Stanford



Claudia Beatriz Padula

Assistant Professor of Psychiatry and Behavioral Sciences (Public Mental Health and Population Sciences)

Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor-Univ Med Line, Psychiatry and Behavioral Sciences
- Member, Bio-X
- Member, Wu Tsai Human Performance Alliance
- Member, Wu Tsai Neurosciences Institute

Research & Scholarship

CLINICAL TRIALS

- Deep TMS of Neural Circuits Associated With Stimulant Use Disorder, Recruiting
- Examining the Effectiveness of Deep TMS in Veterans With Alcohol Use Disorder, Not Recruiting
- Assessing the Impact of Deep TMS Neuromodulation on Neural Circuits Associated With Alcohol Use Disorder, Not Specified

Teaching

COURSES

2026-27

- Think Before You Drink: Neurocircuitry of Alcohol Use Across the Developmental Lifespan: PSYC 17N (Win)

2025-26

- Think Before You Drink: Neurocircuitry of Alcohol Use Across the Developmental Lifespan: PSYC 17N (Win)

2024-25

- Think Before You Drink: Neurocircuitry of Alcohol Use Across the Developmental Lifespan: PSYC 17N (Win)

2023-24

- Think Before You Drink: Neurocircuitry of Alcohol Use Across the Developmental Lifespan: PSYC 17N (Win)

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Psychiatry and Behavioral Science (Fellowship Program)

Publications

PUBLICATIONS

- **The OPRM1 A118G G Allele Is Associated With Poorer Auditory-Verbal Learning and Memory, Executive Functions, and Working Memory in Veterans Undergoing Residential Treatment for Alcohol Use Disorder.** *Alcohol, clinical & experimental research*
  Andrade, R., McNerney, M. W., Kraybill, E. P., Padula, C. B., Durazzo, T. C.
  2026; 50 (8): e70385

- **A STEP TOWARDS PRECISION STIMULATION: EVALUATING ALCOHOL-RELATED ATROPHY, AGE, AND SEX IN TRANSCRANIAL MAGNETIC STIMULATION DOSAGE FOR ALCOHOL USE DISORDER**
  Li, S., Knutson, B., Padula, C., McCalley, D.
  WILEY.2026: 35-36

- **SEX MODERATES THE RELATIONSHIP BETWEEN PROCESSING SPEED AND CUMULATIVE SMOKING EXPOSURE IN VETERANS WITH ALCOHOL USE DISORDER**
  Ward, S., Craft III, W., Gonzalez, M., Padula, C.
  WILEY.2026: 46-47

- **THE IMPACT OF EARLY LIFE STRESS ON PREFRONTAL CORTICAL THICKNESS OF VETERANS WITH AUD**
  Curley, C., Warner, G., Padula, C.
  WILEY.2026: 213

- **WHEN COPING HELPS (AND WHEN IT HURTS): CONTEXT-SPECIFIC RELAPSE VULNERABILITY AND FMRI MARKERS OF CRAVING AND CONTROL**
  Kang, H., Warner, G., Durazzo, T., Padula, C.
  WILEY.2026: 36-37

- **EXAMINING THE GENE-ENVIRONMENT INTERACTION OF 5-HTTLPR X EARLY LIFE STRESS WITH DEPRESSIVE AND PTSD SYMPTOMS IN TREATMENT-SEEKING VETERANS WITH ALCOHOL USE DISORDER**
  Cabrera, D., McNerney, M., Craft, W., Durazzo, T., Padula, C.
  WILEY.2026: 4

- **OPRM1 A118G G ALLELE IS ASSOCIATED WITH POORER LEARNING AND MEMORY, EXECUTIVE FUNCTIONS AND WORKING MEMORY IN VETERANS WITH ALCOHOL USE DISORDER**
  Andrade, R., McNerney, M., Padula, C., Durazzo, T.
  WILEY.2026: 162

- **CIGARETTE SMOKING STATUS IS RELATED TO LEFT DORSOLATERAL PREFRONTAL CORTEX NEUROMETABOLITES CONCENTRATIONS IN VETERANS IN TREATMENT FOR ALCOHOL USE DISORDER**
  Carolan, R., Beauregard, L., Gu, M., Padula, C., Durazzo, T.
  WILEY.2026: 225-226

