



**It's not just another Geodesic EEG system.
It's a Geodesic EEG Ecosystem.**



June 2023

BEL Webinar: "Electrical perturbation of human cortex..."



BEL presents "Electrical perturbation of human cortex generates a reliable, individualized read-out of cortical excitability: what's the potential and is this just a phase?" Dr. Allison C. Waters, PhD, Assistant Professor of Psychiatry and Neuroscience at the Nash Family Center for Advanced Circuit Therapeutics, and Ichan School of Medicine at Mount Sinai.

Dr. Waters will present this research as well as a Q and A session.

[Register now to join us for the webinar,](#)

June 30th at 9am PST.

Electrical perturbation mapping provides a read-out of electrocortical dynamics in response to single pulses of brain stimulation. The approach holds great promise for optimizing neuromodulation therapies according to individual differences in brain responsiveness to stimulation.



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SLEEP Meeting 2023



The APSS, AASM, SRS SLEEP 2023 meeting in Indianapolis this month was a great success for BEL! Justin Nichols, Ph.D. enjoyed connecting with people and showcasing BEL's [**Geodesic EEG Ecosystem**](#) for sleep researchers as well as the new prototype of BEL's wearable headband, **WISP with NEAT software** for automatic sleep scoring. Current trends in the sleep market include a strong interest in wearable technology (see the article below on our **WISP headband**), as well as AI powered sleep staging. For the poster session of the SLEEP meeting, BEL was pleased to collaborate on a poster entitled, "Development and Validation of Low Level Transcranial Electrical Stimulation to Enhance Slow Oscillations During Human NREM Sleep". The poster was the product of a study on augmented sleep neurophysiology funded by MTEC (see the article below on grant work). The study is in partnership with colleagues at UNC School of Medicine, University of Washington, Oregon Health and Science University, University of Florida and Montana State University.

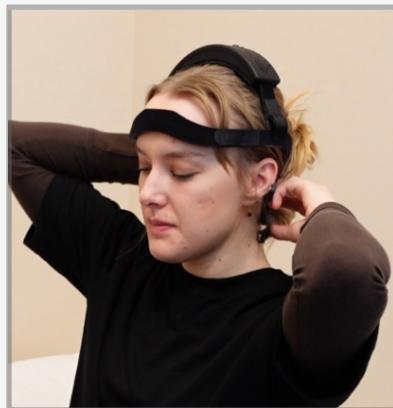


BEL Product Focus



The [BEL EEG System One](#) is a complete EEG System perfectly designed for sleep research. The exceptional comfort and fit of the Geodesic Head Web makes it easy for a subject to snooze during your experiment. The quick application (60 seconds) of our [Geodesic Head Web](#) makes working with children and special populations much simpler.

BEL Technology in Use



The **BEL WISP** headband is currently in use in a major study funded by the National Institute of Aging. [The \\$2.5M grant to study improvement of Mild Cognitive Impairment](#) uses a TES (transcranial electrical stimulation) version of the WISP to lengthen restorative deep sleep for people with MCI. The link between a lack of deep sleep and neurodegenerative diseases is shown in recent scientific literature, as well as the promise of improving these conditions with better quality sleep.

BEL Grant Work



BEL is collaborating with Dr. Jeff Illif, Dr. Miranda Lim, and others on a [\\$4.3M grant from the Department of Defense](#) to study the augmented neurophysiology of sleep and performance readiness. Active-duty service members are often sleep deprived and feel the cognitive impact. The study is using the **BEL WISP technology** to lengthen the participant's deep sleep and study the effects on cognitive function, as well as the glymphatic, or waste clearance, of the brain.