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Current Position	Professor	2024 – present
	Radiological Sciences, Bioengineering, and Physics and Biology in Medicine University of California Los Angeles, Los Angeles, CA, USA	
Education	Ph.D. in Electrical Engineering	2009
	Advisor: Dr. Dwight G. Nishimura Magnetic Resonance Systems Research Laboratory Electrical Engineering, Stanford University, Stanford, CA, USA	
	M.S. in Electrical Engineering	2005
	Electrical Engineering, Stanford University, Stanford, CA, USA	
	B.S. in Electrical Engineering	2003
	Electrical Engineering, National Taiwan University, Taipei, Taiwan, ROC	
Experience	Associate Professor	2019 – 2023
	Assistant Professor	2012 – 2019
	Radiological Sciences, Bioengineering, and Physics and Biology in Medicine University of California Los Angeles, Los Angeles, CA, USA	
	Post Doctoral Scholar	2009 – 2012
	Advisor: Dr. Michael V. McConnell Cardiovascular Medicine, Stanford University, Stanford, CA, USA	
	Research Assistant	2005 – 2009
	Advisor: Dr. Dwight G. Nishimura Magnetic Resonance Systems Research Laboratory Electrical Engineering, Stanford University, Stanford, CA, USA	
Honors	ISMRM Interventional MRI Study Group Abstract Award (Mentor)	2023
	ISMRM Image Reconstruction Workshop Poster Award (Mentor)	2023
	ISMRM MR of Cancer Study Group Top 5 Trainee Abstract (Mentor)	2021
	ISMRM W. S. Moore Young Investigator Award Finalist (Mentor)	2019
	UCLA Dr. Moses A. Greenfield Award (Mentor)	2018
	RSNA Trainee Research Prize (Mentor)	2017
	ISMRM Summa Cum Laude Award (Mentor)	2017 – 2024
	ISMRM Magna Cum Laude Award (Mentor)	2015 – 2024
	NSF Graduate Research Fellowship (Mentor)	2015 – 2018
	MRM Distinguished Reviewer	2012 – 2018
	MR Angio Club Potchen Award	2011
	AHA Postdoctoral Fellowship	2011 – 2012
	ISMRM Junior Fellow	2010
	ISMRM Travel Awards	2007 – 2009
	Stanford Graduate Fellowship, Sony Fellow	2003 – 2007

Research Interests *Magnetic Resonance Imaging Quantitative Imaging Image-Guided Interventions
Image Acquisition and Reconstruction Artificial Intelligence Nanotheranostics*

Academic Societies The Institute of Electrical and Electronics Engineers (**IEEE**)
The International Society for Magnetic Resonance in Medicine (**ISMRM**)
American Association of Physicists in Medicine (**AAPM**)

Professional Service (selected)

1. Secretary, ISMRM Body MRI Study Group 2023 – present
2. Guest Editor, *Magnetic Resonance Materials in Physics, Biology and Medicine (MAGMA)* Special Issue on Quantitative Body MRI 2023 – 2024
3. Reviewer, National Institutes of Health (NIH) Imaging Guided Interventions and Surgery (IGIS) 2021 – present
4. Reviewer, Swiss National Science Foundation (SNSF) 2020
5. Reviewer, Netherlands Organisation for Scientific Research (NWO) 2020, 2022
6. Member, ISMRM Workshop on MRI of Obesity and Metabolic Disorders Organizing Committee 2017 – 2019
7. Review Panelist, National Science Foundation (NSF) 2017, 2019
8. Member, AAPM Task Group on Phantoms for Interventional MRI 2016 – 2020
9. Reviewer and Moderator, ISMRM Annual Meetings 2013 – present
10. Contributor, ISMRM Fat-Water Imaging Toolbox 2012
11. Reviewer, *IEEE Signal Processing Letters, Magnetic Resonance in Medicine, Journal of Magnetic Resonance Imaging, Medical Physics, Pediatric Research, Nature Protocols, MAGMA, American Journal of Roentgenology, NMR in Biomedicine*

Research Support (selected)

