

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Inna Slutsky	Full Professor, Department of Physiology and Pharmacology, Sackler School of Medicine, Tel Aviv University, Israel

Education

- 1992 - 1995 BSc in Biology, Hebrew University, Israel.
1996 - 2002 PhD in Neurobiology, Hebrew University, Israel.
2002 - 2005 PostDoc, Picower Center of Learning and Memory, MIT.

Positions

- 2006 - 2010 Lecturer, Tel Aviv University, Depart. Physiology and Pharmacology, Israel.
2011 - 2015 Senior Lecturer, Tel Aviv University, Depart. Physiology and Pharmacology, Israel.
2016 – 2021 Associate Professor, Tel Aviv University, Depart. Physiology and Pharmacology, Israel.
2021 – Full Professor, Tel Aviv University, Depart. Physiology and Pharmacology, Israel.

Honors

- 2002 Porath Foundation Excellence Award, Hebrew University
2004 Infinite Mile Outstanding Achievement Award, Massachusetts Institute of Technology
2006 The Charles E. Smith Fellowship in Honor of Professor Joel Elkes for Young Investigator, The National Institute of Psychobiology in Israel
2007 Margaret Stulz Award for Young Scientists, Tel Aviv University
2008 American Federation for Aging Research: New Investigator Award in Alzheimer's disease
2010 Alzheimer's Association: Young Investigator Award
2010 Bernard Katz Award for Young Scientists in Neuroscience
2011 Sieratzki Prize for Advances in Neuroscience
2011 ERC starting grant
2013 Best publication award, Tel Aviv University
2014 Mentorship award, Tel Aviv University
2015 Scientific Excellence Award, Tel Aviv University.
2016 MetLife Foundation, Promising Investigator Award in Alzheimer's Disease
2016 Scientific Excellence Award, Tel Aviv University
2016 ERC consolidator award
2019 MOS, Israel-China Flagship Project in Brain Sciences
2023 ERC advanced grant

Other Experience

- 2023 - President, Israeli Society for Neuroscience
2020 - Head, Department of Physiology & Pharmacology, Sackler Faculty of Medicine
2021 - Head, Master Student Research Program, Sagol School of Neuroscience
Editorial Board Member: *eLife*, *Scientific Reports*, *Frontiers in Cellular and Molecular Neuroscience*

Ad hoc Reviewer: Neuron, Nature Neuroscience, Nature Communications, eLife, EMBO Journal, PLOS Biology, Acta Neuropathologica, Journal of Neuroscience, Journal of Neurophysiology, Neuroscientist, Journal of Alzheimer's Disease, Neurobiology of Aging, Trends in Neuroscience.

Member of American Federation for Aging Research (AFAR) National Scientific Advisory Council Scientific Advisory Board, CIBB, Neuroscience and Disease area, Coimbra University, Portugal

Member of grant committees – ISF, BSF, AFAR

Member of Clore committee for PhD fellowships;

2019-2019 Chair of PhD Admission Committee, Sackler Faculty of Medicine

2017-2019 Member of Balvatnik Awards Committee, New York Academy of Science

2016-2020 Member of Azrieli committee for Phd fellowships

2012-2020 Member of Ph.D. Program committee, Sagol School of Neuroscience, Tel Aviv University

Selected publications:

