

# Stanford

---



## Gergely Szabo

Basic Life Res Scientist, Neurosurgery

### Publications

---

#### PUBLICATIONS

- **Dentate gyrus mossy cells control spontaneous convulsive seizures and spatial memory** *Science*  
Bui, A., et al  
2018; 787–90
- **Extended Interneuronal Network of the Dentate Gyrus.** *Cell reports*  
Szabo, G. G., Du, X., Oijala, M., Varga, C., Parent, J. M., Soltesz, I.  
2017; 20 (6): 1262-1268
- **Cannabinoid Control of Learning and Memory through HCN Channels** *NEURON*  
Maroso, M., Szabo, G. G., Kim, H. K., Alexander, A., Bui, A. D., Lee, S., Lutz, B., Soltesz, I.  
2016; 89 (5): 1059-1073
- **Pass-Through Code of Synaptic Integration.** *Neuron*  
Szabo, G. G., Soltesz, I.  
2015; 87 (6): 1124-1126
- **Resolution revolution: epilepsy dynamics at the microscale** *CURRENT OPINION IN NEUROBIOLOGY*  
Szabo, G. G., Schneider, C. J., Soltesz, I.  
2015; 31: 239-243
- **Anatomically Heterogeneous Populations of CB1 Cannabinoid Receptor-Expressing Interneurons in the CA3 Region of the Hippocampus Show Homogeneous Input-Output Characteristics** *HIPPOCAMPUS*  
Szabo, G. G., Papp, O. I., Mate, Z., Szabo, G., Hajos, N.  
2014; 24 (12): 1506-1523
- **Cerebellar Directed Optogenetic Intervention Inhibits Spontaneous Hippocampal Seizures in a Mouse Model of Temporal Lobe Epilepsy.** *eNeuro*  
Krook-Magnuson, E., Szabo, G. G., Armstrong, C., Oijala, M., Soltesz, I.  
2014; 1 (1)
- **Functional Fission of Parvalbumin Interneuron Classes During Fast Network Events** *ELIFE*  
Varga, C., Oijala, M., Lish, J., Szabo, G. G., Bezaire, M., Marchionni, I., Golshani, P., Soltesz, I.  
2014; 3
- **Presynaptic Calcium Channel Inhibition Underlies CB1 Cannabinoid Receptor-Mediated Suppression of GABA Release** *JOURNAL OF NEUROSCIENCE*  
Gergely, G. S., Nora, L., Noemi, H., Tibor, A., Zoltan, N., Norbert, H.  
2014; 34 (23): 7958-7963
- **The Effects of an Echinacea Preparation on Synaptic Transmission and the Firing Properties of CA1 Pyramidal Cells in the Hippocampus** *PHYTOTHERAPY RESEARCH*  
Hajos, N., Holderith, N., Nemeth, B., Papp, O. I., Szabo, G. G., Zemankovics, R., Freund, T. F., Haller, J.  
2012; 26 (3): 354-362

• **Parvalbumin-Containing Fast-Spiking Basket Cells Generate the Field Potential Oscillations Induced by Cholinergic Receptor Activation in the Hippocampus** *JOURNAL OF NEUROSCIENCE*

Gulyas, A. I., Szabo, G. G., Ulbert, I., Holderith, N., Monyer, H., Erdelyi, F., Szabo, G., Freund, T. F., Hajos, N.  
2010; 30 (45): 15134-15145

• **Distinct synaptic properties of perisomatic inhibitory cell types and their different modulation by cholinergic receptor activation in the CA3 region of the mouse hippocampus** *EUROPEAN JOURNAL OF NEUROSCIENCE*

Szabo, G. G., Holderith, N., Gulyas, A. I., Freund, T. F., Hajos, N.  
2010; 31 (12): 2234-2246