1. NIH/NIBIB R01EB031934 (PI: **Wu**/Tsao/Lu) 2022 – 2026
New Technologies for Real-Time MRI-Guided Robotic-Assisted Abdominal Interventions
2. NIH/NIBIB U01EB031894 (PI: **Wu**/Altbach/Deshpande) 2022 – 2027
Quantitative MRI and Deep Learning Technologies for Classification of NAFLD
3. Siemens Medical Solutions USA (PI: **Wu**) 2021 – 2024
Accelerated Multi-Contrast High-Resolution 3D Dual-Echo Steady State Knee MRI
4. NIH/NIDDK R01DK124417 (PI: **Wu**/Calkins) 2020 – 2025
Quantifying Body Composition and Liver Disease in Children Using Free-Breathing MRI and MRE
5. NIH/NCI R01CA248506 (PI: Sung/**Wu**) 2020 – 2025
Integrating Quantitative MRI and Artificial Intelligence to Improve Prostate Cancer Classification
6. Siemens Medical Solutions USA (PI: Finn/**Wu**) 2018 – 2023
AI-Enabled Smart MRI for Personalized Diagnosis and Treatment
7. UCLA Innovation Fund Therapeutics Award (PI: **Wu**/Zink) 2018 – 2020
MRI-Guided HIFU-Responsive Theranostic Nanoparticles

1. Kafali SG, Bolster Jr. BD, Shih S-F, Delgado TI, Deshpande V, Zhong X, Adamos TR, Ghahremani S, Calkins KL, **Wu HH**. Self-Gated Radial Free-Breathing Liver MR Elastography: Assessment of Technical Performance in Children at 3T. *Journal of Magnetic Resonance Imaging* 2024. doi: 10.1002/jmri.29541. PMID: 39036994.
2. Shih S-F, **Wu HH**. Free-Breathing MRI Techniques for Fat and R_2^* Quantification in the Liver. *Magnetic Resonance Materials in Physics, Biology and Medicine (MAGMA)* 2024. doi: 10.1007/s10334-024-01187-2. PMID: 39039272.
3. Zhong X, Nickel MD, Kannengiesser SAR, Dale BM, Gao C, Shih S-F, **Wu HH**, Deshpande V. Accelerated Free-Breathing Liver Fat and R_2^* Quantification Using Multi-Echo Stack-of-Radial MRI with Motion-Resolved Multi-Dimensional Regularized Reconstruction: Initial Retrospective Evaluation. *Magnetic Resonance in Medicine* 2024. doi: 10.1002/mrm.30117. PMID: 38650444.
4. Zhou W, Li X, Zabihollahy F, Lu DS, **Wu HH**. Deep Learning-Based Automatic Pipeline for 3D Needle Localization on Intra-Procedural 3D MRI. *International Journal of Computer Assisted Radiology and Surgery* 2024. doi: 10.1007/s11548-024-03077-3. PMID: 38520646.
5. Zhang Z, Aygun E, Shih S-F, Raman SS, Sung K, **Wu HH**. High-Resolution Prostate Diffusion MRI using Eddy Current-Nulled Convex Optimized Diffusion Encoding and Random Matrix Theory-Based Denoising. *Magnetic Resonance Materials in Physics, Biology and Medicine (MAGMA)* 2024. doi: 10.1007/s10334-024-01147-w. PMID: 38349453.
6. Kafali SG, Shih S-F, Li X, Kelly T, Chowdhury S, Loong S, Moretz J, Barnes S, Li Z, **Wu HH**. Automated Abdominal Adipose Tissue Segmentation and Volume Quantification on Longitudinal MRI using 3D Convolutional Neural Networks with Multi-Contrast Inputs. *Magnetic Resonance Materials in Physics, Biology and Medicine (MAGMA)* 2024. doi: 10.1007/s10334-023-01146-3. PMID: 38300360.
7. Ming Z, Pogosyan A, Colbert CM, **Wu HH**, Finn JP, Ruan D, Hu P, Christodoulou AG, Nguyen K-L. ECG-Free Cine MRI with Data-Driven Clustering of Cardiac Motion: Proof-of-Concept. *NMR in Biomedicine* 2024; e5091. <https://doi.org/10.1002/nbm.5091>. PMID: 38196195.
8. Lin J, Qi M, Suraweck C, Raman SS, **Wu HH**, Sung K. High Resolution 3D MRI with Deep Generative Networks via Novel Slice-Profile Transformation Super-Resolution. *IEEE Access* 2023; 11:95022-95036. doi: 10.1109/ACCESS.2023.3307577. PMID: 37711392.
