

Education & Training

- Senior Research Associate** 2017–present
Advisors: Amanda J. Roberts, Ph.D. and Marisa Roberto, Ph.D.
The Scripps Research Institute, La Jolla, CA
- Research Associate** 2013–2017
Advisor: Marisa Roberto, Ph.D.
The Scripps Research Institute, La Jolla, CA
- Ph.D. Neurobiology and Behavior** 2007–2013
M.Phil. Neurobiology and Behavior
Advisor: Neil L. Harrison, Ph.D.
Columbia University, New York, NY
- M.Sc. Chemistry** 2003–2007
B.A. Biochemistry & Biology, Distinction in the Vagelos Scholar Honors Program
Advisor: Brenda E. Porter, M.D., Ph.D.
University of Pennsylvania, Philadelphia, PA
- Research Assistant** Summer 2004, 2007
Advisor: Christopher MacGowan, Ph.D.
The Hospital for Sick Children, Toronto, Canada

Grant Funding

- NIH Pathway to Independence Award - K99/R00 AA025408 (PI: Varodayan)** 2017–present
National Institute on Alcohol Abuse and Alcoholism
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 drinking and anxiety-like behavior.
Mentored by: Marisa Roberto, Ph.D. and Amanda Roberts, Ph.D.

Honors & Awards

- Young Investigator Travel Award, Winter Conference on Brain Research 2019
Hot Topic Presentation, American College of Neuropsychopharmacology Meeting 2018
Harry June ACNP Travel Award, American College of Neuropsychopharmacology 2017
Young Investigator Award, Association of Alcohol Researchers of Indian Origin 2017
Enoch Gordis Research Recognition Award Postdoc Finalist, Research Society on Alcoholism 2016
Junior Investigator Award, Research Society on Alcoholism 2015, 2016
Memorial Award, Research Society on Alcoholism 2015
Travel Award, Third International Congress on Alcoholism and Stress, NIAAA 2014
Best Pharmacology Retreat Talk, Pharmacology Department, Columbia University 2011
Enoch Gordis Research Recognition Award Grad Student Finalist, Research Society on Alcoholism 2011
Student Merit Award, Research Society on Alcoholism 2010, 2011
Eukaryotic Gene Expression Course Scholarship, Cold Spring Harbor Laboratory 2009
Roy & Diana Vagelos Molecular Life Sciences Scholarship, University of Pennsylvania 2004–2007
University of Pennsylvania Trustee Scholarship, University of Pennsylvania 2003–2007

Teaching/Mentoring Experience & Training

- Mentored two high school students, Harvey Mudd College Upward Bound Program 2018

Panelist for Funding Fest: K99/R00 & the NIH Grant Process, Salk/TSRI/UCSD	2018, 2019
K-12 Schools Visiting Scientist, TSRI Alcohol Research Center	2017–present
Academic Laboratory Management & Leadership Symposium Attendee, Salk/TSRI/UCSD	2017
Guest Lecturer, Scientific Research Symposium, Southwestern Community College	2016
NextProf Science Workshop Attendee, University of Michigan	2016
Co-mentored two graduate students and one high school student, Columbia University	2009–2012
STEM Education Fellow, New York Academy of Sciences	2012
Guest Lecturer, Developmental & Systems Neuroscience Course, Columbia University	2011
Undergraduate & Graduate Teaching Assistant, Columbia University	2010–2011
Cellular & Molecular Neuroscience (W3004/4004)	
Developmental & Systems Neuroscience (W3005/4005)	
Fundamentals of College Teaching Workshop Attendee, Columbia Teaching & Learning Center	2011
NYC Regional Brain Bee Coordinator, Dana Alliance for Brain Initiatives	2011–2012
NYC Regional Brain Bee Mentor, Dana Alliance for Brain Initiatives	2010–2012
K-12 Schools Visiting Scientist, Columbia University Neuroscience Outreach	2009–2012
Columbia Science Mentor, Mott Hall II Middle School	2009

Professional Affiliations and Service

Education Committee Member, Research Society on Alcoholism	2017–present
Review Editor, <i>Frontiers in Psychiatry – Psychopharmacology</i>	2017–present
Ad hoc Reviewer, <i>Frontiers in Psychiatry, & Neuropharmacology</i>	2017–present
Ad hoc Reviewer (with Dr. Roberto), <i>Addiction Biology, Alcohol, Biological Psychiatry, Journal of Neuroscience, Neuropharmacology, Neuropsychopharmacology, & PNAS</i>	2014–present
Alumni Interviewer, University of Pennsylvania	2014–present
Member, Research Society on Alcoholism	2009–present
Member, Society for Neuroscience	2006–present

