

Curriculum Vitae

Name: **Ji, Yang**

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EDUCATION

09/2013- 12/2018	Ph.D., Biomedical Engineering University of Science and Technology of China	Hefei, China
09/2009- 06/2013	B.S., Electrical Engineering Anhui University	Hefei, China

WORK EXPERIENCE

9/2019- present	Psychiatry Neuroimaging Laboratory, Department of Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, MA (Postdoctoral Research Fellow) Development of novel diffusion MRI acquisition and modeling and their application in mental disorders.
1/2019- 09/2019	Department of Radiology, University of California San Diego La Jolla, CA (Postdoctoral Scholar-Employee) Optimization of the UTE Chemical Exchange Saturation Transfer (CEST) technique to measure pH values of various knee joint tissues including articular cartilage and menisci.
09/2016- 10/2018	Martinos Center for Biomedical Imaging, MGH & Harvard Medical School Boston, MA (Visiting Ph.D. Student) Evaluated DKI to study acute ischemic stroke Developed microscopic diffusional kurtosis imaging (μ DKI) with symmetrized double diffusion encoding EPI Evaluated μ DKI to study epilepsy rat Investigated mechanism of ketogenic diet efficacy in pharmacologically intractable epilepsy using GluCEST MRI Determined multi-pool contributions to endogenous amide proton transfer

effects in global ischemia with high spectral resolution in vivo CEST MRI
Decoupled Amide Proton Transfer (APT) and Nuclear Overhauser Effect
(NOE) Contrasts on stroke model using Direct Saturation-Corrected CEST
MRI

Developed a fast multi-slice T_{1app} sequence for arterial spin labeling (ASL)
cerebral blood flow (CBF)

07/2015-08/2016

Department of Electronic Science and Technology, University of Science
and Technology of China
Hefei, China
(Ph.D. Student)

Developed the MRI pulse sequences of eliminating Metal-Induced Artifacts

09/2013-06/2015

Department of Automation Engineering, University of Science and
Technology of China
Hefei, China
(M.S. Student)

The surveillance camera system of detecting abnormal Human Behaviors
development Based on W2KPCA-KNN Algorithm

RESEARCH INTERESTS

Develop novel in vivo MRI contrast mechanisms (e.g. Chemical Exchange Saturation Transfer
(CEST), Magnetization Transfer (MT) Contrast)

Arterial Spin Labeling (ASL)

Diffusion Kurtosis imaging (DKI)

Ultrashort echo time (UTE), radial sampling

Evaluate emerging MRI methods in animal models of human diseases (e.g. Ischemic Stroke,
Tumor, epilepsy and Alzheimer's disease)

MRI image reconstruction, accelerating magnetic resonance imaging via deep learning

Skills of Programming

C, C++, Matlab, Python

Pulse sequence programming (GE EPIC and Siemens IDEA)

PEER-REVIEWED PUBLICATIONS

1. **Ji, Yang**, Iris Yuwen Zhou, Bensheng Qiu, and Phillip Zhe Sun. "Progress toward quantitative in vivo chemical exchange saturation transfer (CEST) MRI." *Israel Journal of Chemistry* 57.9 (2017): 809-824.
2. **Ji, Yang**, Jeffrey Paulsen, Iris Yuwen Zhou, Dongshuang Lu, Patrick Machado, Bensheng Qiu, Yi-Qiao Song and Phillip Zhe Sun. "In vivo microscopic diffusional kurtosis imaging with symmetrized double diffusion encoding EPI." *Magnetic resonance in medicine* 2019;81:533-

3. **Ji, Yang**, Wu Yin, Iris Yuwen Zhou, Dongshuang Lu, Bensheng Qiu, Yi-Qiao Song and Phillip Zhe Sun. " Preliminary evaluation of accelerated microscopic diffusional kurtosis imaging (μ DKI) in a rodent model of epilepsy." *Magnetic resonance imaging* 56 (2019): 90-95.
4. **Ji, Yang**, Wu Yin, Yinghua Jiang, Dongshuang Lu, Xiaoying Wang, Bensheng Qiu and Phillip Zhe Sun. "Improvement of cerebral blood flow measurement with fast multi-slice apparent T1 spin locking MRI." Submitted to *Magnetic resonance in medicine* (**in preparation**)
5. de Mello Ricardo, Yajun Ma, **Yang Ji**, Jiang Du, and Eric Y. Chang. "Quantitative MRI Musculoskeletal Techniques: An Update." *American Journal of Roentgenology* (2019): 1-10.
6. Rachel A. High*, **Yang Ji***, YaJun Ma, Qingbo Tang, Jiang Du, Eric Y. Chang "In vivo assessment of extracellular pH of joint tissues using acidoCEST-UTE MRI. *Quantitative Imaging in Medicine and Surgery*. 2019 Mar 9. (contributed equally)
7. Iris Yuwen Zhou, Dongshuang Lu, **Yang Ji**, Limin Wu, Enfeng Wang, Jerry S. Cheung, Xiao-An Zhang, Phillip Zhe Sun. "Determination of multipool contributions to endogenous amide proton transfer effects in global ischemia with high spectral resolution in vivo chemical exchange saturation transfer MRI." *Magnetic resonance in medicine*, 81(1), pp.645-652.
8. Yuwen Zhou, Iris, Enfeng Wang, Jerry S. Cheung, Dongshuang Lu, **Yang Ji**, Xiaoan Zhang, Giulia Fulci, and Phillip Zhe Sun. "Direct saturation - corrected chemical exchange saturation transfer MRI of glioma: Simplified decoupling of amide proton transfer and nuclear overhauser effect contrasts." *Magnetic resonance in medicine* 78, no. 6 (2017): 2307-2314.
9. Lu, Dongshuang, Yinghua Jiang, **Yang Ji**, Iris Yuwen Zhou, Emiri Mandeville, Eng H. Lo, Xiaoying Wang, and Phillip Zhe Sun. "JOURNAL CLUB: Evaluation of Diffusion Kurtosis Imaging of Stroke Lesion With Hemodynamic and Metabolic MRI in a Rodent Model of Acute Stroke." *American Journal of Roentgenology* 210, no. 4 (2018): 720-727.