

Selected Publications:

1. Friedman A, et al. (2016) Analysis of complex neural circuits with nonlinear multidimensional hidden state models. *Proc Natl Acad Sci U S A*.
2. Friedman A, Keselman MD, Gibb LG, & Graybiel AM (2015) A multistage mathematical approach to automated clustering of high-dimensional noisy data. *Proc Natl Acad Sci U S A* 112(14):4477-4482.
3. Friedman A, et al. (2015) A Corticostriatal Path Targeting Striosomes Controls Decision-Making under Conflict. *Cell* 161(6):1320-1333.
4. Friedman A, et al. (2010) Electrical stimulation of the lateral habenula produces enduring inhibitory effect on cocaine seeking behavior. *Neuropharmacology* 59(6):452-459.
5. Friedman A, et al. (2009) Programmed acute electrical stimulation of ventral tegmental area alleviates depressive-like behavior. *Neuropsychopharmacology* 34(4):1057-1066.

Publications:

6. Lax E, et al. (2016) PARP-1 is Required for Retrieval of Cocaine-Associated Memory by Binding to the Promoter of a Novel Gene Encoding a Putative Transposase Inhibitor. *Molecular Psychiatry*.
7. Bruchim-Samuel M, et al. (2016) Electrical stimulation of the vmPFC serves as a remote control to affect VTA activity and improve depressive-like behavior. *Exp Neurol*.
8. Gazit T, et al. (2015) Programmed deep brain stimulation synchronizes VTA gamma band field potential and alleviates depressive-like behavior in rats. *Neuropharmacology* 91:135-141.
9. Lax E, et al. (2013) Neurodegeneration of lateral habenula efferent fibers after intermittent cocaine administration: implications for deep brain stimulation. *Neuropharmacology* 75:246-254.
10. Dikshtein Y, et al. (2013) beta-endorphin via the delta opioid receptor is a major factor in the incubation of cocaine craving. *Neuropsychopharmacology* 38(12):2508-2514.
11. Friedman A, Lax E, Abraham L, Tischler H, & Yadid G (2012) Abnormality of VTA local field potential in an animal model of depression was restored by patterned DBS treatment. *Eur Neuropsychopharmacol* 22(1):64-71.

12. Friedman A, Shaldubina A, Flaumenhaft Y, Weizman A, & Yadid G (2011) Monitoring of circadian rhythms of heart rate, locomotor activity, and temperature for diagnosis and evaluation of response to treatment in an animal model of depression. *J Mol Neurosci* 43(3):303-308.
13. Friedman A, et al. (2011) Electrical stimulation of the lateral habenula produces an inhibitory effect on sucrose self-administration. *Neuropharmacology* 60(2-3):381-387.
14. Roth-Deri I, et al. (2009) Antidepressant treatment facilitates dopamine release and drug seeking behavior in a genetic animal model of depression. *Eur J Neurosci* 30(3):485-492.
15. Friedman A, et al. (2009) Early prediction of the effectiveness of antidepressants: inputs from an animal model. *J Mol Neurosci* 39(1-2):256-261.
16. Yadid G & Friedman A (2008) Dynamics of the dopaminergic system as a key component to the understanding of depression. *Prog Brain Res* 172:265-286.
17. Maayan R, et al. (2008) The effect of DHEA complementary treatment on heroin addicts participating in a rehabilitation program: a preliminary study. *Eur Neuropsychopharmacol* 18(6):406-413.
18. Friedman A, Friedman Y, Dremencov E, & Yadid G (2008) VTA dopamine neuron bursting is altered in an animal model of depression and corrected by desipramine. *J Mol Neurosci* 34(3):201-209.
19. Friedman A, et al. (2007) Decoding of dopaminergic mesolimbic activity and depressive behavior. *J Mol Neurosci* 32(1):72-79.
20. Friedman A, et al. (2005) Variability of the mesolimbic neuronal activity in a rat model of depression. *Neuroreport* 16(5):513-516.