

## **Sarah H. Lisanby, Ph.D.**



Dr. Lisanby is an internationally recognized expert in the field of brain stimulation. Her work is translational, spanning nonhuman primates, healthy humans, and clinical populations. JP Gibbons Endowed Professor with Tenure and former Department Chair of the Duke Department of Psychiatry, she founded and directed the Duke Brain Stimulation and Neurophysiology Division that encompasses interdisciplinary research labs spanning technology development, pre-clinical modeling, translational neuroscience, clinical trials, and clinical application. Prior to being recruited to Duke as Department Chair, Dr. Lisanby founded and directed the Columbia Division of Brain Stimulation, where she was Professor of Psychiatry. Dr. Lisanby been PI on a series of

NIH and DARPA funded studies on the development of novel neuromodulation technologies, including studies on the rational design of magnetic and electrical seizure therapies. Her team pioneered magnetic seizure therapy (MST) as a novel depression treatment from the stages of animal testing, first in human, and now international clinical trials. An experienced NIH-funded researcher, she has been PI of a series of R01 and U01 mechanisms involving transcranial magnetic stimulation (TMS) and other devices. Dr. Lisanby was PI of the series of studies that established the fMRI-guided TMS during working memory training to improve working memory performance in healthy volunteers, and to remediate working memory deficits following sleep deprivation. This paradigm has been extended to mitigate the effects of age-related decline in working memory. In October 2015, she took a leave of absence from Duke to serve as Director of Translational Research at NIMH, where she founded and directs the Neuromodulation Unit in the Experimental Therapeutics Branch in the NIMH Intramural Research Program. The Neuromodulation Unit specializes in the use of noninvasive neuromodulation tools to measure and manipulate neuroplasticity to improve human health. Dr. Lisanby co-leads the NIH BRAIN Initiative Team on large-scale recording and modulation devices.