

Zhongzheng (Brooks) Fu, Ph.D.

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Professional Appointments

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

- 2022 **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*. In press.
- 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

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

Mentoring Experience

Undergraduate

2020 – 2021	Danielle Beam Project: Hierarchical Bayesian modeling of flexible cognitive control Cedars-Sinai Medical Center
2020	Elise. Y. Liu, California Institute of Technology Project: Domain generality of conflict adaptation effects Caltech SURF program Elizabeth (Rae) Moar Project: Perceptual straightening in autism using hierarchical Bayesian modelling Caltech SURF program

Conferences, Workshops & Presentations

Invited Workshops

2018	Sloan-NOMIS Summer School on Cognitive Foundations of Economic Behaviors, University of Zurich
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- 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