Stanford

Timothy Durazzo

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

Bio

ACADEMIC APPOINTMENTS

• Professor - University Medical Line, Psychiatry and Behavioral Sciences

COMMUNITY AND INTERNATIONAL WORK

· Commissioned Officer, CA Army National Guard

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The mission of the Durazzo BRASS lab is to better understand how the interplay between biomedical, psychological and social factors influence treatment outcome in Veterans and civilians seeking treatment for alcohol and substance use disorders. To accomplish this mission, our multidisciplinary team integrates information from advanced neuroimaging, neurocognitive assessment, psychodiagnostic and genotyping methods to identify the biopsychosocial factors associated with relapse and sustained sobriety. Veteran's Administration and Stanford funded Clinical trials are currently being conducted by the BRASS lab that evaluate repetitive transcranial magnetic stimulation techniques as novel complementary treatments to reduce the high rate of relapse experienced by individuals with alcohol and substance abuse disorders. The ultimate goal of our multidisciplinary research program is to promote the development of more effective biomedical and behavioral treatments for alcohol and substance use disorders through consideration of the brain biology, psychology and social circumstances of each individual.

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

April May

Publications

PUBLICATIONS

Regional cortical brain volumes at treatment entry relates to post treatment WHO risk drinking levels in those with alcohol use disorder. Drug and alcohol
dependence

Durazzo, T. C., Stephens, L. H., Kraybill, E. P., May, A. C., Meyerhoff, D. J. 2024; 255: 111082

• 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

 Leadership Styles Experienced During Military Service Predict Later Anhedonic Depressive Symptoms and Self-Efficacy in Veterans With Alcohol Use Disorder. Military medicine Durazzo, T. C., Humphreys, K., LaRocca, M. A. 2023

 Non-abstinent recovery in alcohol use disorder is associated with greater regional cortical volumes than heavy drinking ALCOHOL-CLINICAL AND EXPERIMENTAL RESEARCH

May, A. C., Meyerhoff, D. J., Durazzo, T. C.

2023: 1850-1858

Regional cortical thickness recovery with extended abstinence after treatment in those with alcohol use disorder. Alcohol (Fayetteville, N.Y.)

 $Durazzo,\,T.\,\,C.,\,Stephens,\,L.\,\,H.,\,Meyerhoff,\,D.\,\,J.$

2023

 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

 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

• 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

• Repetitive Transcranial Magnetic Stimulation as a Treatment for Veterans with Cognitive Impairment and Multiple Comorbidities. Journal of Alzheimer's

Cheng, J., Fairchild, J. K., McNerney, M. W., Noda, A., Ashford, J. W., Suppes, P., Chao, S. Z., Taylor, J., Rosen, A., Durazzo, T., Lazzeroni, L. C., Yesavage, J. 1800

 GABA concentrations in the anterior cingulate and dorsolateral prefrontal cortices: Associations with chronic cigarette smoking, neurocognition, and decision making. Addiction biology

Durazzo, T. C., Meyerhoff, D. J.

2021; 26 (3): e12948

• 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

 Not All Is Lost for Relapsers: Relapsers With Low WHO Risk Drinking Levels and Complete Abstainers Have Comparable Regional Gray Matter Volumes ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH

Meyerhoff, D. J., Durazzo, T. C.

2020

 Evaluation of adding the CANTAB computerized neuropsychological assessment battery to a traditional battery in a tertiary care center for veterans APPLIED NEUROPSYCHOLOGY-ADULT

Schulz-Heik, R., Fahimi, A., Durazzo, T. C., Friedman, M., Bayley, P. J.

2020; 27 (3): 256–66

• 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

 Cigarette Smoking History is associated with Poorer Recovery in Multiple Neurocognitive Domains Following Treatment for an Alcohol Use Disorder. Alcohol (Fayetteville, N.Y.)

Durazzo, T. C., Meyerhoff, D. J.

