




Julie Kauer

Professor (Research) of Psychiatry and Behavioral Sciences

 NIH Biosketch available Online

Bio

ACADEMIC APPOINTMENTS

- Professor (Research), Psychiatry and Behavioral Sciences
- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- Fellow, American Association for the Advancement of Science (2012)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Reviewing Editor, eLife (2017 - 2023)
- Councilor, Society for Neuroscien (2018 - 2023)

LINKS

- Kauer lab web site: <http://med.stanford.edu/kauer-lab.html>

Teaching

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Yohan Auguste

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Neurosciences (Phd Program)

Publications

PUBLICATIONS

- **Sex-Specific Effects of Hypocretin Receptor Signaling in Corticotropin-Releasing Factor Neurons on Alcohol Drinking, Anxiety, and Extended Amygdala Neuronal Excitability** *BIOLOGICAL PSYCHIATRY: GLOBAL OPEN SCIENCE*
Ma, Y., Sardar, H., Benabou, M. E., Yu, A. C., Morningstar, A. R., Fajardo, R., Kandil, I. F., Rogers, E. T., Vassalli, A., Kauer, J. A., Giardino, W. J. 2026; 6 (1)
- **Sex-Specific Effects of Hypocretin Receptor Signaling in Corticotropin-Releasing Factor Neurons on Alcohol Drinking, Anxiety, and Extended Amygdala Neuronal Excitability.** *Biological psychiatry global open science*
Ma, Y., Sardar, H., Benabou, M. E., Yu, A. C., Morningstar, A. R., Fajardo, R. N., Kandil, I. F., Rogers, E. T., Vassalli, A., Kauer, J. A., Giardino, W. J. 2026; 6 (1): 100617

- **Kappa opioid receptors control a stress-sensitive brain circuit and drive cocaine seeking.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Martinez Damonte, V., Bailey, L. G., Thakar, A., Stralka, J., Brown, T. E., Kauer, J. A.
2025
- **Sex-specific roles of hypocretin receptor signaling in CRF neurons on alcohol drinking, anxiety, and BNST neuronal excitability**
Giardino, W., Ma, Y., Sardar, H., Morningstar, A., Rogers, E., Kauer, J.
WILEY.2025
- **Aging and injury drive neuronal senescence in the dorsal root ganglia.** *Nature neuroscience*
Donovan, L. J., Brewer, C. L., Bond, S. F., Laslavic, A. M., Pena Lopez, A., Colman, L., Jordan, C. E., Hansen, L. H., González, O. C., Pujari, A., de Lecea, L., Quarta, M., Kauer, et al
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- **Hypothalamic opsin 3 suppresses MC4R signaling and potentiates Kir7.1 to promote food consumption.** *Proceedings of the National Academy of Sciences of the United States of America*
Haddad, H. K., Mercado-Reyes, J. I., Mustafá, E. R., D'Souza, S. P., Chung, C. S., Nestor, R. R., Olinski, L. E., Martinez Damonte, V., Saskin, J., Vemaraju, S., Raingo, J., Kauer, J. A., Lang, et al
2025; 122 (8): e2403891122
- **IMPACT OF HOMEOSTATIC SLEEP PRESSURE ON HYPOCRETIN NEURON ACTIVITY**
Gonzalez, O., Morga-Rodriguez, J., Wang, G., Kauer, J., de Lecea, L.
SPRINGER NATURE.2024: 562-563
- **Loss of mitochondrial enzyme GPT2 leads to reprogramming of synaptic glutamate metabolism.** *Molecular brain*
Baytas, O., Davidson, S. M., Kauer, J. A., Morrow, E. M.
2024; 17 (1): 87
- **Determining the Functional Profile of Dorsal Root Ganglion Neurons Driving Osteoarthritis Pain**
Brewer, C. L., Donovan, L. J., Kauer, J. A., Tawfik, V. L.
CHURCHILL LIVINGSTONE.2024: 11
- **Aging and injury drive neuronal senescence in the dorsal root ganglia.** *bioRxiv : the preprint server for biology*
Donovan, L. J., Brewer, C. L., Bond, S. F., Lopez, A. P., Hansen, L. H., Jordan, C. E., González, O. C., de Lecea, L., Kauer, J. A., Tawfik, V. L.
2024
- **Low-frequency stimulation of Trpv1-lineage peripheral afferents potentiates the excitability of spino-periaqueductal gray projection neurons.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Brewer, C. L., Kauer, J. A.
2023
- **Mapping And Characterizing The Effects Of Inflammatory Injury On The Spinal-Periaqueductal Gray Neural Circuit**
Brewer, C., Kauer, J. A.
CHURCHILL LIVINGSTONE.2023: 23
- **Function of excitatory periaqueductal grey synapses in the ventral tegmental area following inflammatory injury.** *eNeuro*
Manning, C. E., Fritz, M., Kauer, J. A.
2022
- **Loss of mitochondrial enzyme GPT2 causes early neurodegeneration in locus coeruleus.** *Neurobiology of disease*
Baytas, O., Kauer, J. A., Morrow, E. M.
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- **Somatodendritic Release of Cholecystokinin Potentiates GABAergic Synapses Onto Ventral Tegmental Area Dopamine Cells.** *Biological psychiatry*
Martinez Damonte, V., Pomrenze, M. B., Manning, C. E., Casper, C., Wolfden, A. L., Malenka, R. C., Kauer, J. A.
2022
- **Adolescent sleep shapes social novelty preference in mice.** *Nature neuroscience*
Bian, W. J., Brewer, C. L., Kauer, J. A., de Lecea, L.

