Stephanie M. Groman, Ph.D.

Curriculum Vitae

Yale University
Department of Psychiatry
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EDUCATION

2013	Ph.D.	Department of Psychology, University of California, Los Angeles
2012	M.A.	Department of Psychology, University of California, Los Angeles
2005	B.S.	Department of Psychology, University of California, Los Angeles

PROFESSIONAL APPOINTMENTS

Associate Research Scientist Department of Psychiatry	Yale University		
Post-doctoral Fellow Department of Psychiatry Advisor: Dr. Jane R. Taylor	Yale University		
	Department of Psychiatry Post-doctoral Fellow		

PUBLICATIONS

Empirical Data Papers

- **Groman S.M.**, Hillmer A., Liu H., Fowles K., Holden D., Morris E.D., Lee D., and Taylor J.R. Dysregulation of decision-making related to mGluR5, but not D₃ receptor, availability following cocaine self-administration in rats. Submitted to *Molecular Psychiatry*.
- **Groman S.M.**, Hillmer A., Liu H., Fowles K., Holden D., Morris E.D., Lee D., and Taylor J.R. Midbrain D3 receptor availability predicts escalation in cocaine self-administration. In press at *Biological Psychiatry*.
- Reed E.J., Uddenberg S., Mathys C.D., Taylor J.R., **Groman S.M.**, and Corlett P.R. Expecting the unexpected: the paranoid style of belief updating across species. Submitted to *Biological Psychiatry*.
- **Groman S.M.**, Keistler, C., Keip A., Hammarlund E., DiLeone R.J., Piitenger C., Lee D., and Taylor J.R. (2019) Orbitofrontal circuits make distinct contributions to flexible decision-making. *Neuron*. [Epub ahead of print].
- Bond C.W., Foscue E., **Groman S.M.**, Trinko J.R., Taylor J.R., and DiLeone R.J. Medial nucleus accumbens projections to the ventral tegmental area control food consumption. Revised manuscript submitted to *Journal of Neuroscience*.
- Gianessi C., **Groman S.M.**, Thompson S.L., Jiang M., van der Stelt M., and Taylor J.R (2019) Endocannabinoid contributions to alcohol habits and motivation: relevance to treatment. *Addiction Biology*. [Epub ahead of print].
- **Groman S.M.**, Massi B., Mathias S.R., Lee D., and Taylor J.R. (2019) Model-free and model-based influences in addiction. *Biological Psychiatry*. 85(11): 936-