9. Lee B, Janzen C, Aliabadi AR, Lei MYY, **Wu H**, Liu D, Vangala SS, Devaskar SU, Sung K. Early Pregnancy Imaging Predicts Ischemic Placental Disease. *Placenta* 2023; 140:90-99. doi: 10.1016/j.placenta.2023.07.297. PMID: 37549442.
10. Shih S-F, Kafali SG, Calkins KL, **Wu HH**. Uncertainty-Aware Physics-Driven Deep Learning Network for Free-Breathing Liver Fat and R_2^* Quantification using Self-Gated Stack-of-Radial MRI. *Magnetic Resonance in Medicine* 2023; 89(4):1567-1585. doi: 10.1002/mrm.29525. PMID: 36426730.
11. Strobel K, Kafali SG, Shih S-F, Artura AM, Masamed R, Elashoff D, **Wu HH**, Calkins KL. Pregnancies Complicated by Gestational Diabetes and Fetal Growth Restriction: An Analysis of Maternal and Fetal Body Composition Using Magnetic Resonance Imaging in the Third Trimester. *Journal of Perinatology* 2023; 43(1):44-51. doi: 10.1038/s41372-022-01549-5. PMID: 36319757.
12. Gao C†, Ghodrati V†, Shih S-F, **Wu HH**, Liu Y, Nickel MD, Vahle T, Dale B, Sai V, Felker E, Suraweck C, Miao Q, Finn JP, Zhong X, Hu P. Undersampling Artifact Reduction for Free-Breathing 3D Stack-of-Radial MRI Based on a Deep

- Adversarial Learning Network. *Magnetic Resonance Imaging* 2023; 95:70-79. doi: 10.1016/j.mri.2022.10.010. PMID: 36270417. († equal contribution)
13. Lee B, Janzen C, **Wu H**, Vangala SS, Devaskar SU, Sung K. Utility of In Vivo Magnetic Resonance Imaging is Predictive of Gestational Diabetes Mellitus During Early Pregnancy. *Journal of Clinical Endocrinology and Metabolism* 2023; 108(2):281-294. doi: 10.1210/clinem/dgac602. PMID: 36251771.
 14. Story JD, Ghahremani S, Kafali SG, Shih S-F, Kuwahara K, Calkins KL, **Wu HH**. Using Free-Breathing MRI to Quantify Pancreatic Fat and Investigate Spatial Heterogeneity in Children. *J Magn Reson Imaging* 2023; 57(2):508-518. doi: 10.1002/jmri.28337. PMID: 35778376.
 15. Geoghegan R, Zhang L, Priester A, **Wu HH**, Marks L, Natarajan S. Interstitial Optical Monitoring of Focal Laser Ablation. *IEEE Transactions on Biomedical Engineering* 2022; 69(8):2545-2556. doi: 10.1109/TBME.2022.3150279. PMID: 35148260.
 16. Kafali SG, Armstrong T, Shih S-F, Holtrop JL, Venick RS, Ghahremani S, Bolster Jr. BD, Hillenbrand CM, Calkins KL, **Wu HH**. Free-Breathing Radial Magnetic Resonance Elastography of the Liver in Children at 3T: A Pilot Study. *Pediatric Radiology* 2022; 52:1314-1325. doi: 10.1007/s00247-022-05297-8. PMID: 35366073.
 17. Li X, Lee Y, Lu DS, Tsao TC, **Wu HH**. Physics-Driven Mask R-CNN for Physical Needle Localization in MRI-Guided Percutaneous Interventions. *IEEE Access* 2021; 9:161055-161068. doi: 10.1109/ACCESS.2021.3128163.