- **Cigarette smoking, history of major depression and PTSD diagnosis are associated with metabolite levels in the left dorsolateral prefrontal cortex in those in treatment for alcohol use disorder.** *Drug and alcohol dependence*
  Durazzo, T. C., Carolan, R. E., Beauregard, L. H., Gu, M., Padula, C. B.
  2026; 285: 113194

- **Opioid use disorder of any severity is associated with increased suicidality.** *Journal of psychiatric research*
  Craft, W. H., Humphreys, K., Ostacher, M. J., Padula, C. B.
  2026; 195: 177-180

- **LEVERAGING FMRI ALCOHOL CUE-REACTIVITY TO DETERMINE DATA-DRIVEN TMS TARGETS FOR ALCOHOL USE DISORDER: A CASE FOR DMPFC AND IPL STIMULATION**
  Mccalley, D., Padula, C.
  SPRINGERNATURE.2026

- **Females have shorter scalp-to-cortex distances and receive stronger TMS electrical fields: Implications for clinical treatment.** *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*
  McCalley, D. M., Cadicamo, N. J., Weijerman, F., Tenekedjieva, L. T., Knutson, B., Padula, C. B.

2025

- **Toward Inclusive, Evidence-Based rTMS Care for Patients With Co-Occurring Substance Use Disorders.** *The American journal of psychiatry*
  Steele, V. R., Addicott, M. A., Addolorato, G., Baker, T., Biernacki, K., Bonci, A., Brady, K. T., Daughters, S. B., Diana, M., Durazzo, T. C., Ekhtiari, H., Fecteau, S., Fede, et al
  2025; 182 (12): 1095-1096
- **Effects of intermittent theta burst on multiple measures of craving in those with alcohol use disorder.** *Journal of studies on alcohol and drugs*
  Durazzo, T. C., Humphreys, K., Padula, C. B.
  2025
- **Sleep Disturbances Across the Addiction Stages: A Review of Alcohol, Cannabis and their Co-Use** *CURRENT ADDICTION REPORTS*
  Padula, C. B., Grayson, A., Izabel, S., Tenekedjieva, L., Zhang, E., Goldstein-Piekarski, A. N.
  2025; 12 (1)
- **Developing a reverse translational model of low-intensity rTMS in alcohol use disorder: The influence of theta burst stimulation protocols on binge alcohol drinking in mice.** *Transcranial magnetic stimulation (2024)*
  Dhungana, A., McCalley, D. M., Heath, A. M., Kraybill, E. P., Mojabi, F. S., Morales, J. M., Morningstar, A. R., Davis, A. K., Padula, C. B., Giardino, W. J., McNerney, M. W.
  2025; 4
- **Illuminating posterior targets for TMS beyond the prefrontal cortex.** *Nature. Mental health*
  McCalley, D. M., Sanderson, L. L., Dowdle, L. T., Padula, C. B., Siddiqi, S. H., Ellard, K. K., Taylor, J. J.
  2025; 3 (8): 859-869
- **Illuminating posterior targets for transcranial magnetic stimulation beyond the prefrontal cortex** *NATURE MENTAL HEALTH*
  McCalley, D. M., Sanderson, L. L., Dowdle, L. T., Padula, C. B., Siddiqi, S. H., Ellard, K. K., Taylor, J. J.
  2025
- **Neural correlates of affective processing in alcohol use disorder: Understanding the association with post traumatic stress disorder symptom severity and diagnosis**
  Carolan, R., Mccalley, D., Durazzo, T., Padula, C.
  WILEY.2025
- **Insomnia severity differentially affects alcohol craving domains in men and women with alcohol use disorder**
  Grayson, A., Ward, S., Padula, C.
  WILEY.2025
- **Assessing co-occurring PTSD and AUD: Linking PCL-5 symptom clusters to executive functioning in veterans with AUD**
  Ward, S., Craft, C., Craft, W., Padula, C.
  WILEY.2025
- **Changes in anterior frontal brain volumes in active versus sham intermittent theta burst for treatment of alcohol use disorder**
  Durazzo, T., Kraybill, E., Stephens, L., Joseff, B., Padula, C.
  WILEY.2025
- **Changes in left dorsolateral prefrontal cortex metabolite levels in active versus sham intermittent theta burst for treatment of alcohol use disorder**
  Durazzo, T., Stephens, L., Kraybill, E., Joseff, B., Padula, C.
  WILEY.2025
- **Functional connectivity changes in active versus sham intermittent theta burst for treatment of alcohol use disorder**
  Joseff, B., Stephens, L., Kraybill, E., Padula, C., Durazzo, T.
  WILEY.2025
- **Intermittent theta burst to the left dorsolateral prefrontal cortex promoted decreased alcohol consumption and improved outcomes in those with alcohol use disorder: A randomized, double-blind, placebo-controlled clinical trial.** *Drug and alcohol dependence*
  Durazzo, T. C., Kraybill, E. P., Stephens, L. H., McCalley, D. M., Humphreys, K., May, A. C., Padula, C. B.
  2025; 270: 112641
- **Rethinking gender differences: An investigation of comorbid psychopathology and alcohol use disorder in veterans.** *Alcohol, clinical & experimental research*

