

Daphna Joel

School of Psychological Sciences and Sagol School of Neuroscience,
Tel Aviv University, djoel@post.tau.ac.il

October, 2016

ACADEMIC EMPLOYMENT

Tel Aviv University

Professor (2013-present)

Head of the Psychobiology graduate program (2003-present)

Chair of PhD Committee (2013-present)

Associate Professor (2007-2012)

Establisher and Head of Neuroscience PhD program (2007-2010)

Senior Lecturer (2003-2007)

Head of Biology-Psychology with emphasis in Neuroscience BA program (2003-2007)

Lecturer (1998-2003)

Counselor, Interdisciplinary Program for the Fostering of Excellence (1994-1998)

Teaching and Research Assistant (1990-1998)

The Academic College of Tel-Aviv-Yaffo

Teaching (1995-2000)

Ben Gurion University

Teaching (1994-1995)

EDUCATION

1984-1985	Hebrew University	Army service, Talpyot	Exact Sciences		
1988-1991	Tel Aviv University	Sackler Medical School	Medicine	B.Med.Sc	1992 (Cum Laude)
1989-1993	Tel Aviv University	Interdisciplinary Program for the Fostering of Excellence			
1990-	Tel Aviv University	Psychology	Psychobiology,	MA	
1992- 1998	Tel Aviv University	Psychology	Psychobiology, Straight PhD	Ph.D	1998 (Cum Laude)
1996-1998	Tel Aviv University	Training Program for Group Facilitators			

GRANTS

2002-2006	Israel Science Foundation: The neural substrates and the pharmacology of post-training signal attenuation: A potential new rat model of obsessive compulsive disorder. \$140,000, PI			
2004-2006	The National Institute for Psychobiology in Israel: Studying the interplay between the orbital cortex and the striatal serotonergic system in a rat model of obsessive compulsive disorder.			

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	\$30,000, PI
2006-2007	Ministry of Health, Israel: Studying the interplay between procedural and explicit mechanisms in obsessive compulsive disorder and Parkinson's disease patients compared to normal subjects, using functional MRI. \$37,000, PI
2006-2008	German Israeli Foundation for Scientific Research and Development: Mapping brain regions in which high-frequency stimulation has anti-compulsive effects, using two rat models of obsessive compulsive disorder. \$208,560, PI
2006-2008	United States-Israel Binational Science Foundation: Deficient procedural learning in obsessive compulsive disorder. A functional MRI study. \$105,000, PI
2007-2011	Israel Science Foundation: Studying the autoimmune basis of obsessive-compulsive disorder in a rat model. \$184,000, PI
2011-2012	F. Hoffmann-La Roche Ltd, Research agreement, \$124,000, PI
2012-2016	EU Framework Project 7 (FP7) consortium: Translational Adolescent and Childhood Therapeutic Interventions in Compulsive Syndromes. Total grant, 6,000,000 euro; to DJ, 214,800 euro
2012-2015	Israel Science Foundation: The human brain mosaic. 800,000 NIS, PI (with Isaac Meilijson)
2016-2020	Israel Science Foundation: Characterizing the development of abnormalities of brain and behavior in a novel neurodevelopmental rat model of obsessive-compulsive disorder. 920,000 NIS, PI

PUBLICATIONS

1. **Joel, D.** and Weiner, I. (1994) The organization of the basal ganglia-thalamocortical circuits: Open-interconnected rather than closed segregated. Neuroscience, 63, 363-379.
2. Gray, J. A., Joseph, M. H., Hemsley, D. R., Young, A. M. J., Warburton, E. C., Boulenguez, P., Grigoryan, G. A., Peters, S. L., Rawlins, J. N. P., Tai, C.-T., Yee, B. K., Cassaday, H., Weiner, I., Gal, G., Gusak, O., **Joel, D.**, Shadach, E., Shalev, U., Tarrasch, R., & Feldon, J. (1995) The role of mesolimbic dopaminergic and retrohippocampal afferents to the nucleus accumbens in latent inhibition: implications for schizophrenia. Behavioural Brain Research, 71, 19-31.
3. Gal, G., **Joel, D.**, Gusak, O., Feldon, J., and Weiner, I. (1997) The effects of electrolytic lesion to the shell subterritory of the nucleus accumbens on delayed-non-match-to-sample and 4-arm baited 8-arm radial maze tasks. Behavioural Neuroscience, 111, 92-103.
4. **Joel, D.**, and Weiner, I. (1997) The connections of the primate subthalamic nucleus: Indirect pathways and the open-interconnected scheme of basal ganglia-thalamocortical circuitry. Brain Research Reviews, 23, 62-78.