2022

- **TRPV1-Expressing Sensory Neuron Stimulation-based Model of Inflammatory Injury Enhances the Excitability of Spinal Neurons Targeting the Periaqueductal Gray**
Brewer, C., Kauer, J. A.
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- **Hyperexcitable arousal circuits drive sleep instability during aging.** *Science (New York, N.Y.)*
Li, S. B., Damonte, V. M., Chen, C., Wang, G. X., Kebschull, J. M., Yamaguchi, H., Bian, W. J., Purmann, C., Pattni, R., Urban, A. E., Mourrain, P., Kauer, J. A., Scherrer, et al
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- **Endogenous opsin 3 (OPN3) protein expression in the adult brain using a novel OPN3 -mCherry knock-in mouse model.** *eNeuro*
Olinski, L. E., Tsuda, A. C., Kauer, J. A., Oancea, E.
2020
- **Periaqueductal Gray and Rostromedial Tegmental Inhibitory Afferents to VTA Have Distinct Synaptic Plasticity and Opiate Sensitivity.** *Neuron*
St Laurent, R. n., Martinez Damonte, V. n., Tsuda, A. C., Kauer, J. A.
2020
- **Synaptic plasticity at inhibitory synapses in the ventral tegmental area depends upon stimulation site.** *eNeuro*
St Laurent, R., Kauer, J.
2019
- **Properties of neurons in the superficial laminae of trigeminal nucleus caudalis.** *Physiological reports*
Pradier, B., McCormick, S. J., Tsuda, A. C., Chen, R. W., Atkinson, A. L., Westrick, M. R., Buckholtz, C. L., Kauer, J. A.
2019; 7 (12): e14112
- **Two-Pronged Control of the Dorsal Raphe by the VTA.** *Neuron*
Kauer, J. A., Polter, A. M.
2019; 101 (4): 553–55
- **NMDA receptor activation induces long-term potentiation of glycine synapses.** *PLoS one*
Kloc, M. L., Pradier, B., Chirila, A. M., Kauer, J. A.
2019; 14 (9): e0222066
- **Long-Term Depression Induced by Optogenetically Driven Nociceptive Inputs to Trigeminal Nucleus Caudalis or Headache Triggers** *JOURNAL OF NEUROSCIENCE*
Pradier, B., Bin Shin, H., Kim, D., St Laurent, R., Lipscombe, D., Kauer, J. A.
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- **Kappa Opioid Receptors Regulate Stress-Induced Cocaine Seeking and Synaptic Plasticity** *NEURON*
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Edwards, J. G., Gibson, H. E., Jensen, T., Nugent, F., Walther, C., Blickenstaff, J., Kauer, J. A.
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McMahon, L. L., Williams, J. H., Kauer, J. A.
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- **METABOTROPIC GLUTAMATE RECEPTOR-INDUCED DISINHIBITION IS MEDIATED BY REDUCED TRANSMISSION AT EXCITATORY SYNAPSES ONTO INTERNEURONS AND INHIBITORY SYNAPSES ONTO PYRAMIDAL CELLS** *NEUROSCIENCE LETTERS*

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