

CURRICULUM VITAE
JOSEPH PROSEN SCHACHT, PH. D.

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Education

Postdoctoral

Medical University of South Carolina, Charleston, SC, 2010-2015
Mentor: Raymond F. Anton, M.D.

Internship

Charleston Consortium Psychology Internship Program, Charleston, SC
2009-2010 (American Psychological Association-accredited)

Graduate

University of Colorado, Boulder, CO
Ph. D., Clinical Psychology (APA-accredited) and Neuroscience, 2010
M.A., Psychology, 2006
Mentor: Kent E. Hutchison, Ph.D.

Undergraduate

University of Michigan, Ann Arbor, MI
A.B. with Highest Distinction, with Honors in Psychology, 2004
Majors: Psychology and Philosophy; Minor: Germanic Studies

Professional Licensure

2019-present **Clinical Psychologist**, Colorado #PSY.0005078
2013-2019 **Clinical Psychologist**, South Carolina #1273 (inactive)

Academic Appointments

2019- **Associate Professor (tenure-track)**, Department of Psychiatry, University of Colorado School of Medicine, Aurora, CO.

2019- **Adjunct Associate Professor**, Department of Psychiatry & Behavioral Sciences, Medical University of South Carolina, Charleston, SC.

2019 **Associate Professor (tenure-track)**, Department of Psychiatry & Behavioral Sciences, Medical University of South Carolina, Charleston, SC.

2015-2019 **Assistant Professor (tenure-track)**, Department of Psychiatry & Behavioral Sciences, Medical University of South Carolina, Charleston, SC.

2011-2012 **Adjunct Faculty**, Department of Psychology, College of Charleston, Charleston, SC.

2010-2015 **Postdoctoral Fellow**, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC.

- 2009-2010 **Pre-doctoral Intern**, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC.
- 2008-2009 **Pre-doctoral Fellow**, Laboratory of Imaging Genomics and Neurodiagnostic Discovery, The Mind Research Network, Albuquerque, NM.
- 2004-2008 **Pre-doctoral Fellow**, Colorado Alcohol and Smoking Laboratory, Department of Psychology and Neuroscience, University of Colorado, Boulder, CO.
- 2002-2004 **Research Assistant**, Molecular Genetics Laboratory (PI: David C. Kohrman, Ph.D.), Kresge Hearing Research Institute, Department of Otolaryngology, University of Michigan School of Medicine, Ann Arbor, MI.
- 2002-2004 **Research Assistant**, Cross-Cultural Cognitive Bias Laboratory (PI: Edward C. Chang, Ph.D.), Department of Psychology, University of Michigan, Ann Arbor, MI.

Honors and Awards

- 2022 **Associate Member**, American College of Neuropsychopharmacology (ACNP)
- 2018 **Travel Award**, American College of Neuropsychopharmacology (ACNP)
- 2016 **Travel Award**, International Society for Biomedical Research on Alcoholism (ISBRA)
- 2014-2016 **Junior/Senior Scholar**, Alcohol Medical Scholars Program (Director: Marc A. Schuckit, M.D.)
- 2014 **Enoch Gordis Research Award Finalist (Post-doctoral)**, Research Society on Alcoholism
- 2011-2014 **Junior Investigator Travel Award**, Research Society on Alcoholism
- 2012 **Memorial Award**, Research Society on Alcoholism
- 2012 **Young Investigator Travel Award**, International Behavioural and Neural Genetics Society
- 2011 **Summer Fellowship**, UCLA Advanced Neuroimaging Training Program
- 2010 **Scientist-Practitioner Award**, Charleston Consortium Psychology Internship Program
- 2010 **Enoch Gordis Research Award Finalist (Pre-doctoral)**, Research Society on Alcoholism
- 2010 **Student Merit Travel Award**, Research Society on Alcoholism
- 2006-2009 **Ruth L. Kirchstein National Research Service Award**, National Institute on Drug Abuse
- 2004-2005 **University Fellowship**, University of Colorado, Boulder
- 2004 **Phi Beta Kappa**, University of Michigan

Grants and Contracts

Current

- 2021-2022 **Principal Investigator**, NIAAA 75N94021F00002. *Alcohol Cue Human Laboratory Study Testing ASP-8062*. Total direct costs = \$326,004.
- 2019-2024 **Principal Investigator**, NIAAA R01 AA027765. *A pharmacogenetic human laboratory investigation of brexpiprazole in Alcohol Use Disorder*. Total direct costs = \$1,786,101.
- 2019-2024 **Principal Investigator**, NIAAA R01 AA026859. *COMT inhibition as a potential therapeutic target among individuals with comorbid Alcohol Use Disorder and Attention-Deficit/Hyperactivity Disorder*. Total direct costs = \$1,141,183.
- 2021-2028 **Co-Investigator**, NIAAA 75N94021D00016. *NIAAA Medications Development Clinical Investigations Network for the Treatment of Alcohol Use Disorder – Clinical Sites*. Total direct costs = \$254,060.

