

Stanford



Yihe Ma

Postdoctoral Scholar, Psychiatry

Bio

BIO

Yihe received her Ph.D. degree in Physiology in 2020 from University of Wisconsin-Madison. Her thesis work focused on interrogating hippocampal microcircuits with a hybrid genetically-encoded voltage indicator. In 2021, Yihe joined the Giardino lab as a postdoctoral scholar under the co-mentorship of Dr. William Giardino and Dr. Julie Kauer. At the Giardino lab, Yihe aims to leverage imaging techniques and slice electrophysiology to investigate the underlying mechanism of addiction and sleep disorders in BNST neuropeptide circuits.

HONORS AND AWARDS

- Biological Sciences Scholar Award, University of Wisconsin-Madison (2012)

PROFESSIONAL EDUCATION

- Bachelor of Science, Peking University (2012)
- Doctor of Philosophy, University of Wisconsin Madison (2020)

STANFORD ADVISORS

- William Giardino, Postdoctoral Faculty Sponsor
- Julie Kauer, Postdoctoral Research Mentor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Systems & Circuits Neuroscience, Addiction, Stress, Sleep, Plasticity, Imaging

Publications

PUBLICATIONS

- **Direct synaptic excitation between hilar mossy cells revealed with a targeted voltage sensor.** *Hippocampus*
Ma, Y., Bayguinov, P. O., McMahon, S. M., Scharfman, H. E., Jackson, M. B.
2021
- **Optical Studies of Action Potential Dynamics with hVOS probes.** *Current opinion in biomedical engineering*
Ma, Y. n., Bayguinov, P. O., Jackson, M. B.
2019; 12: 51–58
- **Imaging Voltage in Genetically Defined Neuronal Subpopulations with a Cre Recombinase-Targeted Hybrid Voltage Sensor** *JOURNAL OF NEUROSCIENCE*
Bayguinov, P. O., Ma, Y., Gao, Y., Zhao, X., Jackson, M. B.

2017; 37 (38): 9305–19

- **Action Potential Dynamics in Fine Axons Probed with an Axonally Targeted Optical Voltage Sensor** *ENEURO*

Ma, Y., Bayguinov, P. O., Jackson, M. B.

2017; 4 (4)

- **Single-trial imaging of spikes and synaptic potentials in single neurons in brain slices with genetically encoded hybrid voltage sensor** *JOURNAL OF NEUROPHYSIOLOGY*

Ghitani, N., Bayguinov, P. O., Ma, Y., Jackson, M. B.

2015; 113 (4): 1249–59