

# Stanford

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## Barna Dudok

Postdoctoral Scholar, Neurosurgery

### Bio

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#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Semmelweis University (2017)
- Master of Science, Eotvos Lorand University (2009)

### Publications

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#### PUBLICATIONS

- **Alternating sources of perisomatic inhibition during behavior.** *Neuron*  
Dudok, B., Klein, P. M., Hwaun, E., Lee, B. R., Yao, Z., Fong, O., Bowler, J. C., Terada, S., Sparks, F. T., Szabo, G. G., Farrell, J. S., Berg, J., Daigle, et al  
2021
- **Cell-specific STORM super-resolution imaging reveals nanoscale organization of cannabinoid signaling** *NATURE NEUROSCIENCE*  
Dudok, B., Barna, L., Ledri, M., Szabo, S. I., Szabadits, E., Pinter, B., Woodhams, S. G., Henstridge, C. M., Balla, G. Y., Nyilas, R., Varga, C., Lee, S., Matolcsi, et al  
2015; 18 (1): 75-?
- **Ripple-selective GABAergic projection cells in the hippocampus.** *Neuron*  
Szabo, G. G., Farrell, J. S., Dudok, B., Hou, W. H., Ortiz, A. L., Varga, C., Moolchand, P., Gulsever, C. I., Gschwind, T., Dimidschstein, J., Capogna, M., Soltesz, I.  
2022
- **Imaging the endocannabinoid signaling system.** *Journal of neuroscience methods*  
Dudok, B., Soltesz, I.  
1800: 109451
- **A fluorescent sensor for spatiotemporally resolved imaging of endocannabinoid dynamics in vivo.** *Nature biotechnology*  
Dong, A., He, K., Dudok, B., Farrell, J. S., Guan, W., Liput, D. J., Puhl, H. L., Cai, R., Wang, H., Duan, J., Albarran, E., Ding, J., Lovinger, et al  
2021
- **PharmacostORM nanoscale pharmacology reveals cariprazine binding on Islands of Calleja granule cells.** *Nature communications*  
Prokop, S., Abranyi-Balogh, P., Barti, B., Vamosi, M., Zoldi, M., Barna, L., Urban, G. M., Toth, A. D., Dudok, B., Egyed, A., Deng, H., Leggio, G. M., Hunyady, et al  
2021; 12 (1): 6505
- **Toward Understanding the Diverse Roles of Perisomatic Interneurons in Epilepsy.** *Epilepsy currents*  
Dudok, B., Klein, P. M., Soltesz, I.  
2021; 22 (1): 54-60
- **Toward Understanding the Diverse Roles of Perisomatic Interneurons in Epilepsy** *EPILEPSY CURRENTS*  
Dudok, B., Klein, P. M., Soltesz, I.  
2021

- **Recruitment and inhibitory action of hippocampal axo-axonic cells during behavior.** *Neuron*  
Dudok, B., Szoboszlay, M., Paul, A., Klein, P. M., Liao, Z., Hwaun, E., Szabo, G. G., Geiller, T., Vancura, B., Wang, B., McKenzie, S., Homidan, J., Klaver, et al  
2021
- **In vivo endocannabinoid dynamics at the timescale of physiological and pathological neural activity.** *Neuron*  
Farrell, J. S., Colangeli, R., Dong, A., George, A. G., Addo-Osafo, K., Kingsley, P. J., Morena, M., Wolff, M. D., Dudok, B., He, K., Patrick, T. A., Sharkey, K. A., Patel, et al  
2021; 109 (15): 2398
- **Supramammillary regulation of locomotion and hippocampal activity.** *Science (New York, N.Y.)*  
Farrell, J. S., Lovett-Barron, M., Klein, P. M., Sparks, F. T., Gschwind, T., Ortiz, A. L., Ahanonu, B., Bradbury, S., Terada, S., Oijala, M., Hwaun, E., Dudok, B., Szabo, et al  
2021; 374 (6574): 1492-1496
- **In vivo assessment of mechanisms underlying the neurovascular basis of postictal amnesia.** *Scientific reports*  
Farrell, J. S., Colangeli, R., Dudok, B., Wolff, M. D., Nguyen, S. L., Jackson, J., Dickson, C. T., Soltesz, I., Teskey, G. C.  
2020; 10 (1): 14992
- **Neurophysiology of space travel: energetic solar particles cause cell type-specific plasticity of neurotransmission.** *Brain structure & function*  
Lee, S., Dudok, B., Parihar, V. K., Jung, K., Zöldi, M., Kang, Y., Maroso, M., Alexander, A. L., Nelson, G. A., Piomelli, D., Katona, I., Limoli, C. L., Soltesz, et al  
2016: -?
- **Presynaptic Protein Synthesis Is Required for Long-Term Plasticity of GABA Release** *NEURON*  
Younts, T. J., Monday, H. R., Dudok, B., Klein, M. E., Jordan, B. A., Katona, I., Castillo, P. E.  
2016; 92 (2): 479-492
- **Correlated confocal and super-resolution imaging by VividSTORM** *NATURE PROTOCOLS*  
Barna, L., Dudok, B., Miczan, V., Horvath, A., Laszlo, Z. I., Katona, I.  
2016; 11 (1): 163-183
- **Multiple Forms of Endocannabinoid and Endovanilloid Signaling Regulate the Tonic Control of GABA Release** *JOURNAL OF NEUROSCIENCE*  
Lee, S., Ledri, M., Toth, B., Marchionni, I., Henstridge, C. M., Dudok, B., Kenesei, K., Barna, L., Szabo, S. I., Renkecz, T., Oberoi, M., Watanabe, M., Limoli, et al  
2015; 35 (27): 10039-10057
- **Functional and structural deficits at accumbens synapses in a mouse model of Fragile X** *FRONTIERS IN CELLULAR NEUROSCIENCE*  
Neuhof, D., Henstridge, C. M., Dudok, B., Sepers, M., Lassalle, O., Katona, I., Manzoni, O. J.  
2015; 9
- **Enzymatic machinery for endocannabinoid biosynthesis associated with calcium stores in glutamatergic axon terminals** *JOURNAL OF NEUROSCIENCE*  
Nyilas, R., Dudok, B., Urban, G. M., Mackie, K., Watanabe, M., Cravatt, B. F., Freund, T. F., Katona, I.  
2008; 28 (5): 1058-1063