Past

- 2016-2020 **Co-Principal Investigator**, NIAAA P50 AA010761. Charleston Alcohol Research Center Research Component 2. *Effects of Cortical Dopamine Regulation on Drinking, Craving, and Cognitive Control*. (Center PI: Howard C. Becker). Total direct costs for component = \$724,870.
- 2018-2020 **Co-Principal Investigator**, Laboratorio Farmaceutico CT contract. *Effect of GET-73 on magnetic resonance spectroscopy measure of central glutamate and GABA and fMRI activation in non-treatment-seeking alcohol-dependent individuals*. (Co-PIs: Raymond F. Anton and James J. Prisciandaro). Total direct costs = \$308,519.
- 2018-2019 **Principal Investigator**, NIAAA HHSN271201500004I. *Alcohol Cue Human Laboratory Study Testing ANS-6637*. Total direct costs = \$433,912.
- 2015-2019 **Principal Investigator**, NIAAA R00 AA021419. *Neural Connectivity and the Transition to Alcohol Dependence*. Total direct costs for R00 phase = \$499,584.
- 2018-2019 **Principal Investigator**, MUSC Center for Genomic Medicine Pilot Grant. *A pilot study of DNA methylation as a pharmacogenetic predictor of treatment response in AUD*. Total direct costs = \$75,000.
- 2018 **Consultant**, NIAAA R21 AA026129. *A human laboratory study of N-acetylcysteine for Alcohol Use Disorder*. (PI: William W. Stoops).
- 2015-2016 **Co-Principal Investigator**, NIAAA Human Laboratory Paradigms (HLAB) Development Contract HHSN275201500004I. (Co-PI: Raymond F. Anton). Total direct costs = \$5,000.
- 2014-2015 **Co-Investigator**, Administrative Supplement to Promote Collaborative Research on Addiction at NIH (administrative supplement to NIAAA P50 AA010761). *Comorbidity of Nicotine and Alcohol Use: Basic Mechanisms and Effects of Varenicline* (PI: Howard C. Becker). Total direct costs = \$100,000.
- 2013-2015 **Principal Investigator**, NIAAA K99 AA021419. *Neural Connectivity and the Transition to Alcohol Dependence*. Total direct costs for K99 phase = \$193,897.
- 2013-2014 **Principal Investigator**, Charleston Alcohol Research Center Pilot Project (sub-award from NIAAA P50 AA010761). *Resting State Neural Connectivity and GABA/Glutamate Balance in Alcohol Dependence* (Co-PI: James J. Prisciandaro). Total direct costs = \$25,000.
- 2009-2013 **Pre- (2009-2010) and Postdoctoral (2010-2013) Fellow**, NIAAA T32 AA007474. *Training in Alcohol Research* (PI: John J. Woodward).
- 2006-2009 **Principal Investigator**, NIDA National Research Service Award F31 DA021496. *A Transdisciplinary Approach to Cannabis Addiction*. Total direct costs = \$75,993.

Publications

Peer-reviewed journal articles ($n = 35$; $h\text{-index} = 19$) *indicates a trainee

1. **Schacht, J. P.**, Hoffman, M., Im., Y., Voronin, K. E., Book, S. W., & Anton, R. F. (in press). Effects of pharmacological and genetic regulation of COMT signaling in Alcohol Use Disorder: A randomized, placebo-controlled trial of tolcapone. *Neuropsychopharmacology*.

2. **Schacht, J. P.**, Hoffman, M., Chen, B. H., & Anton, R. F. (2022). Epigenetic moderators of naltrexone efficacy in reducing heavy drinking in Alcohol Use Disorder: A randomized trial. *The Pharmacogenomics Journal*, 22, 1-8.
3. Ekhtiari H., ... **Schacht, J.P.**, et al. (2022). A methodological checklist for fMRI drug cue reactivity studies: development and expert consensus. *Nature Protocols*, 17, 567-595.
4. Ellingson, J. M., Hinckley, J. D., Ross, J. M., **Schacht, J. P.**, Bidwell, L. C., Bryan, A. D., Hopfer, C J., Riggs, P., & Hutchison, K. E. (2021). The Neurocognitive Effects of Cannabis Across the Lifespan. *Current Behavioral Neuroscience Reports*, 8, 124-133.
5. Burnette, E. M., Grodin, E. N., **Schacht, J. P.**, & Ray, L. A. (2021). Clinical and neural correlates of reward and relief drinking. *Alcoholism: Clinical & Experimental Research*, 45, 194-203.
6. Anton, R. F., Voronin, K. E., Book, S. W., Latham, P. K., Randall, P. K., Glen, W. B., Hoffman, M., & **Schacht, J. P.** (2020). Opioid and dopamine genes interact to predict naltrexone response in a randomized Alcohol Use Disorder clinical trial. *Alcoholism: Clinical & Experimental Research*, 44, 2084-2096.
7. Hartwell, E. E., Feinn, R., Morris, P., Gelernter, J., Krystal, J., Arias, A. J., Hoffman, M., Petrakis, I., Gueorguieva, R., **Schacht, J. P.**, Oslin, D., Anton, R. F., & Kranzler, H. R. (2020). Systematic review and meta-analysis of the moderating effect of rs1799971 in *OPRM1*, the mu-opioid receptor gene, on response to naltrexone treatment of Alcohol Use Disorder. *Addiction*, 115, 1426-1437.
8. Prisciandaro, J. J., **Schacht, J. P.**, Prescott, A. P., Brenner, H. M., Renshaw, P. F., Brown, T. R., & Anton, R. F. (2020). Intraindividual changes in brain GABA, glutamate, and glutamine levels following short-term monitored abstinence from alcohol in treatment-naïve individuals with Alcohol Use Disorder and light drinkers. *Addiction Biology*, 25, e12810.
9. Karoly, H. C.*, **Schacht, J. P.**, Jacobus, J., Meredith, L. R., Taylor, C. T., Tapert, S. F., Gray, K. M., & Squeglia, L. M. (2019). Preliminary evidence that computerized approach avoidance training is not associated with changes in fMRI cannabis cue reactivity in non-treatment-seeking adolescent cannabis users. *Drug and Alcohol Dependence*, 200, 145-152.
10. Karoly, H. C.*, **Schacht, J. P.**, Meredith, L. R., Jacobus, J., Tapert, S. F., Gray, K. M., & Squeglia, L. M. (2019). Investigating a novel fMRI cannabis cue reactivity task in youth. *Addictive Behaviors*, 89, 20-28.
11. Prisciandaro, J. J., **Schacht, J. P.**, Prescott, A. P., Brenner, H. M., Renshaw, P. F., Brown, T. R., & Anton, R. F. (2019). Evidence for a unique association between fronto-cortical glycine levels and recent heavy drinking in treatment-naïve individuals with Alcohol Use Disorder. *Neuroscience Letters*, 706, 207-210.
12. **Schacht, J. P.**, Anton, R. F., McNamara, P. J., Im, Y., & King, A. C. (2019). The dopamine transporter VNTR polymorphism moderates the relationship between acute response to alcohol and future Alcohol Use Disorder symptoms. *Addiction Biology*, 24, 1109-1118.
13. Prisciandaro, J. J., **Schacht, J. P.**, Prescott, A. P., Renshaw, P. F., Brown, T. R., & Anton, R. F. (2019). Differential brain glutamate, GABA, and glutamine levels and associations with recent heavy drinking in treatment naïve individuals with Alcohol Use Disorder versus social drinkers. *Alcoholism: Clinical & Experimental Research*, 43, 221-226.