 18. Armstrong T†, Zhong X†, Shih S-F, Felker ER, Lu DS, Dale BM, **Wu HH**. Free-Breathing 3D Stack-of-Radial MRI Quantification of Liver Fat and R_2^* in Adults with Fatty Liver Disease. *Magnetic Resonance Imaging* 2022; 85:141-152. doi: 10.1016/j.mri.2021.10.016. PMID: 34662702. († equal contribution)
 19. Chang C†, Huang Z†, Shih S-F, Luo Y, Ko A, Cui Q, Sumner J, Cavallero S, Das S, Gao W, Sinsheimer J, Bui A, Jacobs J, Pajukanta P, **Wu H**, Tai YC, Li Z, Hsiai T. Electrical Impedance Tomography for Non-Invasive Identification of Fatty Liver Infiltrate in Overweight Individuals. *Scientific Reports* 2021; 11:19859. doi: 10.1038/s41598-021-99132-z. PMID: 34615918. († equal contribution)
 20. Deng T†, Zhang L†, Li X, Zink JI*, **Wu HH***. Responsive Nanoparticles to Enable a Focused Ultrasound-Stimulated Magnetic Resonance Imaging Spotlight. *American Chemical Society (ACS) Nano* 2021; 15:14618-14630. doi: 10.1021/acsnano.1c04339. PMID: 34519214. († equal contribution, * corresponding authors)
 21. Zhong X, Armstrong T, Gao C, Nickel MD, Han F, Dale BM, Li X, Kafali SG, Hu P, **Wu HH**, Deshpande V. Accelerated k-Space Shift Calibration for Free-Breathing Stack-of-Radial MRI Quantification of Liver Fat and R_2^* . *Magn Reson Med* 2021. doi: 10.1002/mrm.28981. PMID: 34412158.
 22. Dual SA, Maforo NG, McElhinney DB, Prosper A, **Wu HH**, Maskatia S, Renella P, Halnon N, Ennis DB. Right Ventricular Function and T1-Mapping in Boys with Duchenne Muscular Dystrophy. *J Magn Reson Imaging* 2021. doi: 10.1002/jmri.27729. PMID: 34037289.
 23. Maforo NG, Magrath P, Moulin K, Shao J, Kim G, Prosper A, Renella P, **Wu HH**, Halnon N, Ennis DB. T1-Mapping and Extracellular Volume Estimates in Pediatric Subjects with Duchenne Muscular Dystrophy and Healthy Controls at 3T. *J Cardiovascular Magnetic Resonance* 2020; 22(1):85. doi: 10.1186/s12968-020-00687-z. PMID: 33302967.
 24. Martin T, Janzen C, Li X, Del Rosario I, Chanlaw T, Choi S, Armstrong T, Masamed R, **Wu HH**, Devaskar SU, Sung K. Characterization of Uterine Motion in Early

- Gestation using MRI-Based Motion Tracking. *Diagnostics* 2020; 10(10):840. doi: 10.3390/diagnostics10100840. PMID: 33086473.
25. Cheng C, Chen W, Zhang L, **Wu HH***, Zink JI*. Magnetic Resonance Imaging of High-Intensity Focused Ultrasound-Stimulated Drug Release from a Self-Reporting Core@Shell Nanoparticle Platform. *Chemical Communications* 2020; 56:10297-10300. doi: 10.1039/D0CC03179H. PMID: 32756711. (* corresponding authors)
 26. Li X, Young AS, Raman SS, Lu DS, Lee Y, Tsao TC, **Wu HH**. Automatic Needle Tracking using Mask R-CNN for MRI-Guided Percutaneous Interventions. *International Journal of Computer Assisted Radiology and Surgery* 2020; 15(10):1673-1684. doi: 10.1007/s11548-020-02226-8. PMID: 32676870.
 27. Zhong X, Hu HH, Armstrong T, Li X, Lee Y, Tsao TC, Nickel MD, Kannengiesser SAR, Dale BM, Deshpande V, Kiefer B, **Wu HH**. Free-Breathing Volumetric Liver R_2^* and Proton-Density Fat Fraction Quantification in Pediatric Patients Using Stack-of-Radial MRI with Self-Gating Motion Compensation. *J Magn Reson Imaging* 2020, 53(1):118-129. doi: 10.1002/jmri.27205. PMID: 32478915.
 28. Lee Y, Li X, Simonelli J, Lu D, **Wu HH**, Tsao TC. Adaptive Tracking Control of One-Dimensional Respiration Induced Moving Targets by Real-Time Magnetic Resonance Imaging Feedback. *IEEE/ASME Transactions on Mechatronics* 2020; 25(4):1894-1903. doi: 10.1109/TMECH.2020.2998150.