Chaired Symposia

1. Beyond Inflammation: Neuroimmune Pathways in Alcohol Use Disorders
Winter Conference on Brain Research, Snowmass, CO 2019
2. Noradrenergic mechanisms at the intersection of alcohol dependence and stress
Research Society on Alcoholism Annual Meeting, San Diego, CA 2018
3. Calcium signaling toolkit: integrators and targets of alcohol
Research Society on Alcoholism Annual Meeting, San Antonio, TX 2015

Invited Research Talks

1. Circuit dysfunction at the intersection of alcohol and stress
National Institute on Alcohol Abuse and Alcoholism, NIH, Bethesda, MD 2019
2. Circuit dysfunction at the intersection of alcohol and stress
Departments of Pharmacology and Psychiatry & Behavioral Neurosciences,
Wayne State University, Detroit, MI 2019
3. Circuit dysfunction at the intersection of alcohol and stress
School of Psychology, University of Ottawa, Ottawa, ON, Canada 2019
4. Circuit dysfunction at the intersection of alcohol and stress
Department of Biological Sciences, University of Texas at El Paso, El Paso, TX 2019

5. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Anatomy & Neurobiology, University of Maryland School of Medicine, Baltimore, MD
6. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Neuroscience, UConn Health School of Medicine, Farmington, CT
7. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Psychology, Binghamton University, Binghamton, NY
8. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Neuroscience, West Virginia University School of Medicine, Morgantown, WV
9. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Neuroscience & Experimental Therapeutics, Albany Medical College, Albany, NY
10. The role of the interleukin-1 system in alcohol dependence-induced cortical dysfunction 2019
Winter Conference on Brain Research, Snowmass, CO
11. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Physiology, Louisiana State University - Health Sciences Center, New Orleans, LA
12. Circuit dysfunction at the intersection of alcohol and stress 2019
Department of Psychology, University of Toronto Scarborough, Toronto, ON, Canada
13. Circuit dysfunction at the intersection of alcohol and stress 2018
Division of Pharmacology and Toxicology, The University of Texas at Austin College of Pharmacy, Austin, TX
14. The role of the interleukin-1 system in alcohol dependence-induced cortical dysfunction 2018
Hot Topic Presentation, American College of Neuropsychopharmacology Meeting, Hollywood, FL
15. Circuit dysfunction at the intersection of alcohol and stress 2018
Department of Psychological Sciences, Kansas State University, Manhattan, KS
16. Circuit dysfunction at the intersection of alcohol and stress 2018
Department of Pharmacology, Physiology & Neuroscience, University of South Carolina School of Medicine, Columbia, SC
17. Circuit dysfunction at the intersection of alcohol and stress 2018
School of Neurosciences, Virginia Tech, Blacksburg, VA
18. Noradrenergic regulation of central amygdala GABA synapses is altered by alcohol dependence 2018
Research Society on Alcoholism Annual Meeting, San Diego, CA
19. Alcohol dependence disrupts amygdalar L-type voltage-gated calcium channel mechanisms 2018
Behavioral Pharmacology Society Annual Meeting, San Diego, CA
20. Alcohol-induced adaptation of IL-1 signaling at GABA synapses in the mouse prelimbic cortex 2018
Gordon Research Seminar, Alcohol and the Nervous System, Galveston, TX
21. Effects and interactions of ethanol and endocannabinoids in rat central and basolateral amygdala 2018
American College of Neuropsychopharmacology Meeting, Hollywood, FL
22. Alcohol dependence disrupts voltage-gated calcium channels in the rat central amygdala 2016
Department of Biological Sciences, University of Alaska Anchorage, Anchorage, AK

