2021

# Roberto U. Cofresí-Bonilla, Ph.D.

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# **Professional Appointments**

Research Assistant Professor 2022-present

Department of Psychological Sciences, University of Missouri

Postdoctoral Fellow 2018-2022

Department of Psychological Sciences, University of Missouri

#### **Education**

Ph.D. Neuroscience, University of Texas at AustinB.Sc. Biochemistry, University of Texas at Austin2013

#### **Active Grant Awards**

K99-AA029169 NIH Pathway to Independence Award (Role: PI)2022-2024 (K99)Mentor & Co-Mentor: Bruce Bartholow & Brett Froeliger2024-2027 (R00)

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

A translational human laboratory Pavlovian conditioning model of individual differences in risk for alcohol cue incentive salience sensitization and longitudinal assessment of problematic alcohol use.

# **Recently Submitted Grant Applications**

NIH/CSR P01CA265797 (Role: Co-I; PI: Froeliger)

Investigating Novel Approaches for Translational Tobacco Treatment (INNOVAT3)

Submission: December 2022

NIH/CSR R01 (Role: Co-I; MPIs: Froeliger [contact], Bartholow)

Restructuring reward in tobacco use disorder with Savoring training: neural mechanisms

Submission: March 2023

#### **Awards**

R01-AA025451-[04/05]S1 (Role: Postdoctoral Trainee; PI: Bartholow). NIAAA. 2021-2022 Administrative Supplement to Promote Diversity: Characterizing Low Alcohol Sensitivity in Laboratory and Real-World Contexts

R25-MH-080794 (Travel Award and Scholarship). National Institute of Mental Health (NIMH). UC-Davis/SDSU Yearly Workshop in the Event-Related Potential Technique

(ERP Boot Camp)

MU Cognitive Neuroscience Systems (CNS) Core Facility Pilot Study Seed Grant 2021

MU Postdoctoral **Research Study Seed Grant** 2020

T32-AA013526 (Role: Postdoctoral Trainee) NIAAA. Psychology of Alcohol and 2020-2021

Addiction Training at the University of Missouri

College of Arts and Sciences Postdoctoral Fellowship, University of Missouri	2018-2020
<b>T32-AA07471</b> (Role: Predoctoral Trainee). NIAAA. Alcohol Training Grant Waggoner Center for Alcohol and Addiction Research	2015-2018
UT Austin Graduate School Diversity Mentoring Fellowship Award	2014
UT Austin Office of Vice President for Research Undergraduate Research Fellowship	2012
UT System Louise-Stokes Alliance for Minority Participation Summer Fellowship	2010

