BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Dorit Ron, Ph.D.	Professor of Neurology in Residence University of California San Francisco

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
The Hebrew University of Jerusalem, Israel	B.Ph.Sc.	1977-1982	Pharmaceutical Science
The Hebrew University of Jerusalem, Israel	M.Ph.	1983-1985	Pharmaceutical Science
The Hebrew University of Jerusalem, Israel	Ph.D.	1986-1990	Pharmacology

Positions and Employment

1991-1992	Postdoctoral Fellow, Ernest Gallo Clinic and Research Center (EGCRC), University of California, San Francisco (UCSF), Dept. of Neurology
1992-1995	Postdoctoral Fellow, Stanford Univ., Dept. of Molecular Pharmacology, Stanford, CA
1995-1997	Scientist, Dept. of Biological Research, Terrapin Technologies
1997-1998	Assistant Research Biochemist, EGCRC
1999-2013	Principal Investigator, EGCRC
1999-2000	Assistant Adjunct Professor, Dept. of Neurology, UCSF
2000-present	Member, Wheeler Center for the Neurobiology of Addiction, UCSF
2000-present	Assistant Professor in Residence, Dept. of Neurology, UCSF
2002-present	Member Biomedical Science Graduate Program, UCSF
2004-present	Member, Graduate Program in Neuroscience, UCSF
2004-present	Member Pharmaceutical Science, Pharmacogenomic Graduate Program, UCSF
2004-2009	Associate Professor in Residence, Dept. of Neurology, UCSF
2009-present	Scientific Director, P50 NIH-NIAAA Center Grant, “Alcohol Center for Translational Genetics”
2009-present	Professor in Residence, Dept. of Neurology, UCSF
2009-present	Endowed Chair in Cell Biology of Addiction in Neurology

Awards

2013	NIAAA MERIT Award

Selected Service and Memberships (2000-Present)

2001-2002	Member, Executive Committee, Gallo Research Center
2002-present	Member, Postdoctoral Fellows Committee, Gallo Research Center
2002-04, 2006	Chair, Retreat Committee, Gallo Research Center
2004	NIH-NIAAA NAL Study Section, Ad Hoc Member
2004-2005	NIH NIAAA Special Emphasis Panels, Ad Hoc Member
2004-2008	NIH-NIAAA NAL Study Section Permanent Member
2004-2005	Research Society on Alcoholism Educational Committee Member
2005-present	Editorial Board, *Alcohol*
2005-2007	Research Society on Alcoholism Program Committee Member
2005-present	Biomedicine/Neuroscience Panel Review, Science Foundation, Ireland
2006-2007	Research Society on Alcoholism Program Committee, Chair
2007	NIH-NIAAA Special Emphasis Panel, Ad Hoc, Chair
2007	NIH-NIAAA, Ad Hoc Reviewer, Fellowships Review Panel
2008	NIH-NIAAA Special Emphasis Panel, Ad Hoc Member
2008	Member, Gallo Center Faculty Search Committee, Statistical Human Geneticist
2008	NIH, Ad Hoc Reviewer, Neurogenetics Special Emphasis Grant Review Panel
2009	NIH-NIAAA, Ad Hoc Reviewer, Special Emphasis Panel, The Effects of Alcohol on Glia Cells
2009	NIH, Ad Hoc Reviewer, Challenge Grants In Health And Science Research

