal Institute - Functional MRI and sensorimotor outcomes in neonates (Beth Kline-Fath, MD)

Imaging Research Center » Jean Tkach, PhD

Neonatology and Pulmonary Biology » Stephanie Merhar, MD

Perinatal Institute - Pulmonary MRI in the NICU: The Future Now (Robert Fleck, MD)

Pulmonary Medicine » Jason Woods, PhD

Imaging Research Center » Jean Tkach, PhD

Neonatology and Pulmonary Biology » Paul Kingma, MD

Research Innovation and Pilot Fund - cMRI assessment of RV and pulmonary structure and function in CDH using a dedicated neonatal MRI scanner (Mantosh Rattan, MD; Robert Fleck, MD)

Imaging Research Center » Jean Tkach, PhD

Cardiology » Michael Taylor, MD

Neonatology and Pulmonary Biology » Paul Kingma, MD

The Effects of Cognitive Training on Attention and Neural Processing following Pediatric TBI (Ohio Department of Public Safety Emergency Medical Services Grant, PI: Wade/Yuan) (Jim Leach, MD)

Pediatric Neuroimaging Research Consortium » Weihong Yuan, PhD

Behavior Medicine » Leanne Tamm

Rehabilitation » Shari Wade, PhD

Thrasher Foundation - Functional MRI to predict visual, auditory, and motor outcomes in infants with brain injury

Pediatric Neuroimaging Research Consortium » Scott K. Holland, PhD

Imaging Research Center » Jean Tkach, PhD

Neonatology » Stephanie Merhar, MD

Validation of diffusion tensor imaging as a biomarker for infantile hydrocephalus (CCTST JIT, PI: Yuan)

Pediatric Neuroimaging Research Consortium » Weihong Yuan, PhD

Imaging Research Center » Diana Lindquist, PhD

Neurosurgery » Francesco Mangano, DO and June Goto, PhD

Neurology » Charles Vorhees, PhD and Michael Williams, PhD

Grants, Contracts, and Industry Agreements

Grant and Contract Awards

Annual Direct

AMIN/FLECK/GUTMARK/SHOTT (MPI)

Dynamic Computational Modeling of Obstructive Sleep Apnea in Down Syndrome

National Institutes of Health

R01 HL 105206

09/17/10-08/31/15

\$702,133

BRODY, A

Therapeutic Development Center Imaging Core

Cystic Fibrosis Foundation Therapeutics, Inc

01/01/14-12/31/23

\$17,722

DIFRANCESCO, M**Imaging the Blood-Brain Barrier in Childhood-Onset Neuropsychiatric Lupus**

Lupus Foundation

10/01/13-09/30/14

\$120,000

DUMOULIN, C**Endorectal Prostate MRI w/Tetrahedron Tracking: Better Cancer Delineation**

National Institutes of Health(Brigham & Women's Hospital)

R21 CA 158987

07/01/12-06/30/14

\$35,000

MR-Image Guided Focused Ultrasound for Treatment of Liver and Renal Cancer

Stanford University(National Cancer Institute)

R01 CA 121163

04/01/09-05/31/14

\$155,814

Ohio Third Frontier Medical Imaging Program

Ohio Department of Development(GE Healthcare)

07/15/12-07/14/14

\$144,712

HOLLAND, S**Pediatric Functional Neuroimaging Research Network**

National Institutes of Health

HHSN275200900018C

09/28/09-09/27/14

\$1,263,478

Longitudinal Assessment of Manic Symptoms

National Institutes of Health

R01 MH 073816

09/16/05-02/28/15

\$184,757

KIM, H**MR Quantification of Muscular Fat in Duchenne Muscular Dystrophy: Integrating T2 Relaxation Time Mapping and MR Spectroscopy**

RSNA Research & Education Foundation

07/01/12-06/30/14

\$76,000

LEACH, J**Diagnostic Imaging Review: NIH COG Chair Grant**

National Institutes of Health(Children's Hospital of Philadelphia)

U10 CA 098543

3/1/2013-12/31/14

\$2,156

LEE, G**Comprehensive Quantitative Ultrafast 3D Liver MRI**

National Institutes of Health(Case Western University)

R01 DK 098503

08/01/13-07/31/18

\$16,227

LI, YU**Novel RF Coils and k-t Space Imaging for Neonatal Chest MRI within NICUs**

National Institutes of Health

R21 HD 071540	08/01/13-07/31/15	\$125,000
LINDQUIST, D		
The Effect of Lithium on Intracellular Sodium in Brain in vivo		
National Institutes of Health(University of Cincinnati)		
R21 MH 094837	09/01/13-08/31/15	\$76,763
WALLIHAN, D		
Liver Elastography as a Marker for Progressive Hepatic Disease and Failing Fontan Physiology		
Society of Pediatric Radiology		
	09/01/13-08/31/14	\$10,000
WANSAPURA, J		
Cardiac Structure and Function in Early Familial Cardiomyopathy		
National Institutes of Health		
K25 HL 102244	04/15/10-03/31/15	\$122,017
	Current Year Direct	\$3,051,779
Industry Contracts		
FLECK, R		
Bayer HealthCare Pharmaceuticals, Inc		
		\$4,280
PODBERESKY, D		
Siemens Medical Solutions USA, Inc		
		\$4,450
	Current Year Direct Receipts	\$8,730
Funded Collaborative Efforts		
BRODY, A		
MR predictors of infection, inflammation, and structural lung damage in CF		
National Institutes of Health		
Clancy, JP	9/26/2012-6/30/2016	5%
CARE, M		
Early biomarkers of Autism Spectrum Disorders in infants		
National Institutes of Health		
Krueger, D	9/1/2012-8/31/2017	3%
CECIL, K		
2/2-Anomalous Motor Physiology in ADHD		
National Institutes of Health		
Gilbert, D	5/1/2012-4/30/2017	15%