Craft, W. H., Padula, C. B.
2025

- **Effects of intermittent theta burst to the left dorsolateral prefrontal cortex on brain volumes and neurometabolites in people with alcohol use disorder: a preliminary investigation.** *Frontiers in human neuroscience*
  Durazzo, T. C., Beauregard, L. H., Gu, M., Kraybill, E. P., Joseff, B. D., Herrold, A. A., Humphreys, K., McNerney, M. W., Knutson, B., Padula, C. B.
  2025; 19: 1613993

- **Two Faces of Reward: Alcohol-Cue and Monetary Assessment of Reward Circuit Functioning Reveals Neural Predictors of Relapse in Alcohol Use Disorder**
  Padula, C., MacNiven, K., Tenekedjieva, L., McCalley, D., Knutson, B., Williams, L.
  SPRINGERNATURE.2024: 217-218

- **Females Experience Greater Clinical Benefit from TMS for AUD: A Translational Analysis of Sex-Differences in Preclinical and Clinical Treatment Outcomes**
  McCalley, D., Hanlon, C., Giardino, W. J., McNerney, M., Padula, C.
  SPRINGERNATURE.2024: 230-231

- **Accelerated Deep TMS in Alcohol Use Disorder: A Preliminary Pilot Trial Targeting the Dorsal Anterior Cingulate Cortex Increases Neural Target Engagement and Abstinence.** *Brain stimulation*
  Padula, C. L., Tenekedjieva, L. E., McCalley, D. A., Morales, J. A., Madore, M. I.
  2024

- **Context matters: Exploring the adaptive nature of self-regulation skills in predicting abstinence among veterans with alcohol use disorder.** *Alcohol, clinical & experimental research*
  Dwyer, C. L., Padula, C. B.
  2024

- **Transdiagnostic Mood, Anxiety and Trauma Symptom Factors in Alcohol Use Disorder: Neural Correlates Across Three Brain Networks.** *Biological psychiatry. Cognitive neuroscience and neuroimaging*
  Tenekedjieva, L. T., McCalley, D. M., Goldstein-Piekarski, A. N., Williams, L. M., Padula, C. B.
  2024

- **INviting Veterans InTo Enrollment in Alzheimer's Disease Research Centers (INVITE-ADRC): An NIA and VA-sponsored initiative to increase veteran participation in aging and dementia research.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
  Padula, C. B., Ball, S., Wyman, M. F., Evans, K., Grant, H., Periyakoil, V. S., Zhu, C. W., Yaffe, K., Huang, G. D.
  2024

- **A pilot, randomized clinical trial: Left dorsolateral prefrontal cortex intermittent theta burst stimulation improves treatment outcomes in veterans with alcohol use disorder.** *Alcohol, clinical & experimental research*
  Padula, C. B., McCalley, D. M., Tenekedjieva, L., MacNiven, K., Rauch, A., Morales, J. M., Knutson, B., Humphreys, K., Williams, L. M., Durazzo, T. C.
  2024; 48 (1): 164-177

- **Preliminary Results of Deep Transcranial Magnetic Stimulation to the Dorsal Anterior Cingulate Cortex Reveal Increased Neural Target Function and Abstinence in Veterans with Alcohol Use Disorder**
  Padula, C., McCalley, D., Tenekedjieva, L., Morales, J., Madore, M.
  SPRINGERNATURE.2023: 448

- **Left Dorsolateral Prefrontal Cortex Intermittent Theta Burst Stimulation Improves Treatment Outcomes in Veterans With Alcohol Use Disorder: A Randomized, Sham-Controlled Clinical Pilot Trial**
  McCalley, D., Tenekedjieva, L., MacNiven, K., Rauch, A., Morales, J., Knutson, B., Humphreys, K., Williams, L., Durazzo, T., Padula, C.
  SPRINGERNATURE.2023: 449

