

**Florence P. Varodayan**  
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**Education**

Ph.D. in Neurobiology & Behavior, Columbia University

2013

Dissertation: Alcohol alters the expression of SNAREs and spontaneous GABA release via

NIH/NIAAA

~~AlcNPPCP~~

The goal of this project is to investigate how alcohol dependence induces noradrenergic neuroadaptations that dysregulate infralimbic control of the central amygdala, and whether this circuit mediates withdrawal-induced alcohol dri8a1my2 0.0040.004 Tc 10 ( )-2750aml0 Tw 8.3 0 T10 (do6(d)-81 (er)

Alcohol Dependence and Withdrawal Impair Serotonergic Regulation of GABA Transmission in the Rat Central Nucleus of the Amygdala. *J Neurosci* 40(36):6842-6853.  
<https://doi.org/10.1523/JNEUROSCI.0733-20.2020>.

8. **Varodayan FP**, Minning MA, Steinman MQ, Oleata CS, Riley MW, Sabino V, Roberto M. (2020). PACAP regulation of central amygdala GABAergic synapses is altered by restraint stress. *Neuropharmacology* 168:107752. <https://doi.org/10.1016/j.neuropharm.2019.107752>.
9. Bajo M, Patel RR, Hedges DM, **Varodayan FP**, Vlkolinsky R, Davis TD, Burkart MD, Blednov Y, Roberto M. (2019). Role of MyD88 in IL-1b and ethanol modulation of GABAergic transmission in the central amygdala. *Brain Sci* , 9(12):361. <https://doi.org/10.3390/brainsci9120361>.
10. Suárez J, Khom S, Alén F, Natividad LA, **Varodayan FP**, Patel RR, Kirson D, Arco R, Ballesta A, Bajo M, Rubio L, Martín-Fardon R, Rodríguez de Fonseca F, Roberto M. (2019). Cessation of fluoxetine treatment increases alcohol seeking during relapse and dysregulates endocannabinoid and glutamatergic signaling in the central amygdala. *Addiction* 25(5):e12813. <https://doi.org/10.1111/adb.12813>.
11. Patel RR, Khom S, Steinman MQ, **Varodayan FP**, Kiosses WB, Hedges D, Vlkolinsky R, Nadav T, Polis I, Bajo M, Roberts AJ, Roberto M. (2019). IL-1 expression is increased and regulates GABA transmission following chronic ethanol in mouse central amygdala. *Brain Bulletin* 75:208-219. <https://doi.org/10.1016/j.bbi.2018.10.009>.
12. **Varodayan FP\***, Sidhu H\*, Roberto M, Contet C. (2018). Morphological and functional evidence of increased excitatory signaling in the prelimbic cortex during ethanol withdrawal. *Neuropharmacology* 133:470-480. <https://doi.org/10.1016/j.neuropharm.2018.02.014>.  
 \*Co-first authors
13. **Varodayan FP**, Khom S, Patel RR, Hedges D, Steinman MQ, Oleata CS, George O, Roberto M, Bajo M. (2018). Role of TLR4 in the Modulation of Central Amygdala GABA Transmission by CRF Following Restraint Stress. *Alcohol* 53(6):642-649. <https://doi.org/10.1093/alcalc/agx114>.
14. Blasio A, Wang J, Wang D, **Varodayan FP**, Pomrenze MB, Miller J, Lee AM, McMahon T, Gyawali S, Wang H, Roberto M, McHardy S, Pleiss MA, Messing RO. (2018). Novel Small Molecule Inhibitors of Protein Kinase C Epsilon Reduce Ethanol Consumption in Mice. *Biological Psychiatry* , 84(3):193-201. <https://doi.org/10.1016/j.biopsych.2017.10.017>.
15. **Varodayan FP\***, Correia D\*, Kirson D\*, Khom S, Oleata CS, Schweitzer P, Roberto M. (2017). CRF modulates glutamate transmission in the central amygdala of naïve and ethanol-dependent rats. *Neuropharmacology* 125: 418-428. <https://doi.org/10.1016/j.neuropharm.2017.08.009>.  
 \*Co-first authors
16. **Varodayan FP**, Logrip ML, Roberto M. (2017). P/Q-type voltage-gated calcium channels mediate the Nucleus Accumbens Core (NAc) CRF-induced ethanol seeking. *Journal of Neurosci* 37(46):13611-13621. <https://doi.org/10.1523/JNEUROSCI.1111-17.2017>

[www.sciencedaily.com/releases/2017/04/170412132352.htm](http://www.sciencedaily.com/releases/2017/04/170412132352.htm)

- "Alcoholism Treatment 2017: Alcohol-Dependent Brains Respond To Booze Differently." Medical Daily, 13 April 2017. <http://www.medicaldaily.com/alcoholism-treatment-2017-alcohol-dependent-brains-respond-booze-differently-415601>