Principal Investigator: Dorit Ron

2009	NIH, Ad Hoc Reviewer, Special Emphasis Panel, Motivated Behavior
2009-2012	Chair, Associate Investigators Committee, Gallo Research Center
2009-2012	Member, Executive Committee, Gallo Research Center
2010-2012	NIH, Member, College of CSR reviews
2010	NIH, Ad Hoc Reviewer, Special Emphasis Panel, Alcohol
2010	Israel Society for Neuroscience
2010-2011	Chair, Retreat Committee, Gallo Research Center
2010-2011	Research Society on Alcoholism Program Committee Member
2010-2011	Member, Gallo Center Faculty Search Committee
2011-present	Associate Editor, *Journal of Neuroscience*
2011-present	Field Editor, *Alcoholism: Clinical and Experimental Research*
2012-2013	Director of Intramural Programs, EGCRC
2012-2016	NIH-NIAAA AA4 Study Section Permanent Member
2012-2014	Chair, Retreat Committee, Gallo Research Center
2013	NIH, Ad Hoc Reviewer, Special Emphasis Panel
2013-14	Organizer and Vice Chair, "Gordon Conference on Alcohol's Actions in the CNS"
2013-2014	2014 RSA/ISBRA Conference Program Committee Member
2013-2014	Co-Editor, Special Review Issue, *Alcohol* Journal
2014	Scientific Advisory Board member – Yale Alcohol Center

SELECTED PUBLICATIONS (2000-PRESENT)

1. **Ron D**, Vagts AJ, Dohrman DP, Yaka R, Jiang Z, Yao L, Crabbe J, Grisel JE, Diamond I. Uncoupling of βIIPKC from its targeting protein RACK1 in response to ethanol in cultured cells and mouse brain. *FASEB J* 14:2303-2314, 2000.
2. Yaka R, Thornton C, Vagts AJ, Phamluong K, Bonci A, **Ron D.** NMDA-receptor function is regulated by the inhibitory scaffolding protein, RACK1. *Proc Natl Acad Sci USA* 99:5710-5715, 2002.
3. He D-Y, Vagts AJ, Yaka R, **Ron D.** Ethanol induces gene expression via the nuclear compartmentalization of RACK1. *Mol Pharmacol* 62(2):272-280, 2002.
4. Yaka R, Phamluong K, Vagts AJ, **Ron D.** Pituitary adenylate cyclase activating polypeptide (PACAP(1-38)) enhances NMDA receptor function and BDNF expression via RACK1. *J Biol Chem* 278:9630-9638, 2003.
5. Yaka R, Phamluong K, **Ron D.** Scaffolding of Fyn kinase to the NMDA receptor determines brain region sensitivity to ethanol. *J Neurosci* 23:3623-3632, 2003.
6. Thornton C, Yaka R, Dinh S, **Ron D.** H-Ras modulates N-Methyl-D-Aspartate receptor function via inhibition of Src tyrosine kinase activity. *J Biol Chem* 278:23823-23829, 2003.
7. Ungless M, Singh V, Crowder TL, Yaka R, **Ron D,** Bonci A. Corticotropin-releasing factor (CRF) requires CRF-binding protein to potentiate NMDA receptors via CRF receptor 2 in dopamine neurons. *Neuron* 39:401-407, 2003.
8. Vagts AJ, He D-Y, **Ron D.** Cellular adaptation to chronic ethanol results in altered compartmentalization and function of the scaffolding protein RACK1. *Alcoholism: Clin Exp Res* 27:1599-1605, 2003.
9. Yaka R, Tang K-C, Camarini R, **Ron D.** Fyn kinase and NR2B containing NMDA receptors regulate acute ethanol sensitivity but not intake or conditioned reward. *Alcoholism: Clin Exp Res* 27:1736-1742, 2003.
10. Thornton C, Tang K-C, Phamluong K, Luong K, Vagts A, Nikanjam D, Yaka R, **Ron D.** Spatial and temporal regulation of RACK1 function and N-methyl-D-aspartate receptor activity through WD40 motif-mediated dimerization. *J Biol Chem* 279(30):31357-31364, 2004.
11. McGough NN, He DY, Logrip ML, Jeanblanc J, Phamluong K, Luong K, Kharazia V, Janak PH, **Ron D.** RACK1 and brain-derived neurotrophic factor: A homeostatis pathway that regulates alcohol addiction. *J Neurosci* 24:10542-10552, 2004.
12. He D-Y, McGough NNH, Ravindranathan A, Phamluong K, Janak PH, **Ron D.** The glial derived neurotrophic factor mediates the desirable actions of the anti-addiction drug Ibogaine. *J Neurosci* 25:619-628, 2005.

