



Huijun Chen Ph. D.

Tenured Associate Professor



Huijun Chen is a Tenured Associate Professor of Department of Biomedical Engineering, School of Medicine, Tsinghua University. He got his Ph. D. degree in 2008 at Department of Mechanics, Peking University, and worked in Department of Radiology, University of Washington, Seattle from 2008 to 2012 as a Senior Fellow (postdoc). He has been funded by the National Natural Science Foundation of China and National Key Research and Development Plan of China as PI. He has published more than 40 papers cited by SCI, including Radiology, Neurology, MRM, Stroke, JACC imaging and JCMR. He also has more than 90 abstracts accepted by international meetings and several patents. He is a committee member of RSNA Quantitative Imaging Biomarker Alliance (QIBA) PDF-MRI Technical Committee and Chinese Society of Cerebral Blood Flow and Metabolism.

Research Interests

My research interest is the MR **Quantitative Physiological Imaging** using MRI. Different from most MR imaging methods that target structural information, my research focuses on the quantification of physiological and pathophysiological processes of diseases in vivo. My work has led to multiple technological innovations, including MR imaging sequence design, image reconstruction, image post-processing and physiological modeling, which allow physicians to noninvasively characterize the pathobiology of human diseases and monitor progression and/or regression with high accuracy and reliability. By providing whole clinical MR solutions and carrying out translational clinical research, my research goal is to finally improving the prevention, diagnosis, clinical treatment route, and prognosis of diseases, especially in cardiovascular and liver disease.

Representative Publications

1. H Qi, J Sun, S Chen, Z Zhou, X Pan, Y Wang, X Zhao, R Li, C Yuan, **H Chen***. Carotid intraplaque hemorrhage imaging with quantitative vessel wall T1 mapping: technical development and initial experience. **Radiology** 2018;287(1):276-284.
2. H Qi, F Huang, Z Zhou, P Koken, N Balu, B Zhang, C Yuan, **H Chen***. Large coverage black-bright blood interleaved imaging sequence (LaBBI) for 3D dynamic contrast-enhanced MRI of vessel wall. **Magnetic Resonance in Medicine** 2018;79(3):1334-1344.
3. J Ning, Y Sun, S Xie, B Zhang, F Huang, P Koken, J Smink, C Yuan, **H Chen***, Simultaneous acquisition sequence for improved hepatic pharmacokinetics quantification accuracy (SAHA) for dynamic contrast-enhanced MRI of liver. **Magnetic Resonance in Medicine** 2018;79(5):2629-2641
4. J Wang, H Liu, J Sun, H Xue, S Yu, C Liang, X Han, Z Guan, L Xie, L Wei, C Yuan, X Zhao, **H Chen**. Varying correlation between 18F-fluorodeoxyglucose positron emission tomography and dynamic contrast-enhanced MRI in carotid atherosclerosis: implications for plaque inflammation. **Stroke** 2014;45(6):1842-1845.
5. J Sun, Y Song, **H Chen***, WS Kerwin, DS Hippe, L Dong, Min Chen, Cheng Zhou, Thomas S. Hatsukami, Chun Yuan. "Adventitial perfusion and intraplaque hemorrhage: a dynamic contrast-enhanced MRI study in the carotid artery". **Stroke** 2013;44(4):1031-1036

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