14. **Schacht, J. P.,** Voronin, K. E., Randall, P. K., & Anton, R. F. (2018). Dopaminergic genetic variation influences aripiprazole effects on alcohol self-administration and the neural response to alcohol cues in a randomized trial. *Neuropsychopharmacology*, 43, 1247-1256.
15. Anton, R. F., Latham, P. K., Voronin, K. E., Randall, P. K., Book, S. W., Hoffman, M., & **Schacht, J. P.** (2018). Nicotine use/smoking is associated with the efficacy of naltrexone in the treatment of alcohol dependence. *Alcoholism: Clinical & Experimental Research*, 42, 751-760.
16. Nguyen-Louie, T. T., Simmons, A. N., Squeglia, L. M., Infante, A. M., **Schacht, J. P.,** & Tapert, S. F. (2018). Earlier alcohol use onset prospectively predicts changes in functional connectivity. *Psychopharmacology*, 235, 1041-1054.
17. **Schacht, J. P.,** Randall, P. K. Latham, P. K., Voronin, K. E., Book, S. W., Myrick, H., & Anton, R. F. (2017). Predictors of naltrexone response in a randomized trial: Reward-related brain activation, *OPRM1* genotype, and smoking status. *Neuropsychopharmacology*, 42, 2640-2653.
18. Anton, R. F., **Schacht, J. P.,** Voronin, K. E., Randall, P. K. (2017). Aripiprazole suppression of drinking in a clinical laboratory paradigm: Influence of impulsivity and self-control. *Alcoholism: Clinical & Experimental Research*, 41, 1370-1380.
19. **Schacht, J. P.** (2016). *COMT* val158met moderation of dopaminergic drug effects on cognitive function: A critical review. *The Pharmacogenomics Journal*, 16, 430-438.
20. Adams, Z. W., **Schacht, J. P.,** Randall, P., & Anton, R. F. (2016). The Reasons for Heavy Drinking Questionnaire: Factor structure and validity in alcohol-dependent adults involved in clinical trials. *Journal of Studies on Alcohol and Drugs*, 77, 354-361.
21. Boyd, S. J.*, **Schacht, J. P.,** Prisciandaro, J. J., Voronin, K., & Anton, R. F. (2016). Alcohol-induced stimulation mediates the effect of a *GABRA2* SNP on alcohol self-administrated among alcohol-dependent individuals. *Alcohol and Alcoholism*, 51, 549-554.
22. Courtney, K. E., **Schacht, J. P.,** Hutchison, K. E., Roche, D. J. O., & Ray, L. A. (2016). Neural substrates of cue reactivity: Association with treatment outcomes and relapse. *Addiction Biology*, 21, 3-22.
23. Prisciandaro, J. J., **Schacht, J. P.,** Prescott, A. P., Renshaw, P. F., Brown, T. R., & Anton, R. F. (2016). Associations between recent heavy drinking and dorsal anterior cingulate N-acetylaspartate and glutamate concentrations in non-treatment seeking individuals with alcohol dependence. *Alcoholism: Clinical & Experimental Research*, 40, 491-496.
24. **Schacht, J. P.,** Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2014). Varenicline effects on drinking, craving and neural reward processing among non-treatment-seeking alcohol-dependent individuals. *Psychopharmacology (Berl.)*, 231, 3799-3807.
25. **Schacht, J. P.,** Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2013). Effects of a GABA-ergic medication combination and initial alcohol withdrawal severity on cue-elicited brain activation among treatment-seeking alcoholics. *Psychopharmacology (Berl.)*, 227, 627-637.
26. **Schacht, J. P.,** Anton, R. F., & Myrick, H. (2013). Functional neuroimaging studies of alcohol cue reactivity: A quantitative meta-analysis and systematic review. *Addiction Biology*, 18, 121-133.

27. **Schacht, J. P.,** Anton, R. F., Voronin, K. E., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2013). Interacting effects of naltrexone and *OPRM1* and *DAT1* variation on the neural response to alcohol cues. *Neuropsychopharmacology*, 38, 414-422.
28. **Schacht, J. P.,** Hutchison, K. E., & Filbey, F. M. (2012). Associations between cannabinoid receptor-1 (*CNR1*) variation and hippocampus and amygdala volumes in heavy cannabis users. *Neuropsychopharmacology*, 37, 2368-2376.
29. **Schacht, J. P.,** Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2011). Stability of fMRI striatal response to alcohol cues: A hierarchical linear modeling approach. *NeuroImage*, 56, 61-68.
30. **Schacht, J. P.,** Randall, P. K., Waid, L. R., Baros, A. M., Latham, P. K., Wright, T. M., Myrick, H., & Anton, R. F. (2011). Neurocognitive performance, alcohol withdrawal, and effects of a combination of flumazenil and gabapentin in alcohol dependence. *Alcoholism: Clinical & Experimental Research*, 35, 2030-2038.
31. Filbey, F. M., **Schacht, J. P.,** Myers, U. S., Chavez, R. S., & Hutchison, K. E. (2010). Individual and additive effects of the *CNR1* and *FAAH* genes on brain response to marijuana cues. *Neuropsychopharmacology*, 35, 967-975.
32. Filbey, F. M., **Schacht, J. P.,** Myers, U. S., Chavez, R. S., & Hutchison, K. E. (2009). Marijuana craving in the brain. *Proceedings of the National Academy of Sciences USA*, 106, 13016-13021.
33. **Schacht, J. P.,** Selling, R., & Hutchison, K. E. (2009). Intermediate cannabis dependence phenotypes and the *FAAH* C385A variant: An exploratory analysis. *Psychopharmacology (Berl.)*, 203, 511-517.
34. Haughey, H. M., Marshall, E., **Schacht, J. P.,** Louis, A., & Hutchison, K. E. (2008). Marijuana withdrawal and craving: Influence of the *CNR1* and *FAAH* genes. *Addiction*, 103, 1678-1686.
35. Hutchison, K. E., Haughey, H., Niculescu, M., **Schacht, J.,** Kaiser, A., Stitzel, J., Horton, W. J., & Filbey, F. (2008). The incentive salience of alcohol: Translating the effects of genetic variant in *CNR1*. *Archives of General Psychiatry*, 65, 841-850.

