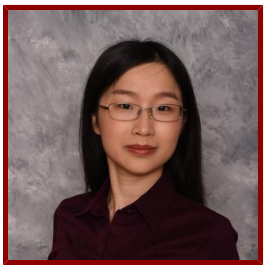
Stanford



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)

STANFORD ADVISORS

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

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

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

Publications

PUBLICATIONS

- **Imaging Voltage Globally and in Isofrequency Lamina in Slices of Mouse Ventral Cochlear Nucleus.** *eNeuro*
  Ma, Y., Shu, W., Lin, L., Cao, X., Oertel, D., Smith, P. H., Jackson, M. B.
  2023
- **Neural circuit mechanisms of the cholecystokinin (CCK) neuropeptide system in addiction.** *Addiction neuroscience*
  Ma, Y., Giardino, W. J.
  2022; 3
- **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., 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