13. Suvarna N, Borgland S, Auberson YP, Bonci A, **Ron D.** Acute ethanol exposure alters functional NMDA receptor NR2 subunit ratio via H-Ras. *J Biol Chem* 280:31450-31459, 2005.
14. Ashique AM, Kharazia V, Yaka R, Peterson AS, **Ron D**. Localization of the scaffolding protein RACK1 in the developing and adult mouse brain. *Brain Res* 1069:31-38, 2006.
15. Szumlinski KK, Abernathy KE, Oleson EB, Klugmann M, Lominac KD, He D-Y, **Ron D**, During M, Kalivas PW. Homer isoforms differentially regulate cocaine-induced neuroplasticity. *Neuropsychopharmacology* 31:768-77, 2006.
16. Janak PJ, Wolf F, Pandey SC, Logrip ML, **Ron D.** BIG news in alcohol addiction: new findings on growth factor pathways BDNF, insulin, and GDNF. *Alcoholism: Clin Exp Res* 30:214-221, 2006.
17. Jeanblanc J, He D-Y, McGough NNH, Logrip ML, Phamluong K, Janak PH, **Ron D.** The dopamine D3 receptor is part of a homeostatic pathway regulating ethanol consumption. *J Neurosci* 26:1457-1464. 2006.
18. Kiely PA, O'gorman D, Luong K, **Ron D**, O'connor R. Insulin-like growth factor I controls a mutually exclusive association of RACK1 with protein phosphatase 2A and {beta}1 integrin to promote cell migration. *Mol Cell Biol* 2006 Jun; 26(11):4041-51.
19. He D-Y and **Ron D**. Autoregulation of glial cell line derived neurotrophic factor expression: Implications for the long-lasting actions of the anti-addiction drug, Ibogaine. *FASEB J* 20:2420-2422, 2006.
20. Schilström B, Yaka R, Suvarna N, Singh V, **Ron D**, Bonci A. Cocaine enhances NMDA currents in midbrain dopamine cells via redistribution of NMDA receptors. *J Neurosci* 26:8549-8558, 2006.
21. Wang J, Carnicella S, Phamluong K, Jeanblanc J, Ronesi JA, Chaudhri N, Janak PH, Lovinger DM, **Ron D**. Ethanol induces long-term facilitation of NR2B-NMDA receptor activity in the dorsal striatum: Implications for alcohol drinking behavior. *J Neurosci* 27:3593-3602, 2007. (Faculty of 1000 Biology: http://www.f1000biology.com/article/id/1085799, factor 6 "must read" category).
22. Jurd R, Thornton C, Jun W, Luong K, Phamluong K, Kharazia V, **Ron D**. Mind Bomb-2 is an E3 ligase that ubiquitinates the NMDA receptor NR2B subunit in a phosphorylation-dependent manner. *J Biol Chem* 283:301-310, 2008. (Faculty of 1000 Biology: http://www.f1000biology.com/article/id/1094973, factor 6 "must read" category).
23. Logrip ML, Janak PH, **Ron D**. Dynorphin is a downstream effector of striatal BDNF regulation of ethanol intake. *FASEB J* 22:2393-2404, 2008.
24. He D-Y and **Ron D**. GDNF reverses ethanol-mediated increases in tyrosine hydroxylase immunoreactivity via altering the activity of Hsp90. *J Biol Chem* 283:12811-12818, 2008.
25. Carnicella S, Kharazia V, Jeanblanc J, Janak PH, **Ron D**. GDNF is a fast-acting potent inhibitor of alcohol consumption and relapse. *Proc Natl Acad Sci USA* 105:8114-8119, 2008. (Faculty of 1000 Biology: http://www.f1000medicine.com/article/nmkg0cv6960wh9f/id/1117769, factor 6 "must read" category).
26. Grosso S, Volta V, Sala LA, Magri L, Vietri M, Marchisio PC, **Ron D**, Biffo S. PKCbII modulates translation independently from mTOR and through RACK1. *Biochemical J* 415:77-85, 2008.
27. Rewal M, Jurd R, Gill MT, He D-Y, **Ron D,** Janak PH. Alpha4-containing GABA-A receptors in the nucleus accumbens mediate moderate intake of alcohol. *J Neurosci* 29:543-549, 2009.
28. Carnicella S, Yamamoto R, and **Ron D.** Excessive ethanol intake is reduced by GDNF. *Alcohol* 43:35-43. 2009.
29. Carnicella S, Ahmadiantherani S, He D-Y, Nielsen CK, Bartlett SE, Janak PH and **Ron D**. Cabergoline decreases alcohol drinking and seeking behaviors via GDNF. *Biological Psychiatry* 66:146-153, 2009.
30. Carnicella S, Ahmadianteherani S, **Ron D**. GDNF is an endogenous negative regulator of ethanol-mediated reward and of ethanol consumption after a period of deprivation. *Alcoholism: Clin Exp Res* 6:1012-1024, 2009.
31. Logrip ML, Janak PH, **Ron D.** Escalating ethanol intake is associated with altered corticostriatal BDNF expression. *J Neurochem* 109:1459-1468, 2009.
32. Logrip ML, Janak PH, **Ron D**. Blockade of ethanol reward by the kappa opioid receptor agonist U50,488H. *Alcohol* 43:359-365, 2009.
33. Jeanblanc J, He D-Y, Logrip ML, Carnicella S, Kharazia V, Janak PH, **Ron D**. Endogenous BDNF in the dorsolateral striatum gates alcohol drinking. *J Neurosci* 29:13494-13502, 2009.
34. He D-Y, Neasta J, **Ron D**. Epigenetic regulation of BDNF expression via the scaffolding protein RACK1. *J Biol Chem* 285:19043-19050, 2010.