- Alcohol dependence activates microglia and reverses the IL-1 β induced decrease in inhibition of prelimbic cortex pyramidal neurons 2016
 Research Society on Alcoholism Annual Meeting, New Orleans, LA
23. L-type channel mediation of ethanol-induced GABA release is disrupted by chronic exposure 2015
 Research Society on Alcoholism Annual Meeting, San Antonio, TX
24. Alcohol alters SNARE protein expression and spontaneous GABA release 2012
 Committee on the Neurobiology of Addictive Disorders, The Scripps Research Institute, San Diego, CA
25. Alcohol alters the expression of SNARE proteins and spontaneous GABA release 2012
 Anesthesiology Department Basic Sciences Research Meeting, Columbia University, NYC, NY
26. Alcohol induces Vamp2, but not Vamp1, gene expression in neurons via activation of HSF1 2011
 Pharmacology Department Retreat, Columbia University, NYC, NY
27. Alcohol induces Vamp2, but not Vamp1, gene expression in neurons via activation of HSF1 2011
 Research Society on Alcoholism Annual Meeting, Atlanta, GA
28. Neurogenesis and cell cycle changes in epilepsy 2006
 Children's Hospital of Philadelphia, Joseph Stokes Jr. Research Institute Chalk Talk Series, Philadelphia, PA

Research Articles

1. 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) Fluoxetine increases alcohol consumption, anxiolytic behavior, endocannabinoid system gene expression and glutamate transmission in the rat central amygdala after ethanol relapse. *Addiction Biology*, in press.
2. 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 β expression is increased and regulates GABA transmission following chronic ethanol in mouse central amygdala. *Brain, Behavior and Immunity*, 75, 208-219. <https://doi.org/10.1016/j.bbi.2018.10.009>.
3. **Varodayan FP***, Sidhu H*, Roberto M, Contet C. (2018) Morphological and functional changes in prelimbic cortex dendritic spines induced by alcohol dependence. *Neuropharmacology*, 133, 470-480. <https://doi.org/10.1016/j.neuropharm.2018.02.014>.
 *Co-first authors
4. **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 and Alcoholism*, 53, 642-649. <https://doi.org/10.1093/alcalc/agx114>.
5. 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, 193-201. <https://doi.org/10.1016/j.biopsych.2017.10.017>.
6. **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

7. **Varodayan FP**, Logrip ML, Roberto M. (2017) P/Q-type voltage-gated calcium channels mediate the alcohol and CRF sensitivity of central amygdala GABAergic synapses. *Neuropharmacology*, 125, 97-206. <https://doi.org/10.1016/j.neuropharm.2017.07.017>.
8. **Varodayan FP***, de Guglielmo G, Logrip ML, George O, Roberto M*. (2017) Alcohol dependence disrupts amygdalar L-type voltage-gated calcium channel mechanisms. *Journal of Neuroscience*, 37(17), 4593-4603. <https://doi.org/10.1523/JNEUROSCI.3721-16.2017>.
 *Corresponding authors
 Faculty of 1000 Prime Recommended: <https://f1000.com/prime/727467401>
 Press Release by The Scripps Research Institute published in:
 - “Surprising brain change appears to drive alcohol dependence.” ScienceDaily, 12 April 2017. 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>
9. 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. *Journal of Neuroscience* 37(5), 1139-1155. <https://doi.org/10.1523/JNEUROSCI.2002-16.2016>.
10. **Varodayan FP**, Bajo M, Soni N, Luu G, Madamba SG, Schweitzer P, Roberto M. (2017) Chronic alcohol exposure disrupts CB₁ regulation of GABAergic transmission in the rat basolateral amygdala. *Addiction Biology* 22(3), 766-778. <https://doi.org/10.1111/adb.12369>.
11. 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. *Neuropharmacology* 107, 1-8. <https://doi.org/10.1016/j.neuropharm.2016.03.003>.
12. **Varodayan FP**, Soni N, Bajo M, Luu G, Madamba SG, Schweitzer P, Parsons LH, Roberto M. (2016). Chronic ethanol exposure decreases CB₁ receptor function at GABAergic synapses in the rat central amygdala. *Addiction Biology* 21(4), 788-801. <https://doi.org/10.1111/adb.12256>.
13. Herman MA, **Varodayan FP**, Oleata CS, Luu G, Kirson D, Heilig M, Ciccocioppo R, Robert M. (2016) Glutamatergic transmission in the central nucleus of the amygdala is selectively altered in Marchigian Sardinian alcohol-preferring rats: Alcohol and CRF effects. *Neuropharmacology* 102, 21-31. <https://doi.org/10.1016/j.neuropharm.2015.10.027>.
14. Bajo M, **Varodayan FP**, Madamba SG, Roberts AJ, Casal LM, Oleata C, Siggins GR, Roberto M. (2015). Interleukin-1 Interacts with Ethanol Effects on GABAergic Transmission in the Mouse Central Amygdala. *Frontiers in Pharmacology* 19(6), 49. <https://doi.org/10.3389/fphar.2015.00049>.
15. Bajo M, Herman MA, **Varodayan FP**, Oleata CS, Madamba SG, Harris RA, Blednov YA, Roberto M. (2015). Role of the IL-1 receptor antagonist in ethanol-induced regulation of GABAergic transmission in the central amygdala. *Brain, Behavior and Immunity* 45, 189-97. <https://doi.org/10.1016/j.bbi.2014.11.011>.
16. Kallupi M, **Varodayan FP**, Oleata CS, Correia D, Luu G, Roberto M. (2014). Nociceptin/Orphanin FQ decreases glutamate transmission and blocks ethanol-induced effects in the central amygdala of naïve and ethanol-dependent rats. *Neuropsychopharmacology* 39(5), 1081-92. <https://doi.org/10.1038/npp.2013.308>.