Manuscripts under review and in preparation

Book chapters (n = 2)

1. **Schacht, J. P.** & Hutchison, K. E. (2015). Using clinical neuroscience to understand addiction treatment. In S. W. Feldstein-Ewing, K. Witkiewitz, & F. M. Filbey (Eds.), *Neuroimaging and Psychosocial Addiction Treatment: An Integrative Guide for Researchers and Clinicians*. London: Palgrave Macmillan.
2. Anton, R. F., **Schacht, J. P.,** & Book, S. W. (2014). Pharmacologic treatment of alcoholism. In E. V. Sullivan & A. Pfefferbaum (Eds.), *Handbook of Clinical Neurology, 3rd series, Volume 125: Alcohol and the Nervous System* (pp. 527-542). Philadelphia: Elsevier.

Invited commentary (n = 2)

1. Bartels, K., & **Schacht, J. P.** (2021). Cocaine-positive patients undergoing elective surgery – from avoiding case cancellations to treating substance use disorders. *Anesthesia & Analgesia*, 132, 305-307.

2. **Schacht, J. P.** (2018). Parsing cannabis exposure and predisposing risk effects: Does adolescent cannabis use cause neurocognitive impairment, or result from it? *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 3, 654-656.

Patent

1. Anton, R. F., & **Schacht, J. P.** (2018). Dopamine Agonists in Treating Disorders Associated with Dopamine Receptor Activity. United States Patent Application 16/017,781, filed June 25, 2018. Patent pending.

Invited Presentations

External

1. *Effects of pharmacological and genetic regulation of COMT signaling in Alcohol Use Disorder: A randomized, placebo-controlled trial of tolcapone.* (2022, February). Center for Alcohol and Addiction Studies Rounds Series, Brown University, Providence, RI.
2. *Of medicines and magnets: New directions in treatment development for Alcohol Use Disorder.* (2022, January). Clinical Psychology Professional Development Seminar, Department of Psychology and Neuroscience, University of Colorado, Boulder, CO.
3. *Modulation of dopaminergic neurotransmission affects drinking in genetically targeted subgroups.* (2021, March). T32 Alcohol Research Seminar, University of California San Diego School of Medicine, San Diego, CA.
4. *Of medicines and magnets: New directions in treatment development for Alcohol Use Disorder.* (2019, May). Department of Psychiatry, University of Colorado School of Medicine, Aurora, CO.
5. *Neuroscience-informed treatment of alcohol use disorders.* (2017, August). Integrative Biosciences Center, Wayne State University, Detroit, MI.
6. *Neuroscience-informed treatment of alcohol use disorders: Perspectives for the next generation of addiction scientists.* (2017, February). Heidelberg University/Central Institute of Mental Health/German Society on Addiction Research & Addiction Therapy symposium in honor of the re-allocation of the Chair in Addiction Research, Heidelberg, Germany.
7. *Pharmacogenetics of Alcohol Use Disorder.* (2015, May; 2015, November; 2016, March). Alcohol Medical Scholars Program, Boston, MA; La Jolla, CA; Laguna Beach, CA.
8. *Identification of neural targets for pharmacological treatment in alcohol use disorders.* (2014, October). Neuroscience Program, SRI International, Menlo Park, CA.
9. *Identification of neural targets for pharmacological treatment in alcohol use disorders.* (2014, September). Treatment Research Center, Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA.
10. *Alcohol craving in the brain: Neuroimaging and pharmacological manipulation.* (2014, April). Department of Psychology, University of California, Los Angeles, CA.
11. *Using imaging genetics to understand the development and treatment of addiction.* (2013, November). Department of Psychology, Michigan State University, East Lansing, MI.

12. *Alcohol craving in the brain: Neuroimaging and pharmacological manipulation.* (2013, November). National Institute on Drug Abuse Intramural Research Program, Baltimore, MD.
13. *Using imaging genetics to understand addiction.* (2013, January). Brown University Center for Alcohol and Addiction Studies, Providence, RI.
14. *From brain to behavior: Neuroimaging and mental illness.* (2012, October). Mental Wellness Partnership, Spartanburg Regional Healthcare System, Spartanburg, SC.

Internal (CU and MUSC)

15. *Of medicines and magnets: New directions in treatment development for Alcohol Use Disorder.* (2019, May). Center for Biomedical Imaging Lecture Series, Medical University of South Carolina.
16. *Counseling techniques for primary care: Motivational enhancement.* (2018, November). Project ECHO (Extension for Community Healthcare Outcomes) Opioid Use Disorder Tele-Mentoring Sessions, Medical University of South Carolina.
17. *Does nicotine use affect the efficacy of naltrexone in Alcohol Use Disorder?* (2018, May). Tobacco Research Interest Group, Hollings Cancer Center, Medical University of South Carolina.
18. *A pilot study of DNA methylation as a pharmacogenetic predictor of treatment response in AUD.* (2018, January). Center for Genomic Medicine Retreat, Medical University of South Carolina.
19. *Neuroimaging and medications development for Alcohol Use Disorder.* (2016, June). 29th Annual Update in Psychiatry, Medical University of South Carolina.
20. *Alcohol craving in the brain: Neuroimaging and pharmacological manipulation.* (2013, October). Grand Rounds, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina.
21. *Functional neuroimaging in addiction.* (2012, February). Neuropsychology Seminar Series, Medical University of South Carolina.
22. *Medication effects on alcohol cue-elicited brain activation.* (2011, May). Imaging Group Lecture Series, Center for Biomedical Imaging, Medical University of South Carolina.
23. *Hierarchical linear modeling for fMRI analysis.* (2010, October). Center for Advanced Imaging Research, Medical University of South Carolina.
24. *Brain-based endophenotypes for alcohol dependence.* (2010, April). Center for Drug and Alcohol Programs, Medical University of South Carolina.