- 945.
- **Groman S.M.**, Massi B., Mathias S., Curry D., Lee D., and Taylor J.R. (2019) Neurochemical and behavioral dissections of decision-making in a rodent multi-stage task. *Journal of Neuroscience*. 39(2): 295-306.
- Gianessi C., **Groman S.M.**, and Taylor J.R. (2018) Bidirectional modulation of food habit expression by the endocannabinoid system. *European Journal of Neuroscience*. [Epub ahead of print].
- **Groman S.M.**, Rich K.M., Smith N.J., Lee D., and Taylor J.R. (2017) Chronic exposure to methamphetamine disrupts reinforcement-based decision-making in rats. *Neuropsychopharmacology*. 43(4): 770-780.
- Rapanelli M., Frick L.R., Xu M., **Groman S.M.**, Jindachomthong K., Kamamaki N., Tanahira C., Taylor J.R., and Pittenger C. (2017) Targeted interneuron depletion in the dorsal striatum produces autism-like behavioral abnormalities in male but not female mice. *Biological Psychiatry*. 82(3): 194-203.
- Kaneko G., Sanganahalli B.G., **Groman S.M.**, Wang H., Coman D., Rao J., Herman P., Jiang L., Rich K., de Graaf R.A., Taylor J.R., and Hyder F. (2016) Hypofrontality and posterior hyperactivity observed in early schizophrenia: Multi-modal characterizations by imaging and behavior. *Biological Psychiatry*. 81(6): 503-513.
- **Groman S.M.**, Smith N.J., Petrulli J.R., Massi B., Chen L., Ropchan J., Huang Y., Lee D., Morris E.D., and Taylor J.R. (2016) Dopamine D3 receptor availability is associated with inflexible decision making. *Journal of Neuroscience*.36(25):6732-41.
- Elsworth J.D., Jentsch J.D., **Groman S.M.**, Roth R.H., Redmond D.E., and Leranth C. (2015) Low circulating levels of bisphenol-A induce cognitive deficits and loss of asymmetric spine synapses in the dorsolateral prefrontal cortex and hippocampus of adult male monkeys. *Journal of Comparative Neurology*, 523(8): 1248-57.
- **Groman S.M.**, James A.S., Seu E., Tran S., Clark T.A., Harpster S.N., Crawford M., Burtner J., Feiler K., Roth R.H., Elsworth J.D., London E.D., and Jentsch J.D. (2014) In the blink of an eye: Relating positive-feedback sensitivity to striatal dopamine D2 receptors through blink rate. *Journal of Neuroscience*, 34(43):14443-54.
- Elsworth J.D., **Groman S.M.**, Jentsch J.D., Leranth C. Redmond D.E., and Roth R.H. (2014) Primate phencyclidine (PCP) model of schizophrenia: sex-specific effect on cognition, spine synapse number and dopamine turnover in dorsolateral prefrontal cortex. *International Journal of Neuropsychopharmacology*. 18(6).
- Seu, E.*, **Groman S.M.***, Arnold, A.P., and Jentsch J.D. (2014) Sex chromosome complement influences reward sensitivity in mice. *Genes, Brain and Behavior*, 13(6):527-34. * indicates equal author contribution.
- **Groman S.M.***, Morales A.M.*, Lee B., London E.D., and Jentsch J.D. (2013) Increased gray matter volume in the putamen after chronic escalating methamphetamine exposure co-varies with inhibitory control in vervet monkeys. * indicates equal author contribution. *Psychopharmacology*, 229(3):527-38.
- Jarcho J.M., Feier N.A., Bert A., Labus J.A., Lee M., Stains J., Ebrat B., **Groman S.M.**, Tillisch K., Brody A.L., London E.D., Mandelkern M.A., and Mayer E.A. (2013) Diminished neurokinin-1 receptor availability in patients with two forms of chronic visceral pain. *Pain*, 154(7):987-96.
- **Groman S.M.**, James A.S., Seu E., Crawford M.A., Harpster S., and Jentsch J.D. (2013) Monoamine levels within the orbitofrontal cortex and putman interact to predict reversal learning performance. *Biological Psychiatry*. 73(8):756-62.
- Groman S.M.*, Lee B.*, Seu E., James A.S., Feiler K., London E.D., and Jentsch J.D.

- (2012) Dysregulation of D2-Mediated dopamine transmission in monkeys after chronic escalating methamphetamine exposure. *Journal of Neuroscience.*, 32:5843-52. * indicates equal author contribution.
- Elsworth J.D., **Groman S.M.**, Jentsch J.D., Valles R., Shahid M., Wong E. Martson H., and Roth R.H. (2011) Asenapine effects on cognitive and monoamine dysfunction elicited by subchronic phencyclidine administration. *Neuropharmacology*. 62:1442-52.
- **Groman S.M.**, Lee B., London E.D., Mandelkern M., James A.S., Feiler K., Rivera R., Dahlbom M., Sossi V., Vandervoort E., and Jentsch J.D. (2011) Dorsal striatal D2-like receptor availability co-varies with sensitivity to positive reinforcement during discrimination learning. *Journal of Neuroscience*., 20:7291-7299.
- Jentsch, J.D., Woods, J.A., **Groman, S.M.**, and Seu, E. (2010) Behavioral characteristics and neural mechanisms mediating performance in a rodent version of the Balloon Analogue Risk Task. *Neuropsychopharmacology*. 35:1797-806.
- James A.S.*, **Groman S.M.***, Seu E., Jorgensen M., Fairbanks L.A. and Jentsch J.D. (2007) Dimensions of impulsivity are associated with poor spatial working memory performance in monkeys. *Journal of Neuroscience*., 27: 14358-64. * indicates equal author contribution.
- Lee B., **Groman S.M.**, London E.D. and Jentsch, J.D. (2007) Dopamine D2/D3 receptors play a specific role in the reversal of a learned visual discrimination in monkeys. *Neuropsychopharmacology*., 32: 2125-2134.