 29. Zhang Z, **Wu HH***, Priester A, Magyar C, Afshari Mirak S, Shakeri S, Mohammadian Bajgiran A, Hosseiny M, Azadikhah A, Sung K, Reiter RE, Sisk AE, Raman S, Enzmann DR. Prostate Microstructure in Prostate Cancer using 3T MRI with Diffusion-Relaxation Correlation Spectrum Imaging: Validation with Whole-Mount Digital Histopathology. *Radiology* 2020; 296(2):348-355. doi: 10.1148/radiol.2020192330. PMID: 32515678. (* corresponding author)
 30. Singhrao K, Fu J, Gao Y, **Wu HH**, Yang Y, Hu P, Lewis JH. A Generalized System of Tissue-Mimicking Materials for Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). *Physics in Medicine and Biology* 2020; 65(13):13NT01. doi: 10.1088/1361-6560/ab86d4. PMID: 32252048.
 31. Li X†, Perotti LE†, Martinez JA, Duarte-Vogel SM, Ennis DB, **Wu HH**. Real-Time 3T MRI-Guided Cardiovascular Catheterization in a Porcine Model using a Glass-Fiber Epoxy-Based Guidewire. *PLoS ONE* 2020; 15(2):e0229711. doi: 10.1371/journal.pone.0229711. PMID: 32102092. († equal contribution)
 32. Koulakis JP, Rouch J, Huynh N, **Wu HH**, Dunn JC, Putterman S. Tumescant injections in subcutaneous pig tissue disperse fluids volumetrically and maintain elevated local concentrations of additives for several hours, suggesting a treatment for drug resistant wounds. *Pharmaceutical Research* 2020; 37: 51. doi: 10.1007/s11095-020-2769-2. PMID: 32043171.
 33. Singhrao K, Fu J, **Wu H**, Hu P, Kishan AU, Chin RK, Lewis JH. A Novel Anthropomorphic Multimodality Phantom for MRI-Based Radiotherapy Quality Assurance Testing. *Medical Physics* 2020; 47(4):1443-1451. doi: 10.1002/mp.14027. PMID: 31954078.
 34. Hu HH, Branca RT, Hernando D, Karampinos DC, Machann J, McKenzie CA, **Wu HH**, Yokoo T, Velan SS. Magnetic Resonance Imaging of Obesity and Metabolic Disorders: Summary from the 2019 ISMRM Workshop. *Magn Reson Med* 2020; 83(5):1565-1576. doi: 10.1002/mrm.28103. PMID: 31782551.
 35. Simonelli J, Lee Y, Chen C, Li X, Mikael S, Lu D, **Wu HH**, Tsao TC. Hydrostatic Actuation for Remote Operations in MR Environment. *IEEE/ASME Transactions on Mechatronics* 2020; 25(2):894-905. doi: 10.1109/TMECH.2019.2959805.

36. Cheng C†, Chen W†, Zhang L, **Wu HH***, Zink JI*. A Responsive Mesoporous Silica Nanoparticle Platform for Magnetic Resonance Imaging-Guided High-Intensity Focused Ultrasound-Stimulated Cargo Delivery with Controllable Location, Time, and Dose. *Journal of the American Chemical Society* 2019; 141(44):17670-17684. doi: 10.1021/jacs.9b07591. PMID: 31604010. († equal contribution, * corresponding authors)
37. Zhong X†, Armstrong T†, Nickel MD, Kannengiesser SAR, Pan L, Dale BM, Deshpande V, Kiefer B, **Wu HH**. Effect of Respiratory Motion on Free-Breathing 3D Stack-of-Radial Liver R_2^* Relaxometry and Improved Quantification Accuracy using Self-Gating. *Magn Reson Med* 2020; 83(6):1964-1978. doi: 10.1002/mrm.28052. PMID: 31682016. († equal contribution)
38. Li X, Lee Y, Mikael S, Simonelli J, Tsao TC, **Wu HH**. Respiratory Motion Prediction using Fusion-Based Multi-Rate Kalman Filtering and Real-Time Golden-Angle Radial MRI. *IEEE Transactions on Biomedical Engineering* 2020; 67(6):1727-1738. doi: 10.1109/TBME.2019.2944803. PMID: 31567071.
39. Mikael S, Simonelli J, Li X, Lee Y, Lee YS, Sung K, Lu D, Tsao TC, **Wu HH**. MRI-Guided Targeted Needle Placement During Motion using Hydrostatic Actuators. *The International Journal of Medical Robotics and Computer Assisted Surgery* 2020; 16(2):e2041. doi: 10.1002/rcs.2041. PMID: 31674721.
