

Stanford



Scott Owen

Assistant Professor of Neurosurgery and, by courtesy, of Neurobiology

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor, Neurosurgery
- Assistant Professor (By courtesy), Neurobiology
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- Stanley Fahn Junior Faculty Award, Parkinson's Foundation (2021-2024)
- NARSAD Young Investigator Award, Brain and Behavior Research Foundation (2019-2020)
- K99 Pathway to Independence Award, NIMH (2016-2018)
- Award for Scientific Excellence, Gladstone Institutes (2017)
- F32 - Ruth L. Kirschstein National Research Service Award (NRSA), NINDS (2014-2016)
- Above and Beyond Award, Gladstone Institutes (2012)
- F31 - Ruth L. Kirschstein National Research Service Award (NRSA), NIMH (2008-2010)
- NDSEG Graduate Fellowship, Department of Defense (2005-2008)
- Bassett Physics Prize, Amherst College (1999)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Faculty Member, Society for Neuroscience NeurOnline Training Series (2018 - 2018)
- Chair, Gordon-Kenan Research Seminar on Inhibition in the CNS (2015 - 2015)
- Panelist, National Defense Science and Engineering Graduate Fellowship Selection Committee (2015 - 2015)
- Co-Chair, Gordon-Kenan Research Seminar on Interneuron Diversity (2013 - 2013)

PROFESSIONAL EDUCATION

- Visiting Scientist, The Allen Institute , Neuroscience (2020)
- Post-Doc, Gladstone Institutes, UCSF , Neuroscience (2019)
- PhD, Stanford University , Molecular and Cellular Physiology (2012)
- AB, Amherst College , Physics (2002)

LINKS

- Owen Lab Website: <https://med.stanford.edu/owen-lab.html>

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Jason Clark

Doctoral Dissertation Advisor (AC)

Deniz Bingul

Publications

PUBLICATIONS

- **Thermal constraints on in vivo optogenetic manipulations.** *Nature neuroscience*
Owen, S. F., Liu, M. H., Kreitzer, A. C.
2019; 22 (7): 1061–65
- **Targeted genomic CRISPR-Cas9 screen identifies MAP4K4 as essential for glioblastoma invasion.** *Scientific reports*
Prolo, L. M., Li, A. n., Owen, S. F., Parker, J. J., Foshay, K. n., Nitta, R. T., Morgens, D. W., Bolin, S. n., Wilson, C. M., Vega L, J. C., Luo, E. J., Nwagbo, G. n., Waziri, et al
2019; 9 (1): 14020
- **An open-source control system for in vivo fluorescence measurements from deep-brain structures.** *Journal of neuroscience methods*
Owen, S. F., Kreitzer, A. C.
2019; 311: 170–77
- **A Genetically Encoded Fluorescent Sensor Enables Rapid and Specific Detection of Dopamine in Flies, Fish, and Mice.** *Cell*
Sun, F. n., Zeng, J. n., Jing, M. n., Zhou, J. n., Feng, J. n., Owen, S. F., Luo, Y. n., Li, F. n., Wang, H. n., Yamaguchi, T. n., Yong, Z. n., Gao, Y. n., Peng, et al
2018; 174 (2): 481–96.e19
- **Fast-Spiking Interneurons Supply Feedforward Control of Bursting, Calcium, and Plasticity for Efficient Learning.** *Cell*
Owen, S. F., Berke, J. D., Kreitzer, A. C.
2018; 172 (4): 683–95.e15
- **Oxytocin enhances hippocampal spike transmission by modulating fast-spiking interneurons** *NATURE*
Owen, S. F., Tuncdemir, S. N., Bader, P. L., Tirko, N. N., Fishell, G., Tsien, R. W.
2013; 500 (7463): 458-?
- **Ca(v)1 and Ca(v)2 Channels Engage Distinct Modes of Ca²⁺ Signaling to Control CREB-Dependent Gene Expression** *CELL*
Wheeler, D. G., Groth, R. D., Ma, H., Barrett, C. F., Owen, S. F., Safa, P., Tsien, R. W.
2012; 149 (5): 1112-1124
- **Mouse model of Timothy syndrome recapitulates triad of autistic traits** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Bader, P. L., Faizi, M., Kim, L. H., Owen, S. F., Tadross, M. R., Alfa, R. W., Bett, G. C., Tsien, R. W., Rasmuson, R. L., Shamloo, M.
2011; 108 (37): 15432-15437
- **Inhibitory Neurons Hear Themselves during Development** *NEURON*
Owen, S. F., Tsien, R. W.
2010; 66 (2): 164-166
- **Excitation-transcription coupling mechanisms engaged by specific calcium channel types**
Tsien, R. W., Wheeler, D. G., Groth, R. D., Ma, H., Owen, S. F., Barrett, C. F.
ELSEVIER IRELAND LTD.2010: E20

- **Fast line-based experiment timing system for LabVIEW** *REVIEW OF SCIENTIFIC INSTRUMENTS*
Owen, S. F., Hall, D. S.
2004; 75 (1): 259–65