

Yi He

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Google Scholar: <https://scholar.google.com/citations?user=FOi4EIIAAAJ>

CURRENT POSITION

15/01/2018 – Present Postdoctoral Researcher
Danish Research Centre for Magnetic Resonance,
Copenhagen University Hospital Hvidovre, Denmark

EDUCATION

09/05/2018 **Ph.D. (Dr. rer. nat.) in Neuroscience (Magna Cum Laude)**
Department High-field Magnetic Resonance, Max Planck
Institute for Biological Cybernetics / Graduate Training Cen-
tre of Neuroscience, International Max Planck Research
School, University of Tuebingen, Tuebingen, Germany

30/06/2011 Master of Engineering in Biomedical Engineering
Southeast University, Nanjing, China

30/06/2008 Bachelor of Engineering in Biomedical Engineering
Central South University, Changsha, China

EMPLOYMENT EXPERIENCE

01/2014 - 12/2017 Ph. D. student
Department High-field Magnetic Resonance
Max Planck Institute for Biological Cybernetics,
Tuebingen, Germany

07/2013 - 12/2013 Research Associate
Shenzhen Institutes of Advanced Technology,
Chinese Academy of Sciences, China

07/2011 - 06/2013 Research Assistant
Shenzhen Institutes of Advanced Technology,
Chinese Academy of Sciences, China

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2014 - Present Trainee Member, International Society for Magnetic Resonance in Medicine
(ISMRM)

HONORS AND AWARDS

2019 Marie Skłodowska-Curie Fellow (European Commission)

2017 Summa Cum Laude Merit Award (ISMRM, top 5%), Honolulu, USA

2016 Outstanding poster award, Gordon Research Conferences in vivo MR, Andover, USA

2015 Summa Cum Laude Merit Award (ISMRM, top 5%), Toronto, Canada

2015 Educational Stipend ISMRM

2014 - 2017 Doctoral Scholarships from Max Planck Society

IMPACT OF PUBLICATIONS

Total Citations = 381 h-index = 9 i10-index = 8 (Google Scholar)

PUBLICATIONS (8)

1. **He Y**, Wang M, Chen X, Pohmann R, Polimeni J, Scheffler K, Rosen B, Kleinfeld D and Yu X, Ultra-slow single-vessel BOLD and CBV-based fMRI spatiotemporal dynamics and correlations with neuronal intracellular calcium signals. **Neuron**, 2018, 97(4):925-939. e5. DOI: 10.1016/j.neuron.2018.01.025 (**Issue Highlights**)
2. Yu X, **He Y**, Wang M, Merkle H, Dodd S, Afonso S and Koretsky AP. Sensory and optogenetically driven single-vessel fMRI. **Nature Methods**, 2016, 13(4): 337-340. DOI:10.1038/nmeth.3765
3. Wang M, **He Y**, Sejnowski T, Yu X. Positive and negative BOLD signals are regulated by Ca²⁺-mediated gliovascular interactions. **Proceedings of the National Academy of Sciences of the United States of America (PNAS)**, 2018, 115(7): E1647-E1656. DOI: 10.1073/pnas.1711692115
4. Miao F, Cheng Y, **He Y**, He Q and Li Y. A Wearable Context-Aware ECG Monitoring System Integrated with Built-in Kinematic Sensors of the Smartphone. **Sensors**. 2015, 15(5): 11465-11484.
5. Miao F, **He Y**, Liu J, Li Y and Ayoola I. Identifying typical physical activity on smartphone with varying positions and orientations. **Biomedical Engineering**. 2015, 14(1:32): 1-15.
6. **He Y** and Li Y. Physical Activity Recognition Utilizing the Built-In Kinematic Sensors of a Smartphone. **International Journal of Distributed Sensor Networks**. 2013, Article ID 481580: 1-10.
7. **He Y**, Li Y and Yin C. Falling-Incident Detection and Alarm by Smartphone with Multimedia Messaging Service. **E-Health Telecommunication Systems and Networks**. 2012, 1: 1-5.

TALKS (5)

1. **He Y** (May-30-2018) Talk: Illuminating brain activity: from neurons, vessels to global function, VisionDay 2018, Technical University of Denmark, Denmark.
2. **He Y**, Pohmann R, Scheffler K, Kleinfeld D, Rosen B and Yu X (April-25-2017) Abstract Talk: Mapping the task-related and resting-state vascular dynamic network connectivity in rats and humans, 25th Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (**ISMRM 2017**), Honolulu, HI, USA 304-305.
3. **He Y**, Pohmann R, Scheffler K, Kleinfeld D, Rosen B and Yu X (September-2016) Abstract Talk: Map task-related and resting-state Vascular Network Connectivity in Rats and Humans, 17th Conference of Junior Neuroscientists of Tübingen (NeNa 2016): Neuroscience & Law, Schramberg, Germany 13.
4. **He Y**. Map Task-Related and Resting-State Vascular Network Connectivity with Single-Vessel SSFP-fMRI, **Gordon Research Conference: In Vivo Magnetic Resonance - MRI Inside-Out and Outside-In**, Andover, NH, USA. (July-2016)
5. **He Y**, Merkle H and Yu X (June-2-2015) Abstract Talk: Single Venule Multi-Echo Line-Scanning fMRI (MELS-fMRI), 23rd Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (**ISMRM 2015**), Toronto, Canada (0361).

POSTERS (7)

1. **He Y**, Wang M, Chen X and Yu X (April-27-2017): Identify the neural basis of vascular dynamic network connectivity with high-field fMRI, 25th Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM 2017), Honolulu, HI, USA.
2. Wang M, **He Y** and Yu X (April-25-2017): A novel role of intrinsic astrocytic calcium spikes to mediate brain states through central/dorsal thalamic nuclei, 25th Annual Meeting and Exhibition

of the International Society for Magnetic Resonance in Medicine (ISMRM 2017), Honolulu, HI, USA.

3. **He Y**, Zhang K and Yu X (June-2-2015): Model the single-venule fMRI signal at the millisecond scale, 23rd Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM 2015), Toronto, Canada.
4. Wang M, **He Y**, Tang Y, Merkle H and Yu X (June-3-2015): Identify the “single unit” of neurovascular coupling by single-vessel fMRI and optogenetics, 23rd Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM 2015), Toronto, Canada.
5. Wang M, **He Y**, Tang Y, Balla DZ, Qian C and Yu X (June-3-2015): Map the light-driven fMRI signal in combination with in vivo recording, 23rd Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM 2015), Toronto, Canada.
6. Scheffler K, Ehnes P, **He Y**, Merkle H and Yu X (June-3-2015): Functional imaging at 14.1T using high-resolution pass band bSSFP, 23rd Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM 2015), Toronto, Canada.
7. Wang M, **He Y**, Tang Y, Balla D and Yu X (March-19-2015): Light-driven fMRI and Electrophysiological Responses in Rat Brain, 10th Annual Meeting of the European Society for Molecular Imaging (EMIM 2015), Tübingen, Germany.

SOFTWARE COPYRIGHT (1)

1. Li Y, **He Y**, Shangguan W. Health Management Software based on Android-based Smart TV and Set-top Box, Chinese software copyright, 2012SR121512.

SCIENTIFIC REVIEW:

Journals: Sensors, Diagnostics

Conference Abstracts: ISMRM Annual Meeting