40. Zhang Z, Moulin KF, Aliotta E, Shakeri S, Afshari Mirak S, Hosseiny M, Raman S, Ennis DB, **Wu HH**. Prostate Diffusion MRI with Minimal Echo Time using Eddy Current Nulled Convex Optimized Diffusion Encoding. *J Magn Reson Imaging* 2020; 51(5):1526-1539. doi: 10.1002/jmri.26960. PMID: 31625663.
41. Geoghegan R, Santamaria A, Priester A, Zhang L, **Wu H**, Grundfest W, Marks L, Natarajan S. A Tissue-Mimicking Prostate Phantom for 980 nm Laser Interstitial Thermal Therapy. *International Journal of Hyperthermia* 2019; 36(1):993-1002. doi: 10.1080/02656736.2019.1660811. PMID: 31544549.
42. Deng T†, Zhang L†, **Wu HH***, Zink JI*. A Nanoparticle Enabled Focused Ultrasound-Stimulated Magnetic Resonance Imaging Spotlight. *Chemical Communications* 2019; 55:10261-10264. doi: 10.1039/C9CC03701B. PMID: 31393462. († equal contribution, * corresponding authors)
43. Zhang L, Armstrong T, Li X, **Wu HH**. A Variable Flip Angle Golden-Angle-Ordered 3D Stack-of-Radial MRI Technique for Simultaneous Proton Resonant Frequency Shift and T_1 -based Thermometry. *Magn Reson Med* 2019; 82(6):2062-2076. doi: 10.1002/mrm.27883. PMID: 31257639.
44. Armstrong T, Ly KV, Ghahremani S, Calkins KL, **Wu HH**. Free-Breathing 3-D Quantification of Infant Body Composition and Hepatic Fat Using a Stack-of-Radial Magnetic Resonance Imaging Technique. *Pediatric Radiology* 2019; 49(7):876-888. doi: 10.1007/s00247-019-04384-7. PMID: 31001664.
45. Ly K, Armstrong T, Yeh J, Ghahremani S, Kim GH, **Wu HH**, Calkins KL. Free-Breathing MRI Assessment of Body Composition in Healthy and Overweight Children: An Observational Study. *J Pediatric Gastroenterology and Nutrition* 2019; 68(6):782-787. doi: 10.1097/MPG.0000000000002309. PMID: 30789865.
46. Keenan KE, Biller JR, Delfino JG, Boss MA, Does MD, Evelhoch JL, Griswold MA, Gunter JL, Hinks RS, Hoffman SW, Kim G, Lattanzi R, Li X, Marinelli L, Metzger GJ, Mukherjee P, Nordstrom RJ, Peskin AP, Perez E, Russek SE, Sahiner B, Serkova N, Shukla-Dave A, Steckner M, Stupic KF, Wilmes LJ, **Wu HH**, Zhang H, Jackson EF, Sullivan DC. Recommendations Towards Standards for Quantitative MRI (qMRI) and Outstanding Needs. *J Magn Reson Imaging* 2019; 49(7):e26-e39. doi: 10.1002/jmri.26598. PMID: 30680836.

47. Zhong X, Shakeri S, Liu D, Sayre J, Raman SS, **Wu HH**, Sung K. Repeatability and Reproducibility of Variable Flip Angle T_1 Quantification in the Prostate at 3 Tesla. *J Magn Reson Imaging* 2019; 49(6):1730-1735. doi: 10.1002/jmri.26596. PMID: 30548513.
48. Zhong X, Cao R, Shakeri S, Scalzo F, Lee Y, Enzmann DR, **Wu HH**, Raman S, Sung K. Deep Transfer Learning Based Prostate Cancer Classification using 3 Tesla Multiparametric MRI. *Abdominal Radiology* 2019; 44(6):2030-2039. doi: 10.1007/s00261-018-1824-5. PMID: 30460529.
49. Armstrong T, Liu D, Martin T, Masamed R, Janzen C, Wong C, Chanlaw T, Devaskar SU, Sung K, **Wu HH**. 3D R_2^* Mapping of the Placenta During Early Gestation Using Free-Breathing Multiecho Stack-of-Radial MRI at 3T. *J Magn Reson Imaging* 2019; 49(1):291-303. doi: 10.1002/jmri.26203. PMID: 30142239. (**2019 ISMRM Young Investigator Award Finalist**)
50. **Wu HH**, Priester A, Khoshnoodi P, Zhang Z, Shakeri S, Afshari Mirak S, Asvadi NH, Ahuja P, Sung K, Natarajan S, Sisk A, Reiter R, Raman S, Enzmann D. A System Using Patient-Specific 3D-Printed Molds to Spatially Align In Vivo MRI with Ex Vivo MRI and Whole-Mount Histopathology for Prostate Cancer Research. *J Magn Reson Imaging* 2019; 49(1):270-279. doi: 10.1002/jmri.26189. PMID: 30069968.
