



## Daniel McCalley

Instructor, Psychiatry and Behavioral Sciences

 Curriculum Vitae available Online

### Bio

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#### ACADEMIC APPOINTMENTS

- Instructor, Psychiatry and Behavioral Sciences

#### HONORS AND AWARDS

- Outstanding Scholar in Neuroscience Award (OSNAP), National Institute of Mental Health (NIMH) and National Institute of Drug Abuse (NIDA) (2022)
- Distinguished Graduate, Medical University of South Carolina, College of Graduate Studies (2022)
- Ruth L. Kirschtein National Service in Research Award; F31, National Institute of Alcohol Abuse and Alcoholism (2020-2022)

#### PROFESSIONAL EDUCATION

- Ph.D., Medical University of South Carolina , Neuroscience (2022)
- B.S., University of Pittsburgh , Neuroscience (2017)

#### LINKS

- Twitter: <https://twitter.com/danmccalley?lang=en>
- Google scholar: <https://scholar.google.com/citations?user=tBWiU6sAAAAJ&hl=en>

### Publications

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#### PUBLICATIONS

- **The importance of overlap: A retrospective analysis of electrical field maps, alcohol cue-reactivity patterns, and treatment outcomes for alcohol use disorder.** *Brain stimulation*  
McCalley, D. M., Hanlon, C. A.  
2023
- **Sex/Gender as a Factor That Influences Transcranial Magnetic Stimulation Treatment Outcome: Three Potential Biological Explanations** *FRONTIERS IN PSYCHIATRY*  
Hanlon, C. A., McCalley, D. M.  
2022; 13: 869070
- **Targeting the Salience Network: A Mini-Review on a Novel Neuromodulation Approach for Treating Alcohol Use Disorder.** *Frontiers in psychiatry*  
Padula, C. B., Tenekedjeva, 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
- **Medial prefrontal cortex theta burst stimulation improves treatment outcomes in Alcohol Use Disorder: a double-blind, sham-controlled neuroimaging study** *Biological Psychiatry: Global Open Science*  
McCalley, D. M., Kaur, N., Wolf, J. P., Contreras, I. E., Book, S. W., Smith, J. P., Hanlon, C. A.

2022

- **Regionally specific gray matter volume is lower in alcohol use disorder: Implications for noninvasive brain stimulation treatment** *ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH*  
McCalley, D. M., Hanlon, C. A.  
2021; 45 (8): 1672-1683
- **Determining the optimal pulse number for theta burst induced change in cortical excitability** *SCIENTIFIC REPORTS*  
McCalley, D. M., Lench, D. H., Doolittle, J. D., Imperatore, J. P., Hoffman, M., Hanlon, C. A.  
2021; 11 (1): 8726
- **Non-invasive brain stimulation as a tool to decrease chronic pain in current opiate users: A parametric evaluation of two promising cortical targets** *DRUG AND ALCOHOL DEPENDENCE*  
Imperatore, J. P., McCalley, D. M., Borckardt, J. J., Brady, K. T., Hanlon, C. A.  
2021; 218: 108409
- **Non-invasive Brain Stimulation for Alcohol Use Disorders: State of the Art and Future Directions** *NEUROTHERAPEUTICS*  
Philip, N. S., Sorensen, D. O., McCalley, D. M., Hanlon, C. A.  
2020; 17 (1): 116-126
- **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
- **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 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
- **A Randomized Controlled Trial of Medial Prefrontal Cortex Theta Burst Stimulation for Cocaine Use Disorder: A Three-Month Feasibility and Brain Target Engagement Study** *BIOLOGICAL PSYCHIATRY-COGNITIVE NEUROSCIENCE AND NEUROIMAGING*  
McCalley, D. M., Kinney, K. R., Kaur, N., Wolf, J. P., Contreras, I. E., Smith, J. P., Book, S. W., Hanlon, C. A.  
2025; 10 (6): 616-625
- **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
- **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.  
SPRINGER NATURE.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.  
SPRINGER NATURE.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
- **Transdiagnostic Mood, Anxiety and Trauma Symptom Factors in Alcohol Use Disorder: Neural Correlates Across Three Brain Networks.** *Biological psychiatry. Cognitive neuroscience and neuroimaging*

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Tenekedjieva, L. T., McCalley, D. M., Goldstein-Piekarski, A. N., Williams, L. M., Padula, C. B.  
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.  
SPRINGER NATURE.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.  
SPRINGER NATURE.2023: 449
- **Evaluating a novel fMRI-compatible foot pedal device for unipedal and bipedal motion: Test-retest reliability of evoked brain activity** *HUMAN BRAIN MAPPING*  
Doolittle, J. D., Downey, R. J., Imperatore, J. P., Dowdle, L. T., Lench, D. H., McLeod, J., McCalley, D. M., Gregory, C. M., Hanlon, C. A.  
2021; 42 (1): 128-138
- **Activity-regulated cytoskeleton-associated protein (Arc/Arg3.1) regulates anxiety- and novelty-related behaviors** *GENES BRAIN AND BEHAVIOR*  
Penrod, R. D., Kumar, J., Smith, L. N., McCalley, D., Nentwig, T. B., Hughes, B. W., Barry, G. M., Glover, K., Taniguchi, M., Cowan, C. W.  
2019; 18 (7): e12561
- **Consequences of Adolescent Exposure to the Cannabinoid Receptor Agonist WIN55,212-2 on Working Memory in Female Rats** *FRONTIERS IN BEHAVIORAL NEUROSCIENCE*  
Kirschmann, E. K., McCalley, D. M., Edwards, C. M., Torregrossa, M. M.  
2017; 11: 137