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Current Position	Associate Professor	2019 – 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	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 Multi-Disciplinary Training Program in Cardiovascular Imaging at Stanford (CVIS), <i>and</i> AHA Postdoctoral Fellowship (Role: PI) 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 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
	UCLA Innovation Fund Therapeutics Award (Lead PI)	2017
	RSNA Trainee Research Prize (Mentor)	2017
	ISMRM Summa Cum Laude Award (Mentor)	2017 – 2022
	ISMRM Magna Cum Laude Award (Mentor)	2015 – 2022
	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
	CVIS Postdoctoral Fellowship	2009 – 2011
	ISMRM Travel Awards	2007 – 2009
	Stanford Graduate Fellowship, Sony Fellow	2003 – 2007

Academic Societies

IEEE, ISMRM, AAPM

Research Interests

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

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 – 2023
Accelerated Multi-Contrast High-Resolution 3D Dual-Echo Steady State Knee MRI
4. NIH/NIDDK R01DK124417 (PI: **Wu**/Calkins) 2020 – 2024
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

Journal Publications

1. 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* 2022, in press. doi: 10.1002/jmri.28337. PMID: 35778376.
2. 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.
3. 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.
4. 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.
5. 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 R₂* 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)
6. 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)

7. 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)
8. 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.
9. 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.
10. 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.
11. 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.
12. 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)
13. 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.
14. 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.
15. 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.
16. 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)
17. 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.

18. 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)
19. 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.
20. 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.
21. 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.
22. 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.
23. 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)
24. 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 R₂* 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)
25. 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.
26. 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.
27. 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.
28. 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.
29. 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)

30. 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.
31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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**)
37. **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.
38. 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.
39. Zhong X, Martin T, **Wu HH**, Nayak K, Sung K. Prostate DCE-MRI with B1+ Correction using an Approximated Analytical Approach. *Magn Reson Med* 2018; 80(6):2525-2537. doi: 10.1002/mrm.27232. PMID: 29770495.

40. 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.
41. 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 R2* on Image Quality. *Am J Roentgenology* 2018; 211(3):588-594. doi: 10.2214/AJR.17.19288. PMID: 29995500.
42. 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.
43. 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)
44. 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)
45. 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.
46. 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.
47. 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.
48. Chung DJ, Sung K, Osuagwu FC, **Wu HH**, Lassman C, Lu DS. Contrast Enhancement Patterns after Irreversible Electroporation: Experimental Study of CT Perfusion Correlated to Histopathology in Normal Porcine Liver. *J Vasc Interv Radiol* 2016; 27(1):104-111. doi: 10.1016/j.jvir.2015.09.005. PMID: 26547121.
49. 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.
50. Kwon KT, Kerr AB, **Wu HH**, Hu BS, Brittain JH, Nishimura DG. Non-contrast-enhanced Peripheral Angiography using a Sliding Interleaved Cylinder Acquisition. *Magn Reson Med* 2015; 74(3):727-738. doi: 10.1002/mrm.25452. PMID: 25203505.
51. Srinivasan S, **Wu HH**, Sung K, Margolis D, Ennis DB. Fast 3D T₂-weighted Imaging using Variable Flip Angle Transition into Driven Equilibrium (3D T₂-TIDE) Balanced SSFP for Prostate Imaging at 3T. *Magn Reson Med* 2015; 74(2):442-451. doi: 10.1002/mrm.25430. PMID: 25195659.
52. Middione MJ, **Wu HH**, Ennis DB. Convex Gradient Optimization for Increased Spatiotemporal Resolution and Improved Accuracy in Phase Contrast MRI. *Magn Reson Med* 2014; 72(6):1552-1564. doi: 10.1002/mrm.25059. PMID: 24347040.