## **Peer-Reviewed Publications**

- \* indicates mentee co-author. More information about mentees in the **Mentoring** section on page 7.
- 19. \*Kohen, C. B., Cofresí, R. U., Bartholow, B. D., & Piasecki, T. M. (2023). Alcohol craving in the natural environment: Moderating roles of cue exposure, drinking, and alcohol sensitivity. Experimental and Clinical Psychopharmacology, 31(1), 57–71. https://doi.org/10.1037/pha0000540
- 18. Cofresí, R.U., Piasecki, T.M., & Bartholow, B.D. (2022). Acute Sensitization of the P3 Event-Related Potential Response (ERP) to Beverage Images and the Risk for Alcohol Use Disorder (AUD). Addiction Neuroscience, 4, 100041. https://doi.org/10.1016/j.addicn.2022.100041
- 17. Cofresí, R. U., Piasecki, T. M., Bartholow, B. D., and Schachtman, T. R. (2022). Enhanced conditioned "liking" of novel visual cues paired with alcohol or non-alcohol beverage container images among individuals at higher risk for alcohol use disorder. Psychopharmacology, 0123456789. https://doi.org/10.1007/s00213-022-06231-4
- Cofresí, R. U., Piasecki, T. M., Hajcak, G., & Bartholow, B. D. (2022). Internal consistency and test–retest reliability of the P3 event-related potential (ERP) elicited by alcoholic and nonalcoholic beverage pictures. Psychophysiology, 59, e13967. https://doi.org/10.1111/psyp.13967
- 15. Cofresí, R.U., \*Kohen, C. B., Motschman, C., Wiers, R.W., Piasecki, T.M., & Bartholow, B.D. (2022) Behavioral response bias and event-related brain potentials implicate elevated incentive salience attribution to alcohol cues in emerging adults with lower sensitivity to alcohol. Addiction 117, 892–904. https://doi.org/10.1111/add.15728
- 14. Cofresí, R. U., Watts, A. L., \*Martins, J. S., Wood, P. K., Sher, K. J., Cowan, N., Miyake, A., & Bartholow, B. D. (2021). Acute effect of alcohol on working memory updating. Addiction, 116(11), 3029–3043. https://doi.org/10.1111/add.15506
- 13. Fleming, K. A., Cofresí, R. U., & Bartholow, B. D. (2021). Transfer of incentive salience from a first-order alcohol cue to a novel second-order alcohol cue among individuals at risk for alcohol use disorder: electrophysiological evidence. Addiction, *116*(7), 1734–1746. https://doi.org/10.1111/add.15380
- Cofresí, R. U., Bartholow, B. D. Acute effects of alcohol on error-elicited negative affect during a cognitive control task (2020). Psychopharmacology, 327 (11), 3383-3397. https://doi.org/10.1007/s00213-020-05619-4
- Vena, A. A., Zandy, S. L., Cofresí, R. U., & Gonzales, R. A. (2020). Behavioral, neurobiological, and neurochemical mechanisms of ethanol self-administration: A translational review. Pharmacology & Therapeutics, 212, 107573. https://doi.org/10.1016/j.pharmthera.2020.107573

- Cofresí, R. U., Bartholow, B. D., Fromme, K. (2020). Female drinkers are more sensitive than male drinkers to alcohol-induced heart rate increase. Experimental and Clinical Psychopharmacology, 28(5), 540-552. https://doi.org/10.1037/pha0000338
- 09. Cofresí, R. U., Bartholow, B. D., Piasecki, T. M. (2019). Evidence for incentive salience sensitization as a pathway to alcohol use disorder. Neuroscience & Biobehavioral Reviews, 107, 897-926. https://doi.org/10.1016/j.neubiorev.2019.10.009
- 08. Cofresí, R. U., Gonzales, R. A., Monfils, M.-H., Chaudhri, N., & Lee, H. J. Cue-alcohol associative learning in female rats. (2019). Alcohol, 81, 1–9. https://doi.org/10.1016/j.alcohol.2019.03.003
- 07. Cofresí, R. U., \*Grote, D.J., Le, E.V.T, Gonzales, R. A., Monfils, M.-H., Chaudhri, N., & Lee, H. J. Alcohol-associated antecedent stimuli elicit alcohol seeking in non-dependent rats and may activate the insula. (2019). Alcohol, 76, 91–102. https://doi.org/10.1016/j.alcohol.2018.08.004.
- 06. Monfils, M.-H., Lee, H. J., Keller, N. E., Roquet, R. A., Quevedo, S., Agee, L., Cofresí, R. U., & Shumake, J. Predicting extinction phenotype to optimize fear reduction. (2018). Psychopharmacology, 236 (1), 99-110. https://doi.org/10.1007/s00213-018-5005-6
- 05. Cofresí, R. U., Lee, H. J., Monfils, M.-H., Chaudhri, N., & Gonzales, R. A. Characterizing conditioned reactivity to sequential alcohol-predictive cues in well-trained rats. (2018). Alcohol, 69, 41–49. https://doi.org/10.1016/j.alcohol.2017.11.034
- 04. Cofresí, R. U., \*Lewis, S. M., Chaudhri, N., Lee, H. J., Monfils, M.-H., & Gonzales, R. A. (2017). Postretrieval Extinction Attenuates Alcohol Cue Reactivity in Rats. Alcoholism: Clinical and Experimental Research, 41(3), 608–617. http://doi.org/10.1111/acer.13323
- 03. Shnitko, T. A., Taylor, S. C., Stringfield, S. J., Zandy, S. L., Cofresí, R. U., Doherty, J. M., Lynch, W., Boettiger, C., Gonzales, R.A., Robinson, D. L. (2016). Acute phenylalanine/tyrosine depletion of phasic dopamine in the rat brain. Psychopharmacology, 233(11), 2045–2054. http://doi.org/10.1007/s00213-016-4259-0
- 02. Mangieri, R. A., Cofresí, R. U., & Gonzales, R. A. (2014). Ethanol exposure interacts with training conditions to influence behavioral adaptation to a negative instrumental contingency. Frontiers in Behavioral Neuroscience, 8(June), 1–9. http://doi.org/10.3389/fnbeh.2014.00220
- 01. Mangieri, R. A., Cofresí, R. U., & Gonzales, R. A. (2012). Ethanol Seeking by Long Evans Rats Is Not Always a Goal-Directed Behavior. PLoS ONE, 7(8), e42886. http://doi.org/10.1371/journal.pone.0042886

