"Plasticity Induced by Theta Burst Stimulation: Common Effects of BDNF and Transcranial Direct Current Stimulation?"

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Dr. Rothwell received his PhD from the University of London, UK, in 1980. He is a Fellow of the Academy of Medical Sciences, and has served as Head of the Sobell Department of Motor Neuroscience and Movement Disorders at the UCL Institute of Neurology. His laboratory specialises in devising new techniques to study the physiology of the human motor system in intact, awake volunteers, with the objective of examining pathological changes in neurological disease, not only for the purposes of identifying pathology but also to chart compensatory changes that occur in parts of the system unaffected by the disease process. This work has provided insight into the mechanisms of action of deep brain stimulation for the treatment of Parkinson’s disease and dystonia, and the disorganization of cortical and brainstem circuitry in different forms of myoclonus. His lab has a long experience with transcranial magnetic stimulation (TMS) and has pioneered its use as a cortical connectivity probe, as a virtual lesion technique, and as a method for provoking long-term neuromodulation, including theta burst TMS.