

CV - Shlomo Wagner, Ph.D.

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Education

Hebrew University of Jerusalem	Biology	B.Sc., 1993
Hebrew University of Jerusalem	Neuroscience	M.Sc., 1997
Hebrew University of Jerusalem	Neuroscience	Ph.D., 2000

Postdoctoral

Harvard University	Neuroscience	2000-2004
Hebrew University of Jerusalem	Neuroscience	2005-2006

Employment

2017 – Current: Associate Professor and Head of the Laboratory for
Neurobiology of Social Behavior, University of Haifa, Haifa, Israel.

2013-2017: Senior Lecturer and Head of the Laboratory for Neurobiology
of Social Behavior, University of Haifa, Haifa, Israel.

2007-2013: Lecturer and Head of the Laboratory for Neurobiology of
Social Behavior, University of Haifa, Haifa, Israel.

Honors

- 1997 Hebrew University Intel - Dean's award
- 1998 Fulbright post-doctoral fellowship (not used).
- 1998 Rothschild Foundation post-doctoral fellowship (not used).
- 1998 EMBO long-term post-doctoral fellowship.
- 2005 Post-doctoral fellowship of the Interdisciplinary Center for Neural Computation (ICNC)
- 2006 The Charles E. Smith fellowship in Honor of Prof. Joel Elkes of the National Institute for Psychobiology in Israel

Papers

1. **Wagner, S.**, *Urocortins and their unfolding role in mammalian social behavior*, **Cell Tissue Res.** 2018 Nov 21. doi: 10.1007/s00441-018-2962-3
2. Cohen, L., Maroun, M., and **Wagner, S.**, *Behavior: Oxytocin Promotes Fearless Motherhood*, **Current Biology** 28(8):R359-R361, 2018
3. Frankiensztajn, L.M., Gur-Pollack, R. and **Wagner, S.**, *A combinatorial modulation of synaptic plasticity in the rat medial amygdala by oxytocin, urocortin3 and estrogen*, **Psychoneuroendocrinology**, 92:94-102, 2018
4. Rajamani K.T., **Wagner S.**, Grinevich, V. and Harony-Nicolas, H. *Oxytocin as a Modulator of Synaptic Plasticity: Implications for Neurodevelopmental Disorders*, **Frontiers in Synaptic Neuroscience** 10:17, 2018
5. Netser, S., Haskal, S., Magalnik, H., and **Wagner, S.** *A novel system for tracking social preference dynamics in mice reveals sex- and strain-specific characteristics*, **Molecular Autism** 8:53, 2017
6. Zylbertal, A., Yarom, Y. and **Wagner, S.**, *The Slow Dynamics of Intracellular Sodium Concentration Increase the Time Window of Neuronal Integration: A Simulation Study*, **Frontiers in Computational Neuroscience**, 11:85, 2017
7. Zylbertal, A., Yarom, Y. and **Wagner, S.**, *Synchronous infra-slow bursting in the mouse accessory olfactory bulb emerge from interplay between intrinsic neuronal dynamics and network connectivity*, **J. Neuroscience**, 37(10): 2656-2672, 2017
8. Harony-Nicolas, H., #Kay, M., du Hoffmann,J., Bozdagi-Gunal, O., Klein, M.E., Riad, M., Daskalakis, N.P., Castillo, P.E., Hof, P.R., Shapiro, M.L., Baxter, M.G., **Wagner, S.** and Buxbaum, J.D. *Oxytocin improves social and attentional deficits in a novel genetically modified rat model of autism*, **eLife**, e18904, 2017
9. Garfinkel, BP., Arad, S., Neuner, SM., Netser, S., **Wagner, S.**, Kaczorowski, CC., Rosen, CJ., Gal, M., Soreq, H. and Orly, J. *HP1BP3 expression*

determines maternal behavior and offspring survival, **Genes, Brain and Behavior**, 15:678-688, 2015

