

Curriculum Vitae**Erin L. Martin, Ph.D.****Assistant Professor**

Medical University of South Carolina	Office Phone: 843-876-3528
125 Doughty Street, Suite 190	Email: marterin@musc.edu
Charleston, SC 29403	Website: https://marterin.github.io

EDUCATION

- 2024 **Doctor of Philosophy**, Neuroscience
 Medical University of South Carolina, Charleston, SC
 Advisor: Aimee McRae-Clark, Pharm.D.
- 2015 **Bachelor of Arts**, Psychology
 University of Maryland, Baltimore County, Baltimore, MD

PROFESSIONAL EXPERIENCE

- 2026 – **Assistant Professor**
 2026 – 2026 **Research Assistant Professor**
 2024 – 2025 **Postdoctoral Fellow**
 Addiction Sciences Division
 Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina,
 Charleston, SC
- 2016 – 2019 **Research Program Coordinator**
 2016 – 2016 **Research Intern**
 Behavioral Pharmacology Research Unit
 Department of Psychiatry and Behavioral Sciences, Johns Hopkins University, Baltimore, MD

GRANT SUPPORT

Training Grants

- 8/26 – 7/31 The contribution of the endocannabinoid system to sex differences in THC-associated reward
 K01-DA065775 – National Institute on Drug Abuse
 Direct cost: \$969,294
 Role: Principal Investigator
- 1/26 – 7/26 Sex differences in neurobehavioral response to acute THC in adults with cannabis use disorder
 K12-DA031794 – National Institute on Drug Abuse
 Direct cost: \$50,000
 Role: Principal Investigator
- 5/24 – 12/25 Drug Abuse Training Program
 T32-DA007288 – National Institute on Drug Abuse
 Role: Postdoctoral Fellow (PI: Jacqueline McGinty, Ph.D.)
- 6/22 – 4/24 Evaluating contributors to relapse in comorbid major depressive disorder and cannabis use
 disorder
 F31-DA057051 – National Institute on Drug Abuse
 Role: Principal Investigator

- 8/20 – 5/22 Drug Abuse Training Program
T32-DA007288 – National Institute on Drug Abuse
Role: Pre-Doctoral Trainee (PI: Jacqueline McGinty, Ph.D.)
- 5/20 – 7/20 Drug Abuse Research Training Summer Research Fellowship
R25-DA020537 – National Institute on Drug Abuse
Role: Summer Trainee (PI: Sudie Back, Ph.D.)

Research Grants

- 6/25 – 6/26 Sex differences in the genetics of cannabinoid metabolism
Early Career Investigator Grant – College on Problems of Drug Dependence
Direct cost: \$10,000
Role: Principal Investigator
- 8/23 – 7/28 MUSC Specialized Center of Research Excellence on Sex Differences (SCORE): Sex differences in risk of cognitive decline in older cannabis users
U54-DA016511 – National Institute on Drug Abuse
Direct cost: \$1,255,479
Role: Co-Investigator (MPIs: Andreana Benitez, Ph.D., Aimee McRae-Clark, Pharm.D.)
- 5/21 – 4/22 Endocannabinoid dysregulation in cannabis dependence and acute cannabis withdrawal
U54-DA016511 – National Institute on Drug Abuse
Direct cost: \$15,000 (Pilot Award)
Role: Principal Investigator

HONORS & AWARDS

- 2025 ICRS Postdoctoral Scientific Achievement Award
- 2024 SCORE Annual Meeting Early Career Presentation Award
- 2024 ICRS Braude Foundation Award
- 2024 MUSC Distinguished Graduate Award
- 2024 SOBP Predoctoral Travel Fellowship Award
- 2023 CPDD Early Career Research Presentation Competition Winner
- 2022 MUSC Research Day Oral Presentation Award
- 2022 SCORE Annual Meeting Flash Talk Award
- 2022 MUSC Dean's Incentive Award
- 2022 ICRS Braude Foundation Award
- 2022 ICRS Trainee Grant
- 2022 CPDD NIDA Director's Travel Award
- 2021 ICRS Trainee Award
- 2021 CPDD NIDA Women & Sex/Gender Junior Investigator Travel Award
- 2015 Cum Laude, University of Maryland, Baltimore County

PUBLICATIONS

Peer-Reviewed Journal Articles

- 15) McRae-Clark AL, **Martin EL**, Baker NL, Neelon B, McClure EA, Tomko RL, Gray KM, & Gex KS. Sex differences in cannabis use disorder study outcomes: an aggregated secondary analysis of medication trials. *Drug and Alcohol Dependence* (2026).
- 14) **Martin EL**, Baker NL, Neelon B, Saladin ME, Gray KM, Watson Z, & McRae-Clark AL. Sex differences in stress responding in a randomized, placebo-controlled clinical trial of progesterone in cannabis use disorder. *Psychopharmacology* (2026).
- 13) **Martin EL**, Baker NL, Ramakrishnan V, Neelon B, Saladin ME, & McRae-Clark AL. Gender differences in circumstances associated with cannabis use. *The American Journal on Addictions* (2025).
- 12) **Martin EL**, Campbell LM, Thorn K, Sahlem GL, McRae-Clark AL, & Benitez A. Sex differences in normative