53. Ingle RR, **Wu HH**, Addy NO, Cheng JY, Yang PC, Hu BS, Nishimura DG. Nonrigid Autofocus Motion Correction for Coronary MR Angiography with a 3D Cones Trajectory. *Magn Reson Med* 2014; 72(2):347–361. doi: 10.1002/mrm.24924. PMID: 24006292. **(2014 ISMRM Young Investigator Award Finalist)**
54. Kwon KT, **Wu HH**, Shin T, Cukur T, Lustig M, Nishimura DG. 3D Magnetization-Prepared Imaging Using a Concentric Cylinders Trajectory. *Magn Reson Med* 2014; 71(5):1700–1710. doi: 10.1002/mrm.24823. PMID: 23818212.
55. McConnell MV, **Wu HH**. Respiratory-Mode Display of Echocardiographic Images Highlights Effects of Pericardial Disease. *JACC: Cardiovasc Imaging* 2013; 6(8):917–919. doi: 10.1016/j.jcmg.2012.12.013. PMID: 23769491.
56. Dong HZ, Worters PW, **Wu HH**, Ingle RR, Vasanaawala SS, Nishimura DG. Non-Contrast-Enhanced Renal Angiography Using Multiple Inversion Recovery and Alternating TR Balanced SSFP. *Magn Reson Med* 2013; 70(2):527–536. doi: 10.1002/mrm.24480. PMID: 23172805.
57. **Wu HH**, Gurney PT, Hu BS, Nishimura DG, McConnell MV. Free-Breathing Multi-phase Whole-Heart Coronary MR Angiography Using Image-Based Navigators and 3D Cones Imaging. *Magn Reson Med* 2013; 69(4):1083–1093. doi: 10.1002/mrm.24346. PMID: 22648856.
58. Addy NO, **Wu HH**, Nishimura DG. A Simple Method for MR Gradient System Characterization and k-Space Trajectory Estimation. *Magn Reson Med* 2012; 68(1):120–129. doi: 10.1002/mrm.23217. PMID: 22189904.
59. **Wu HH**, Nishimura DG. 3D Magnetization-Prepared Imaging Using a Stack-of-Rings Trajectory. *Magn Reson Med* 2010; 63(5):1210–1218. doi: 10.1002/mrm.22288. PMID: 20432292.
60. **Wu HH**, Lee JH, Nishimura DG. Fat/Water Separation Using a Concentric Rings Trajectory. *Magn Reson Med* 2009; 61(3):639–649. doi: 10.1002/mrm.21865. PMID: 19097243.
61. **Wu HH**, Lee JH, Nishimura DG. MRI Using a Concentric Rings Trajectory. *Magn Reson Med* 2008; 59(1):102–112. doi: 10.1002/mrm.21300. PMID: 17969074.

**Conference
Papers**

62. Kafali SG, Shih S-F, Li X, Chowdhury S, Loong S, Barnes S, Li Z, **Wu HH**. 3D Neural Networks for Visceral and Subcutaneous Adipose Tissue Segmentation using Volumetric Multi-Contrast MRI. *43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 2021, pp. 3933-3937. doi: 10.1109/EMBC46164.2021.9630110. PMID: 34892092.
63. Liu Z, Maforo NG, Renella P, Halnon N, **Wu HH**, Ennis DB. Reproducibility of Left Ventricular CINE DENSE Strain in Pediatric Subjects with Duchenne Muscular Dystrophy. *2021 Functional Imaging and Modeling of the Heart (FIMH) Meeting*, pp. 232-241. doi: 10.1007/978-3-030-78710-3_23.
64. Shih S-F, Kafali SG, Armstrong T, Zhong X, Calkins KL, **Wu HH**. Deep Learning-Based Parameter Mapping with Uncertainty Estimation for Fat Quantification using Accelerated Free-Breathing Radial MRI. *IEEE 18th International Symposium on Biomedical Imaging (ISBI)*, 2021, pp. 433-437. doi: 10.1109/ISBI48211.2021.9433938.
65. Geoghegan R, Priester A, Zhang L, **Wu H**, Marks L, Natarajan S. Monitoring Focal Laser Ablation with Interstitial Fluence Probes: Monte Carlo Simulation and Phantom Validation. *42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, 2020, pp. 5272-5275.

66. Kafali SG, Shih S-F, Ruan D, **Wu HH**. Adaptive Locally Low Rank and Sparsity Constrained Reconstruction for Accelerated Dynamic MRI. *IEEE 17th International Symposium on Biomedical Imaging (ISBI)*, 2020, pp. 930-934.
67. Simonelli J, Lee Y, Mikael S, Chen C, Li X, Sung K, Lu D, **Wu HH**, Tsao TC. An MR-Compatible Stage for Respiratory Motion Emulation. *International Federation of Automatic Control (IFAC) PapersOnLine* 2017; 50(1):6073-6078.

Book Chapters

1. Armstrong T, **Wu HH**. Fat Quantification Techniques. In: *Quantitative Magnetic Resonance Imaging, Academic Press, Elsevier* 2020, Chapter 27, pp. 695-734. ISBN: 978-0-12-817057-1. doi: 10.1016/B978-0-12-817057-1.00029-9.

Patents

1. Li X, **Wu HH**. Systems and Methods for Real-Time Motion Prediction in Dynamic Imaging. US Patent No. 11,432,737 B2, Date of Patent 9/6/2022.
2. Zhong X, **Wu HH**, Deshpande V, Armstrong T, Pan L, Nickel MD, Kannengiesser S. Free-Breathing MRI with Motion Compensation. US Patent No. 11,175,366 B2, Date of Patent 11/16/2021.
3. Rangwala N, **Wu HH**, Sung K. Method and Apparatus for Accurate Parametric Mapping. US Patent No. 10,895,621 B2, Date of Patent 1/19/2021.
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5. McConnell MV, **Wu HH**. Respiratory Mode (R-Mode) - Acquisition and Display of Cardiovascular Images to Show Respiratory Effects. US Patent No. 10,219,787 B2, Date of Patent 3/5/2019.
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