17. **Varodayan FP***, Harrison NL. (2013). HSF1 transcriptional activity mediates alcohol induction of Vamp2 expression and GABA release. *Frontiers in Integrative Neuroscience* 7, 89. <https://doi.org/10.3389/fnint.2013.00089>.
*Corresponding author
18. Pignataro L*, **Varodayan FP***, Tannenholz LE, Protiva P, Harrison NL. (2013). Brief alcohol exposure alters transcription in astrocytes via the heat shock pathway. *Brain and Behavior* 3(2), 114-133. <https://doi.org/10.1002/brb3.125>.
*Co-first authors
Press Release by Columbia University published in:
- “Researchers find that alcohol consumption damages brain's support cells.” Medical Express, 18 March 2013. <https://medicalxpress.com/news/2013-03-alcohol-consumption-brain-cells.html>
19. **Varodayan FP**, Pignataro L, Harrison NL. (2011). Alcohol induces Synaptotagmin 1 expression in neurons via activation of heat shock factor 1. *Neuroscience* 193, 63-71. <https://doi.org/10.1016/j.neuroscience.2011.07.035>.
20. **Varodayan FP**, Zhu X, Cui X, Porter BE. (2009). Seizures increase cell proliferation in the dentate gyrus by shortening progenitor cell-cycle length. *Epilepsia* 50(12), 2638-2647. <https://doi.org/10.1111/j.1528-1167.2009.02244.x>.
21. Porter BE, Lund IV, **Varodayan FP**, Wallace RW, Blendy JA. (2008). The role of transcription factors cyclic-AMP responsive element modulator (CREM) and inducible cyclic-AMP early repressor (ICER) in epileptogenesis. *Neuroscience* 152(3), 829-836. <https://doi.org/10.1016/j.neuroscience.2007.10.064>.
22. Macgowan CK, Al-Kwif O, **Varodayan F**, Yoo S, Wright GA, Kellenberger CJ. (2005). Optimization of 3D contrast-enhanced pulmonary magnetic resonance angiography in pediatric patients with congenital heart disease. *Magnetic Resonance in Medicine* 54(1), 207-212. <https://doi.org/10.1002/mrm.20538>.

Review Articles and Commentaries

1. Roberto M, **Varodayan FP**. (2017) Synaptic targets: Chronic alcohol actions. *Neuropharmacology*, 122, 85-99. <https://doi.org/10.1016/j.neuropharm.2017.01.013>.
2. Roberto M, **Varodayan F**. (2015) Commentary on the Third International Congress on “Alcoholism and Stress: A Framework for Future Treatment Strategies”. *Alcohol* 49(8), e1-2. <https://doi.org/10.1016/j.alcohol.2015.11.007>.
3. Pignataro L, **Varodayan FP**, Tannenholz LE, Harrison NL. (2009). The regulation of neuronal gene expression by alcohol. *Pharmacology and Therapeutics* 124(3), 324-335. <https://doi.org/10.1016/j.pharmthera.2009.09.002>.