- modeling of cortical thickness in cannabis use disorder. *Drug and Alcohol Dependence Reports* (2025).
- 11) Lee DC, Schlienz NJ, Herrmann ES, **Martin EL**, Leoutsakos J, Budney AJ, Tompkins DA, Hampson AJ, & Vandrey R. Randomized controlled trial of zolpidem as a pharmacotherapy for cannabis use disorder. *Journal of Substance Use and Addiction Treatment* (2024).
 - 10) **Martin EL**, Baker NL, Sempio C, Christians U, Klawitter J, & McRae-Clark AL. Sex differences in endocannabinoid tone in a pilot study of cannabis use disorder and acute cannabis abstinence. *Addiction Biology* (2023).
 - 9) **Martin EL**, Neelon B, Brady K, Guille C, Baker N, Ramakrishnan V, Gray KM, Saladin ME, & McRae-Clark AL. Differential prevalence of Adverse Childhood Experiences (ACEs) by gender and substance used in individuals with cannabis, cocaine, opioid, and tobacco use disorders. *The American Journal of Drug and Alcohol Abuse* (2023).
 - 8) Garcia-Romeu A, Elmore J, Mayhugh R, Schlienz NJ, **Martin EL**, Strickland JC, Bonn-Miller MO, Munson J, Jackson H, & Vandrey R. Online survey of medicinal cannabinoid users: qualitative analysis of users' experiences. *Frontiers in Pharmacology* (2022).
 - 7) Sholler DJ, Zamarripa CA, Spindle TR, **Martin EL**, Kuntz D, Vandrey R, & Grabenauer M. Urinary excretion profile of cannabinoid analytes following acute administration of oral and vaporized cannabis in infrequent cannabis users. *Journal of Analytical Toxicology* (2022).
 - 6) **Martin EL**, Strickland JC, Schlienz NJ, Munson J, Jackson H, Bonn-Miller MO, & Vandrey R. Antidepressant and anxiolytic effects of medicinal cannabis use in an observational trial. *Frontiers in Psychiatry* (2021).
 - 5) **Martin EL**, Doncheck EM, Reichel CM, & McRae-Clark AL. Consideration of sex as a biological variable in the translation of pharmacotherapy for stress-associated drug seeking. *Neurobiology of Stress* (2021).
 - 4) Strickland JC, Jackson H, Schlienz NJ, Salpekar J, **Martin EL**, Munson J, Bonn-Miller MO, & Vandrey R. Cross-sectional and longitudinal evaluation of cannabidiol (CBD) product use and health among people with epilepsy. *Epilepsy & Behavior* (2021).
 - 3) Spindle TR, **Martin EL**, Grabenauer M, Woodward T, Milburn M, & Vandrey R. Assessment of cognitive and psychomotor impairment, subjective drug effects, and blood THC concentrations following acute administration of oral and vaporized cannabis. *Journal of Psychopharmacology* (2021).
 - 2) **Martin EL** & McRae-Clark AL. Evidence for the endocannabinoid system as a therapeutic target in the treatment of cannabis use disorder. *Current Addiction Reports* (2020).
 - 1) Schlienz NJ, Scalsky R, **Martin EL**, Jackson H, Munson J, Strickland JC, Bonn-Miller MO, Loflin M, & Vandrey R. A cross-sectional and prospective comparison of medicinal cannabis users and controls on self-reported health. *Cannabis & Cannabinoid Research* (2020).