35. Wang J, Lanfranco MF, Gibb SL, Yowell QV, Carnicella S, **Ron D**. Long-lasting adaptations of the NR2B-containing NMDA receptors in the dorsomedial striatum play a crucial role in alcohol consumption and relapse. *J Neurosci* 30:10187-10198, 2010.
36. Wang J, Carnicella S, He D-Y, Ahmadiantehrani S, Barak S, Ben Hamida S, Kharazia V, Zapata A, Shippenberg TS and **Ron D**. Nucleus accumbens-derived GDNF is a retrograde enhancer of dopaminergic tone in the mesocorticolimbic system. *J Neurosci* 30:14502-14512, 2010.
37. Carnicella S, He D-Y, Yowell QV, Glick SD and **Ron D**. Noribogaine, but not 18-MC, exhibits similar actions as ibogaine on GDNF expression and ethanol self-administration. *Addiction Biology* 15:424-433, 2010.
38. Neasta J, Ben Hamida S, Yowell Q, Carnicella S and **Ron D**. A role for mTOR complex 1 signaling in neuroadaptations underlying alcohol-related disorders. *Proc Natl Acad Sci USA* 107:20093-20098, 2010.
39. Carnicella S, Yowell QV and **Ron D**. Regulation of operant oral ethanol self-administration: A dose-response curve study in rats. *Alcoholism: Clin Exp Res* 35:1-10, 2011.
40. Gibb SL, Jeanblanc J, Barak S, Yowell QV, Yaka R and **Ron D**. Lyn kinase regulates mesolimbic dopamine release: implication for alcohol reward. *J Neurosci* 31:2180-2187, 2011.
41. Nie H, Rewal M, Gill TM, **Ron D** and Janak PH. Extrasynaptic d-containing GABA receptors in the nucleus accumbens dorsomedial shell contribute to alcohol intake. *Proc Natl Acad Sci USA*. 108:4459-4464, 2011.
42. Wang J, Lanfranco MF, Gibb SL and **Ron D**. Ethanol-mediated long-lasting adaptations of the NR2B-containing NMDA receptors in the dorsomedial striatum. *Channels* 5(4):1-5, 2011.
43. Barak S, Yowell QV, Carnicella S and **Ron D**. Glial cell line-derived neurotrophic factor reverses alcohol-induced allostasis of the mesolimbic dopaminergic system: implications for alcohol reward and seeking. *J Neurosci* 31:9885-9894, 2011.
44. Neasta J, Ben Hamida S, Yowell QV, Carnicella S and **Ron D**. AKT signaling pathway in the nucleus accumbens mediates excessive alcohol drinking behaviors. *Biological Psychiatry* 70:575-582, 2011.
45. Gibb SL, Ben Hamida S, Lanfranco MF and **Ron D**. Ethanol-induced increase in Fyn kinase activity in the dorsomedial striatum is associated with subcellular redistribution of PTPα. *J Neurochem* 119:879-889, 2011.