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5. **Joel D.**, Weiner, I., and Feldon J. (1997) Electrolytic lesions of the medial prefrontal cortex in rats disrupt performance on an analog of the Wisconsin Card Sorting Test but do not disrupt latent inhibition: Implications for animal models of schizophrenia. Behavioural Brain Research, 85, 187-201.
6. **Joel, D.**, Tarrasch R., Feldon J., and Weiner, I. (1997) Effects of electrolytic lesions of the medial prefrontal cortex or its subfields on 4-arm baited 8-arm radial maze, two-way active avoidance and conditioned fear tasks in the rat. Brain Research, 765, 37-50.
7. **Joel, D.**, Ayalon L., Tarrasch R., Zohar O., Veenman L., Feldon J., and Weiner, I. (1998) Electrolytic lesion of globus pallidus ameliorates the behavioral and neurodegenerative effects of quinolinic acid lesion of the striatum: A potential novel treatment in a rat model of Huntington's disease. Brain Research, 787, 143-148.
8. Weiner I., Hairston I., Shayit M., Feldman G., **Joel D.**, and Feldon J. (1998) Strain differences in latent inhibition. Psychobiology, 26, 57-64.
9. Weiner I., Feldon J., Tarrasch R., Hairston I., and **Joel D.** (1998) Fimbria-fornix cut affects spontaneous activity, two-way avoidance and delayed non matching to sample, but not latent inhibition. Behavioural Brain Research, 96, 59-70.
10. Weiner I., Gaisler I., Shiller D., Green A., Zuckerman L. and **Joel D.** (2000) Screening of antipsychotic drugs in animal models. Drug Development Research, 50: 235-249.
11. **Joel D.** and Weiner I. (2000) The connections of the dopaminergic system with the striatum in rats and primates: An analysis with respect to the functional and compartmental organization of the striatum. Neuroscience, 96, 451-474.
12. Inzelberg R., Nisipeanu P., **Joel D.**, Sarkantus M., Blumen S.C., Carasso R.L. (2001) Acute mania and hemichorea. Clinical Neuropharmacology, 24, 300-303.
13. **Joel D.**, and Avisar A. (2001) Excessive lever pressing following post-training signal attenuation in rats: A possible animal model of obsessive compulsive disorder? Behavioural Brain Research, 123, 77-87.
14. **Joel D.**, Avisar A. and Doljansky J. (2001) Enhancement of excessive lever-pressing after post-training signal attenuation in rats by repeated administration of the D1 antagonist SCH 23390 or the D2 agonist quinpirole but not of the D1 agonist SKF 38393 or the D2 antagonist haloperidol. Behavioral Neuroscience, 115, 1291–1300.

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15. **Joel D.** (2001) The open interconnected model of basal ganglia-thalamocortical circuitry and its relevance to the clinical syndrome of Huntington's disease. Movement Disorders, 16, 407-23.

16. **Joel D.**, Niv Y. and Ruppin E. (2002) Actor-critic models of the basal ganglia: New anatomical and computational perspectives. Neural Networks, 15, 535-547.

17. Niv Y., **Joel D.**, Meilijson I. and Ruppin E. (2002) Evolution of reinforcement learning in bees: A simple explanation for complex foraging behaviors. Adaptive Behavior, 10, 5-24.

18. **Joel D.** and Doljansky J. (2003) Selective alleviation of 'compulsive' lever-pressing in rats by D1, but not D2, blockade: Possible implications for the involvement of D1 receptors in obsessive compulsive disorder. Neuropsychopharmacology, 28, 77-85.

19. Weiner I., Schiller D., Gaisler-Salomon I., Green A. and **Joel D.** (2003) A comparison of drug effects in latent inhibition and the forced swim test differentiates between the typical antipsychotic haloperidol, the atypical antipsychotics clozapine and olanzapine, and the antidepressants imipramine and paroxetine. Behavioural Pharmacology, 14, 215-222.