# **Manuscripts Under Review / In Prep**

- 09. Acuff, S. F., Cofresí, R. U., Varner, A., Sable, J., Bartholow, B. D., MacKillop, J., Murphy, J.G. Integration of Electrophysiological and Behavioral Economic Models of Reward Among Heavy Drinking Emerging Adults. in prep.
- 08. Brown, A., Cofresí, R. U., Froeliger, B. Associations between the Wisconsin Inventory of Smoking Dependence Motives (WISDM-68) and Regional Brain Volumes in Adult Smokers. <u>submitted</u>.
- 07. Maralit, A. M., Haney, A., McMullin, S., Cofresí, R. U., Keerstock, S., Bartholow, B. D., and McCarthy, D. M. Individual differences in executive functioning predict individual differences in subjective response to alcohol in the laboratory. in prep.
- 06. \*Brancaleone, P. J., Cofresí, R. U., Volpert-Esmond, H., and Bartholow, B. D. Rapid attentional processing of faces predicts race-biased responding differently depending on the motivation to control prejudice. in prep.
- 05. Keerstock, S., Cofresí, R. U. Acute and chronic effects of alcohol on speech perception: a systematic review. in prep.

- 04. \*Brancaleone, P. J., Cofresí, R. U., Ito, T. A., and Bartholow, B. D. Executive functioning, motivation to control prejudice, and the adjustment of race-biased responding. <u>in prep.</u>
- 03. \*Kohen, C. B., Cofresí, R. U., Bartholow, B. D., and Piasecki, T. M. Event-related potential (ERP) P3 response to alcohol cues forecasts heavier ecologically assessed drinking episodes. in prep.
- 02. Cofresí, R. U., \*Upton, S., Brown, A., Piasecki, T. M., Bartholow, B. D., and Froeliger, B.. Alcohol sensitivity moderates alcohol cue reactivity in nodes of the reward and salience networks: a fMRI pilot study. in prep.
- 01. Cofresí, R. U., Morales, S., Piasecki, T. M., and Bartholow, B. D. EEG time-frequency signatures of alcohol cue reactivity in emerging adult drinkers. **<u>submitted.</u>**