2020

• Medical Conditions Linked to Atherosclerosis Are Associated With Magnified Cortical Thinning in Individuals With Alcohol Use Disorders. Alcohol and alcoholism (Oxford, Oxford, Oxfordshire)

Durazzo, T. C., Nguyen, L. C., Meyerhoff, D. J. 2020

Modeling neurocognitive and neurobiological recovery in addiction COGNITION AND ADDICTION: A RESEARCHER'S GUIDE FROM MECHANISMS
 TOWARDS INTERVENTIONS

Meyerhoff, D. J., Durazzo, T. C., VerdejoGarcia, A. 2020: 379–92

 Evaluation of adding the CANTAB computerized neuropsychological assessment battery to a traditional battery in a tertiary care center for veterans. Applied neuropsychology. Adult

Schulz-Heik, R. J., Fahimi, A., Durazzo, T. C., Friedman, M., Bayley, P. J. 2019: 1–11

Changes of frontal cortical subregion volumes in alcohol dependent individuals during early abstinence: associations with treatment outcome. Brain imaging and behavior

Durazzo, T. C., Meyerhoff, D. J. 2019

Cerebellar Morphometry and Cognition in the Context of Chronic Alcohol Consumption and Cigarette Smoking. Alcoholism, clinical and experimental
research

Cardenas, V. A., Hough, C. M., Durazzo, T. C., Meyerhoff, D. J. 2019

• White matter microstructural correlates of relapse in alcohol dependence PSYCHIATRY RESEARCH-NEUROIMAGING

Zou, Y., Murray, D. E., Durazzo, T. C., Schmidt, T. P., Murray, T. A., Meyerhoff, D. J. 2018; 281: 92-100

 Cigarette smoking is associated with cortical thinning in anterior frontal regions, insula and regions showing atrophy in early Alzheimer's Disease DRUG AND ALCOHOL DEPENDENCE

Durazzo, T. C., Meyerhoff, D. J., Yoder, K. K. 2018; 192: 277-284

Cigarette smoking is associated with cortical thinning in anterior frontal regions, insula and regions showing atrophy in early Alzheimer's Disease. Drug
and alcohol dependence

Durazzo, T. C., Meyerhoff, D. J., Yoder, K. K. 2018: 192: 277–84

• White matter microstructural correlates of relapse in alcohol dependence. Psychiatry research. Neuroimaging

Zou, Y., Murray, D. E., Durazzo, T. C., Schmidt, T. P., Murray, T. A., Meyerhoff, D. J. 2018; 281: 92–100

 Regional Brain Volume Changes in Alcohol-Dependent Individuals During Short-Term and Long-Term Abstinence ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH

Zou, X., Durazzo, T. C., Meyerhoff, D. J. 2018; 42 (6): 1062–72

 Differences in White Matter Microstructure and Connectivity in Nontreatment-Seeking Individuals with Alcohol Use Disorder ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH

Chumin, E. J., Goni, J., Halcomb, M. E., Durazzo, T. C., Dzemidzic, M., Yoder, K. K. 2018; 42 (5): 889–96

 Brain GABA and Glutamate Concentrations Following Chronic Gabapentin Administration: A Convenience Sample Studied During Early Abstinence From Alcohol FRONTIERS IN PSYCHIATRY

Meyerhoff, D. J., Murray, D. E., Durazzo, T. C., Pennington, D. L. 2018: 9: 78

Regional cerebral blood flow in opiate dependence relates to substance use and neuropsychological performance ADDICTION BIOLOGY
Murray, D. E., Durazzo, T. C., Schmidt, T. P., Murray, T. A., Abe, C., Guydish, J., Meyerhoff, D. J.

