Stanford



Wiebke Struckmann

Postdoctoral Scholar, Psychiatry

Bio

BIO

Dr. Struckmann earned her B.Sc. and M.Sc. degrees in Psychology from the University of Jena in Germany, followed by a Ph.D. in Clinical Neuroscience from Uppsala University in Sweden. Throughout her doctoral studies, Dr. Struckmann used functional magnetic resonance imaging (fMRI) and functional near-infrared spectroscopy (fNIRS) in a neuroimaging-guided clinical trial assessing the effectiveness of transcranial magnetic stimulation (TMS) targeting the dorsomedial prefrontal cortex to alleviate anhedonia in individuals with depression and schizophrenia.

Dr. Struckmann joined the Stanford Brain Stimulation Lab as a Postdoctoral Scholar in September 2022. Presently, she leads a clinical trial examining personalized therapeutic neuromodulation for anhedonic depression. Driven by her passion for innovative research methodologies, Dr. Struckmann incorporates personalized task designs and physiological assessments to untangle the intricate relationships between cognition, emotion, and psychiatric symptoms, extending her investigations to include obsessive-compulsive disorder (OCD) and addiction. Dr. Struckmann's primary objective is to advance both our comprehension and treatment of mental health conditions through probing target networks in the brain.

STANFORD ADVISORS

- · Nolan Williams, Postdoctoral Faculty Sponsor
- · Cammie Rolle, Postdoctoral Research Mentor

Publications

PUBLICATIONS

 Modulation of dorsolateral prefrontal cortex functional connectivity after intermittent theta-burst stimulation in depression: Combining findings from fNIRS and fMRI NEUROIMAGE-CLINICAL

Struckmann, W., Boden, R., Gingnell, M., Fallmar, D., Persson, J. 2022; 34: 103028

 Dorsomedial prefrontal theta burst stimulation to treat anhedonia, avolition, and blunted affect in schizophrenia or depression - a randomized controlled trial. Journal of affective disorders

Bodén, R., Bengtsson, J., Thörnblom, E., Struckmann, W., Persson, J.

2021; 290: 308-315

Unchanged Cognitive Performance and Concurrent Prefrontal Blood Oxygenation After Accelerated Intermittent Theta-Burst Stimulation in Depression:
A Sham-Controlled Study FRONTIERS IN PSYCHIATRY

Struckmann, W., Persson, J., Gingnell, M., Weigl, W., Wass, C., Boden, R. 2021; 12: 659571

• Intermittent theta burst stimulation over the dorsomedial prefrontal cortex modulates resting-state connectivity in depressive patients: A sham-controlled study. Behavioural brain research

Persson, J., Struckmann, W., Gingnell, M., Fällmar, D., Bodén, R.

2020; 394: 112834

 $\bullet \ \ Pain \ trajectories \ of \ dorsomedial \ prefrontal \ intermittent \ theta \ burst \ stimulation \ versus \ sham \ treatment \ in \ depression \ \textit{BMC NEUROLOGY}$

Malm, E., Struckmann, W., Persson, J., Boden, R.

2020; 20 (1): 311

• Modulation of the prefrontal blood oxygenation response to intermittent theta-burst stimulation in depression: A sham-controlled study with functional near-infrared spectroscopy WORLD JOURNAL OF BIOLOGICAL PSYCHIATRY

Struckmann, W., Persson, J., Weigl, W., Gingnell, M., Boden, R.

2021; 22 (4): 247-256