

# Caffey Award for Best Basic Science Paper

## (1999-present)

- **1999** - Changes in Renal Blood Flow Depicted with Contrast-enhanced Harmonic Imaging During Acute Urinary Obstruction; Claudon, M, Barnewolt, CE, Taylor, GA, Dunning, PS, Gobet, R, MD; Badawy, A.
- **2000** - Detection of Early Atherosclerosis with Radiolabeled Monocyte Chemoattractant Protein-1 in Prediabetic Zucker Rats; Blankenberg FG, Tait, JF, Strauss, HW, Valentine HA.
- **2001** - Computer-Simulated Radiation Dose Reduction For Pediatric Abdominal Helical CT, Frush, D, Slack, CC, Hollingsworth, CL, Bisset III,GS, Donnelly, LF, Hsieh,JI
- **2002** - Understanding the Functional Angiogenic Process in an Antigen-Induced Arthritis Model: Correlative BOLD MR Imaging (fMRI) of the Stages of Synovitis along the Time Course of the Disease; A. S. Doria, MD, Diagnostic Imaging, Hospital for Sick Children, Ontario, P.S. Babyn, MD, A. Crawley, PhD, M. Noseworthy, PhD, K. Pritzker, MD, R. B. Salter, MD, et al
- **2003** - A Novel Method for Non-Viral Gene-Therapy: Transcatheter Hydrodynamic Delivery Using Isolated Liver as a Depot Organ In a Rabbit Model; Kevin Baskin, MD, Children's Hospital of Philadelphia, PA, Simon J. Eastman, PhD; Ronald K. Scheule, PhD; Bradley L. Hodges, PhD; Qiuming Chu, MS; Richard B. Towbin, MD
- **2004** - Site-Specific Induction of Lymphatic Malformations in a Rat Model for Image-Guided Therapy; Robert F. Short, MS, Department of Radiology, Children's Radiological Institute, Children's Hospital, Columbus, OH; William E. Shiels, DO; Thomas J. Sferra, MD; Katherine Nicol, MD; Minka Schofield, MD; Gregory Wiet, MD
- **2005** - Quantitative Measurement of Microbubble Ultrasound Contrast Agent Flow To Assess the Efficacy of Angiogenesis Inhibitors In Vivo; Beth McCarville, MD, Dept of Rad Sciences, St. Jude Children's Research Hosp, Memphis, TN; Christian Streck, MD; Chin-Shang Li, PhD; Andrew Davidoff, MD
- **2006** - <sup>64</sup>Cu-Immuno-PET Imaging of Neuroblastoma with Bioengineered Anti-GD2 Antibodies; Stephan D Voss, MD, PhD, Radiology, Children's Hospital Boston, Harvard Medical School, Boston, MA; Suzanne V Smith, PhD; Nadine M Di Bartolo, PhD; Lacey J McIntosh; Erika M Cyr; Ali A Bonab, PhD, et. al.
- **2007** - MR Imaging of Adenocarcinomas with Folate-Receptor Targeted Contrast Agents; Heike E Daldrop-Link, MD, PhD, Radiology, University of California San Francisco, San Francisco, CA; Zhen J Wang, MD; Reinhard Meier, MD; Claire Corot, PhD
- **2008** - Evaluation of Quality Assurance Quality Control Phantom for Digital Neonatal Chest Projection Imaging; Steven Don, MD, Mallinckrodt Institute of Radiology, Washington University School of Medicine
- **2009** - Faster Pediatric MRI Via Compressed Sensing - Shreyas Vasanawala, Stanford University, Marcus Alley, Richard Barth, Brian Hargreaves, John Pauly, Michael Lustig
- **2010** - Clinical Evaluation of Readout-Segmented-EPI for Diffusion-Weighted Imaging – Roland Bammer, PhD, Stanford University, Palo Alto, CA, Samantha J Holdsworth, PhD; Stefan Skare, PhD; Kristen Yeom, MD; Patrick D Barnes, MD; High-Resolution Motion-Corrected Diffusion-Tensor Imaging (DTI) in Infants – Stefan T Skare, PhD, Stanford University, Stanford, CA; Samantha J Holdsworth, PhD; Kirsten Yeom, MD; Patrick D Barnes, MD; Roland Bammer, PhD; 3D SAP-EPI in Motion-Corrected Fast Susceptibility Weighted Imaging (SWI) – Roland

Bammer, PhD, Stanford University, Palo Alto, CA, Samantha J Holdsworth, PhD; Stefan Skare, PhD; Kristen Yeom, MD; Patrick D Barnes, MD;