- **BDNF rs6265 Met carriers with alcohol use disorder show greater age-related decline of N-acetylaspartate in left dorsolateral prefrontal cortex.** *Drug and alcohol dependence*
  Durazzo, T. C., McNerney, M. W., Hansen, A. M., Gu, M., Sacchet, M. D., Padula, C. B.
  2023; 248: 109901

- **Brain tract structure predicts relapse to stimulant drug use.** *Proceedings of the National Academy of Sciences of the United States of America*
  Tisdall, L., MacNiven, K. H., Padula, C. B., Leong, J. K., Knutson, B.

2022; 119 (26): e2116703119

- **Active Cigarette Smoking Is Associated With Increased Age-Related Decline on Measures of Visuospatial Learning and Memory and Executive Function in Alcohol Use Disorder.** *Alcohol and alcoholism (Oxford, Oxfordshire)*
  Padula, C. B., Durazzo, T. C.
  2022

- **Transdiagnostic Versus Traditional Diagnostic Approaches to Psychiatric Symptoms in Alcohol Use Disorder: Associations With Emotion Regulation and Salience Network Function**
  Tenekedjieva, L., Goldstein-Piekarski, A. N., Madore, M. R., Kaur, M., Coffigny, M., Padula, C. B.
  ELSEVIER SCIENCE INC.2022: S104

- **Targeting the Salience Network: A Mini-Review on a Novel Neuromodulation Approach for Treating Alcohol Use Disorder.** *Frontiers in psychiatry*
  Padula, C. B., Tenekedjieva, L., McCalley, D. M., Al-Dasouqi, H., Hanlon, C. A., Williams, L. M., Kozel, F. A., Knutson, B., Durazzo, T. C., Yesavage, J. A., Madore, M. R.
  2022; 13: 893833

- **The Role of Neural Reward Expectancy and Valuation in Readiness to Change Among Treatment Seeking Veterans With Alcohol Use Disorder (AUD)**
  Hagerty, S. L., Durazzo, T. C., Williams, L. M., Padula, C. B.
  ELSEVIER SCIENCE INC.2021: S342

- **Dimensions of Craving Interact with COMT Genotype to Predict Relapse in Individuals with Alcohol Use Disorder Six Months after Treatment.** *Brain sciences*
  Padula, C. B., Hansen, A., Hughes, R. L., McNerney, M. W.
  2021; 11 (1)

- **Heart Rate, Brain Imaging Biomarkers and Cognitive Impairment in Older (>= 63 years) Women** *AMERICAN JOURNAL OF CARDIOLOGY*
  Haring, B., Liu, J., Rapp, S. R., Shimbo, D., Padula, C. B., Mozhui, K., Li, W., Espeland, M., Wassertheil-Smoller, S.
  2020; 129: 102-108

- **Predicting relapse after alcohol use disorder treatment in a high-risk cohort: The roles of anhedonia and smoking.** *Journal of psychiatric research*
  Nguyen, L., Durazzo, T. C., Dwyer, C. L., Rauch, A. A., Humphreys, K., Williams, L. M., Padula, C. B.
  2020; 126: 1–7

- **NEUROPHYSIOLOGICAL CORRELATES OF REWARD ANTICIPATION AND ANHEDONIA IN VETERANS WITH ALCOHOL USE DISORDER**
  Rauch, A., Williams, L., Dwyer, C., Linh-Chi Nguyen, Padula, C.
  WILEY.2019: S119

- **Brain activation to cannabis- and alcohol-related words in alcohol use disorder.** *Psychiatry research. Neuroimaging*
  Müller-Oehring, E. M., Berre, A. L., Serventi, M. n., Kalon, E. n., Haas, A. L., Padula, C. B., Schulte, T. n.
  2019; 294: 111005

- **Mean Heart Rate and Brain Morphology in Elderly Women Without a History of Cardiovascular Disease**
  Haring, B., Liu, J., Shimbo, D., Padula, C. B., Li, W., Mozhui, K., Rapp, S., Espeland, M., Wassertheil-Smoller, S.
  LIPPINCOTT WILLIAMS & WILKINS.2019

