



Mingjian He

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Bio

STANFORD ADVISORS

- Patrick Purdon, Postdoctoral Faculty Sponsor

LINKS

- Github Profile: <https://github.com/mh105>
- Purdon Lab: <https://purdonlab.stanford.edu>
- Stanford Memory Laboratory: <https://memorylab.stanford.edu>

Teaching

COURSES

2023-24

- Time Series Analysis for Neuroscience Data Using State Space Models: BIOS 404 (Sum)

Publications

PUBLICATIONS

- **A dynamic generative model can extract interpretable oscillatory components from multichannel neurophysiological recordings.** *bioRxiv : the preprint server for biology*
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- **Age-Dependent Electroencephalogram Features in Infants Under Spinal Anesthesia Appear to Mirror Physiologic Sleep in the Developing Brain: A Prospective Observational Study** *ANESTHESIA AND ANALGESIA*
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- **Effects of Aging on Externally Cued and Internally Driven Uncertainty Representations** *NEUROPSYCHOLOGY*
Korthauer, L. E., Festa, E. K., Gemelli, Z. T., He, M., Heindel, W. C.
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- **Pupil size tracks cue-trace interactions during episodic memory retrieval** *PSYCHOPHYSIOLOGY*
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- **Switching state-space modeling of neural signal dynamics.** *PLoS computational biology*
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- **Age-related differences in prefrontal glutamate are associated with increased working memory decay that gives the appearance of learning deficits.** *eLife*
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- **Transient oscillation dynamics during sleep provide a robust basis for electroencephalographic phenotyping and biomarker identification** *SLEEP*
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- **Time perception in film is modulated by sensory modality and arousal** *ATTENTION PERCEPTION & PSYCHOPHYSICS*
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2022; 84 (3): 926-942
- **Automatic segmentation of sleep spindles: A variational switching state-space approach**
He, M., Das, P., Hotan, G., Purdon, P. L., Matthews, M. B.
IEEE.2022: 1301-1305
- **Age-Related EEG Power Reductions Cannot Be Explained by Changes of the Conductivity Distribution in the Head Due to Brain Atrophy** *FRONTIERS IN AGING NEUROSCIENCE*
He, M., Liu, F., Nummenmaa, A., Hamalainen, M., Dickerson, B. C., Purdon, P. L.
2021; 13: 632310
- **Age-related changes in the functional integrity of the phasic alerting system: a pupillometric investigation** *NEUROBIOLOGY OF AGING*
He, M., Heindel, W. C., Nassar, M. R., Siefert, E. M., Festa, E. K.
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