Neurobehavioral and Neuroimaging Effects of Traffic Exposure in Children (CCAAPS)

National Institutes of Health

Ryan, P 7/1/2012-3/31/2017 20%

Early Lead Exposure, ADHD & Persistent Criminality: Role of Genes and Environment

National Institutes of Health

Dietrich, K 4/1/2007-3/31/2014 10%

DIFRANCESCO, M**Effect of Adolescent Sleep Restriction on Neural & Neurobehavioral Functioning**

National Institutes of Health

Beebe, D 9/1/2009-7/31/2014 20%

DUMOULIN, C**Dynamic Computational Modeling of Obstructive Sleep Apnea in Down Syndrome**

National Institutes of Health

Amin, R 9/17/2010-8/31/2015 3%

Novel RF Coils and k-t Space Imaging for Neonatal Chest MRI within NICUs

National Institutes of Health

Li, Yu 8/1/2013-7/31/2015 5%

Neonatal Intensive Care Unit Magnetic Resonance Imaging (NICU MRI)

CCHMC Innovation Fund

Dumoulin, C 7/1/2013-6/30/2015 3%

Taking the IRC MR Engineering core from "good" to "best" - CORE

CCTST

Dumoulin, C 7/1/2012-6/30/2014 3%

Engineering a faster and quieter NICU MR scanner

CCTST

Dumoulin, C 7/1/2013-6/30/2014 3%

FLECK, R**MR predictors of infection, inflammation, and structural lung damage in CF**

National Institutes of Health

Clancy, JP 9/26/2012-6/30/2016 10%

GOSKE, M**CT Radiation Safety in Children: A Model for a National Web-based Continuous Quality Improvement Program**

Society of Pediatric Radiology

Goske, M 8/1/2008-12/31/2014 1%

Developing a "Best Practice" National Registry for CT Scans in Children

RSNA

Goske, M 7/1/2009-6/30/2014 1%

Quality Improvement Registry in CT Scans in Children: Retreat

CCHMC

Goske, M	7/1/2012-6/30/2014	1%
HOLLAND, S		
Imaging the effect of centrotemporal spikes and seizures		
National Institutes of Health		
Vannest, J	9/15/2011-6/30/2016	3%
Longitudinal DTI study in Children Treated for Congenital Hydrocephalus		
National Institutes of Health		
Yuan, W	7/1/2009-6/30/2014	5%
KLINE-FATH, B		
Novel RF Coils and k-t Space Imaging for Neonatal Chest MRI within NICUs		
National Institutes of Health		
Li, Yu	8/1/2013-7/31/2015	3%
LEACH, J		
Pediatric Functional Neuroimaging Research Network		
National Institutes of Health		
Holland, S	9/28/2009-9/27/2014	10%
LEE, G		
Pediatric Functional Neuroimaging Research Network		
National Institutes of Health		
Holland, S	9/28/2009-9/27/2014	50%
Imaging the Blood-Brain Barrier in Childhood-onset Neuropsychiatric Lupus		
Lupus Foundation of America		
DiFrancesco, M	10/1/2013-9/30/2014	5%
Structural MRI Images for Speech Sound Disorder Therapy		
The University of Cincinnati		
Boyce, S	7/1/2012-6/30/2014	3%
LI, YU		
Noninvasive, MR-Guided HIFU Therapy of TSC-Associated Renal Angiomyolipomas		
DOD		
Li, Yu	7/1/2011-6/30/2014	10%
MR-guided HIFU for cancer therapy		
St. Baldrick's Foundation		
Li, Yu	7/1/2012-6/30/2014	15%
PODBERESKY, D		
Liver Elastography as a marker for progressive hepatic disease and failing Fontan physiology		
Society of Pediatric Radiology		
Wallihan, D	9/1/2013-8/31/2014	3%

CRN in Non-Alcoholic Steatohepatitis (NASH CRN)

National Institutes of Health

Xanthakos, S 8/30/2009-4/30/2015 1%

SERAI, S**Early biomarkers of Autism Spectrum Disorders in infants**

National Institutes of Health

Krueger, D 9/1/2012-8/31/2017 5%

Liver Elastography as a marker for progressive hepatic disease and failing Fontan physiology

Society of Pediatric Radiology

Wallihan, D 9/1/2013-8/31/2014 3%

TKACH, J**Novel RF Coils and k-t Space Imaging for Neonatal Chest MRI within NICUs**

National Institutes of Health

Li, Yu 8/1/2013-7/31/2015 5%

Intestinal Motility and Gastroschisis

The Gerber Foundation

South, A 7/1/2013-6/30/2016 25%

YUAN, W**Using Diffusion Tensor Imaging (DTI) with Tractography to Measure the Treatment Effect of Everolimus in Tuberous Sclerosis Complex (TSC) Patients with Epilepsy: An EXIST-3 Sub-study Analysis**

Novartis Pharmaceuticals

Franz, D 11/8/2012-12/1/2017 27%

Effects of Cognitive Training on Attentive and Neural

Ohio Department of Public Safety

Wade, S 7/1/2011-6/30/2014 5%

Total \$3,060,509