

Zhongzheng (Brooks) Fu, Ph.D.

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United States

Academic Positions

2023 – on **Assistant Professor**
Department of Neurological Surgery
UT Southwestern Medical Center
Dallas, TX, USA

2023 – on **Visiting Scholar**
Division of the Humanities and Social Sciences
California Institute of Technology
Pasadena, CA, USA

Postdoctoral Trainings

2020 – 2023 **Postdoctoral Scholar**
Department of Neurosurgery
Cedars-Sinai Medical Center
Los Angeles, CA, USA

2020 – 2023 **Visiting Postdoctoral Scholar**
Division of the Humanities and Social Sciences
California Institute of Technology
Pasadena, CA, USA

2019 – 2020 **Postdoctoral Scholar**
Division of the Humanities and Social Sciences
California Institute of Technology
Pasadena, CA, USA

Education

2012 – 2018 **Ph.D. in Control and Dynamical Systems**, California Institute of Technology, Pasadena, CA, USA

2010 **Exchange Scholarship in Biophysics**, University of California at Berkeley, Berkeley, CA, USA

2008 – 2011 **B.Sc. in Physics**, University of Hong Kong, Hong Kong, China

Publications

Peer-reviewed Papers

- 2023 Z. Fu, A. Sajad, S. P. Errington, J. D. Schall, U. Rutishauser. Neurophysiological mechanisms of performance monitoring in human and nonhuman primates. *Nature Reviews Neuroscience*. doi:[10.1038/s41583-022-00670-w](https://doi.org/10.1038/s41583-022-00670-w).
- 2022 Z. Fu, D. Beam, J. M. Chung, C. M. Reed, A. N. Mamelak, R. Adolphs, U. Rutishauser. The geometry of domain-general performance monitoring in the human medial frontal cortex. *Science*. 376, eabm9922 doi:[10.1126/science.abm9922](https://doi.org/10.1126/science.abm9922).
- 2019 Ⓢ Z. Fu, D. A. J. Wu, I. Ross, J. M. Chung, A. N. Mamelak, R. Adolphs, U. Rutishauser. Single-neuron correlates of error monitoring and post-error adjustments in human medial frontal cortex. *Neuron*. 101, 165-177.e5 doi:[10.1016/j.neuron.2018.11.016](https://doi.org/10.1016/j.neuron.2018.11.016).
- 2017 Z. Fu, U. Rutishauser. Single-neuron correlates of awareness during attentional blinks. *Trends in Cognitive Sciences*. 22(1), 5-7 doi:[10.1016/j.tics.2017.10.005](https://doi.org/10.1016/j.tics.2017.10.005).
- S. Sun, S. Zhen, Z. Fu, D. A. J. Wu, S. Shimojo, R. Adolphs, R. Yu, S. Wang. Decision ambiguity is mediated by a late positive potential originating from cingulate cortex. *Neuroimage*. 157, 400-414. doi:[10.1016/j.neuroimage.2017.06.003](https://doi.org/10.1016/j.neuroimage.2017.06.003).
- 2013 Ⓢ F. Klein, R. Diskin, J. F. Scheid, C. Gaebler, H. Mouquet, I. S. Georgiev, M. Pancera, T. Zhou, R. Incesu, Z. Fu, P. NP. Gnanapragasam, T. Y. Oliveira, M. S. Seaman, P. D. Kwong, P. J. Bjorkman, M. C. Nussenzweig. Somatic mutations of the immunoglobulin framework are generally required for broad and potent HIV-1 neutralization. *Cell*. 153, 126-138. doi:[10.1016/j.cell.2013.03.018](https://doi.org/10.1016/j.cell.2013.03.018).

Awards & Honors

- 2023 Malaniak Awards for Excellence in Postdoctoral Research, Cedars-Sinai Medical Center
- 2023 CNSM Prize for an Exceptional Publication, Center for Neural Science and Medicine, Cedars-Sinai Medical Center
- 2022 Trainee Highlight Award, The BRAIN Initiative Meeting
- 2022 CNSM Prize for an Exceptional Publication, Center for Neural Science and Medicine, Cedars-Sinai Medical Center
- 2019 Spot Research Award for Outstanding Publication, Department of Neurosurgery, Cedars-Sinai Medical Center
- 2010 Rising Stars of Research Award, University of British Columbia
- 2009 Overseas Research Fellowship, University of Hong Kong
- 2009 International Genetically Engineered Machine Competition (iGEM), Gold Awards
- 2009 Summer Research Award, University of Hong Kong

Conferences, Workshops & Presentations

Invited Workshops

- 2018 Sloan-NOMIS Summer School on Cognitive Foundations of Economic Behaviors, University of Zurich
- 2018 Junior Scientist Workshop on Mechanistic Cognitive Neuroscience, Janelia Farm Research Campus, Howard Hughes Medical Institute

2016 Berkeley Summer Course in Mining and Modeling Neuroscience Data, University of California at Berkeley

Conferences

2022 Annual Meeting of the Cognitive Neuroscience Society

2017 American Association of Neurological Surgeons Annual Scientific Meeting

2014 – 2021 Annual Meetings of the Society for Neuroscience

Invited Talks

2022 8th Annual BRAIN Initiative Meeting

2022 TCCI Neurochat

2017 American Association of Neurological Surgeons Annual Scientific Meeting

Professional Membership

2021 – on Cognitive Neuroscience Society

2013 – on Society for Neuroscience