Presentations at Scientific Meetings (first- and last-author only)

Oral/podium

1. **Schacht, J. P.,** Hoffman, M., Im, Y., Voronin, K. E., & Anton, R. F. (2022, June). *Effects of pharmacological and genetic regulation of COMT signaling in Alcohol Use Disorder: A randomized, placebo-controlled trial of tolcapone.* Symposium accepted for presentation at the 45th Annual Meeting of the Research Society on Alcoholism, Orlando, FL.
2. **Schacht, J. P.,** Im, Y., Hoffman, M., Voronin, K. E., & Anton, R. F. (2021, December). *Alcohol cue-elicited brain activation as an endophenotype for Alcohol Use Disorder medications development.* Study

group presented at the 60th Annual Meeting of the American College on Neuropsychopharmacology, San Juan, Puerto Rico.

3. **Schacht, J. P.,** Im., Y., Voronin, K. E., & Anton, R. F. (2021, June). *Relationships between peripheral COMT activity, drinking, and cue-elicited brain activation in a human laboratory study of COMT inhibition*. Symposium presented at the 44th Annual Meeting of the Research Society on Alcoholism/20th Congress of the International Society for Biomedical Research on Alcoholism (virtual meeting).
4. **Schacht, J. P.,** Hoffman, M., Voronin, K. E., & Anton, R. F. (2019, June). *Prediction of alcohol harm reduction outcomes from cue-elicited brain activation in a randomized trial of naltrexone*. Symposium presented at the 42nd Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.
5. **Schacht, J. P.,** Voronin, K. E., Randall, P. K., & Anton, R. F. (2017, June). *Interacting effects of aripiprazole and dopaminergic genetic variation on alcohol self-administration and the neural response to alcohol cues*. Symposium presented at the 40th Annual Meeting of the Research Society on Alcoholism, Denver, CO.
6. **Schacht, J. P.,** Randall, P. K. Latham, P. K., Voronin, K. E., Myrick, H., & Anton, R. F. (2016, September). *Alcohol cues and the ventral striatum: Pharmacogenetic moderation of naltrexone effects and prediction of treatment response*. Symposium presented at the 2016 World Congress on Alcohol and Alcoholism (International Society for Biomedical Research on Alcoholism), Berlin, Germany.
7. **Schacht, J. P.,** Voronin, K. E., & Anton, R. F. (2016, February). *Dopaminergic genetic effects on the neural correlates of response inhibition among young adults with Alcohol Use Disorder*. Symposium presented at the 44th Annual Meeting of the International Neuropsychological Society, Boston, MA.
8. **Schacht, J. P.,** Prisciandaro, J. J., Voronin, K. E., & Anton, R. F. (2015, June). *Multimodal magnetic resonance imaging of neural connectivity in early-stage alcohol dependence: Associations with impulsivity*. Symposium presented at the 38th Annual Meeting of the Research Society on Alcoholism, San Antonio, TX.
9. **Schacht, J. P.,** Randall, P. K., & Anton, R. F. (2014, June). *Prediction and validation of alcohol dependence severity from neural functional connectivity during alcohol cue exposure*. Symposium, paper, and poster presented at the 37th Annual Meeting of the Research Society on Alcoholism/17th Congress of the International Society for Biomedical Research on Alcoholism, Bellevue, WA.
10. **Schacht, J. P.,** Tabesh, A., Voronin, K. E., & Anton, R. F. (2013, May). *Frontostriatal white matter microstructure and temporal discounting in alcohol dependence*. Symposium presented at the 1st Annual Collaborative Perspectives on Addiction meeting (American Psychological Association, Divisions 28 and 50), Atlanta, GA.
11. **Schacht, J. P.,** Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2012, June). *Interacting effects of naltrexone and OPRM1 and DAT variation on the neural response to alcohol cues*. Symposium presented at the 35th Annual Meeting of the Research Society on Alcoholism, San Francisco, CA.
12. **Schacht, J. P.,** Anton, R. F., & Myrick, H. (2011, September). *Functional neuroimaging studies of alcohol cue reactivity: A quantitative meta-analysis*. Paper presented at the 2011 NIAAA Training Directors Meeting, Providence, RI.