T1-Weighted 3D SAP-EPI for Use in Pediatric Imaging – Roland Bammer, PhD, Stanford University, Palo Alto, CA, Samantha J Holdsworth, PhD; Stefan Skare, PhD; Kristen Yeom, MD; Patrick D Barnes, MD

- **2011** - An MR System for Imaging Neonates in the NICU, Jean Tkach, Randy Giaquinto, Wolfgang Loew, Ronald Pratt, Barret Daniels, Blaise Jones, Lane Donnelly, Charles Dumoulin, Cincinnati Children's Hospital Medical Center
- **2012** - Advantages of a Nanoparticle Blood Pool Contrast Agent Over Conventional Intravascular Glomerular-Filtered Contrast Agents for Pulmonary Vascular Imaging; Ananth Annapragada, Texas Children's Hospital, R. Paul Guillerman, Eric Hoffman, David Kaczka, Ketan Ghaghada, Cristian Badea
- **2013** - Psychometric Function: A Novel Statistical Analysis Approach to Optimize CT Dose: Steven Don, MD, Mallinckrodt Institute of Radiology, St. Louis, MO, Bruce Whiting, David Politte, Parinaz Massoumzadeh, Charles Hildebolt
- **2014** - No longer a holiday: Improving the pediatric radiology elective for medical students and pediatric housestaff  
Eddie Hyatt, Vanderbilt University, Department of Radiology and Radiological Sciences, Nashville, TN, Cody Penrod, Sudha Singh, Jayne Seekins, DO, Amy Fleming, Melissa Hilmes, MD
- **2015** - Gonad Shields: Good or Bad for Patient Radiation Exposure?; Summer L. Kaplan, MD, Department of Radiology, The Children's Hospital of Philadelphia, Philadelphia, PA, Dennise Magill, MS, Marc A. Felice, MS, Sayed Ali, MD, Xiaowei Zhu, MS
- **2016** - In vivo Profiling of Folate Receptor Expression in Rat Placenta Using MR Molecular Imaging; Ketan Ghaghada, PhD, Zbigniew Starosolski, PhD, Eric Tanifum, PhD, Haijun Gao, PhD, Igor Stupin, MD, PhD, Saakshi Bhayana, BS, Chandresh Patel, BS, Chandrasekhar Yallampalli, DVM, PhD, Ananth Annapragada, PhD, Texas Children's Hospital, Houston, TX
- **2017** - Performance of a Deep Neural Network Learning Model in Assessing Skeletal Maturity on Pediatric Hand Radiographs; David B. Larson, MD, MBA<sup>1</sup>, Matthew C. Chen<sup>1</sup>, Matthew P. Lungren, MD, MPH<sup>1</sup>, Safwan S. Halabi, MD<sup>1</sup>, Nicholas V. Stence, MD<sup>2</sup>, Curtis P. Langlotz, MD, PhD<sup>1</sup> <sup>1</sup>Radiology, Stanford University, Stanford, CA <sup>2</sup>University of Colorado, Aurora, CO
- **2018** - Feed and Wrap MRU; Sila Kurugol, PhD, Radiology, Boston Children's Hospital and Harvard Medical School, Onur Afacan, PhD, Catherine Seager, MD, Reid Nichols, Richard S. Lee, MD, Simon K. Warfield, PhD, Jeanne S. Chow, MD
- **2019** - Contrast-Enhanced Brain Ultrasound Perfusion Metrics in the EXTra-uterine Environment for Neonatal Development; Ryne Didier, Anush Sridharan, PhD, Kendall Lawrence, Barbara Coons, Marcus Davey, Beverly Coleman, Alan Flake
- **2020** - In vivo Characterization of Emerging White Matter Connectivity in the Fetal Brain in the Third Trimester of Pregnancy; Camilo Jaimes, MD; Fedel Machado-Rivas, MD; Clemente VelascoAnis, BA; Shadab Khan, PhD; Baram Marami, PhD; Ali Gholipour, PhD
- **2021** - Evolution of the T1-Weighted Signal of the Fetal Liver During Pregnancy; Max Zalcman, Lucille Packard Children's Hospital, Stanford University - Department of Pediatric Radiology, Stanford, CA, Aurélie D'hondt, Jarrett Rosenberg, Safwan Halabi, Richard Barth, Erika Rubesova

- **2022** - Preclinical Dose-ranging and Efficacy Studies of Ferumoxytol-enhanced MRI for Visualization of the Retroplacental Clear Space; Andrew A. Badachhape\*, Laxman Devkota; Rohan Bhavane, Prajwal Bhandari, Mayank Srivastava, Ketan B. Ghaghada, Karin Fox, Chandrasekhar Yallampalli, Ananth Annapragada