20. **Joel D.**, Ayalon L., Tarrasch R., and Weiner I. (2003) Deficits induced by quinolinic acid lesion to the striatum in a position discrimination and reversal task are ameliorated by permanent and temporary lesion to the globus pallidus: A potential novel treatment in a rat model of Huntington's disease. Movement Disorders, 18, 1499-507.

21. Ayalon L., Doron R., Weiner I. and **Joel D.** (2004) Amelioration of behavioral deficits in a rat model of Huntington's disease by an excitotoxic lesion to the globus pallidus. Experimental Neurology, 186, 46-58

22. **Joel D.**, Ben-Amir E., Doljansky J. and Flaisher S. (2004) 'Compulsive' lever-pressing in rats is attenuated by the serotonin re-uptake inhibitors paroxetine and fluvoxamine but not by the tricyclic antidepressant desipramine or the anxiolytic diazepam. Behavioral Pharmacology, 15, 241-252.

23. **Joel D.**, Doljansky J., Roz N. and Rehavi M. (2005) Role of the orbital cortex and the serotonergic system in a rat model of obsessive compulsive disorder. Neuroscience, 130, 25-36.

24. **Joel D.**, Zohar O., Afek M., Hermesh H., Lerner L., Kuperman R., Gross-Isseroff R., Weizman A. and Inzelberg R. (2005) Impaired procedural learning in obsessive compulsive disorder and Parkinson's disease, but not in major depressive disorder. Behavioural Brain Research, 157, 253-263.

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25. **Joel D.**, Doljansky J., Schiller D. (2005) 'Compulsive' lever-pressing in rats is enhanced following lesions to the orbital cortex, but not to the basolateral nucleus of the amygdala or to the dorsal medial prefrontal cortex. Eur. J. Neurosci. 21, 2252-2262.
26. Tarrasch R., Goelman G., **Joel D.**, Weiner I. (2005) Long term functional consequences of quinolinic acid striatal lesions and their alteration following an addition of a globus pallidus lesion assessed using pharmacological magnetic resonance imaging. Experimental Neurology, 196, 244-253.
27. **Joel D.** (2006) Current animal models of obsessive compulsive disorder: A critical review. Progress in Neuropsychopharmacology and Biological Psychiatry, 30, 374-388.
28. **Joel D.** (2006) The signal attenuation rat model of obsessive-compulsive disorder: A review. Psychopharmacology, 186, 487-503.
29. **Joel D.**, Klavir O. (2006) The effects of temporary inactivation of the orbital cortex in the signal attenuation rat model of obsessive compulsive disorder. Behavioral Neuroscience, 120, 976-83.
30. Niv Y., **Joel D.**, Dayan P. (2006). A normative perspective on motivation. Trends Cog. Sci. 10, 375-381.
31. Niv Y., Daw N.D., **Joel D.** and Dayan P. (2007) Tonic dopamine: Opportunity costs and the control of response vigor. Psychopharmacology, 191, 507-520.
32. Brimberg L., Flaisher S., Schilman E. and **Joel D.** (2007) Strain differences in compulsive lever-pressing. Behavioural Brain Research, 179, 141-151. (IF 3.393, 88th out of 238 in Neurosciences, 12th out of 48 in Behavioral Sciences)
33. Schonberg T., Daw N., **Joel D.**, O'Doherty J.P. (2007) Reinforcement learning signals in the human striatum distinguish learners from non-learners during reward-based decision making. J. Neurosci. 27, 12860-12867
34. Winter C., Mundt A., Jalali R., **Joel D.**, Harnack D., Morgenstern R. , Juckel G., Kupsch A. (2008) High frequency stimulation and temporary inactivation of the subthalamic nucleus reduce quinpirole induced compulsive checking behavior in rats. Experimental Neurology 210, 217-228
35. Schilman E. A., Uylings H. B., Galis-de Graaf Y., **Joel D.**, Groenewegen H. J. (2008) The orbitofrontal cortex in rats topographically projects to central parts of the caudate-putamen complex. Neurosci. Lett. 432, 40-45