13. **Schacht, J. P.**, Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2010, June). *Stability of fMRI response to alcohol cues: A repeated study among non-treatment-seeking alcoholics*. Paper and poster presented at the 33rd Annual Meeting of the Research Society on Alcoholism, San Antonio, TX.
- Poster *indicates a trainee*
14. **Schacht, J. P.**, Prisciandaro, J. J., & Anton, R. F. (2018, December). *Differential associations between cortical GABA and glutamate and resting-state functional connectivity of the dorsal anterior cingulate cortex in Alcohol Use Disorder*. Poster presented at the 57th Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
15. Karoly, H. C.*, Anton, R.F., Voronin, K.E. & **Schacht, J.P.** (2018, December). *Intrinsic Network Coupling During an Alcohol Cue Task: Association with Alcohol-Induced Stimulation and Effects of Aripiprazole*. Poster presented at the 57th Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
16. **Schacht, J. P.**, Anton, R. F., McNamara, P. J., Im, Y., & King, A. C. (2018, June). *Effects of DAT1 VNTR genotype on relationships between acute response to alcohol across the BrAC curve and subsequent Alcohol Use Disorder symptoms*. Poster presented at the 41st Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
17. Karoly, H. C.*, Anton, R.F., Voronin, K.E. & **Schacht, J.P.** (2018, June). *Examining the effects of aripiprazole on neural network dynamics during an alcohol cue task*. Poster presented at the 41st Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
18. **Schacht, J. P.**, Anton, R. F., McNamara, P. J., Im, Y., & King, A. C. (2017, December). *The dopamine transporter VNTR polymorphism moderates the relationship between acute response to alcohol and future Alcohol Use Disorder symptoms*. Poster presented at the 56th Annual Meeting of the American College of Neuropsychopharmacology, Palm Springs, CA.
19. **Schacht, J. P.**, Voronin, K. E., Randall, P. K., & Anton, R. F. (2016, December). *Pharmacogenetic effects of DAT1 variation on aripiprazole response among non-treatment-seeking individuals with Alcohol Use Disorder*. Poster presented at the 55th Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
20. Meredith, L. R.*, Prisciandaro, J. J., Voronin, K. E., Anton, R. F., & **Schacht, J. P.** (2016, June). *Relationships between behavioral impulsivity and white matter microstructure in young adults with alcohol dependence*. Poster presented at the 39th Annual Meeting of the Research Society on Alcoholism, New Orleans, LA.
21. **Schacht, J. P.**, Myrick, H., Latham, P. K., Voronin, K. E., & Anton, R. F. (2015, December). *Effects of DRD4 VNTR genotype on alcohol cue-elicited brain activation among treatment-seeking alcoholics*. Poster presented at the 54th Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
22. **Schacht, J. P.**, Randall, P. K., Voronin, K. E., & Anton, R. F. (2014, December). *Variation at the COMT val158met SNP moderates aripiprazole effects on drinking and alcohol cue-elicited activation of the orbitofrontal cortex*. Poster presented at the 53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ.
23. **Schacht, J. P.**, Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2013, December). *Varenicline effects on neural reward processing among non-treatment-seeking alcohol dependent*

individuals. Poster presented at the 52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL.

24. **Schacht, J. P.,** Cortese, B. M., Voronin, K. E., & Anton, R. F. (2013, June). *Resting state functional connectivity of the default mode network predicts impulsive choice in alcohol dependence*. Poster presented at the 35th Annual Meeting of the Research Society on Alcoholism, Orlando, FL.
25. **Schacht, J. P.,** Cortese, B. M., Voronin, K. E., & Anton, R. F. (2013, February). *Functional connectivity of the default mode network and temporal discounting of reward in alcoholism*. Poster presented at the 3rd International Conference on Applications of Neuroimaging to Alcoholism (ICANA-3), New Haven, CT.
26. **Schacht, J. P.,** Tabesh, A., Voronin, K. E., & Anton, R. F. (2012, December). *Diffusional kurtosis imaging of frontal white matter in alcohol-dependent young adults with and without attention deficit hyperactivity disorder*. Poster presented at the 51st Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
27. **Schacht, J. P.,** Hutchison, K. E., & Filbey, F. M. *Associations between cannabinoid receptor-1 (CNRI) variation and amygdala and hippocampus volumes in heavy cannabis users*. (2012, May). Poster presented at the 14th Annual Genes, Brain, and Behavior meeting of the International Behavioural and Neural Genetics Society, Boulder, CO.
28. **Schacht, J. P.,** Anton, R. F., Randall, P. K., Li, X., Henderson, S., & Myrick, H. (2011, June). *Alcohol cue-elicited activation of the dorsolateral prefrontal cortex: Relationship to relapse drinking during alcohol treatment*. Poster presented at the 34th Annual Meeting of the Research Society on Alcoholism, Atlanta, GA.
29. **Schacht, J. P.,** Myers, U., Chavez, R., Hutchison, K. E., & Filbey, F. M. (2009, June). *Marijuana users with comorbid alcohol use disorders respond differently to marijuana cues: An fMRI study*. Poster presented at the 32nd Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
30. **Schacht, J. P.,** & Hutchison, K. E. (2008, June). *Effects of past-month drinking on craving for and response to marijuana*. Poster presented at the 31st Annual Meeting of the Research Society on Alcoholism/14th Congress of the International Society for Biomedical Research on Alcoholism, Washington, D.C.
31. **Schacht, J. P.,** Selling, R., & Hutchison, K. E. (2007, June). *The fatty acid amide hydrolase C385A (P129T) variant: Analysis of association with intermediate cannabis dependence phenotypes*. Poster presented at the 37th Annual Meeting of the Behavior Genetics Association, Amsterdam, The Netherlands.

Clinical Experience

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| 2011-2013 | Postdoctoral Fellow , Inpatient and Intensive Outpatient Programs, Center for Drug and Alcohol Programs, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina (<i>Supervisors</i> : Kelly Barth, M.D., & Joshua P. Smith, Ph.D.) |
| 2010 | Neuropsychology Intern , Division of Neurology, Department of Neurosciences, Medical University of South Carolina (<i>Supervisor</i> : Mark T. Wagner, Ph.D.) |
| 2010 | Psychology Intern , Centralized Inpatient Programming Service, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina (<i>Supervisor</i> : Joshua P. Smith, Ph.D.) |

- 2009-2010 **Psychology Intern**, Center for Drug and Alcohol Programs, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina (*Supervisor*: John Roitzsch, Ph.D.)
- 2009-2010 **Psychology Intern**, Substance Abuse Treatment Center, Mental Health Service Line, Ralph H. Johnson VA Medical Center, Charleston, SC (*Supervisor*: Steven D. LaRowe, Ph.D.)
- 2008-2009 **Research Therapist**, *A New Pharmacotherapy for Alcohol Dependence: Olanzapine*, The Mind Research Network, Albuquerque, NM (*Supervisor*: Sarah W. Feldstein-Ewing, Ph.D.)
- 2007-2008 **Therapist**, The Robert D. Sutherland Center for the Evaluation and Treatment of Bipolar Disorder, Boulder, CO (*Supervisor*: Alisha Brosse, Ph.D.)
- 2007 **Emergency Psychiatric Worker**, Emergency Psychiatric Service, Mental Health Center of Boulder and Broomfield Counties, Boulder, CO (*Supervisor*: Chris Randol, MSW)
- 2006-2008 **Research Therapist**, Mood and Anxiety Research Laboratory, University of Colorado, Boulder
Supervisors: Alisha Brosse, Ph.D., & Donald Weatherley, Ph.D)
- 2005-2008 **Therapist**, Raimy Psychology Clinic, University of Colorado, Boulder (*Supervisors*: David Miklowitz, Ph.D., Mark Whisman, Ph.D., Donald Weatherley, Ph.D., Monte Atkinson, Ph.D., & Rebecca Fossel, Ph.D.)