### **Selected Conference Abstracts**

- 11. \*Kohen, C. B., Cofresí, R. U., Piasecki, T. M., & Bartholow, B. D. "Measures of sensitivity to the effects of alcohol: trait-stability and concomittant changes with alcohol involvement." 56<sup>th</sup> Annual Convention of the Association for Behavioral and Cognitive Therapies. November 17-20; 2022; New York City, NY.
- \*Kohen, C. B., Cofresí, R. U., Piasecki, T. M., & Bartholow, B. D. "Alcohol cue event-related potential response and ecologically assessed drinking behavior in emerging adults." 45<sup>th</sup> Annual Research Society on Alcohol Scientific Meeting. June 25-29; 2022; Orlando, FL
- 09. Olvera M. E., Cervantes M. C., Cofresí R. U., Monfils M-H, Gonzales R. A., & Lee H. J. "Extinction after memory retrieval attenuates alcohol seeking behavior in rats previously exposed to chronic ethanol vapor." 45<sup>th</sup> Annual Research Society on Alcohol Scientific Meeting. June 25-29; 2022; Orlando, FL.
- 08. Cofresí R. U., \*Upton, S., \*Rodgers, M., Brown, A., \*Ebada, R., Piasecki, T. M., Froeliger, B., & Bartholow, B. D. "Alcohol sensitivity moderates alcohol cue reactivity in anterior insula and medial prefrontal cortex: an fmri pilot study". 45<sup>th</sup> Annual Research Society on Alcohol Scientific Meeting. June 25-29; 2022; Orlando, FL.
- 07. Cofresí, R. U., \*Kohen, C. B., Motschman, C. A., Piasecki, T. M., Bartholow, B. D. "Approach Bias to Alcohol Cues in Lower Sensitivity Drinkers: Event-Related Potentials Implicate Response Conflict and Stimulus Significance." 44<sup>th</sup> Annual Research Society on Alcohol Scientific Meeting & Congress of the International Society for Biomedical Research on Alcohol. June 19-23; 2021. *Virtual Poster Session Due to COVID-19 Pandemic*.
- 06. \*Kohen, C. B., Cofresí, R. U., \*Martins, J. S., Piasecki, T. M., Bartholow, B. D. "The Impact of Alcohol Sensitivity on Alcohol Cue Processing in Underage Drinkers." 60<sup>th</sup> Annual Meeting of the Society for Psychophysiological Research. Oct 5-6; 2020. *Virtual Poster Session Due to COVID-19 Pandemic*.
- 05. Cofresí, R. U., Bartholow, B. D. "Pictures of alcoholic beverages can serve as secondary reinforcers in humans." 43<sup>rd</sup> Annual Research Society on Alcohol Scientific Meeting & Congress of the International Society for Biomedical Research on Alcohol. June 20-25; 2020. *Virtual Poster Session Due to COVID-19 Pandemic*.
- 04. Cofresí, R. U., Bartholow, B. D., Fromme, K. "Sex-specific moderation of alcohol's effects on heart rate by alcohol use-related environmental cues." 59<sup>th</sup> Annual Society for Psychophysiological Research Meeting. Sep 25-29; 2019; Washington, DC.
- 03. Cofresí, R. U., Ferguson, L. B., Tretyak, V., Fromme, K. "Alcohol pharmacokinetics and drinking habits in young adults." 41st Annual Research Society on Alcohol Scientific Meeting. June 15-20; 2018; San Diego, CA.

- 02. Cofresí, R. U., Chaudhri, N., Lee, H. J., Monfils, M.-H., Gonzales, R.A. "Post-retrieval extinction can attenuate recovery and reinstatement of conditioned reactivity to alcohol cues in Long-Evans rats." Alcoholism and Stress: A Framework for Future Treatment Strategies; 2017; May 9-12; Volterra, Italy.
- 01. Cofresí, R. U., \*Lewis, S. M., \*Tuite, K. M., Chaudhri, N., Lee, H. J., Monfils, M.-H., Gonzales, R. A. "Characterizing appetitive and consummatory behavior in a novel alcohol cue conditioning paradigm that uses a retractable sipper." 39th Annual Research Society on Alcohol Scientific Meeting. June 25-29; 2016; New Orleans, LA.