2018; 23 (2): 781–95

Cigarette smoking is associated with amplified age-related volume loss in subcortical brain regions. Drug and alcohol dependence

Durazzo, T. C., Meyerhoff, D. J., Yoder, K. K., Murray, D. E. 2017: 177: 228-236

 Effects of abstinence and chronic cigarette smoking on white matter microstructure in alcohol dependence: Diffusion tensor imaging at 4T. Drug and alcohol dependence

Zou, Y., Murray, D. E., Durazzo, T. C., Schmidt, T. P., Murray, T. A., Meyerhoff, D. J. 2017; 175: 42-50

 Neurocognition and inhibitory control in polysubstance use disorders: Comparison with alcohol use disorders and changes with abstinence JOURNAL OF CLINICAL AND EXPERIMENTAL NEUROPSYCHOLOGY

Schmidt, T. P., Pennington, D. L., Cardoos, S. L., Durazzo, T. C., Meyerhoff, D. J. 2017; 39 (1): 22-34

 Psychiatric, Demographic, and Brain Morphological Predictors of Relapse After Treatment for an Alcohol Use Disorder. Alcoholism, clinical and experimental research

Durazzo, T. C., Meyerhoff, D. J. 2017: 41 (1): 107-116

Regional brain volume changes in alcohol-dependent individuals during early abstinence: associations with relapse following treatment. Addiction Biology
Durazzo, T. C., Mon, A., Gazdzinski, S., Meyerhoff, D. J.

2017; 22 (5): 1416-1425

Neurocognition and inhibitory control in polysubstance use disorders: Comparison with alcohol use disorders and changes with abstinence. Journal of clinical and experimental neuropsychology

Schmidt, T. P., Pennington, D. L., Cardoos, S. L., Durazzo, T. C., Meyerhoff, D. J. 2016: 1-13

• Fat may affect magnetic resonance signal intensity and brain tissue volumes. Obesity research & clinical practice

Mon, A., Abé, C., Durazzo, T. C., Meyerhoff, D. J. 2016; 10 (2): 211-5

 Frontal Metabolite Concentration Deficits in Opiate Dependence Relate to Substance Use, Cognition, and Self-Regulation. Journal of addiction research & therapy

Murray, D. E., Durazzo, T. C., Schmidt, T. P., Abé, C., Guydish, J., Meyerhoff, D. J. 2016; 7 (4)

 Active Cigarette Smoking in Cognitively-Normal Elders and Probable Alzheimer's Disease is Associated with Elevated Cerebrospinal Fluid Oxidative Stress Biomarkers. Journal of Alzheimer's disease: JAD

Durazzo, T. C., Korecka, M., Trojanowski, J. Q., Weiner, M. W., O' Hara, R., Ashford, J. W., Shaw, L. M. 2016; 54 (1): 99-107

 Chronic Cigarette Smoking in Healthy Middle-Aged Individuals Is Associated With Decreased Regional Brain N-acetylaspartate and Glutamate Levels. Biological psychiatry

Durazzo, T. C., Meyerhoff, D. J., Mon, A., Abé, C., Gazdzinski, S., Murray, D. E. 2016; 79 (6): 481-8

• Interaction of Cigarette Smoking History With APOE Genotype and Age on Amyloid Level, Glucose Metabolism, and Neurocognition in Cognitively Normal Elders. Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco

Durazzo, T. C., Mattsson, N., Weiner, M. W.

2016; 18 (2): 204-11

 Serial longitudinal magnetic resonance imaging data indicate non-linear regional gray matter volume recovery in abstinent alcohol-dependent individuals. Addiction biology

Durazzo, T. C., Mon, A., Gazdzinski, S., Yeh, P. H., Meyerhoff, D. J. 2015: 20 (5): 956-67

Comparison of Regional Brain Perfusion Levels in Chronically Smoking and Non-Smoking Adults. International journal of environmental research and
public health

Durazzo, T. C., Meyerhoff, D. J., Murray, D. E.

2015; 12 (7): 8198-213

- Brain perfusion in polysubstance users: relationship to substance and tobacco use, cognition, and self-regulation. *Drug and alcohol dependence* Murray, D. E., Durazzo, T. C., Mon, A., Schmidt, T. P., Meyerhoff, D. J. 2015; 150: 120-8
- Alcohol use disorder with and without stimulant use: brain morphometry and its associations with cigarette smoking, cognition, and inhibitory control. PloS one

Pennington, D. L., Durazzo, T. C., Schmidt, T. P., Abé, C., Mon, A., Meyerhoff, D. J. 2015; 10 (3): e0122505