46. Barak S, Ahmadiantehrani S, Kharazia V and **Ron D**. Positive autoregulatory feedback loop of GDNF in the ventral tegmental area: implications for alcohol abuse disorders. *Translational Psychiatry* (Nature Press) 1:doi:10.1038/tp.2011.57, 2011.
47. Neasta J, Kiely PA, He D-Y, Adams DR, O'Connor R and **Ron D**. Direct interaction between the scaffolding proteins RACK1 and 14-3-3ζ regulates BDNF transcription. *J Biol Chem* 287:322-336, 2012.
48. Rewal M, Donahue R, Gill TM, Nie H, **Ron D** and Janak PH. Alpha4 subunit-containing GABAA receptors in the accumbens shell contribute to the reinforcing effects of alcohol. *Addiction Biology* 2:309-321, 2012.
49. Wang J, Ben Hamida S, Darcq E, Zhu W, Gibb, SL, Lanfranco MF, Carnicella S and **Ron D**. Ethanol-mediated facilitation of AMPA Receptor Function in the Dorsomedial Striatum: Implication for Alcohol Drinking Behavior. *J Neurosci* 32:15124-15132, 2012.
50. Ben Hamida S, Neasta J, Lasek AW, Kharazia V, Zou M, Carnicella S, Janak PH and **Ron D**. The small G protein H-Ras in the mesolimbic system is a molecular gateway to alcohol-seeking and excessive drinking behaviors. *J Neurosci* 32:15849-15858, 2012. (Faculty of 1000 Prime Recommendation: http://f1000.com/prime/717962739#recommendations).
51. Jeanblanc J, Logrip ML, Janak PH and **Ron D**. BDNF-mediated regulation of ethanol consumption requires the activation of the MAP kinase pathway and protein synthesis. *Eur J Neuroscience* 37:607-612, 2013.
52. Waurnalt V, Darcq E, Levine A, Barak S and **Ron D**. Chromatin remodeling – A novel strategy to control excessive alcohol drinking. *Translational Psychiatry* (Nature Press) 3:e231, 2013.
53. Ahmadiantehrani S and **Ron D**. Dopamine D2 receptor activation leads to the up-regulation of GDNF via Gβγ-Erk1/2-dependent induction of Zif268. *J Neurochem* 125:193-204, 2013.
54. Barak S, Liu F, Ben Hamida S, Yowell QV, Neasta J, Kharazia V, Janak PH and **Ron D**. Disruption of alcohol-related memories by mTORC1 inhibition prevents relapse. *Nature Neurosci* 16(8):1111-7, 2013. See also http://www.nature.com/news/blocking-boozy-memories-reduces-risk-of-relapse-1.13252.
55. Seif T, Chang S-J, Simms JA, Gibb SL, Dadgar J, Chen BT, Harvey BK, **Ron D**, Messing RO, Bonci A and Hopf FW. Cortical activation of accumbens hyperpolarization-active NMDARs mediates aversion-resistant alcohol intake. *Nature Neurosci* 16(8):1094-1100, 2013.

