

Brief Description of the Alcohol and Neuroimaging Study

The goal of this study is to characterize the role of the neuroimmune system in alcohol use disorder (AUD). Previous research suggests that antibiotics may be effective in treating inflammation in the brain (neuroinflammation) and help offset some of the negative consequences of heavy drinking.

We will examine neuroinflammation via magnetic resonance imaging (MRI) and see how it relates to alcohol use and thinking and memory. The study will also determine whether minocycline, an FDA-approved antibiotic medication, affects any of the above listed measures.

We are recruiting healthy controls and heavy alcohol drinkers to be randomized to receive either 200 mg of minocycline per day or placebo (an inactive substance) for approximately 28 days and complete study sessions over the course of 6 weeks. The first session will be performed immediately before starting the medication and the final session will be completed after taking the medication daily for approximately 28 days. At the first and final sessions, participants will complete neurocognitive performance tasks and an MRI of the brain, as well as additional questionnaires and tasks. Participants will be asked to come back for weekly visits to receive medication, talk to the study staff about any side effects, and respond to questionnaires.

This study is being conducted by Dr. Daniel Roche and his team at the Maryland Psychiatric Research Center in Catonsville, MD, part of the University of Maryland School of Medicine.

For more information, call 410-402-6412 or email addictionlab@som.umaryland.edu.