Teaching Experience

As Instructor of Record:

- 2011-2012 **Adjunct Faculty**, Department of Psychology, College of Charleston, Charleston, SC
- *PSYC 333: Health Psychology*, Fall 2011, Spring 2012, & Fall 2012

As Guest Lecturer:

- 2021 **Guest Lecturer**, Psychiatry PGY-1 Seminar Series, University of Colorado Anschutz Medical Campus
- *Circuits and Cells*, January 2021, April 2021
- 2020 **Guest Lecturer**, Addiction Psychiatry Fellowship, University of Colorado Anschutz Medical Campus
- *Neuroimaging in Addiction*, October 2020
- 2020 **Guest Lecturer**, NRSC 7614: Biological Basis of Psychiatric and Neurological Disorders, University of Colorado Anschutz Medical Campus
- *Neurobiology of Addiction: Perspectives from Neuroimaging*, March 2020
- 2012-2019 **Guest Lecturer**, Psychiatry PGY-2 Seminar Series, Medical University of South Carolina
- *Neurobiology of Addiction*, February 2012, February 2013, February 2014, January 2015, February 2016, March 2017, March 2018, February 2019
- 2012-2019 **Guest Lecturer**, Addiction Psychiatry Fellowship, Medical University of South Carolina
- *Introduction to Neuroimaging*, August 2012, November 2013, April 2016, December 2016, October 2017, March 2019
- 2012-2018 **Guest Lecturer**, Psychiatry PGY-3 Seminar Series, Medical University of South Carolina

- *Motivational Interviewing for Substance Use Disorders*, October 2012, November 2013, October 2014, October 2015, October 2016, December 2017, November 2018
- *Pharmacogenetics of Alcohol Use Disorder Treatment*, March 2017

2014 **Guest Lecturer**, NIMH T32 Child and Adult Trauma Training Program, Medical University of South Carolina

- *Neuroimaging in Clinical Research*, March 2014

2013-2014 **Guest Lecturer**, DART Psychiatry Residency Research Training Program for Physician-Scientists, Medical University of South Carolina

- *Neuroimaging in Psychiatry*, October 2013, December 2014

2012 **Guest Lecturer**, PSYC 420: Developmental Psychology, University of South Carolina

- *Adolescence, Emerging Adulthood, and the Surfacing of Psychopathology*, July 2012

As Teaching Assistant:

2015-2019 **Lab Assistant**, College of Medicine, Medical University of South Carolina

- *First-year medical student curriculum: Brain Dissection*, Fall 2015, Spring 2016, Fall 2016, Spring 2017, Spring 2018, Fall 2019

2004-2006 **Graduate Teaching Assistant**, Department of Psychology and Neuroscience, University of Colorado, Boulder

- *PSYC 3313: Psychopathology*, Fall 2005, Spring 2006, & Fall 2006
- *PSYC 4684: Developmental Psychology*, Fall 2004 & Spring 2005

2002 **Undergraduate Teaching Assistant**, Department of Psychology, University of Michigan, Ann Arbor

- *PSYC 114: Honors Introduction to Psychology*, Spring 2002

Mentorship

<u>Years</u>	<u>Mentee</u>	<u>Position</u>	<u>Current position</u>
2021-present	Erin Moe, B.A., PgC	Research assistant	Research asst., Univ. of Colorado
2019-present	Rachel Hoffman, M.A.	Research assistant	Research asst., Univ. of Colorado
2019-present	Kaitlin Mitchell, B.S.	Research assistant	Research asst., Univ. of Colorado
2018-2021	Katy Fuqua, B.A.	Research assistant	Coordinator, FirstString Research
2019	Andrew Rowley, B.S.	NIDA DART student	M.D. student, MUSC
2018	Andrew Kern, B.S.	Summer M.D. student	Resident, MUSC
2017-2019	Daniel Lench, B.A.	Neuroscience Ph.D. student (Dissertation committee)	Post-doc, MUSC
2017-2018	Hollis Karoly, M.A.	Pre-doctoral intern	Asst. Professor, Colorado St. Univ.
2016-2018	Kelsey Gnade, B.A.	Research assistant	Ph.D. student, Louisiana St. Univ.
2015-2018	Lindsay Meredith, B.A.	Research assistant	Ph.D. student, UCLA
2014-2015	Stephen J. Boyd, M.A.	Pre-doctoral intern	Asst. Professor, OHSU

Professional Memberships

2009-present	Research Society on Alcoholism
2015-present	International Society for Biomedical Research on Alcoholism
2022-present	American College of Neuropsychopharmacology (elected Associate Member)

Scientific Peer Review

NIH Study Section Membership

2021-2025 Standing Member, Clinical, Treatment, and Health Services Research Review Subcommittee (AA-3), NIAAA

Grant Reviewer:

National Institutes of Health Study Sections

2021, June ZAA1 CC (04) M (Special Emphasis Panel), NIAAA
2021, March ZRG1 IFCN-C (02) (Special Emphasis Panel), NIH CSR
2021, March ZAA1 GG (03) M (Special Emphasis Panel), NIAAA
2020, June NPAS Study Section (Ad-hoc member), NIH CSR
2020, March ZAA1 GG (03) M (Special Emphasis Panel), NIAAA
2019, October NAL Study Section (Ad-hoc member), NIH CSR
2019, May ZAA1 CC (10) (Special Emphasis Panel), NIAAA