Review Articles

- Feeney E.J., **Groman S.M.**, Taylor J.R., and Corlett P.R. (2017) Explaining delusions: reducing uncertainty through basic and computational neuroscience. Schizoophrenia Bulletin, 43(2): 263-272.
- Voon V., Reiter A., Sebold M., and **Groman S**. (2017) Model-based control in dimensional psychiatry. Biological Psychiatry. 82: 391-400.
- Jentsch J.D., Ashenhurst J.R., Cenvantes M.C., **Groman S.M.**, James A.S., and Pennington Z.T. (2014) Dissecting impulsivity and its relationships to drug addictions. *Annals of the New York Academy of Sciences*, 1327(1):1-26.
- **Groman, S.M.** and Jentsch, J.D. (2013) Identifying the molecular basis of inhibitory control deficits in addictions: Neuroimaging in non-human primates. *Current Opinion on Neurobiology*, 23(4):625-31.
- Dean, A.K., **Groman, S.M.**, Morales, A.M., and London, E.D. (2012) An evaluation of evidence that methamphetamine abuse causes cognitive decline in humans. Neuropsychopharmacology. 38:259-74.
- **Groman, S.M.** and Jentsch, J.D. (2011) Cognitive control and the D2-like receptor: A dimensional understanding of addiction. *Anxiety and Depression*. 32:5843-52.
- **Groman, S.M.**, James, A.S., and Jentsch, J.D. (2008) Poor response inhibition: At the nexus between substance abuse and attention deficit/hyperactivity disorder. *Neuroscience and Biobehavioral Reviews*. 33:690-8.

Commentaries

Groman, S.M. (2019) Investigating the computational underpinnings of addiction. Neuropsychopharmacology. [Epub ahead of print].

Book Chapters

- Groman S.M. The neurobiology of impulsive decision making and reinforcement learning in non-human animals. Recent advances in research on impulsivity and impulsive behaviors. Edited by Harriet De Wit and J. David Jentsch. Published by Springer, expected 2020.
- Jentsch J.D., Groman S.M., James A.S., Seu E. Monoaminergic regulation of cognitive

control in laboratory animals. *Inhibitory Control and Drug Abuse Prevention: From Research to Translation*. Edited by Michael Bardo, Elaine Fishbein and Richard Milich. Published by Springer, 2011.

Original Papers in Preparation

- **Groman S.M.**, Carlyle B., Wilson R., Nairn A., and Taylor J.R. Protein targets mediating addiction susceptibility in rats. *In preparation*.
- **Groman S.M.**, Feeney E., Ofray D., Corlett P., and Taylor J.R. Dissociating the reinforcement learning mechanisms mediating model-free and model-based influences in reversal learning. *In preparation*.
- Keip A.J., Moin Afshar N., Taylor J.R., and **Groman S.M.** Drug-induced disruptions in negative outcome updating are related to compulsive drug taking. *In preparation*.
- Moin Afshar N.*, Keip A.J.*, Trinko R.J., DiLeone R.J., and **Groman S.M.** Dietary restriction of Vitamin D during perinatal development disrupts adolescent decision making. *In preparation*. * indicates equal author contribution.
- Moin Afshar N., Keip A.J., Lee D., Taylor J.R., and **Groman S.M.** Proteomic correlates of adolescent decision making in the rat. *In preparation*.

AWARDS AND HONORS

- **2017** Winter Conference on Brain Research Travel Fellowship Travel award to attend and present at the WCBR 2018 conference (\$1,000) Yale University
- 2015 American College of Neuropsychopharmacology Travel Award Travel award to attend the ACNP conference (\$2,000) Yale University