#### **Invited Research Talks**

- 15. "Alcohol beverage cues elicit top-down and bottom-up motivational conflict among underage risky drinkers: an event-related potential (ERP) study." 2023 Convention of the American Psychological Association (APA). Aug 3-5; 2023; Washington, DC.
- 14. "Alcohol beverage cues have conditioned incentive value in humans: preliminary studies of individual differences." 61st Annual Meeting of the Society for Psychophysiological Research. Oct 5-6; 2022; Vancouver, BC, CA.
- 13. "Event-related potential (ERP) and event-related spectral perturbation (ERSP) signatures of incentive salience attribution." 2022 Convention of the American Psychological Association (APA). Aug 6; 2022; Minneapolis, MN.
- 12. "Automatic approach to alcohol among underage drinkers at high risk for future alcohol use disorders." University of Texas MD Anderson Cancer Center, Division of Cancer Prevention and Population Sciences, Department of Behavioral Science, Behavioral Science Research News Hour. 2021; Feb 15; Virtual.
- "Cued approach and its ERP correlates among underage drinkers varying in alcohol sensitivity."
  University of Missouri, Department of Psychological Sciences, Alcohol and Addictions Research Group Seminar, 2020; Oct 12; Virtual.
- "Second-order alcohol cue conditioning in humans." University of Missouri, Department of Psychological Sciences, Alcohol and Addictions Research Group Seminar, 2020; Jan 27; Columbia, MO.
- 09. "Breaking hearts: acute effect of alcohol, cues, and context." University of Missouri, Department of Psychological Sciences, Alcohol and Addictions Research Group Seminar, 2019; April 15; Columbia, MO.
- 08. "Deconditioning reactivity to an alcohol cue: proof of concept in the rat" University of Missouri, Psychological Sciences; 2018; Mar 5; Columbia, MO.
- 07. "Updating maladaptive alcohol-associative memory: proof-of-concept in the rat" University of Chicago, Department of Psychiatry & Behavioral Neuroscience; 2018; Mar 2; Chicago, II.
- 06. "Does heavy drinking induce metabolic tolerance in healthy young adults?" University of Texas Waggoner Center for Addiction and Alcohol Research Meeting; 2018; May 9; Austin, TX.
- 05. "Testing a memory updating approach to relapse prevention for alcohol use disorders using a preclinical rat model." University of Texas, Department of Psychology, Behavioral Neuroscience Area Seminar; 2018; Feb 14; Austin, TX.
- 04. "Preventing relapse to cue-elicited alcohol seeking with post-retrieval extinction." 40th Annual Research Society on Alcohol Scientific Meeting. June 24-28; 2017; Denver, CO.
- 03. "Alcohol cue retrieval-extinction." University of Texas, Institute for Neuroscience, Retreat; 2016; Oct 9; Austin, TX.

- 02. "Alcohol cue retrieval-extinction." University of Texas, Department of Psychology, Behavioral Neuroscience Area Seminar; 2016; Feb 17; Austin, TX.
- 01. "Attenuating cued alcohol seeking." University of Texas, Waggoner Center for Addiction and Alcohol Research Meeting; 2016; Jan 27; Austin, TX.

# **Invited Guest Lectures (Teaching)**

- 08. "Pavlov's bells in alcohol use" in Alcohol Research Training Summer School, Dr. Denis McCarthy. University of Missouri, 2022; June 8; Columbia, MO.
- 07. "Pavlov's bells in alcohol use" in Alcohol Research Training Summer School, Dr. Ken J. Sher. University of Missouri, 2021; June 8; Columbia, MO.
- 06. "Pavlov's bells in alcohol use" in Alcohol Research Training Summer School, Dr. Ken J. Sher. University of Missouri, 2019; June 4; Columbia, MO.
- 05. "Adapting to chronic drug: tolerance & sensitization" in Upper Division Undergraduate Course: "Neurobiology of Addiction", Dr. R. Adron Harris. University of Texas at Austin; 2018; April 12; Austin, TX
- 04. "Pharmacology of Marijuana" in Upper Division Undergraduate Course: "Psychopharmacology", Dr. Hongjoo (Joanne) Lee. University of Texas at Austin; 2017; Nov 12; Austin, TX
- 03. "Pharmacology of Alcohol" in Upper Division Undergraduate Course: "Psychopharmacology", Dr. Hongjoo (Joanne) Lee. University of Texas at Austin; 2017; Nov 9; Austin, TX
- 02. "Neuropsychopharmacology of alcohol, marijuana, and other recreational drugs" in Lower Division Undergraduate Course: "Biopsychology", Dr. Hongjoo Lee. University of Texas at Austin; 2017; Feb 6; Austin, TX
- 01. "Introduction to Pharmacology" in Lower Division Undergraduate Course: "Biopsychology", Dr. Hongjoo Lee. University of Texas at Austin; 2017; Feb 3; Austin, TX

## Mentoring

\* indicates mentee is from one or more populations historically underrepresented in the scientific enterprise, as defined by NIH.

