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ACADEMIC APPOINTMENTS

- Instructor, Adult Neurology

Publications

PUBLICATIONS

- **Interpretable Machine Learning Identifies an Emergent Absence Seizure Mechanism.** *bioRxiv : the preprint server for biology*
  Hull, J. M., Denomme, N., Ganguli, S., Huguenard, J. R.
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- **Beyond seizure control: Identifying deficits in cognitive networks in absence epilepsy.** *Science advances*
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- **Neuromodulation of voltage-gated sodium channels by Gβ1γ2 subunits: Implications for GNB1-linked encephalopathy** *NEUROBIOLOGY OF DISEASE*
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- **Rhythmic Quakes Shock the Cortical Focus Theory.** *Epilepsy currents*
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- **The reuniens thalamus recruits recurrent excitation in the medial prefrontal cortex.** *Proceedings of the National Academy of Sciences of the United States of America*
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- **N-(4-Bromo-2,5-Dimethoxyphenethyl)-6-(4-Phenylbutoxy)Hexan1-Amine (XOB): A Novel Phenylalkylamine Antagonist of Serotonin 2A Receptors and Voltage-Gated Sodium Channels** *MOLECULAR PHARMACOLOGY*
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- **Atlas of the aging mouse brain reveals white matter as vulnerable foci.** *Cell*
  Hahn, O., Foltz, A. G., Atkins, M., Kedir, B., Moran-Losada, P., Guldner, I. H., Munson, C., Kern, F., Pálovics, R., Lu, N., Zhang, H., Kaur, A., Hull, et al

2023

- **A CMOS-based highly scalable flexible neural electrode interface.** *Science advances*
  Zhao, E. T., Hull, J. M., Mintz Hemed, N., Uluşan, H., Bartram, J., Zhang, A., Wang, P., Pham, A., Ronchi, S., Huguenard, J. R., Hierlemann, A., Melosh, N. A.
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- **Heterogeneity of voltage gated sodium current density between neurons decorrelates spiking and suppresses network synchronization in Scn1b null mouse models.** *Scientific reports*
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- **DSCAM gene triplication causes excessive GABAergic synapses in the neocortex in Down syndrome mouse models** *PLOS BIOLOGY*
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- **Ankyrin-G regulates forebrain connectivity and network synchronization via interaction with GABARAP** *MOLECULAR PSYCHIATRY*
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- **Neuronal hyperexcitability in a mouse model of SCN8A epileptic encephalopathy** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
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