 Early Career Investigator Award Travel award to attend the College on Problems of Drug Dependence conference (\$1,000) Yale University
- 2013 UCLA Psychology Department Joseph A. Gengerelli Award for Dissertation of the Year (\$500) UCLA
- **2012** Travel Award to attend the International Behavioral Neuroscience Society conference (\$1,000)
 - Samuel Eiduson Student Lectureship Award (\$500) UCLA
 - NIDA Director's Travel Award to attend the College on Problems of Drug Dependence conference (\$1,000) UCLA
 - Scholarship to attend the Cold Spring's Harbor Laboratory Summer Course "Cellular Biology of Addiction" (\$1,900) UCLA
 - UCLA BRI/Semel Institute Neuroscience Graduate Student Travel Award (\$500) UCLA APF/COGDOP Clarence J. Rosecrans Scholarship (\$2,000) UCLA
 - American Psychology Association Dissertation Research Award (\$1,000), UCLA
- 2011 Travel Award to attend the National Institute of Drug Abuse mini-convention "Frontiers in Addiction Research" (\$750) - UCLA
- 2010 Charles Drew Substance Abuse Best Student Speaker Award UCLA
- **2009** Brain, Behavior and Chemistry: Translational Research in Addiction Travel Award (\$550) UCLA
 - Brain, Behavior and Chemistry: Best Student Oral Presentation (\$100) UCLA BRI/Semel Institute Neuroscience Graduate Student Travel Award (\$500) UCLA

GRANTS AND FELLOWSHIPS

R21 MH120615 07/01/19-06/31/21

Identification of a non-invasive neuroimaging biomarker of prenatal synaptic

development

Role: PI

Annual total costs: \$137,500

R21 MH120799 07/01/19-06/31/21

Explaining paranoia: computational modeling of belief updating in the general population

Role: Co-l

Annual total costs: \$137,500

Yale/NIDA Proteomics Pilot Grant (Parent grant: P30 DA 018343)

06/30/19-06/30/21

A 'targeted' approach to identify the proteins underlying the biobehavioral mechanisms of addiction

Role: Pl

Annual total costs: \$7,500

Brain and Behavior Research Foundation Early Investigator Award

NCE

Dopamine signaling and decision-making in an animal model of schizophrenia

Role: PI

Annual total costs: \$35,000

Pending funding

K01 DA048126 07/1/20-6/30/25

Molecular mechanisms of susceptibility to drug use

Role: PI

Percentile: 1% Impact score: 20 Pending council meeting: 6/2020

U01 DA051977 07/01/20-06/30/25

Genomic mechanisms of decision making and opioid use trajectories in the rat

Role: PI

Pending IRG review (2/2020)

R21 AG 09/01/20-08/31/22

Whole brain in vivo characterization of synaptic density across the lifespan of the rat.

Role: PI

Pending IRG review (TBD)

Past funding

Center for the Translational Neuroscience of Alcoholism (CTNA) Pilot Grant (Parent grant: P50

AA 012870)

1/30/16 - 1/29/17

Reinforcement-learning mechanisms in alcohol-taking behaviors

Role: PI

Total costs: \$50,000

T32 Fellowship – Biological Sciences Training Program (Parent grant: MH 014276)

4/1/13-3/30/15

Neurobiology of decision-making in mental illness

Role: Post-doctoral fellow

Consortium for Neuropsychiatric Phenomics pilot project award (Parent grant: P50-

MH077248) 6/08-6/09

Mechanistic studies related to D2-receptor signaling in impulsivity

Role: PI

Total costs: \$20,000

Consortium for Neuropsychiatric Phenomics pilot project award (Parent grant: P50-

MH077248) 6/08-6/09

Assessment of D1 and D2 receptors in the brain and their association with behavioral

phenotypes Role: Co-Pl

Total costs: \$38,800

F31 DA 028812 4/1/10 – 3/31/13

Impulsivity and D2 receptor function: behavioral and PET correlates

Role: PI

Total costs: \$104,328

INVITED TALKS

2020 Elucidating the role of OFC circuits in decision making. BRAIN investigators meeting. Alexandria, VA.

Role of Model-Free and Model-Based Reward Learning in Drug Self-Administration.

Neurobiology of Drug Addiction Gordon Research Conference. Newry, ME.

Neural circuits of reinforcement learning and compulsive drug use. International Society for Research on Impulsivity. New York, New York.

Understanding the role of OFC circuits in reinforcement learning and addiction. Division of Substance Abuse Seminar, Veterans Administration Connecticut Health Care System, New Haven, Connecticut.