Manuscripts in submission or in preparation

1. **Varodayan FP***, Minning M, Steinman MQ, Oleata CS, Sabino V, Roberto M. PACAP regulation of central amygdala GABAergic synapses is altered by restraint stress (in revision).
*Corresponding author
2. **Varodayan FP**, Davis TD, Nadav T, Burkart MD, Roberts AJ, Bajo M, Roberto M. Alcohol-induced neuroadaptation of IL-1 signaling at GABAergic synapses in the mouse prelimbic cortex (in preparation).

- Nguyen JD, Kirson D, Steinman MQ, Patel R, Khom S, **Varodayan FP**, Hedges DM, Oleata CS, Grant Y, Roberto M, Taffe MA. Withdrawal-induced escalated oxycodone self-administration is mediated by kappa opioid receptor function (preprint on bioRxiv: <https://doi.org/10.1101/177899>).

Research Conference Abstracts

- Varodayan FP**, Pahng AR, Davis TD, Nadav T, Bajo M, Burkart MD, Edwards SE, Roberts AJ, Roberto M. (2019) The role of the Interleukin-1 system in alcohol-induced cortical dysfunction. 42nd Research Society on Alcoholism Annual Meeting, Minneapolis, MN.
- Varodayan FP**, Pahng AR, Davis TD, Nadav T, Bajo M, Burkart MD, Edwards SE, Roberts AJ, Roberto M. (2019) The role of the Interleukin-1 system in alcohol-induced cortical dysfunction. 13th Annual Canadian Neuroscience Meeting, Toronto, ON, Canada.
- Varodayan FP**, Steinman MQ, Davis TD, Wolfe SA, Nadav T, Montgomery SE, Kiosses WB, Burkart MD, Roberts AJ, Bajo M, Roberto M. (2018) Alcohol-induced neuroadaptation of IL-1 signaling at GABAergic synapses in the mouse prelimbic cortex. 48th Society for Neuroscience Annual Meeting, San Diego, CA. *Soc Neurosci. Abst. Program* #P-648.14
- Khom S, Patel RR, Hedges D, **Varodayan FP**, Bajo M, Steinman MQ, Vlkolinsky R, Kirson D, Roberto M. (2018) Alcohol dependence and withdrawal alter serotonergic modulation of GABA transmission in the CeA. 48th Society for Neuroscience Annual Meeting, San Diego, CA. *Soc Neurosci. Abst. Program* #P- 601.01
- Varodayan FP**, Steinman MQ, Davis TD, Wolfe SA, Nadav T, Montgomery SE, Kiosses WB, Burkart MD, Roberts AJ, Bajo M, Roberto M. (2018) Alcohol-induced neuroadaptation of IL-1 signaling at GABAergic synapses in the mouse prelimbic cortex. Gordon Research Conference: Alcohol & the Nervous System, Galveston, TX.
- 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. American College of Neuropsychopharmacology 56th Annual Meeting, Palm Springs, CA. *Neuropsychopharmacology*, 42, S294-S475.
- 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. 40th Research Society on Alcoholism Annual Meeting, Denver, CO. *Alcohol Clin. Exp. Res.* 41, S1, P-385.
- Kirson D, Steinman MQ, Oleata CS, **Varodayan FP**, Patel R, Roberto M. (2017) Oxytocin decreases central amygdala GABAergic signaling in naïve but not alcohol dependent rats. 40th Research Society on Alcoholism Annual Meeting, Denver, CO. *Alcohol Clin. Exp. Res.* 41, S1, P-712.
- Khom S, Patel R, Hedges D, **Varodayan FP**, Steinman MQ, Bajo M, Roberto M. (2017) Alcohol dependence and withdrawal alter serotonin regulation of GABA transmission in the CeA. 40th Research Society on Alcoholism Annual Meeting, Denver, CO. *Alcohol Clin. Exp. Res.* 41, S1, P-26.
- 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. *Alcohol*, 60, P-109.
- 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 immune responses in the mouse central amygdala: focus on glia and IL-1 system. Fourth International Congress on Alcoholism and Stress, Volterra, Italy. *Alcohol*, 60, P-95