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36. Flaisher-Grinberg S., Klavir O. and **Joel D.** (2008) The role of 5-HT_{2a} and 5-HT_{2c} receptors in the signal attenuation rat model of obsessive compulsive disorder. Int. J. Neuropsychopharmacol 11, 811–825
37. Winter C., Flash S., Klavir O., Klein J., Sohr R. and **Joel D.** (2008) The role of the subthalamic nucleus in 'compulsive' behavior in rats. Eur. J. Neurosci. 27, 1902-1911
38. Klavir O, Flash S., Winter C. and **Joel D.** (2009) High frequency stimulation and pharmacological inactivation of the subthalamic nucleus reduces 'compulsive' lever-pressing in rats. Experimental Neurology, 215, 101-109.
39. Flaisher-Grinberg S., Albelda N., Gitter L., Weltman K., Arad M. and **Joel D.** (2009) Ovarian hormones modulate 'compulsive' lever-pressing in female rats. Hormones and Behavior, 55, 356-365.
40. Mundt A., Klein J., **Joel D.**, Heinz A., Djodari-Irani A., Harnack D., Kupsch A., Juckel G., Orawa H., Morgenstern R., Winter C. (2009) High frequency stimulation of the nucleus accumbens core and shell reduces quinpirole-induced compulsive checking in rats. Eur. J. Neurosci. 29, 2401-2412.
41. Schonberg T., O'Doherty J.P., **Joel D.**, Inzelberg R., Segev Y., Daw N.D. (2010) Selective impairment of prediction error signaling in human dorsolateral but not ventral striatum in Parkinson's disease patients: evidence from a model-based fMRI study. NeuroImage. 49, 772-781
42. Schilman E.A., Klavir O., Winter C., Sohr R., **Joel D.** (2010) The role of the striatum in compulsive behavior in intact and orbitofrontal cortex lesioned rats: possible involvement of the serotonergic system. Neuropsychopharmacology, 35, 1026-1039.
43. Albelda N., Bar-On N. and **Joel D.** (2010) The role of NMDA receptors in the signal attenuation rat model of obsessive-compulsive disorder. Psychopharmacology, 210, 13-24.
44. Klavir O, Flash S., Winter C. and **Joel D.** (2011) High but not low frequency stimulation of both the globus pallidus and the entopeduncular nucleus reduces 'compulsive' lever-pressing in rats. Behavioural Brain Research, 216, 84-93.
45. Djodari-Irani A., Klein J., Banzhaf J., **Joel D.**, Heinz A., Harnack D., Lagemann T., Juckel G., Kupsch A., Morgenstern R., Winter C. (2011) Activity modulation of the Globus pallidus and the Nucleus entopeduncularis affects compulsive checking in rats. Behavioural Brain Research, 219, 149-158.
46. **Joel D.** (2011) Male or female? Brains are intersex. Frontiers in Integrative Neuroscience, 5, 57