56. Sparta DR, Hopf FW, Gibb SL, Cho SL, Stuber GD, Messing RO, **Ron D** and Bonci A. Binge ethanol-drinking potentiates corticotropin releasing factor R1 receptor activity in the ventral tegmental area. *Alcohol Clin Exp Res* 37:1680-1687, 2013.
57. Ben Hamida S, Darcq E, Wang J, Wu S, Phamluong K, Kharazia V and **Ron D**. The tyrosine PTPalpha in the dorsomedial striatum promotes excessive ethanol drinking behaviors. *J Neurosci* 4;33(36):14369-78, 2013.
58. Ahmadiantehrani S, Barak S and **Ron D**. GDNF is a novel ethanol-responsive gene in the VTA: Implications for the development and persistence of excessive drinking. *Addiction Biology* Jan 9, 2013. [Epub ahead of print].
59. Darcq E, Ben Hamida S, Wu S, Phamluong K, Kharazia V, Xu J, Lombroso P and **Ron D.** Inhibition of striatal-enriched tyrosine phosphatase 61 in the dorsomedial striatum is required for the development of excessive ethanol consumption. J Neurochem. In revision.

SELECTED BOOK CHAPTERS AND REVIEWS (2004-PRESENT)

1. **Ron D.** Signaling cascades regulating NMDA receptor sensitivity to ethanol. *The Neuroscientist* 10:325-336, 2004.
2. **Ron D** and Jurd R. The ups and downs of signaling cascades in addiction. *Science STKE* 309:re14, 2005.
3. **Ron D** and Janak PH. GDNF and addiction. *Rev Neurosci* 16:277-285, 2005.
4. Woodward JJ, **Ron D**, Winder D, Roberto M. From blue states to up states: a regional view of NMDA-ethanol interactions. *Alcoholism: Clin Exp Res* 30:359-367, 2006.
5. Newton PM and **Ron D**. Protein kinase C and alcohol addiction. *Pharmacol Res* 55:570-577, 2007.
6. **Ron D** and Wang J. The NMDA Receptor and Alcohol Addiction. Chapter 4, pp 59-77. In: VanDongen AMJ, ed. *Biology of the NMDA Receptor*. Taylor and Francis/CRC Press, Boca Raton, 2008.
7. Carnicella S and **Ron D**. GDNF a potential target to treat addiction? *Pharmacology and Therapeutics* 122:9-18, 2009.
8. Chen G, Cuzon Carlson VC, Wang J, Beck A, Heinz A, **Ron D**, Lovinger DM, Buck KJ. Striatal involvement in human alcoholism and alcohol consumption, and withdrawal in animal models. Alcohol Clin Exp Res 35(10):1739-1748, 2011
9. Adams DR, **Ron D**, Kiely PA. RACK1, a multifaceted scaffolding protein: structure and function. *Cell Communication and Signaling* 9:22-45, 2012.
10. Davies DL, Bortolato M, Finn D, Ramaker MJ, Barak S, **Ron D**, Liang J and Olsen RW. Recent advances in the discovery and preclinical testing of novel compounds for the prevention and/or treatment of alcohol use disorders. *Alcohol Clin Exp Ther* 37:8-15, 2013.
11. **Ron D** and Messing RO. Signaling pathways mediating alcohol effects. *Curr Top Behav Neurosci*. 2013; 13:87-126.
12. **Ron D**, Adams DR, Baillie GS, Long A, O'Connor R and Kiely PA. RACK(1) to the Future- A Historical Perspective. *Cell Communication and Signaling.* 11(1):53, 2013.
13. Warnault V and **Ron D.** Chromatin Remodeling – A New Landscape To Treat Harmful Alcohol Drinking. *FutureScience* 5:2011-2013, 2013.
14. Ahmadiantehrani S, Warnault V, Legastelois R, **Ron D.** From signaling pathways to behavior: the light and dark sides of alcohol. Book chapter in *Neurobiology of Alcohol Dependence, NIAAA. In Press*.
15. Carnicella S, **Ron D**, Barak S. Intermittent ethanol access schedule in rats as a preclinical model of alcohol abuse. *Alcohol J. In Press*.