PRESENTATIONS

- 2026 **Martin EL**, Baker NL, Neelon B, McClure EA, Tomko RL, Gray KM, Gex KS, & McRae-Clark AL. Sex differences in cannabis use disorder study outcomes: an aggregated secondary analysis of medication trials. Poster presentation at the College on Problems of Drug Dependence 88th Annual Scientific Meeting.
Martin EL, Baker NL, Neelon B, Tomko RL, Saladin ME, Gray KM, Watson Z, & McRae-Clark AL. The role of progesterone in treatment development for cannabis use disorder. Oral presentation at the Organization for the Study of Sex Differences 20th Annual Meeting, part of symposium "SCORE Program Investigates Sex Influences of Substance Use Disorders to Improve Women's Health".
- 2025 **Martin EL**, Baker NL, Neelon B, Watson Z, Saladin ME, Tomko RL, Sherman BJ, Gray KM, & McRae-Clark AL. Sex differences in stress responding in a clinical trial of progesterone in cannabis use disorder. Oral presentation at the 34th Annual International Cannabinoid Research Society Symposium on the Cannabinoids.
Martin EL, Bradshaw HB, & McRae-Clark AL. Comorbid major depressive disorder and cannabis use disorder is associated with enhanced subjective, but not objective, measures of cannabis withdrawal compared to cannabis use disorder alone. Poster presented at the College on Problems of Drug Dependence 87th Annual Scientific Meeting.
- 2024 **Martin EL**, Campbell LM, Thorn K, Sahlem GL, McRae-Clark AL, & Benitez A. Sex differences in normative modeling of cortical thickness in cannabis use disorder. Oral/poster presentation at the Specialized Centers of Research Excellence on Sex Differences 2024 Annual Meeting.
Martin EL, Bradshaw HB, & McRae-Clark AL. Differences in stress response in individuals with

cannabis use disorder alone and comorbid cannabis use disorder and major depressive disorder. Oral presentation at the 33rd Annual International Cannabinoid Research Society Symposium on the Cannabinoids.

Martin EL, Upton S, Nowling B, Froeliger B, Squeglia LM, Gray KM, & McRae-Clark AL.

Mesocorticolimbic activation is associated with abstinence from cannabis in a pilot trial of varenicline for cannabis use disorder. Poster presented at the College on Problems of Drug Dependence 86th Annual Scientific Meeting.

Martin EL, Neelon B, Saladin ME, Tomko RL, Sherman BJ, Gray KM, & McRae-Clark AL. Multiple measures of stress response differentially predict cannabis use in individuals with cannabis use disorder. Poster presented at the Society of Biological Psychiatry 2024 Annual Meeting.

2023 **Martin EL**, Campbell LM, Thorn K, Sahlem GL, McRae-Clark AL, & Benitez A. Sex differences in cortical thickness in cannabis use disorder. Poster presented at the College on Problems of Drug Dependence 85th Annual Scientific Meeting.

Martin EL, Baker NL, Sempio C, Christians U, Klawitter J, & McRae-Clark AL. Sex differences in endocannabinoid tone in cannabis use disorder and acute cannabis withdrawal. Poster presented at the Society of Biological Psychiatry 2023 Annual Meeting.

2022 **Martin EL**, Baker NL, Sempio C, Christians U, Klawitter J, & McRae-Clark AL. Sex differences in endocannabinoid tone in cannabis use disorder and acute cannabis withdrawal. Oral presentation at the Specialized Centers of Research Excellence on Sex Differences 2022 Annual Meeting.

Martin EL. Treatment for cannabis use disorder: importance of individual differences and the endocannabinoid system. Invited oral presentation for the Drugs Research Group in the Institute of Psychiatry, Psychology, and Neuroscience at King's College London.

Martin EL & McRae-Clark AL. Sex differences in cannabis withdrawal and the role of the endocannabinoid system. Oral presentation at the 31st Annual International Cannabinoid Research Society Symposium on the Cannabinoids.

Martin EL, Baker NL, Neelon B, Saladin ME, Ramakrishnan V, & McRae-Clark AL. Gender differences in antecedents of cannabis use. Oral presentation at the College on Problems of Drug Dependence 84th Annual Scientific Meeting.

Martin EL, Thorn K, Sahlem GL, McRae-Clark AL, & Benitez A. Sex differences in cortical thickness in cannabis use disorder. Poster presented at the Society of Biological Psychiatry 2022 Annual Meeting.

2021 **Martin EL**, Neelon B, Brady KT, Guille C, Baker NL, & McRae-Clark AL. Prevalence of adverse childhood experiences by primary substance used and gender. Poster presented at the Specialized Centers of Research Excellence on Sex Differences 2021 Annual Meeting.

Martin EL, Baker NL, Flanagan JC, Joseph JE, & McRae-Clark AL. Endogenous and exogenous oxytocin differentially impact stress response on the basis of childhood trauma exposure. Poster presented at the College on Problems of Drug Dependence 83rd Annual Scientific Meeting.

Martin EL, Baker NL, Froeliger B, & McRae-Clark AL. Tobacco co-use influences treatment outcomes in a pilot trial of varenicline for cannabis use disorder. Poster presented at the 30th Annual International Cannabinoid Research Society Symposium on the Cannabinoids.

Martin EL, Baker NL, Froeliger B, & McRae-Clark AL. Tobacco co-use affects treatment outcomes in a pilot trial of varenicline for cannabis use disorder. Oral presentation at the Society for Research on Nicotine and Tobacco 2021 Annual Meeting, part of symposium "Treatment Implications and Considerations for the Co-Use of Cannabis and Tobacco".