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47. Albelda N. and **Joel D.** (2011) Current animal models of obsessive compulsive disorder: An update. Neuroscience, 211, 83-106.
48. Albelda N. and **Joel D.** (2012) Animal models of obsessive-compulsive disorder: Exploring pharmacology and neural substrates. Neuroscience & Biobehavioral Reviews, 36, 47-63.
49. Brimberg L., Benhar I., Mascaro-Blanco A., Alvarez K., Lotan D., Winter C., Klein J., Moses A.E., Somnier F.E., Leckman J.F., Swedo S.E., Cunningham M.W., **Joel D.** (2012) Behavioral, pharmacological, and immunological abnormalities after streptococcal exposure: a novel rat model of Sydenham chorea and related neuropsychiatric disorders. Neuropsychopharmacology, 37, 2076–2087
50. **Joel D.** (2012) Genetic-gonadal-genitals sex (3G-sex) and the misconception of brain and gender, or, why 3G-males and 3G-females have intersex brain and intersex gender. Biology of Sex Differences, 3, 27.
51. Yankelevitch-Yahav R., **Joel D.** (2013) Studying the role of acetylcholine in the signal attenuation rat model of obsessive-compulsive disorder. Psychopharmacology, 230, 37-48.
52. **Joel D.**, Tarrasch R., Berman Z., Mukamel M. and Ziv E. (2014) Queering gender: studying gender identity in the normative population. Psychology and Sexuality, 5, 291-321.
53. **Joel D.** and Yarimi D. (2014) Consciousness-raising in a gender conflict group. International Journal of Group Psychotherapy, 64, 48-69.
54. **Joel D.** (2014) Response to Nina K. Thomas and J. Scott Rutan: Is the Personal Political? And Who Benefits From Believing It Is Not? International Journal of Group Psychotherapy, 64, 83-89.
55. Lotan D., Benhar I., Alvarez K., Mascaro-Blanco A., Cox C., Moses A.E., Frenkel D., Cunningham M., **Joel D.** (2014) Behavioral and neural effects of intra-striatal infusion of anti-streptococcal antibodies in rats. Brain, Behavior, and Immunity, 38, 249-62
56. **Joel D.** and Yankelevitch-Yahav R. (2014) Reconceptualizing sex, brain and psychopathology: Interaction, interaction, interaction. Br. J. Pharmacology, 171, 4620-4635
57. Lotan D., Benhar I., Moses A.E., Rehavi M., Cunningham M., **Joel D.** (2014) Antibiotic Treatment Attenuates Behavioral and Neurochemical changes Induced by Exposure of Rats to Group A Streptococcal Infection. Plos One, 9, e101257. doi: 10.1371/journal.pone.0101257

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58. Goltseker, K., Yankelevitch-Yahav R., Albelda, N., & **Joel D.** (2015). Signal attenuation as a rat model of obsessive-compulsive disorder. Journal of Visualized Experiments, (95), e52287. doi:10.3791/52287

59. **Joel D.**, Berman Z., Tavor I., Wexler N., Gaber O., Stein Y., Shefi N., Pool J., Urchs S., Margulies D., Liem F., Hänggi J., Jäncke L., Assaf Y. (2015) Sex beyond the genitalia: The human brain mosaic. Proc Natl Acad Sci U S A, 112, 15468–15473.

60. **Joel D.** (2015) The NIH call to consider sex as a biological variable is conceptually “captured” in the “sex differences” paradigm. Catalyst, 1, 4-5.

61. **Joel D.**, Fausto-Sterling A. (2016) Beyond sex differences: New approaches for thinking about variation in brain structure and function. Phil. Trans. R. Soc. B., 371: 20150451.

62. **Joel D.**, McCarthy M.M. (2016) Circumspective: Incorporating Sex As a Biological Variable in Neuropsychiatric Research: Where Are We Now and Where Should We Be? Neuropsychopharmacology

63. **Joel D.** (2016) Captured in terminology: sex, sex categories, and sex differences. Feminism & Psychology, 26, 335–345.

CHAPTERS IN BOOKS

1. **Joel D.** and Weiner I. (1999) Striatal contention scheduling and the split circuit scheme of basal ganglia-thalamocortical circuitry: From anatomy to behaviour. In: R. Miller and J.R. Wickens (Eds). Conceptual Advances in Brain Research: Brain dynamics and the striatal complex. Harwood Academic Publishers. Amsterdam. pp. 209-236.

2. Weiner I. and **Joel D.** (2002) Dopamine in schizophrenia: Dysfunctional information processing in basal ganglia-thalamocortical split circuits. In: Handbook of Experimental Pharmacology Vol. 154/II, Dopamine in the CNS II (Ed. G. Di Chiara) Springer-Verlag, Berlin, pp. 417-472.

3. **Joel D.**, Stein D.J. and Schreiber R. (2008) Animal Models Of Obsessive-Compulsive Disorder: From Bench To Bedside Via Endophenotypes And Biomarkers. In: R.A. McArthur and F. Borsini (Eds). Animal and translational models of psychiatric disorders. Elsevier.

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4. **Joel, D.** (2014) Sex, Gender, and Brain – A Problem of Conceptualization. In S. Schmitz and G. Höppner (Eds). *Gendered Neurocultures. Feminist and Queer Perspectives on Current Brain Discourses*. Vienna: Zaglossus. e.U.

OTHER PUBLICATIONS

1. **Joel D.** (1999) The limbic basal-ganglia-thalamocortical circuit and goal-directed behavior. *Behavioral and Brain Sciences*, 22, 525-526.