### **Highschool Student**

1. Atul Krishnadas (Fall 2018-Spring 2020): MU Engineering

## **Undergraduate/Post-Bacc Student:**

### Current

- 37. \*Alana Hatanaka (Spring 2023-)
- 36. \*Katelyn Matzdorf (Spring 2023-)
- 35. \*Hannah Drzewiecki (Fall 2022- ): MARC/IMSD Intern
- 34. \*Abigail Obregon (Fall 2022- )
- 33. \*Darius Stewart (Fall 2022- )
- 32. \*Sophia Slinkard (Fall 2022- ):
- 31. Liam Peck (Summer 2022- ): Honors Thesis
- 30. \*Ian Flowers (Fall 2021- ): MU McNair fellow; Honors Thesis
- 29. \*Elizabeth Conley (Fall 2021- ): MU Goldwater Fellowship Nominee; DAAD Summer REU
- 28. \*Emma Johnson (Spring 2021-)

## Past

27. \*Rawan Ebdada (Fall 2021-Fall 2022)

- 26. \*Devon Terry (Fall 2020-Spring 2022). Then: MU McNair Scholar; Honors Thesis. Last known position: Research coordinator for MU Health Neuroscience Center
- 25. Jarod Gage Crum (Fall 2020-Spring 2022). Last known position: Research coordinator for MU Clinical Neuropsychology Lab
- 24. \*Mikayla Rodgers (Fall 2020-Spring 2022). Last known position: Research specialist for the Edwards lab at the MU Molecular Imaging and Theranostics Center
- 23. Cole Schilling (Summer 2021-Spring 2022). Last known position: Graduate Student, Counseling, University of Missouri-Kansas City
- 22. Harjeev Singh (Fall 2020-Spring 2021)
- 21. \*Olivia Layton (Fall 2020-Spring 2021)
- 20. \*Anthony Alvarado (Fall 2020-Spring 2021)
- 19. Kyle Kirby (2020)
- 18. \*Carsen Steele (Fall 2019-Fall 2020)
- 17. \*Christiana Werner (Fall 2019-Spring 2020)
- 16. Stephen Knowlton (Fall 2019)
- 15. \*Thisbe Scholfield-Johnson (Spring 2019-Summer 2019)
- 14. \*Nicole Morse (Fall 2018-Spring 2019)
- 13. Zachary Denton (Fall 2018-Spring 2020)
- 12. \*Kathryn McCulloch (Fall 2018-Spring 2020)
- 11. \*Haley Benson (Summer 2018-Fall 2019). Then: Research coordinator for Social Cognitive and Addiction Neuroscience Lab. Now: Law School
- 10. \*Jenna Weseley (Spring 2017)
- 09. \*Aimée Nazario-Ovalles (Spring 2017)
- 08. Jarod Chaney (Spring 2017)
- 07. \*Lauren Schneider (Spring 2017)
- 06. Dylan J Grote (2016-2017): awarded UT Austin OVPR Undergraduate Research Fellowship; Texas A&M medical school student
- 05. \*Innsun "Kacey" Park (2016): Seoul National University medical school student
- 04. \*Kathleen M Tuite (2015-2016): awarded UT Austin OVPR Undergraduate Research Fellowship
- 03. Krishna K Kapoor (Spring 2015)
- 02. \*Suzanne M Lewis (2014-2015): UW behavioral neuroscience graduate student
- 01. Nathan Drew Wibisono (Summer 2014)

#### **Graduate Student:**

## Current

- 03. Spencer Upton (Fall 2022-)
- 02. Paul Brancaleone (Spring 2021-)
- 01. Casey Kohen (Fall 2019-)