12. Kirson D, Steinman MQ, Oleata CS, **Varodayan FP**, Patel R, Roberto M. (2017) Oxytocin decreases central amygdala GABAergic signaling in naïve but not alcohol dependent rats. Fourth International Congress on Alcoholism and Stress, Volterra, Italy. *Alcohol*, 60, P-105.
13. Nguyen JD, Kirson D, **Varodayan FP**, Khom S, Patel R, Hedges D, Roberto M, Taffe MA. (2017) Kappa opioid receptor signaling contributes to re-escalation of oxycodone self-administration under extended access conditions. Experimental Biology Meeting, Chicago, IL. *Experimental Biology Program*, #P-985.1.
14. **Varodayan FP**, Oleata CS, Sabino V, Roberto M. (2016) A single restraint stress alters PACAP-38 modulation of GABA transmission in the rat central amygdala. 46th Society for Neuroscience Annual Meeting, San Diego, CA. *Soc Neurosci. Abst. Program* #P-124.18.
15. Nguyen JD, Kirson D, **Varodayan FP**, Khom S, Roberto M, Taffe MA. (2016) Determination of kappa opioid receptor contributions to re-escalation of oxycodone self-administration under extended access conditions. 46th Society for Neuroscience Annual Meeting, San Diego, CA. *Soc Neurosci. Abst. Program* #P-78.18.
16. Bajo M, Herman MA, Khom S, **Varodayan FP**, Montgomery SE, Roberts AJ, Roberto M. (2016) Interleukin-1 modulation of GABA transmission in the mouse central amygdala after chronic ethanol exposure. 46th Society for Neuroscience Annual Meeting, San Diego, CA. *Soc Neurosci. Abst. Program* #P-826.08.
17. Bajo M, **Varodayan FP**, Khom S, Hedges DM, Patel RR, Steinman MQ, Herman MA, Montgomery SE, Nadav T, Roberts AJ, Roberto M. (2017) Brain Region Differences in the IL-1 β Modulation of GABAergic Transmission Following Chronic Ethanol Treatment. 50th Winter Conference on Brain Research, Big Sky, Montana.
18. **Varodayan FP**, Montgomery SE, Roberts AJ, Bajo M, Roberto M. (2016). Alcohol dependence activates microglia and reverses the IL-1 β induced decrease in GABA inhibition of prefrontal cortex pyramidal neurons. 39th Research Society on Alcoholism Annual Meeting, New Orleans, LA. *Alcohol Clin. Exp. Res.* 40, S1, P-254.
19. Bajo M, Herman MA, Khom S, **Varodayan FP**, Montgomery SE, Roberts AJ, Roberto M. (2016) Neuroimmune responses in the mouse central amygdala after chronic ethanol exposure: activation of microglia and IL-1 modulation of GABA transmission. 39th Research Society on Alcoholism Annual Meeting, New Orleans, LA. *Alcohol Clin. Exp. Res.* 40, S1, P-255.
20. **Varodayan FP**, Montgomery SE, Roberts AJ, Bajo M, Roberto M. (2016). Alcohol dependence activates microglia and reverses the IL-1 β induced decrease in GABA inhibition of prefrontal cortex pyramidal neurons. Gordon Research Conference: Alcohol & the Nervous System, Galveston, TX.
21. Parsons LH, Natividad L, Ciccocioppo R, **Varodayan F**, Herman M, Roberto M. (2015). Dysregulated endocannabinoid signaling in the CeA: consequence of chronic alcohol exposure vs. pre-morbid vulnerability factor. 38th Research Society on Alcoholism Annual Meeting, San Antonio, TX. *Alcohol Clin. Exp. Res.* 39, S1, P-689.
22. Sabino V, Iemolo A, Blasio A, **Varodayan F**, Roberto M, Cottone P. (2014). Central Amygdala PACAP in the behavioral stress response. 44th Society for Neuroscience Annual Meeting, Washington, DC. *Soc Neurosci. Abst. Program* #P-350.01.
23. **Varodayan FP**, Roberto M. (2014). Ethanol increases GABA release in the rat central nucleus of the amygdala via L- and P/Q-type calcium channels and calcium-induced calcium release. 37th Research Society on Alcoholism Annual Meeting, Bellevue, WA. *Alcohol Clin. Exp. Res.* 38, S1, P-644.