1. **Slutsky, I.** (2024). Linking activity dyshomeostasis and sleep disturbances in Alzheimer disease. *Nature Reviews Neuroscience* 25, 272-284. 10.1038/s41583-024-00797-y.
2. Shoob, S., Buchbinder, N., Shinikamin, O., Gold, O., Baeloha, H., Langberg, T., Zarhin, D., Shapira, I., Braun, G., Habib, N., and **Slutsky, I.** (2023). Deep brain stimulation of thalamic nucleus reuniens promotes neuronal and cognitive resilience in an Alzheimer's disease mouse model. *Nature Communications* 14, 7002. 10.1038/s41467-023-42721-5.
3. Calafate, S., Özturan, G., Thrupp, N., Vanderlinden, J., Santa-Marinha, L., Morais-Ribeiro, R., Ruggiero, A., Bozic, I., Rusterholz, T., Lorente-Echeverría, B., Dias, M., Chen, W. T., Fiers, M., Lu, A., Vlaeminck, I., Creemers, E., Craessaerts, K., Vandembemt, J., van Boekholdt, L., Poovathingal, S., Davie, K., Thal, D. R., Wierda, K., Oliveira, T. G., **Slutsky, I.**, Adamantidis, A., De Strooper, B., and de Wit, J. (2023) Early alterations in the MCH system link aberrant neuronal activity and sleep disturbances in a mouse model of Alzheimer's disease, *Nat Neurosci* 26, 1021-1031.
4. Katsenelson, M., Shapira, I., Abbas, E., Jevdokimenko, K., Styr, B., Ruggiero, A., Aïd, S., Fornasiero, E. F., Holzenberger, M., Rizzoli, S. O., and **Slutsky, I.** (2022) IGF-1 receptor regulates upward firing rate homeostasis via the mitochondrial calcium uniporter, *Proceedings of the National Academy of Sciences* 119, e2121040119.
5. Zarhin, D., Atsmon, R., Ruggiero, A., Baeloha, H., Shoob, S., Scharf, O., Heim, L.R., Buchbinder, N., Shinikamin, O., Shapira, I., Styr, B., Braun, G., Harel, M., Sheinin, A., Geva, N., Sela, Y., Saito, T., Saido, T., Geiger, T., Nir, Y., Ziv, Y., **Slutsky, I.** (2022). Disrupted neural correlates of anesthesia and sleep reveal early circuit dysfunctions in Alzheimer models. *Cell Reports* 38(3) 10.1016/j.celrep.2021.110268.
6. Ruggiero, A, Katsenelson, M, **Slutsky, I.** (2021). Mitochondria: new players in homeostatic regulation of firing rate set points. *Trends in Neurosciences* 44(8), 606-618.
7. Styr, B, Gonen, N, Zarhin, D, Ruggiero, A, Atsmon, R, Neta Gazit, N, Braun, G, Frere, S, Vertkin, I, Shapira, I, Harel, M, Heim, L, Katsenelson, M, Rechnitz, O, Fadila, S, Derdikman, D, Rubinstein, M, Geiger, T, Ruppin, E, **Slutsky, I.** (2019). Mitochondrial Regulation of the Hippocampal Firing Rate Set Point and Seizure Susceptibility. *Neuron*, 102(5), 1009-1024.e8.
8. Frere, S., and **Slutsky, I.** (2018). Alzheimer's Disease: From Firing Instability to Homeostasis Network Collapse. *Neuron* 97, 32-58.
9. Styr, B., and **Slutsky, I.** (2018). Imbalance between Firing Instability and Synaptic Plasticity Drives Early-Phase Alzheimer's Disease. *Nature Neuroscience*, 21(4), 463-473.
10. Gazit, N., Vertkin, I., Shapira, I., Helm, M., Slomowitz, E., Sheiba, M., Mor, Y., Rizzoli, S., and **Slutsky, I.** (2016) IGF-1 Receptor Differentially Regulates Spontaneous and Evoked Transmission via Mitochondria at Hippocampal Synapses, *Neuron* 89, 583-597.

11. Slomowitz, E., Styr, B., Vertkin, I., Milshtein-Parush, H., Nelken, I., Slutsky, M., **Slutsky, I.** (2015). Interplay between population firing stability and single neuron dynamics in hippocampal networks. *Elife* 4.
12. Dolev, I., Fogel, H., Milshtein, H., Berdichevsky, Y., Lipstein, N., Brose, N., Gazit, N., **Slutsky, I.** (2013). Spike bursts increase amyloid-beta 40/42 ratio by inducing a presenilin-1 conformational change. *Nature Neuroscience*, 16: 587-595.
13. Laviv T, Riven I, Dolev I, Vertkin I, Balana B, Slesinger PA, and **Slutsky I.** (2010). Basal GABA regulates GABA(B)R conformation and release probability at single hippocampal synapses. *Neuron* 67, 253-267.
14. Abramov E, Dolev I, Fogel H, Ciccotosto GD, Ruff E, and **Slutsky I.** (2009). Amyloid-[beta] as a positive endogenous regulator of release probability at hippocampal synapses. *Nature Neuroscience* 12, 1567-1576.