#### Past

- 03. \*Kelsey Irvin (Fall 2018-Spring 2021): Clinical internship, SUNY Syracuse
- 02. Jorge Martins (Fall 2018-Spring 2020): Postdoctoral Fellow, Yale
- 01. \*Hannah Volpert-Esmond (Fall 2018-Spring 2020): Assistant Professor, UTEP

# Service & Leadership

### Research community

Reviewer (2020- ) Small Grants Program, Research Society on Alcohol

Reviewer (2022) Annual Scientific Meeting Program Committee, Research Society on Alcohol

Ad-hoc Reviewer

Addiction Biology

**Addictive Behaviors** 

Alcoholism: Clinical & Experimental Research Drug and Alcohol Dependence Experimental and Clinical Psychopharmacology Journal of Substance Abuse Treatment Learning and Motivation Neuropsychopharmacology Psychology of Addictive Behaviors Psychophysiology

Lead organizer (2019-2020) Addictions Journal Club, University of Missouri. Bimonthly meeting of graduate students and postdoctoral fellows to discuss recently published original research articles relevant to psychology and neuroscience of addiction to alcohol and other drugs as well as addictive behaviors, Collaborators; Jorge Martins, Courtney Motschman.

Creator and president (2010-2013) Synapse, Undergraduate Neuroscience Association, University of Texas at Austin. Fostered neuroscience at the undergraduate level. Maintained listsery and communications. Booked campus researchers for "speaker" meetings. Led discussion at "peer-led discussion" meetings. Organized and presented at "journal club" meetings. Twice orchestrated a neuroscience-themed team trivia competition with faculty, postdoc, and grad student judges. Collaborators: Devon Greer, Ryan Ellis, Taylor Allen.

### **Broader community**

Lead organizer (2015-2018) Comprehensive Drug Education Outreach in Austin, TX. Taught basic neuroscience and psychopharmacology to middle school and high school students of economically disadvantaged and historically marginalized ethnic background. Corrected misperceptions about addiction, legality, and relative harm/safety. Discussed the subjective effects and health risks associated with use of various drugs (e.g., alcohol, marijuana, tobacco, inhalants). Collaborators: Adam Gordon, Anna Warden.

#### Skills

Programming: R, Python, MATLAB, E-Prime, Med-State Notation, Arduino

EEG software: Curry8, eeglab, erplab, fieldtrip, NetStation

MRI software: SPM

Statistical software: Lavaan, Mplus, R

Human experiment: EEG-ERP, EEG-ERSP, sMRI, fMRI, MINI, REDCap, online/remote studies, ecological momentary assessment (EMA) methods, gustatory stimulus delivery systems development,

IRB management

Rodent experiment: conditioned response measurement device fabrication, IACUC management

Chemical analysis of biological samples: HPLC-ECD, GC-FID, EHS management

# **Professional memberships**

2014 - present	Society for Neuroscience
2016 – present	Research Society on Alcohol
2016 – present	APA Division 50: Addiction Psychology
2016 – present	APA Division 28: Psychopharmacology & Substance Abuse
2018 – present	Society for Psychophysiological Research
2022 – present	APA Division 6: Behavioral Neuroscience & Comparative Psychology

# **Professional References**

- Bruce Bartholow, PhD. Professor (Psychology) 573-882-1805, BartholowB@missouri.edu

- Brett Froeliger, PhD. Professor (Psychiatry) 573-882-4785, froeligerb@health.missouri.edu
- Thomas Piasecki, PhD. Professor (Psychology) 573-268-1451, tpiasecki@ctri.wisc.edu
- Rueben Gonzales, PhD. Professor Emeritus (Pharmacology) 512-471-5192, rgonzales@austin.utexas.edu
- Kim Fromme, PhD. Professor Emeritus (Clinical Psychology) 512-471-0039, fromme@psy.utexas.edu
- Hongjoo (Joanne) Lee, PhD Associate Professor (Behavioral Neuroscience) 512-232-8055, leehj@psy.utexas.edu
- Marie Monfils, PhD Professor (Behavioral Neuroscience) 512-471-4139, marie.monfils@gmail.com