Jingpeng Wu

Education

2009–2014 **Doctor's Degree**, *Huazhong University of Science & Technology*, *Biomedical Engineering*.

2005–2009 **Bachelor's Degree**, *Huazhong University of Science & Technology*, *Bioinformatics*.

Research Experience

2014-present **Postdoctoral Research Associate**, *Princeton Neuroscience Institute*, Princeton University, Large scale neuron reconstruction using cloud computing.

2011–2014 **Doctoral Student**, *Britton Chance Center for Biomedical Photonics*, HUST, Tracing and analyzing the neuronal projection and blood vessels of the whole mouse brain.

2009–2010 **Doctoral Candidate**, *Britton Chance Center for Biomedical Photonics*, HUST, Image processing for the images from micro-optical sectioning tomography.
Developing the Micro-optical Sectioning Tomography(MOST). We obtained an atlas of whole mouse brain with the highest resolution in the world until now.

Summer 2008 **summer intern**, *CAS-MPG Partner Institute (PICB)*, Shanghai, Gene expression analysis of repeats in the prefrontal cortex.

2006–2008 **Undergraduate**, *Britton Chance Center for Biomedical Photonics*, HUST, Vascular reconstruction of Chinese Digital Human.

Awards

2014	Distinguished Graduate Student	*Huazhong University of Science & Technology*
2014	Star of Science & Technology	*Wuhan National Laboratory for Optoelectronics*
2013	Sanhao Graduate Student	*Huazhong University of Science & Technology*
2013	Discipline Contribution Award	*Huazhong University of Science & Technology*
2010	Outstanding Cadres	*Huazhong University of Science & Technology*
2010	Achievement in Science and Technology Award	*Huazhong University of Science & Technology*

Editorial Duties and Professional Societies

2013, 2016	Member	*Society for Neuroscience*
2018-present	Reviewer	*Frontiers in Neuroanatomy, Neuroinformatics, Frontiers in Neuroinformatics, Frontiers in Neural Circuit, Frontiers in Physiology*

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Publications

Anan Li, Hui Gong, Bin Zhang, Qingdi Wang, Cheng Yan, **Jingpeng Wu**, Qian Liu, Shaoqun Zeng, and Qingming Luo. Micro-optical sectioning tomography to obtain a high-resolution atlas of the mouse brain. ***Science***, 330(6009):1404–1408, 2010.

Jingpeng Wu, Yong He, Zhongqin Yang, Congdi Guo, Qingming Luo, Wei Zhou, Shangbin Chen, Anan Li, Benyi Xiong, Tao Jiang, and Hui Gong. 3D BrainCV: simultaneous visualization and analysis of cells and capillaries in a whole mouse brain with one-micron voxel resolution. ***Neuroimage***, 87:199–208, 2014.

Jingpeng Wu, Congdi Guo, Shangbin Chen, Tao Jiang, Yong He, Wenxiang Ding, Zhongqin Yang, Qingming Luo, and Hui Gong. Direct 3D cellular and vascular analysis reveals inter-columnar vascular branching and columnar capillary bed distribution in the mouse barrel cortex. ***Cerebral Cortex***, 26:23–31, 2016.

Jingpeng Wu, William M Silversmith, and H Sebastian Seung. Chunkflow: Distributed hybrid cloud processing of large 3d images by convolutional nets. *arXiv preprint arXiv:1904.10489*, 2019.

Hui Gong, Shaoqun Zeng, Cheng Yan, Xiaohua Lv, Zhongqin Yang, Tonghui Xu, Zhao Feng, Wenxiang Ding, Xiaoli Qi, Anan Li, **Jingpeng Wu**, and Qingming Luo. Continuously tracing brain-wide long-distance axonal projections in mice at a one-micron voxel resolution. ***Neuroimage***, 74:87–98, 2013.

Kisuk Lee, Nicholas Turner, Thomas Macrina, **Jingpeng Wu**, Ran Lu, and H Sebastian Seung. Convolutional nets for reconstructing neural circuits from brain images acquired by serial section electron microscopy. *Current Opinion in Neurobiology*, 55:188–198, 2019.

Wenxiang Ding, Anan Li, **Jingpeng Wu**, Zhongqin Yang, Yunlong Meng, Simin Wang, and Hui Gong. Automatic macroscopic density artefact removal in a nissl-stained microscopic atlas of whole mouse brain. *Journal of Microscopy*, 251(2):168–177, 2013.

Bin Zhang, Anan Li, Zhongqin Yang, **Jingpeng Wu**, Qingming Luo, and Hui Gong. Modified golgi-cox method for micrometer scale sectioning of the whole mouse brain. *Journal of Neuroscience Methods*, 197(1):1–5, 2011.

Xing Ming, Anan Li, **Jingpeng Wu**, Cheng Yan, Wenxiang Ding, Hui Gong, Shaoqun Zeng, and Qian Liu. Rapid reconstruction of 3D neuronal morphology from light microscopy images with augmented rayburst sampling. *PLoS ONE*, 8(12):e84557, 2013.

Yunlong Meng, Yong He, **Jingpeng Wu**, Shangbin Chen, Anan Li, and Hui Gong. Automatic detection and quantitative analysis of cells in the mouse primary motor cortex. In *Twelfth International Conference on Photonics and Imaging in Biology and Medicine (PIBM 2014)*, volume 9230, page 92301E. International Society for Optics and Photonics, 2014.

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Jingpeng Wu, Hang Feng, Chen Huang, Hui Gong, and Li Anan. Tracing segmentation and loft reconstruction method for blood vessels on chinese digital human. *Computer and Digital Engineering (Chinese Journal)*, 38(11):132–135, 2010.

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