

Radiology

Division Details

RESEARCH AND TRAINING DETAILS

Faculty	46
Joint Appointment Faculty	14
Research Fellows and Post Docs	1
Research Graduate Students	5
Total Annual Grant Award Dollars	\$921,288
Total Annual Industry Award Dollars	\$389,596
CLINICAL ACTIVITIES AND TRAINING	
Inpatient Encounters	56,854
Outpatient Encounters	161,362



Row 1: J Tkach, K Emery, E Orscheln, U Nagaraj, A Oestreich, K Strauss, S O'Hara

Row 2: M Care, M Calvo-Garcia, S Kraus, A Towbin, A Brody, B Jones, J Dillman, J Woods

Row 3: W Yuan, G Lee, M DiFrancesco, E Smith, B Coley, S Brady, C Dumoulin

Division Publications

- Schwimmer JB; Lavine JE; Wilson LA; Neuschwander-Tetri BA; Xanthakos SA; Kohli R; Barlow SE; Vos MB; Karpen SJ; Molleston JP. In Children With Nonalcoholic Fatty Liver Disease, Cysteamine Bitartrate Delayed Release Improves Liver Enzymes but Does Not Reduce Disease Activity Scores. Gastroenterology. 2016; 151:1141-1154.e9.
- Devarakonda SB; Myers MR; Lanier M; Dumoulin C; Banerjee RK. Assessment of Gold Nanoparticle-Mediated-Enhanced
 Hyperthermia Using MR-Guided High-Intensity Focused Ultrasound Ablation Procedure. Nano Letters: a journal dedicated to
 nanoscience and nanotechnology. 2017; 17:2532-2538.
- 3. Bertocci MA; Bebko G; Versace A; Fournier JC; Iyengar S; Olino T; Bonar L; Almeida JRC; Perlman SB; Schirda C. **Predicting** clinical outcome from reward circuitry function and white matter structure in behaviorally and emotionally dysregulated youth. *Molecular Psychiatry*. 2016; 21:1194-1201.
- 4. DeBoer EM; Spielberg DR; Brody AS. Clinical potential for imaging in patients with asthma and other lung disorders. *Journal of Allergy and Clinical Immunology*. 2017; 139:21-28.

- 5. Bakeer N; James J; Roy S; Wansapura J; Shanmukhappa SK; Lorenz JN; Osinska H; Backer K; Huby AC; Shrestha A. Sickle cell anemia mice develop a unique cardiomyopathy with restrictive physiology. Proceedings of the National Academy of Sciences of the United States of America. 2016; 113:E5182-E5191.
- 6. Jaramillo D; Dormans JP; Delgado J; Laor T; St Geme JW. **Hematogenous Osteomyelitis in Infants and Children: Imaging of a Changing Disease.** *Radiology.* 2017; 283:629-643.
- 7. Larson DB; Donnelly LF; Podberesky DJ; Merrow AC; Sharpe RE; Kruskal JB. Peer Feedback, Learning, and Improvement:

 Answering the Call of the Institute of Medicine Report on Diagnostic Error. Radiology. 2017; 283:231-241.
- Serai SD; Dillman JR; Trout AT. Spin-echo Echo-planar Imaging MR Elastography versus Gradient-echo MR Elastography for Assessment of Liver Stiffness in Children and Young Adults Suspected of Having Liver Disease. Radiology. 2017; 282:761-770.
- Trout AT; Serai S; Mahley AD; Wang H; Zhang Y; Zhang B; Dillman JR. Liver Stiffness Measurements with MR Elastography:
 Agreement and Repeatability across Imaging Systems, Field Strengths, and Pulse Sequences. Radiology. 2016; 281:793-804.
- 10. Trout AT; Dillman JR; Xanthakos S; Kohli R; Sprague G; Serai S; Mahley AD; Podberesky DJ. Prospective Assessment of Correlation between US Acoustic Radiation Force Impulse and MR Elastography in a Pediatric Population: Dispersion of US Shear-Wave Speed Measurement Matters. Radiology. 2016; 281:544-552.
- 11. Racadio JM; Nachabe R; Homan R; Schierling R; Racadio JM; Babic D. Augmented Reality on a C-Arm System: A Preclinical Assessment for Percutaneous Needle Localization. *Radiology*. 2016; 281:249-255.
- 12. O'Brien W; Hamelin S; Weitzel EK. **The Preoperative Sinus CT: Avoiding a "CLOSE" Call with Surgical Complications..** *Radiology.* 2016; 281:10-21.
- 13. Dillman JR; Carlos RC; Smith EA; Davenport MS; Maillard VDM; Adler J. Relationship of Bowel MR Imaging to Health-related Quality of Life Measures in Newly Diagnosed Pediatric Small Bowel Crohn Disease. Radiology. 2016; 280:568-575.
- 14. Athans BS; Depinet HE; Towbin AJ; Zhang Y; Zhang B; Trout AT. **Use of Clinical Data to Predict Appendicitis in Patients with Equivocal US Findings.** *Radiology.* 2016; 280:557-567.
- 15. Myer GD; Yuan W; Foss KDB; Thomas S; Smith D; Leach J; Kiefer AW; Dicesare C; Adams J; Gubanich PJ. **Analysis of head** impact exposure and brain microstructure response in a season-long application of a jugular vein compression collar: a prospective, neuroimaging investigation in American football. *British journal of sports medicine*. 2016; 50:1276-1285.
- 16. Nelson JE; Handa P; Aouizerat B; Wilson L; Vemulakonda LA; Yeh MM; Kowdley KV; Abrams SH; Himes R; Krisnamurthy R. Increased parenchymal damage and steatohepatitis in Caucasian non-alcoholic fatty liver disease patients with common IL1B and IL6 polymorphisms. Alimentary Pharmacology and Therapeutics. 2016; 44:1253-1264.
- 17. Katzenstein HM; Furman WL; Malogolowkin MH; Krailo MD; McCarville MB; Towbin AJ; Tiao GM; Finegold MJ; Ranganathan S; Dunn SP. Upfront Window Vincristine/Irinotecan Treatment of High-Risk Hepatoblastoma: A Report From the Children's Oncology Group AHEP0731 Study Committee. Cancer. 2017; 123:2360-2367.
- 18. Wagner LM; Kremer N; Gelfand MJ; Sharp SE; Turpin BK; Nagarajan R; Tiao GM; Pressey JG; Yin J; Dasgupta R. Detection of Lymph Node Metastases in Pediatric and Adolescent/Young Adult Sarcoma: Sentinel Lymph Node Biopsy Versus Fludeoxyglucose Positron Emission Tomography Imaging-A Prospective Trial. Cancer. 2017; 123:155-160.
- 19. Smith A; Abruzzo T; Mahmoud M. Vein of Galen Malformation and High-output Cardiac Failure. *Anesthesiology*. 2016; 125:597-597.
- 20. Depinet H; von Allmen D; Towbin A; Hornung R; Ho M; Alessandrini E. **Risk Stratification to Decrease Unnecessary Diagnostic Imaging for Acute Appendicitis.** *Pediatrics*. 2016; 138:e20154031.
- 21. Allendorfer JB; Hernando KA; Hossain S; Nenert R; Holland SK; Szaflarski JP. **Arcuate fasciculus asymmetry has a hand in language function but not handedness.** *Human Brain Mapping*. 2016; 37:3297-3309.

