



Neuromodulation of Cortical Networks in Neurological and Neuropsychiatric Disorders: Potential Clinical Indications and the Biophysiological Impact of Stimulation

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Message from the Guest Editors

Neuromodulation of cortical networks following electrical and magnetic stimulation techniques has been proposed as a therapeutic tool to assist in treating individuals with neurological and neuropsychiatric disorders. Stimulating cortical networks can enhance neuroplasticity, act as a neuro-rehabilitative tool, or recalibrate aberrant neural pathways. The question is how brain stimulation results in lasting changes in cortical excitability, how brain dynamics evolve during stimulation, how we can quantify the excitability changes in human cortical networks, and how these changes translate into improved clinical outcomes. The aim of the current Special Issue is to gather the latest high-quality research on the use of neuromodulation following electrical and magnetic stimulation in neurological and neuropsychiatric disorders, focusing on movement disorders, spinal cord injury, epilepsy, stroke, aphasia, chronic pain, tinnitus, migraine, depression, anxiety, hallucinations, addiction, and memory disorders. Authors are invited to submit original research articles, reviews, or protocol papers outlining new and promising techniques and stimulation protocols.





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