2020 **Martin EL**, Doncheck EM, Reichel CM, & McRae-Clark AL. Pharmacological interventions in stress-induced drug-seeking: efficacy across sex and species. Oral presentation at the Specialized Centers of Research Excellence on Sex Differences 2020 Annual Meeting.

Martin EL, Baker NL, & McRae-Clark AL. Varenicline in the treatment of cannabis use disorder: impact of tobacco use. Oral presentation at the College on Problems of Drug Dependence 82nd Annual Scientific Meeting.

2019 **Martin EL**, Spindle TR, Grabenauer M, Milburn MA, & Vandrey R. Assessment of impairment following oral and vaporized cannabis administration in infrequent users. Poster presented at the Carolina Cannabinoid Collaborative Annual Meeting 2019.

Martin EL, Schlienz NJ, Munson J, Jackson H, Bonn-Miller MO, & Vandrey R. Therapeutic

cannabinoids in anxiety and depression: results from an observational research study. Poster presented at the 29th Annual International Cannabinoid Research Society Symposium on the Cannabinoids.

Martin EL, Schlienz NJ, Munson J, Jackson H, Bonn-Miller MO, & Vandrey R. Therapeutic cannabinoids in anxiety and depression: results from an observational research study. Oral presentation at the 2019 Cannabis Science Conference East.

2018 **Martin EL**, Schlienz NJ, Herrmann ES, Budney AJ, Lee DC, Hampson A, Smith M, Leoustsakos JS, Stitzer ML, & Vandrey R. Targeting sleep in adults seeking treatment for cannabis use disorder. Poster presented at the 32nd Annual Meeting of the Associated Professional Sleep Societies, LLC. Abstract published in *Sleep*, Volume 41, Supplemental Issue.

TEACHING & MENTORSHIP

Teaching

2024 *Clinical Neuroscience Research*. Lecture delivered to historically disadvantaged sophomore- and junior-level high school students as part of the MUSC Upward Bound initiative.

2024 *Individual Differences in Cannabis Use Disorder with Implications for Endocannabinoid Modulation in Therapeutics Development*. Lecture delivered as part of College of Charleston Neuroscience course BIOL/PSYC 447.

2023 – 2025 *Endocannabinoids and Cannabis Use Disorder*. Lecture delivered to students in the MUSC Summer Undergraduate Research Program (SURP).

2021 – 2022 *Psychopharmacology: How Drugs Affect Our Thoughts, Feelings, and Behavior*. Lecture delivered to students in the MUSC Summer Undergraduate Research Program (SURP).

Mentorship

2023 Jonathan Yass – Undergraduate Intern, College of Charleston

2022 – 2024 Diversity in Addiction Research Training (DART) Near-Peer Mentor, MUSC

2019 Darren Lin – Undergraduate Intern, Johns Hopkins University

2018 Zachary Hyde – Undergraduate Intern, Johns Hopkins University

2017 – 2019 Ryan Scalsky – Undergraduate Intern, University of Maryland, Baltimore County

2017 Paras Dalwadi – Undergraduate Intern, University of Maryland, Baltimore County

2016 Omair Akmal – Undergraduate Intern, Johns Hopkins University

PROFESSIONAL ACTIVITIES & SERVICE

Professional Affiliations

2025 – Organization for the Study of Sex Differences

2022 – 2025 American Psychological Association (Div. 28)

2021 – Society of Biological Psychiatry

2020 – College on Problems of Drug Dependence

2019 – International Cannabinoid Research Society

Service

2022 – 2025 Department of Neuroscience Task Force, MUSC

2022 – 2023 Department of Neuroscience Graduate Student Retreat Organizing Committee, MUSC

2021 Trainee Research Fellowship Subcommittee, Society of Biological Psychiatry

Ad Hoc Reviewer

Addictive Behaviors
American Journal on Addictions
Cannabis & Cannabinoid Research
Cerebral Cortex
Experimental & Clinical Psychopharmacology
Frontiers in Psychiatry

Journal of Psychopharmacology
Molecular Neurobiology
Neuroscience & Biobehavioral Reviews
Neuropsychopharmacology
npj Mental Health Research
Psychopharmacology
Scientific Reports

Community Engagement

2025 "Yes, you can get addicted to weed." Oral presentation given as part of *From the Lab to Recovery* event hosted by MUSC Students for Sensible Drug Policy.

CONSULTING

2019 **Sleep Architecture Consultant**
Department of Psychiatry, University of Pennsylvania, Philadelphia, PA
PI: Marcel Bonn-Miller, Ph.D.
Consultant on Colorado Department of Public Health and Environment grant studying safety and efficacy of cannabis use among veterans with post-traumatic stress disorder (PTSD).