- 22. Arya R; Wilson JA; Fujiwara H; Rozhkov L; Leach JL; Byars AW; Greiner HM; Vannest J; Buroker J; Milsap G. Presurgical language localization with visual naming associated ECoG high- gamma modulation in pediatric drug-resistant epilepsy. Epilepsia. 2017; 58:663-673.
- 23. Hinderer C; Katz N; Louboutin J-P; Bell P; Yu H; Nayal M; Kozarsky K; O'Brien WT; Goode T; Wilson JM. Delivery of an Adeno-Associated Virus Vector into Cerebrospinal Fluid Attenuates Central Nervous System Disease in Mucopolysaccharidosis Type II Mice. Human Gene Therapy. 2016; 27:906-915.
- 24. Yuan W; Treble-Barna A; Sohlberg MM; Harn B; Wade SL. Changes in Structural Connectivity Following a Cognitive Intervention in Children With Traumatic Brain Injury: A Pilot Study. Neurorehabilitation and Neural Repair. 2017; 31:190-201.
- 25. Haws ME; Linscott L; Thomas C; Orscheln E; Radhakrishnan R; Kline-Fath B. A Retrospective Analysis of the Utility of Head Computed Tomography and/or Magnetic Resonance Imaging in the Management of Benign Macrocrania. *The Journal of Pediatrics*. 2017; 182:283-289.e1.

Grants, Contracts, and Industry Agreements

Annual Grant Award Dollars

Investigator	Title	Sponsor	ID	Dates	Amount
Gregory Ryan Lee, PhD	Comprehensive Quantitative Ultrafast 3D Liver MRI	National Institutes of Health (Case Western University)	R01 DK098503	08/01/2013 - 07/31/2018	\$25,314
Todd A Abruzzo, MD	Ultrasound-assisted Thrombolysis for Stroke Therapy	National Institutes of Health (University of Cincinnati)	R01 NS047603	08/15/2014 - 07/31/2019	\$86,078
Jonathan R Dillman, MD, MS	Nonlinear Ultrasound: an Imaging Biomarker of Intestinal Fibrosis in Crohn's Disease	National Institutes of Health (University of Michigan)	R01 DK109032	04/01/2016 - 03/31/2021	\$101,868
Diana M Lindquist, PhD	Risk and resilience Factors for Frontolimbic Connectivity Deficits	National Institutes of Health (University of Cincinnati)	R01 MH107378	03/09/2016 - 01/31/2020	\$69,816
Charles Dumoulin, PhD	An Integrated Coil and Body- mounted MR Robot for Pediatric Arthrography	National Institutes of Health (Children's National Medical Center)	R21 EB020700	05/01/2016 - 02/01/2018	\$204,245
Kim M Cecil, PhD	Developmental Effects of Manganese Exposure in Rural Adolescents: The CARES Cohort Comes of Age	National Institutes of Health (University of Cincinnati)	R01 ES026446	09/30/2016 - 08/31/2021	\$99,572
Joseph Palermo, MD, PhD	Longitudinal Study of Cystic Fibrosis Liver Disease	Cystic Fibrosis Fdn Therapeutics, Inc (University of Colorado)	PUSH MRE study	01/01/2016 - 12/31/2017	\$10,800
Kim M Cecil, PhD Kimberly Yolton, PhD	Internalizing Behaviors and Neuroimaging Outcomes: Impact of PBDE and PFC Exposures	National Institutes of Health	R01 ES027224	09/30/2016 - 05/31/2021	\$323,594.50

Annual Industry Award Dollars

Investigator	Industry Sponsor	Amount
Alexander Towbin, MD	Siemens Medical Solutions USA, Inc.	\$13,415
Andrew T. Trout, MD	Toshiba America Medical Systems, Inc.	\$171,500
Jean Tkach	Summit (Oxford) Limited (University of Florida)	\$149,564
Jonathan R Dillman, MD, MS	Siemens Medical Solutions USA, Inc.	\$17,499
Kim M Cecil, PhD	Lumos Pharma, Inc.	\$37,618
Total Annual Industry Award Dollars		\$389,596