10. Zylbertal, A., Kahan, A., Ben-Shaul, Y., Yarom, Y. and Wagner, S. *Prolonged Intracellular Na⁺ Dynamics Govern Electrical Activity in Accessory Olfactory Bulb Mitral Cells*, **PLOS Biology**, 2015, Dec 16;13(12):e1002319.
11. Maroun, M. and **Wagner, S.** *Oxytocin and memory of emotional stimuli: Some dance to remember, some dance to forget*, **Biological Psychiatry**, 2016, Feb 1;79(3):203-12.
12. Leser, N. and **Wagner, S.** *The effects of acute social isolation on long-term social recognition memory*, **Neurobiology of Learning and Memory**, 124:97-103, 2015.
13. Tendler, A. and **Wagner, S.** *Distinct types of theta rhythmicity are induced by social and fearful stimuli in a network associated with social memory*, **eLife**, 03614, 2015.
14. Shpak, G., Zylbertal, A. and **Wagner, S.**, *Transient and sustained afterdepolarizations in accessory olfactory bulb mitral cells are mediated by distinct mechanisms that are differentially regulated by neuromodulators*, **Frontiers in Cellular Neuroscience**, 8:432, 2015
15. Gur, R., Tendler, A. and **Wagner, S.** *Long-term social recognition memory is mediated by protein synthesis and oxytocin-dependent LTD in the medial amygdala*, **Biological Psychiatry**, 76:377-386, 2014
16. Harony, H., Mamrut, S., Brodsky, L., Shahar-Gold, H., Barki-Harrington, L. and **Wagner, S.**, *Brain region-specific methylation in the promoter of the murine oxytocin receptor gene correlates with its expression*, **Psychoneuroendocrinology**. 39:121-131, 2014
17. Shahar-Gold, H., Gur, R. and **Wagner, S.** *Rapid and reversible impairment of short- and long-term social recognition memory by acute isolation of adult rats*, **PLOS ONE** 8(5):e65085, 2013

18. Mamrut, S., Harony, H., Sood, R., Shahar-Gold, H. Gainer, H., Barki-Harrington, L. and **Wagner, S.** *DNA methylation regulates the transcription of the oxytocin receptor*, 2013, **PLOS ONE**, 8(2): e56869, 2013
19. Shpak, G., Zylbertal, A., Yarom, Y. and **Wagner, S.** *Calcium-activated sustained firing responses distinguish Accessory from main olfactory bulb mitral cells*. **J. Neuroscience**, 32: 6251-6262, 2012.
20. Edry, E., Lamprecht, L., **Wagner, S.** and Rosenblum, K. *Viral-mediated gene manipulation in the adult CNS*. **Frontiers in Molecular Neuroscience**, 4: 57, 2011
21. Zibman, S., Shpak, G. and **Wagner, S.** *Distinct intrinsic membrane properties determine differential information processing between main and accessory olfactory bulb mitral cells*. **Neuroscience**, 189:51-67, 2011.
22. Harony, H. and **Wagner, S.** *The Contribution of Oxytocin and Vasopressin to Mammalian Social Behavior: Potential Role in Autistic Spectrum Disorder*, **NeuroSignals** 18:82-97, 2010.
23. **Wagner, S.** and Yarom, Y. *Excitation by GABA in the SCN reaches its time and place*, **Eur. J. Neuroscience** 30:1461, 2009.
24. Dulac, C and **Wagner, S.** *Brain circuits underlying pheromone signaling*. **Ann. Rev. Genetics**, 40: 449-467, 2006.
25. **Wagner, S.**, Gresser, A., Torello, A.T. and Dulac, C. *A Multi-Receptor Genetic Approach Uncovers an Ordered Integration of VNO Sensory Inputs in the Accessory Olfactory Bulb*. **Neuron**, 50: 697-709, 2006.
26. **Wagner, S.**, Sagiv, N. and Yarom, Y., *GABA-induced current and circadian regulation of chloride in neurones of the rat suprachiasmatic nucleus*. **J Physiol.** 537 :853-869, 2001.
27. **Wagner, S.**, Castel, M., Gainer, H. and Yarom, Y., *GABA in the mammalian suprachiasmatic nucleus and its role in diurnal rhythmicity*. **Nature**, 387: 598-603, 1997.

28. Castel, M., Belenki, M., Cohen, S., **Wagner, S.** and Schwartz, W.J., *Light-induced c-FOS expression in the mouse suprachiasmatic nucleus: Immuno-electron microscopy reveals co-localization in multiple cell types*. *European J. Neuroscience*, 9: 101-111, 1997.
29. Belenky, M., **Wagner, S.**, Yarom, Y., Matzner, H., Cohen, S. and Castel, M., *The suprachiasmatic nucleus in stationary organotypic culture*. *Neuroscience* 70: 127-143, 1996.

Book Chapters

1. **Shlomo Wagner** and Hala Harony-Nicolas, Oxytocin and Autism Spectrum Disorder, in **Behavioral Pharmacology of Neuropeptides: Oxytocin**, Edited by Rene Hurlemann and Valery Grinevich, 2017, Springer, in press