2. Niv Y., **Joel D.**, Meilijson I. and Ruppin, E. (2001) Evolution of reinforcement learning in uncertain environments: Emergence of risk aversion and probability matching. In J. Kelemen & P. Sosik (Eds.), *Advances in Artificial life, Proceedings of ECAL'2001 - the 6th European Conference on Artificial Life*, Springer-Verlag, pp. 252-261.

3. Niv Y., **Joel D.**, Meilijson I. and Ruppin E. (2002) Evolution of reinforcement learning in foraging bees: a simple explanation for risk averse behavior. *Neurocomputing* 44-46, 951-956.

4. **Joel D.** (2002) Deep brain stimulation in Huntington's disease – Globus pallidus externus or substantia nigra pars compacta. *Movement Disorders*, 17, 431-432.

5. Niv Y., Dayan P. and **Joel D.** (2006) - The effects of motivation on extensively trained behavior - Leibniz Technical Report, Hebrew University, 2006-6.

6. **Joel D.** and Tarrasch R. (2010) The risk of a wrong conclusion - on testosterone and gender differences in risk aversion and career choices. *Proc Natl Acad Sci USA*, 107, E19

7. **Joel D.** and Tarrasch R. (2014) On the mis-presentation and misinterpretation of gender-related data: The case of Verma's human connectome study. *Proc Natl Acad Sci USA*, 111: E637

8. Fine C., **Joel D.**, Jordan-Young R., Kaiser A., and Rippon G. (2014) Why Males ≠ Corvettes, Females ≠ Volvos, and Scientific Criticism ≠ Ideology. http://www.dana.org/Cerebrum/2014/Reaction_to_“Equal_≠_The_Same__Sex_Differences_in_the_Human_Brain”/

9. **Joel D.**, Persico A., Hänggi J., Pool J., and Berman Z. (2016) Reply to Del Giudice et al, Chekroud et al, and Rosenblatt: Do brains of females and males belong to two distinct populations? *Proc Natl Acad Sci USA*

10. **Joel D.**, Hänggi J., and Pool J. (2016) Reply to Glezerman: Why differences between brains of females and brains of males do not 'add up' to create two types of brains. *Proc Natl Acad Sci USA*

HONORS AND AWARDS

- 1991 The European Science Foundation Award for participating in a Winter School on Learning and Memory
- 1993 Trotzki Award
- 1993-1994 Tel Aviv University: General Bursary
- 1994,1996 Tel Aviv University: Dean's list
- 1994-1997 Josef Buchmann Doctoral Fellowship Fund
- 1998 Israeli Council for Higher Education: Alon Fellowship for Young Outstanding Scientists
- 2000 Mifal Hapais – Michael Landau Foundation Research Award
- 2003 Tel Aviv University, Faculty of Social Sciences, Rector's award for excellence in teaching
- 2011 Tel Aviv University, Faculty of Social Sciences, Rector's award for excellence in teaching

INVITED AND REFEREED PRESENTATIONS (LAST 5 YEARS ONLY)

- 2010 Reward and Decision Making in the Brain (Jerusalem, Israel). Unraveling the neural mechanisms of compulsive behavior using the Signal Attenuation rat model of obsessive-compulsive disorder (Speaker and Member of the organizing committee)
- 2011 Annual Meeting of Israel Society for Biological Psychiatry (Kibbutz Hagoshrim, Israel) (Speaker)
- 2011 The 24th European College of Neuropsychopharmacology congress (ECNP) (Paris, France) New anatomical and computational perspectives on brain networks involved in compulsive behaviours (Speaker)
- 2012 The 28th Collegium Internationale Neuro-Psychopharmacologium (CINP) (Stockholm, Sweden) Unraveling neural mechanisms of compulsivity using the signal attenuation rat model (Speaker)
- 2012 NeuroCultures - NeuroGenderings II (Vienna, Austria). Sex, gender and brain – A problem of Conceptualization (Keynote speaker)
- 2013 Symposium on Basic & Translational Neuroscience: Sex Differences (Stanford, CA, USA). Sex, brain and psychopathology (Keynote speaker)
- 2013 Stanford Prevention Research Center / General Medical Disciplines Seminar Series (Stanford, CA, USA). Complex Sex-Stress interactions affect brain structure: Why there are sex difference in psychopathology even though brains do not have sex
- 2014 The Organization for the Study of Sex Differences (OSSD) 2014 Annual Meeting (Minneapolis, Minnesota USA), Re-conceptualizing sex beyond the genitalia (Organizer of the symposium and Speaker)
- 2014 NeuroGenderings III (Laussane, Switzerland) Queering gender using positivist methods: An example from a study of gender identity in 'normative' individuals (Speaker)
- 2015 Member of the Program Committee in preparation for the 2015 OSSD meeting, April 21-23 at Stanford