A biobehavioral approach for elucidating the mechanisms of addiction. Medical Discovery Team on Addiction seminar, University of Minnesota Twin Cities, Minneapolis, Minnesota.

A biobehavioral approach for elucidating the mechanisms of addiction. Learning and Behavior Seminar, University of California, Los Angeles.

A biobehavioral approach for elucidating the mechanisms of addiction. Behavioral Pharmacology Research Unit Addiction Research Seminar, Johns Hopkins University, Baltimore, Maryland.

Decision-making in addiction: dissociating susceptibility from consequence. Mind/Brain Institute, Johns Hopkins University, Baltimore, Maryland.

A biobehavioral approach for elucidating the mechanisms of addiction. University of Texas at Dallas, Dallas, TX.

2019 Decision-making in addiction. Neuroscience and Behavior seminar, University of California, Santa Barbara, California.

Insights into the role of orbitofrontal circuits in reinforcement-learning and addiction-relevant mechanisms. Quadrennial meeting on OFC Function. Paris, France.

2018 Behavioral and protein correlates of addiction-relevant behaviors. Psychology and Biology Joint Seminar, Hofstra University, New York.

Model-free and model-based influences in addiction-like behaviors in rats. Cosyne, Breckenridge, Colorado.

- Identifying novel behavioral and protein biomarkers in addiction-related behaviors. Winter Conference on Brain Research, Whistler, British Columbia, Canada.
- **2017** Disentangling cause from consequence: Understanding the decision-making processes underlying addiction. Society for Biological Psychiatry, San Diego, CA.
- 2016 Corticostriatal mechanisms underlying individual differences in decision-making and addiction. The Brain Conferences: New Insights into Psychiatric Disorders through Computational, Biological, and Developmental Approaches. Copenhagen, Denmark. Uncovering the role of meso-striatal dopamine D2 and D3 receptors in decision-making. Dopamine, Vienna, Austria.
- 2015 Reversal learning is predictive of and affected by cocaine self-administration: Dissecting decision-making processes with computational models. College on Problems of Drug Dependence, Phoenix AZ.
- 2012 Differences in feedback-based learning and prefrontal dopamine utilization are associated with variation in the DRD4 gene. International Behavioral Neuroscience Society, Kailua-Kona, HI.
- 2010 Variation in Striatal D2-like Receptor Availability is Related to Individual Differences in Reversal Learning Performance and Feedback Sensitivity in Monkeys. Charles Drew University of Medicine and Science, Los Angeles, CA.
- 2009 Differences in D2 receptor availability in high and low impulsive monkeys. College on Problems of Drug Dependence, Reno, NV.
 Differences in D2 receptor availability and behavioral flexibility as a function of trait impulsivity in monkeys. Behavior, Brain and Chemistry: Translational Research in Addiction, San Antonio, TX.
- **2008** Escalating dose of methamphetamine induces deficits in response inhibition in non-human primates. College on Problems of Drug Dependence, San Juan, Puerto Rico.

CONFERENCE ACTIVITY

Select Papers Presented

- Rossano S., Toyonaga T., **Groman S.M.**, Li S., Berg E., Huang Y., Tarantal A., and Carson R.E. Fetal imaging of synaptic vesicle glycoprotein 2A using ¹⁸F-SynVesT-1 PET on the primate miniEXPLORER. International Symposium of Functional Neuroreceptor Mapping of the Living Brain (Montreal, Canada, June 2020).
- Toyonaga T., Rossano S., Fowles K., Holden D., Naganawa M., Gallezot J., Mulnix T., **Groman S.M.**, and Carson R.E. Synaptogenesis during brain development: A ¹¹C-UCB-J PET study in adolescent rats. Society of Nuclear Medicine and Molecular Imaging (New Orleans, LA, June 2020).
- Moin Afshar N., Keip A.J., Lee D., Taylor J.R., and **Groman S.M.** Decision making improves across adolescent development in the rat: Implications for orbitofrontal circuit development. Society of Biological Psychiatry (New York, NY, May 2020).
- **Groman S.M.**, Liu H., Hillmer A., Fowles K., Holden D., Esterlis I., Morris E.D., Lee D., and Taylor J.R. Distinct roles of dopamine D3 and mGlu5 receptors in addiction-relevant behaviors in the rat. American College of Neuropsychopharmacology (Orlando, FL, December 2019).
- Moin Afshar N., Keip A.J., Lee D., Taylor J.R., and **Groman S.M.** Decision making improves across adolescent development in the rat: Implications for orbitofrontal circuit development. Quadrennial meeting on OFC Function (Paris, France, November 2019).
- Keip A.J., Taylor J.R. and **Groman S.M.** Unidirectional ablation of orbitofrontal-nucleus accumbens projections decreases sensitivity to negative outcomes in methamphetamine self-administering rats. Society for Neuroscience (Chicago, IL