18. Harris RA, Bajo M, Bell RL, Blednov YA, **Varodayan FP**, Truitt JM, de Guglielmo G, Lasek AW, Logrip ML, Vendruscolo LF, Roberts AJ, Roberts E, George O, Mayfield J, Billiar TR, Hackam DJ, Mayfield RD, Koob GF, Roberto M, Homanics GE. (2017). Genetic and Pharmacologic Manipulation of TLR4 Has Minimal Impact on Ethanol Consumption in Rodents. *J Neurosci* 37(5):1139-1155. <https://doi.org/10.1523/JNEUROSCI.2002-16.2016>.
19. **Varodayan FP**, Bajo M, Soni N, Luu G, Madamba SG, Schweitzer P, Roberto M. (2017). Chronic alcohol exposure disrupts CB<sub>1</sub> regulation of GABAergic transmission in the rat basolateral amygdala. *Alb* 22(3):766-778. <https://doi.org/10.1111/adb.12369>.
20. Schweitzer P, Cates-Gatto C, **Varodayan FP**, Nadav T, Roberto M, Lasek AW, Roberts AJ. (2016). Dependence-induced ethanol drinking and GABA neurotransmission are altered in Alk deficient mice. *Neuropharm* 107:1-8. <https://doi.org/10.1016/j.neuropharm.2016.03.003>.
21. **Varodayan FP**, Soni N, Bajo M, Luu G, Madamba SG, Schweitzer P, Parsons LH, Roberto M. (2016). Chronic ethanol exposure decreases CB<sub>1</sub> receptor function at GABAergic synapses in the rat central amygdala. *Alb* 21(4):788-801. <https://doi.org/10.1111/adb.12256>.
22. Herman MA, **Varodayan FP**, Oleata CS, Luu G, Kirson D, Heilig M, Ciccocioppo R, Robert M.

t

[cells.html](#)

28. **Varodayan FP**, Pignataro L, Harrison NL. (2011). Alcohol induces Synaptotagmin 1 expression in neurons *in* activation of heat shock factor 1. *Neuron* 193:63-71.  
<https://doi.org/10.1016/j.neuroscience.2011.07.035>.

29. **Varodayan FP**



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7. **Varodayan FP**, Nadav T, Polis I, Roberts AJ, Roberto M. (2019). Alcohol Dependence Alters Noradrenergic Influe

19. **Varodayan FP**, Steinman MQ, Montgomery SE, Roberts AJ, Bajo M, Roberto M. (2017). Alcohol dependence alters IL-1 regulation of GABA transmission in the mouse prelimbic cortex. Fourth International Congress on Alcoholism and Stress, Volterra, Italy. *Ab* , 60, P-109.
20. Bajo M, Steinman MQ, **Varodayan FP**, Khom S, Patel R, Hedges DM, Herman MA, Montgomery SE, Nadav T, Steiner N, Mandyam CD, Roberts AJ, Roberto M. (2017). Chronic ethanol-induced

TX. *Ab* ~~*ChEPR*~~39, S1, P -689.

31. Sabino V, Iemolo A, Blasio A, **Varodayan F**, Roberto M, Cottone P. (2014). Central Amygdala PACAP in the behavioral stress response. 44<sup>th</sup> Society for Neuroscience Annual Meeting, Washington, DC. ~~*SdN*~~*AbPg* #P-350.01.

43. Pignataro L, **Varodayan FP**, Mamut PL, Tanneholz LE, Harrison NL. (2010). Ethanol activates the heat shock pathway in astrocytes. 33<sup>rd</sup> Research Society on Alcoholism Annual Meeting, San Antonio, TX. *Alcohol in Experimental Research* 34, S1, P -273.
44. **Varodayan FP**, Maronski M, P M. (2010). Ethanol

K-12 Schools Visiting Scientist, Columbia University Neuroscience Outreach  
Columbia Science Mentor, Mott Hall II Middle School

2009–2012  
2009

**Service**

**Editorial Service**

Guest Associate Editor, *Frontiers in Synaptic Neuroscience* Special Issue on Plasticity of Inhibitory Cells in Health and Disease 2021–2022  
Review Editor, *Frontiers in Motivation and Reward* 2022–present  
Review Editor, *Frontiers in Addictive Disorders* 2021–present  
Review Editor, *Frontiers in Psychopharmacology* 2021–present

**Ad-Hoc Reviewer for Peereviewed Journals:**

Addiction Neuroscience, Alcohol, Alcohol & Alcoholism, Behavioural Brain Research, Biological Psychiatry, eNeuro, *Frontiers in Psychiatry*, *Neuropharmacology*, *Progress in Neuropsychopharmacology & Biological Psychiatry*, *Scientific Reports*

**Ad-Hoc Reviewer for Fellowships, Training, and Grant Awarding Programs**

NIAAA Fellowship Psh and Dg,-1 ( )8higA1(h a)4GG 3(h a)2TTldw1 ( ie)-2 (3(h a)2TTh a)4GG 202d( )Tj3 0