

## Transdiagnostic Cognitive Biomarkers

**Status:** Recruiting

### Eligibility Criteria

**Age:** 18 years and over

This study is also accepting healthy

**Healthy Volunteers:** volunteers

**Inclusion Criteria:**

Chronic refractory pain or depression: - chronic pain that is not controlled with oral pain medications or - diagnosis of major depression - Healthy participants: adults at least 18 years old

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**Exclusion Criteria:**

Contraindication to TMS: - Metallic hardware in close contact to the discharging coil (such as cochlear implants, deep brain stimulator, medication pumps) - History of seizures - Epilepsy - Contraindications to MRI - Inability to complete tasks associated with study - Pregnancy - Pediatric participants - Adult lacking ability to consent - Non-English speaking - Blindness  
Healthy Controls: - diagnosis of chronic pain or depression

### Conditions & Interventions

**Conditions:**

Brain & Nervous System, Mental Health & Addiction

**Keywords:**

brain, Depression, fMRI, imaging, MRI, Pain, stimulation, TMS

### More Information

**Description:** The overall objective of this study is to determine the feasibility of identifying transdiagnostic biomarkers of cognitive function mediated by neuromodulation of the dorsolateral prefrontal cortex that are translatable across disease groups in order to more accurately phenotype clusters of cognitive dysfunction. Completing behavioral paradigms with electrophysiology and TMS is a challenging frontier. This study focuses on the feasibility of such an endeavor for those with chronic pain or depression as well as healthy controls.

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**Phase:** NA

**IRB**

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