- October 2019).
- **Groman S.M.,** Keip A.J., DiLeone R.J., Pittenger C.P., Lee D., and Taylor J.R. Orbitofrontal circuits influence multiple reinforcement learning processes. Society for Neuroscience (Chicago, IL October 2019).
- Thompson S.L., **Groman S.M.**, Meyers J.H., Huang G., and Taylor J.R. Role for the gut microbiome in decision-making in mice. Society for Neuroscience (Chicago, IL October 2019).
- Keip A.J., **Groman S.M.**, Carlyl B.C., Wilson R.S., Nairn A.C., and Taylor J.R. Identification of proteins in the orbitofrontal cortex underlying addiction vulnerability and consequence in rats. Neuron Conference at Quinnipiac University (North Haven CT, February 2019).
- **Groman S.M.**, Carlyle B.C., Wilson R., Nairn A., and Taylor J.R. Dissociating the signaling mechanisms underlying addiction vulnerability from consequence of drug use. American College of Neuropsychopharmacology (Hollywood FL, December 2018).
- **Groman S.M.**, Keistler C.K., and Taylor J.R. Disentangling the role of specific orbitofrontal circuits in decision-making. American College of Neuropsychopharmacology (Palm Springs CA, December 2017).
- **Groman S.M.**, Massi B., Mathias S., Lee D., and Taylor J.R. Model-free and model-based reinforcement learning in addiction-related behaviors. Society for Neuroscience (Washington DC, November 2017).
- **Groman S.M.**, Keistler C., and Taylor J.R. Uncovering the role of specific orbitofrontal circuits in decision-making. Society of Biological Psychiatry (San Diego, 2017).
- Hare, B.D., **Groman S.M.**, Genessi C.A., Taylor J.R., and Duman R.S. Dissociating the serotonergic and glutamatergic effects of ketamine on attentional performance. Society for Neuroscience. (San Diego, November 2016).
- Taylor J.R., **Groman S.M.**, Massi B., and Lee D. Parsing decision-making vulnerability factors for addiction from drug-induced dysfunction in rat models. Addiction in theory. (London, May 2016).
- Rich K.M., **Groman S.M.**, Frick L.R., Morales A.M., Pittinger C., and Taylor J.R. An escalating dose of methamphetamine impairs reversal-learning performance: a biobehavioral analysis. NEURON conference. (Quinnipiac University, February 2016).
- **Groman S.M.**, Smith N.J., Petrulli J.R., Chen L., Massi B., Lee D., Morris E.D., and Taylor J.R. Midbrain D3 receptor availability is related to flexible decision-making processes in rats. *Society for Neuroscience*. (Chicago, October 2015).
- **Groman S.M.**, Massi B., Chen L., Lee D., and Taylor J.R. Lesions of the orbitofrontal cortex impair model-based learning in a rodent multi-stage decision-making task. *Society of Biological Psychiatry*. (Toronto, Canada, May 2015).
- **Groman S.M.**, Chen L., Smith N.J., Lee D., and Taylor J.R. Dorsomedial striatum lesions disrupt the balance between model-free and model-based learning in a multistage decision-making task in rats. *Society for Neuroscience*. (Washington D.C., November 2014).
- **Groman S.M.**, Magana L.A., Clark T.A., Pennington Z.T., James A.S., and Jentsch J.D. Spontaneous eye blink rates strongly correlate with in vivo imaging-based measures of striatal dopamine D2-like receptors. *Society for Neuroscience*. (San Diego, November 2013).
- **Groman S.M.**, Clark T.A., Tran S., Crawford M.A., Harpster S.N., and Jentsch J.D. In vivo measures of dopamine D2-like receptor availability predict individual differences in spontaneous eye blink rates. *Society for Neuroscience*. (New Orleans, October 2012).
- Groman S.M., Lee B., Seu E., James A.S., London E.D., Mandelkern M.A., and