24. Bajo M, Madamba SG, **Varodayan FP**, Blednov YA, Harris RA, Siggins GR, Roberto M. (2014). Role of IL-1 receptor antagonist in ethanol-induced regulation of the GABAergic transmission in the central amygdala. 37th Research Society on Alcoholism Annual Meeting, Bellevue, WA. *Alcohol Clin. Exp. Res.* 38, S1, P-366.
25. **Varodayan FP**, Roberto M. (2014). L- and P/Q-type calcium channels mediate ethanol enhancement of GABA release in rat central nucleus of the amygdala. Third International Congress on Alcoholism and Stress, Volterra, Italy. *Alcohol*, 48, P-91.
26. Bajo M, Madamba SG, **Varodayan FP**, Blednov YA, Harris RA, Siggins GR, Roberto M. (2014). Role of IL-1 receptor antagonist in ethanol-induced regulation of the GABAergic transmission in the central amygdala. Third International Congress on Alcoholism and Stress, Volterra, Italy. *Alcohol*, 48, P-76.
27. **Varodayan FP**, Roberto M. (2013). Ethanol enhancement of GABA release in the central nucleus of the amygdala is mediated by calcium channels. 43rd Society for Neuroscience Annual Meeting, San Diego, CA. *Soc Neurosci. Abst. Program* #P-155.02.
28. **Varodayan FP**, Harrison NL. (2011). Alcohol differentially regulates Vamp2 and Vamp1 expression in neurons via heat shock factor 1 (HSF1). Gordon Research Conference: Inhibition in the CNS, Waterville, ME.
29. **Varodayan FP**, Harrison NL. (2011). Alcohol induces Vamp2, but not Vamp1, gene expression in neurons via activation of heat shock factor 1 (HSF1). 34th Research Society on Alcoholism Annual Meeting, Atlanta, GA. *Alcohol Clin. Exp. Res.* 35, S1, P-720.
30. **Varodayan FP**, Pignataro L, Harrison NL. (2010). Alcohol and heat shock regulate Synaptotagmin 1 (Syt1) expression in cortical neurons. 33rd Research Society on Alcoholism Annual Meeting, San Antonio, TX. *Alcohol Clin. Exp. Res.* 34, S1, P-270.
31. Pignataro L, **Varodayan FP**, Mamut PL, Tanneholz LE, Harrison NL. (2010). Ethanol activates the heat shock pathway in astrocytes. 33rd Research Society on Alcoholism Annual Meeting, San Antonio, TX. *Alcohol Clin. Exp. Res.* 34, S1, P-273.
32. **Varodayan FP**, Maronski M, Porter BE. (2006). Seizures increase neurogenesis in the dentate gyrus by shortening progenitor cell cycle length. 36th Society for Neuroscience Annual Meeting, Atlanta, GA. *Soc Neurosci. Abst. Program* #P-418.15.
33. Lund IV, **Varodayan F**, Brooks-Kayal AR, Blendy JA, Porter BE. (2005). Increased severity of epilepsy and lack of neuroprotection after SE in CREM/ICER null mice. 59th American Epilepsy Society Annual Meeting, Washington, DC. *Epilepsia* 46, S8, P-2.069.

Teaching and Mentorship Conference Abstracts

1. Sitko AA, **Varodayan FP**, Hill A, Padilla N, Gellman C, Brachman R, Burgos A, Marshall K, Shakman KB, Yu WH, Waites C, Remole KE. (2012). Columbia University Neuroscience Outreach: An expanding program of K-12 neuroscience outreach in the inner city. 42nd Annual Meeting for the Society for Neuroscience, New Orleans, LA. *Soc Neurosci. Abst. Program* #P-29.08SU.
2. Gellman C, Sitko AA, **Varodayan FP**, Burgos A, Deihle D, Remole K, Crumiller M, Pham T, Wu M, Rabinowitz G, Lourdes Martin Hernandez A, Saotome K, Mihali A, Spatzer A, Murray A, Reibstein L, Alamu O, Jensen CL, Rayport S, Yu H. (2012). An inquiry-based neuroscience curriculum emphasizing the scientific method. 42nd Annual Meeting for the Society for Neuroscience, New Orleans, LA. *Soc Neurosci. Abst. Program* #P-29.07SU.

3. Jensen CL, Sitko A, Hill A, Gellman C, McKellar H, **Varodayan F**, Yu WH, Remole KE. (2011). Columbia University Neuroscience Outreach: Successful inner city K-12 neuroscience workshops. 41st Annual Meeting for the Society for Neuroscience, Washington, DC. *Soc Neurosci. Abst. Program* #P-27.20SU.