Other Organizations

2021, September Fund for Scientific Research-FNRS, Brussels, Belgium
2021, February Hetzler Foundation for Addiction Research
2019, June Fund for Scientific Research-FNRS, Brussels, Belgium
2019, June Center for Medicinal Cannabis Research, University of California, San Diego
2018, June Fund for Scientific Research-FNRS, Brussels, Belgium

Ad-hoc Reviewer:

Addiction, Addiction Biology, Alcohol and Alcoholism, Alcoholism: Clinical & Experimental Research, American Journal of Drug and Alcohol Abuse, American Journal of Psychiatry, Behavioural Brain Research, Behaviour Research and Therapy, Biological Psychiatry, Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, Brain Structure and Function, Current Addiction Reports, Drug and Alcohol Dependence, Experimental and Clinical Psychopharmacology, European Journal of Neuroscience, Frontiers in Human Neuroscience, Human Brain Mapping, International Journal of Neuropsychopharmacology, JAMA Psychiatry/Archives of General Psychiatry, Journal of Neuroscience Methods, Journal of Studies on Alcohol and Drugs, Molecular Psychiatry, NeuroImage, Neuropsychopharmacology, Neuropsychopharmacology, Psychiatry Research, Psychiatry Research: Neuroimaging, Psychology of Addictive Behaviors, Psychopharmacology, Translational Psychiatry

*Top 10 Reviewer, 2018

Academic Service

National/International Organizations:

2022 ***Organizer and Chair, Beyond the Gas and the Brakes: Preclinical and Human Laboratory Studies of Corticostriatal Function in Alcohol Use Disorder.*** Symposium accepted for presentation at the 45th Annual Meeting of the Research Society on Alcoholism, Orlando, FL.

2021 ***Co-organizer and Chair, Functional Neuroimaging in Addiction – Recent Advances in the Monitoring and Prediction of Pharmacological Treatment Effects.*** Symposium presented at the 44th Annual Meeting of the Research Society on Alcoholism/20th Congress of the International Society for Biomedical Research on Alcoholism (virtual meeting).

2019-2024 ***Member, Education Committee,*** Research Society on Alcoholism

2019-2021 ***Member, Program Committee,*** 2020, 2021 Joint Research Society on Alcoholism/International Society for Biomedical Research on Alcoholism meetings

- 2017 **Organizer and Chair**, *Is Dopamine Dead? New Findings Regarding Dopamine's Role in Alcohol Use and Treatment*. Symposium presented at the 40th Annual Meeting of the Research Society on Alcoholism, Denver, CO.
- 2016-2017 **Member**, Program Committee, 2017 Research Society on Alcoholism meeting
- 2016 **Co-organizer**, *Using Neuroimaging to Determine Clinical Phenotypes in Alcohol Use Disorders*. Symposium presented at the 39th Annual Meeting of the Research Society on Alcoholism, New Orleans, LA.
- 2014-2015 **Member**, Planning Committee, 2015 Collaborative Perspectives on Addiction (American Psychological Association, Divisions 28/50) meeting
- 2014 **Organizer and Chair**, *Alcohol and the Connectome: Functional Connectivity Approaches to Studying the Development and Progression of Alcoholism*. Symposium presented at the 37th Annual Meeting of the Research Society on Alcoholism/17th Congress of the International Society for Biomedical Research on Alcoholism, Bellevue, WA.
- 2012 **Co-organizer**, *Genetic Influences on Neuroimaging Phenotypes of Alcohol Use Disorders*. Symposium presented at the 35th Annual Meeting of the Research Society on Alcoholism, San Francisco, CA.

Local Organizations:

University of Colorado School of Medicine

- 2021-2022 **Member**, Scientific Review Committee, Colorado School of Public Health Cannabis Research and Policy Project.

- 2020-present **Member**, Research Advisory Committee, Department of Psychiatry.

Medical University of South Carolina

- 2014-2019 **Member**, Grand Rounds Committee, Department of Psychiatry & Behavioral Sciences.

- 2017-2018 **Co-organizer**, Alcohol Research Breakfast Meeting, Charleston Alcohol Research Center.

- 2016-2017 **Member**, Biostatistician Search Committee, Charleston Alcohol Research Center.

- 2011-2017 **Coordinator**, Addiction Study Group, Center for Biomedical Imaging.

- 2014 **Chair**, Clinical Research Session, Frontiers in Neuroscience Research Meeting, Neuroscience Institute.

- 2014 **Panelist**, Preparing a Compelling K99/R00 Application, College of Graduate Studies.

Data Safety Monitoring Board (DSMB) Membership:

- 2018-2019 **Study**: "Imaging framework for testing GABAergic/glutamatergic drugs in bipolar alcoholics".
PI: James J. Prisciandaro, Ph.D.

- 2018-2019 **Study**: "Gabapentin for bipolar and cannabis use disorders: Relation to brain glutamate".
PI: James J. Prisciandaro, Ph.D.

2018-2019 **Study:** “A proof-of-concept trial of *N*-acetylcysteine for adolescent Alcohol Use Disorder”.
PIs: Kevin C. Gray, M.D., & Lindsay M. Squeglia, Ph.D.

Media Appearances

- 2022 *The Denver Post*, April 17, 2022. “Alcohol deaths jumped by early 30% in Colorado in 2020 with less treatment, more drinking alone.” <https://www.denverpost.com/2022/04/17/colorado-alcohol-deaths-pandemic/>
- 2022 *KDVR*, April 6, 2022. “Clinical trial underway in Colorado to see if new medication can reduce alcohol cravings”. <https://kdvr.com/news/local/clinical-trial-underway-in-colorado-to-see-if-new-medication-can-reduce-alcohol-cravings/>
- 2016 *CBC/Radio-Canada, The Nature of Things*, January 21, 2016. “Wasted: A Documentary”. <https://addictionthenextstep.com/documentary/>; <https://www.imdb.com/title/tt10483212/>