- Jentsch J.D. Escalating exposure to methamphetamine produces persistent alterations in dopaminergic biomarkers and inhibitory control in monkeys. *College on Problems of Drug Dependence*. (Palms Springs, CA, June 2012).
- **Groman S.M.**, Burtner J.L., Feiler K., Rivera R., London E.D. and Jentsch J.D. In vivo measures of D2-like, but not D1-like, receptor availability correlate with eye blink rate in monkeys. *European Behavioral Pharmacology Society*. (Amsterdam, Netherlands, August 2011).
- **Groman, S.M.**, Lee, B., Mandelkern, M., Dahlbom, M., Feiler, K., Rivera, R., London, E.D., and Jentsch, J.D. Sensitivity to Feedback in Discrimination Learning is Related to D2/D3 Receptor Availability in Monkeys. *Society for Neuroscience*. (San Diego, November 2010).
- **Groman, S.M.**, Lee, B., Rivera, R. London, E.D., and Jentsch, J.D. Greater Striatal D2-like Receptor Availability in High Impulsive Non-Human Primates. *Society for Neuroscience*. (Chicago, IL, October 2009).
- **Groman, S.M.**, James, A.S., Fairbanks, L.A., Seu, E., and Jentsch, J.D. Behavioral impulsivity is predictive of the reversal, but not acquisition or retention, of a visual discrimination in juvenile vervet monkeys. *Society for Neuroscience*. (Washington DC, November 2008).
- James, A.S., **Groman, S.M.**, Seu, E., Jorgensen, M., Fairbanks, L.A., and Jentsch, J.D. Trait impulsiveness associates with cognitive deficits in non-human primates. *College on Problems of Drug Dependence*. (San Juan, PR, June 2008).
- Lee, B., **Groman, S.M.**, Seu, E., London, E.D., and Jentsch, J.D. Nonhuman primate model for methamphetamine-induced deficits in response inhibition: preliminary report. *Society for Neuroscience*. (San Diego, CA, November 2007).
- **Groman, S.M.**, James, A.S., Fairbanks LA and Jentsch JD. High behavioral impulsivity is associated with poor spatial working memory in adolescent vervet monkeys. *Society for Neuroscience*. (San Diego, CA, November 2007).

DEPARTMENTAL TALKS

- **2018** Biobehavioral mechanisms underlying decision making in addiction. Psychiatry Department, Yale University.
- 2016 Reinforcement learning in addiction. Psychiatry Department. Yale University.
- 2015 Identifying the unique contributions of the dopamine D3 receptor in addiction-like behaviors. Psychiatry Department, Yale University
- **2014** Translational techniques for assessing decision-making processes in rats. Psychiatry Department, Yale University.
- 2013 The dopamine D2-like receptor: At the nexus between self-control and addiction. Psychiatry Department, Yale University.
- 2012 Dopamine D2-like Receptors: At the nexus between self-control and addiction. Brain Research Institute, University of California, Los Angeles

TEACHING EXPERIENCE

Teaching Assistant

Psychobiology, University of California, Los Angeles Stress and Bodily Disorders, University of California, Los Angeles Fear and Anxiety, University of California, Los Angeles Behavioral neuroscience laboratory, University of California, Los Angeles

Guest Lecturer

Drugs of Abuse: Translation Neurobiology, University of California, Los Angeles

PROFESSIONAL ACTIVITIES

Manuscript review

International Journal of Neuropsychopharmacology, Plos One, Drug and Alcohol Dependence, Journal of Neurophysiology, Journal of Neuroscience, Psychopharmacology, Neuropsychopharmacology, Cerebral Cortex, Biological Psychiatry

Editorial

Guest Editor for PLOS One collection of papers Neuroscientific Basis of Reward and Decision-making

Consulting Editor, Behavioral Neuroscience