51. Priester A, **Wu H**, Khoshnoodi P, Schneider D, Zhang Z, Asvadi N, Sisk A, Raman S, Reiter R, Grundfest W, Marks LS, Natarajan S. Registration Accuracy of Patient-Specific 3D Printed Prostate Molds for Correlating Pathology with Magnetic Resonance Imaging. *IEEE Transactions on Biomedical Engineering* 2019; 66(1):14-22. doi: 10.1109/TBME.2018.2828304. PMID: 29993431.
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53. Armstrong T, Ly KV, Murthy S, Ghahremani S, Kim GHJ, Calkins KL, **Wu HH**. Free-Breathing Quantification of Hepatic Fat in Healthy and NAFLD Children Using a Multiecho 3D Stack-of-Radial MRI Technique. *Pediatric Radiology* 2018; 48(7):941-953. doi: 10.1007/s00247-018-4127-7. PMID: 29728744.
54. Felker ER, Choi K, Sung K, **Wu HH**, Raman SS, Bolster BD, Kannengiesser S, Sorge K, Lu DSK. Liver Magnetic Resonance Elastography at 3T: Agreement Across Pulse Sequences and Effect of Liver R_2^* on Image Quality. *Am J Roentgenology* 2018; 211(3):588-594. doi: 10.2214/AJR.17.19288. PMID: 29995500.
55. Armstrong T, Dregely I, Stemmer A, Han F, Natsuaki Y, Sung K, **Wu HH**. Free-Breathing Liver Fat Quantification using a Multiecho 3D Stack-of-Radial Technique. *Magn Reson Med* 2018; 79(1):370-382. doi: 10.1002/mrm.26693. PMID: 28419582.
56. Felker ER†, Dregely I†, Chung DJ, Sung K, Osuagwu F, Lassman C, Sayre J, **Wu HH**, Lu DS. Irreversible Electroporation: Defining the MRI Appearance of the Ablation Zone with Histopathologic Correlation in a Porcine Liver Model. *Am J Roentgenology* 2017; 208(5):1141-1146. doi: 10.2214/AJR.16.17207. PMID: 28177652. († equal contribution)
57. Tan N†, Lin WC†, Khoshnoodi P, Asvadi NH, Yoshida J, Margolis DJ, Lu DS, **Wu H**, Sung KH, Lu DY, Huang J, Raman SS. In-bore 3-T MR-guided Transrectal Targeted Prostate Biopsy: Prostate Imaging Reporting and Data System Version 2-based Diagnostic Performance for Detection of Prostate Cancer. *Radiology* 2017; 283(1):130-139. doi: 10.1148/radiol.2016152827. PMID: 27861110. († equal contribution)

58. Rangwala N, Dregely I, **Wu HH**, Sung K. Optimization and Evaluation of Reference Region Variable Flip Angle (RR-VFA) B1+ and T1 Mapping in the Prostate at 3T. *J Magn Reson Imaging* 2017; 45(3):751-760. doi: 10.1002/jmri.25410. PMID: 27532669.
59. Aliotta E, **Wu HH**, Ennis DB. Convex Optimized Diffusion Encoding (CODE) Gradient Waveforms for Minimum Time and Bulk Motion Compensated Diffusion Weighted MRI. *Magn Reson Med* 2017; 77(2):717-729. doi: 10.1002/mrm.26166. PMID: 26900872.
60. Dregely I, Margolis D, Sung K, Zhou Z, Rangwala N, Raman S, **Wu HH**. Rapid Quantitative T₂ Mapping of the Prostate using 3D DESS MRI at 3 T. *Magn Reson Med* 2016; 76(6):1720-1729. doi: 10.1002/mrm.26053. PMID: 26765746.
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62. Addy NO, Ingle RR, **Wu HH**, Hu BS, Nishimura DG. High-Resolution Variable-Density 3D Cones Coronary MRA. *Magn Reson Med* 2015; 74(3):614-621. doi: 10.1002/mrm.25803. PMID: 26172829.
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