- **Association of Neural Responses to Drug Cues With Subsequent Relapse to Stimulant Use** *JAMA Netw Open*
  MacNiven, K. H., Jensen, E. L., Borg, N., Padula, C. B., Humphreys, K., Knutson, B.
  2018

- **Blunted amygdala functional connectivity during a stress task in alcohol dependent individuals: A pilot study.** *Neurobiology of stress*
  Wade, N. E., Padula, C. B., Anthenelli, R. M., Nelson, E., Eliassen, J., Lisdahl, K. M.
  2017; 7: 74-79

- **The association between an inflammatory diet and global cognitive function and incident dementia in older women: The Women's Health Initiative Memory Study** *ALZHEIMERS & DEMENTIA*
  Hayden, K. M., Beavers, D. P., Steck, S. E., Hebert, J. R., Tabung, F. K., Shivappa, N., Casanova, R., Manson, J. E., Padula, C. B., Salmoirago-Blotcher, E., Snetselaar, L. G., Zaslavsky, O., Rapp, et al

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- **Cannabis use patterns and motives: A comparison of younger, middle-aged, and older medical cannabis dispensary patients** *ADDICTIVE BEHAVIORS*
  Haug, N. A., Padula, C. B., Sottile, J. E., Vandrey, R., Heinz, A. J., Bonn-Miller, M. O.
  2017; 72: 14-20

- **Utilizing a transdiagnostic neuroscience-informed approach to differentiate the components of a complex clinical presentation: A case report.** *Personalized medicine in psychiatry*
  Vanden Bussche, A. B., Haug, N. A., Ball, T. M., Padula, C. B., Goldstein-Pierarski, A. N., Williams, L. M.
  2017; 3: 30-37

- **Long-term Effects on Cognitive Trajectories of Postmenopausal Hormone Therapy in Two Age Groups** *JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES*
  Espeland, M. A., Rapp, S. R., Manson, J. E., Goveas, J. S., Shumaker, S. A., Hayden, K. M., Weitlauf, J. C., Gaussoin, S. A., Baker, L. D., Padula, C. B., Hou, L., Resnick, S. M., WHIMSY WHIMS-ECHO Study Grp
  2017; 72 (6): 838–45

- **Longitudinal Cognitive Trajectories of Women Veterans from the Women's Health Initiative Memory Study.** *Gerontologist*
  Padula, C. B., Weitlauf, J. C., Rosen, A. C., Reiber, G., Cochrane, B. B., Naughton, M. J., Li, W., Rissling, M., Yaffe, K., Hunt, J. R., Stefanick, M. L., Goldstein, M. K., Espeland, et al
  2016; 56 (1): 115-125

- **Alcohol Consumption Levels and All-Cause Mortality Among Women Veterans and Non-Veterans Enrolled in the Women's Health Initiative.** *Gerontologist*
  Simpson, T. L., Rillamas-Sun, E., Lehavot, K., Timko, C., Rubin, A., Cucciare, M. A., Williams, E. C., Padula, C. B., Hunt, J. R., Hoggatt, K. J.
  2016; 56: S138-49

- **Impact of Type 2 Diabetes and Postmenopausal Hormone Therapy on Incidence of Cognitive Impairment in Older Women.** *Diabetes care*
  Espeland, M. A., Brinton, R. D., Hugenschmidt, C., Manson, J. E., Craft, S., Yaffe, K., Weitlauf, J., Vaughan, L., Johnson, K. C., Padula, C. B., Jackson, R. D., Resnick, S. M.
  2015; 38 (12): 2316-2324

- **Craving is associated with amygdala volumes in adolescent marijuana users during abstinence.** *American journal of drug and alcohol abuse*
  Padula, C. B., McQueeny, T., Lisdahl, K. M., Price, J. S., Tapert, S. F.
  2015; 41 (2): 127-132

- **Gender effects in alcohol dependence: an FMRI pilot study examining affective processing.** *Alcoholism, clinical and experimental research*
  Padula, C. B., Anthenelli, R. M., Eliassen, J. C., Nelson, E., Lisdahl, K. M.
  2015; 39 (2): 272-281

- **Cognition and Competency Restoration: Using the RBANS to Predict Length of Stay for Patients Deemed Incompetent to Stand Trial** *CLINICAL NEUROPSYCHOLOGIST*
  Ross, P. T., Padula, C. B., Nitch, S. R., Kinney, D. I.
  2015; 29 (1): 150-165