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- 2015 The International Academy Of Sex Research (IASR) 2015 Annual Meeting (Toronto, Canada),
Re-thinking sex beyond the genitalia, from dimorphism to mosaic (Invited speaker)
- 2015 45th Annual Congress of the European Association for Behavioural and Cognitive Therapies,
Vive La Petite Difference: On the critical difference between sex differences in genitals and
brains (Keynote speaker)

POPULAR PRESENTATIONS

- 2012 TEDx talk: Are brains male or female? <http://www.youtube.com/watch?v=rYpDU040yzc>
- 2013 SeXX and SeXY: A Dialogue on the Question of the Female Brain and the Male Brain, with
Louann Brizendine, Stanford University,
http://www.youtube.com/watch?annotation_id=annotation_428834&feature=iv&src_vid=tJqBmqIHW5A&v=64fPSH5qqS4

PAST AND CURRENT STUDENTS

Ph.D. Students

- | | | | | |
|------|-----------------------|--|---|----------------------|
| 2008 | Niv Y.
(Cum Laude) | The effects of Motivation on
Habitual Instrumental Behavior | Prof. H. Gutfreund
Prof. P. Dayan
University College London | Hebrew
University |
| 2008 | Flaisher-Grinberg S. | Studying the involvement of 5HT-2A and
5HT-2C receptors in the Signal
Attenuation rat model of obsessive compulsive disorder | | TAU |
| 2009 | Schilman E. | Studying the interplay between the orbital cortex and the striatal
serotonergic system in a rat model of obsessive compulsive disorder. | | TAU |
| 2009 | Schonberg T. | Obsessive compulsive disorder and procedural learning:
dysfunctional striatal processing similar to Parkinson's
disease, or a side effect of over activity in other brain
regions? A functional MRI study | Prof. J. O'Doherty
California Institute of
Technology | TAU |
| 2010 | Klavir O. | Mapping brain regions in which high frequency stimulation has an
anti-compulsive effect in a rat model of obsessive-compulsive disorder | | TAU |
| 2010 | Brimberg L. | Studying the autoimmune hypothesis of obsessive
compulsive disorder in a rat model | Prof. M. Cunningham,
Oklahoma University | TAU |
| 2014 | Dafna Lotan | Studying the neuronal mechanisms underlying GABHS-related
neuropsychiatric disorders | Prof. M. Cunningham,
Oklahoma University | TAU |
| 2015 | Noa Albelda | Sex-specific differences in behavior, physiology and brain morphology
of rats as a result of post-natal immune stimulation | Prof. I. Weiner, TAU | TAU |

Roni Yankelevitz The effects of sex on the behavioral effects of early exposure to selective serotonin reuptake inhibitors

Zohar Berman Sex by stress interactions in the development of psychopathology

Roi Jacobson Gender identity and sexual orientation in people with atypical sex development, gender identity or sexuality

Eliana Avitzour Assessing and changing gender biases in math and science teachers

