Researcher Spotlight

Advancing Mental Health with Neuromodulation

Dr. Desmond Oathes

In this successfully completed trial, **Dr. Desmond Oathes** and his team used targeted repetitive transcranial magnetic stimulation (TMS), approved for depression, to treat patients with PTSD or both PTSD and depression. The positive results were published and Dr. Oathes raised $1.6 million from the NIH in 2024 for related trials, now ongoing.

In addition to teaching at the Perelman School of Medicine at the **University of Pennsylvania**, Dr. Oathes serves as a mentor to students as well as directs the Center for Brain Imaging and Stimulation at Penn. He also provides psychotherapy as a staff psychologist at the Penn Center for the Treatment and Study of Anxiety, providing expertise in cognitive-behavioral therapy, particularly in anxiety-related disorders.

Dr. Oathes has contributed to groundbreaking studies that identify common neurobiological patterns across a range of mental illnesses. His research explores how brain imaging and non-invasive stimulation techniques can be used to better understand and treat conditions such as depression, anxiety, and PTSD, and his publications highlight the neural signatures associated with anxiety and depression. His research not only advances our understanding of these neurological conditions, but also opens new avenues for personalized treatment strategies.

Profile

Dr. Desmond J. Oathes is an Associate Professor of Psychiatry at the Perelman School of Medicine at the University of Pennsylvania, Director of the Center for Brain Imaging and Stimulation and has leadership roles in two other brain stimulation centers. Dr. Oathes received his PhD from Penn State University and served on the faculty at Stanford University before joining Penn in 2016.

CWR Funding

Completed in 2021, this **randomized Phase IIA trial** used repetitive TMS, approved for depression and guided by functional MRI, to deliver targeted treatment to patients with PTSD or both PTSD and depression. Dr. Oathes and this trial represent two of Cures Within Reach's Communities:

- Neurology
- Veterans