M.A.M.Sc. Students

<u>Thesis submitted</u>	<u>Student</u>	<u>Subject</u>	<u>Co-advisor</u>	<u>University</u>
2000	Green A.-S.	Core lesion of the nucleus accumbens in rats leads to increased immobility in the forced swim test and perseveration in the reversal of a position discrimination, and these deficits are reversed by atypical but not typical antipsychotics: A possible new model for the negative symptoms of schizophrenia?	Prof. I. Weiner	TAU
2001	Avisar A.	Extra lever pressing without attempting to collect a reward: Habit or compulsion behavior?		TAU
2001	Niv Y.	Evolution of reinforcement learning in uncertain environments.	Prof. E. Ruppin	TAU
2001	Orly Z.	Habit formation and basal ganglia-related disorders: Impaired acquisition of probabilistic S-R association in Parkinson's disease and obsessive-compulsive disorder.	Dr. R. Inzelberg	TAU
2002	Doljansky J.	The effects of orbital lesion alone and in combination with the serotonin re-uptake inhibitor paroxetine on 'compulsive' lever-pressing.		TAU
2003	Schonberg T.	Constructing a behavioral human replication of an animal model of OCD – excessive pressing following signal attenuation.		TAU
2003	Ben-Amir E.	'Compulsive' lever-pressing in rats is attenuated by the serotonin re-uptake inhibitor fluvoxamine but not by the tricyclic antidepressant desipramine.		TAU
2003	Afek M.	Acquisition of probabilistic S-R associations in obsessive-compulsive disorder and depression.	Dr. D. Koren	Haifa University
2005	Rosenberg K.	The role of the 5-HT1A receptors in compulsive behavior, as observed in a new rat model of obsessive-compulsive disorder.		TAU
2005	Klavir O.	The effect of temporary inactivation of the rat's orbital cortex on behavior, as observed in a novel rat model of obsessive-compulsive disorder		TAU
2005	Brimberg L.	Studying the autoimmune basis of obsessive compulsive disorder in a rat model.		TAU
2007	Flash S.	Effects of excitotoxic lesions and high frequency stimulation		TAU

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		of the subthalamic nucleus on the behavior of rats in a model of obsessive compulsive disorder: A putative role for the subthalamic nucleus in the pathophysiology and treatment of OCD?	
2009	Ben Meir E.	Examination of the interplay between the procedural learning and the declarative learning systems in Alzheimer disease and Parkinson disease patients	TAU
2011	Nitza Bar-On	The role of NMDA receptors in the signal attenuation rat model of obsessive-compulsive disorder	TAU
2011	Lihi Bar-Lev	The effects of acute cannabinoids administration on compulsive behavior of male and female rats in the signal attenuation model of obsessive-compulsive disorder.	TAU
2012	Roni Liber	Effects of exposure to pups on sex hormones and behavior in naive female and male rats.	TAU
2013	Koral Glotseker	Can early rilazole treatment prevent the emergence of compulsive lever-pressing?	TAU
2014	Einat Stoler	The relations between phallogocentric sexual practices and sexual desire and content in heterosexual women	The Academic College of Tel-Aviv-Yaffo
2015	Moran Weber	Sexual practices, desire and content in heterosexual and homosexual women	TAU

MEMBERSHIP IN PROFESSIONAL SOCIETIES

2001-2002	Israel Society for Neurosciences (ISF)
2002-2003	Federation of European Neuroscience Societies (FENS)
2004-2007	International Basal Ganglia Society (IBAGS)
2005-2008	Israel Society for Neurosciences (ISF)
2008, 2011	Israel Society for Biological Psychiatry
2011	European College of Neuropsychopharmacology congress (ECNP)
2012	Collegium Internationale Neuro-Psychopharmacologium (CINP)
2013-present	The Organization for the Study of Sex Differences (OSSD)

REVIEWER:

Journals: Archives of General Psychiatry, Behavior and Brain Sciences, Behavioral Brain Research Behavioral Neuroscience, Behavioral Pharmacology, Biological Psychiatry, Brain and Cognition, Brain Research, Brain Research Bulletin, Chemical Neuroanatomy, Cortex, European Journal of Pharmacology, Journal of Neuroscience, Journal of Psychiatric Research, Neuropsychopharmacology, Pharmacology, Biochemistry and Behavior, Physiology & Behavior, Progress in Neuro-Psychopharmacology & Biologica, Psychiatry, Psychological Review

Foundations: German Israeli Foundation for Scientific Research and Development, Israel Science Foundation, The National Institute for Psychobiology in Israel, United States-Israel Binational Science Foundation

Daphna Joel, Ph.D.

Scientific Advisor to the GIF Foundation in Psychology

Scientific Advisor to the BSF Foundation in Psychology