Neural Plasticity

Hindawi

Special Issue on

Noninvasive Induction of Associative Plasticity in Humans

CALL FOR PAPERS

Associative plasticity, defined as the plasticity formation requiring a pairing conditioning, plays an important role in several physiologic and pathologic conditions in the neural system. Various associative plasticity is generated from the daily life activities in humans (e.g., motor learning and short-term memory). Nevertheless, the daily life activities-induced associative plasticity is difficult to be quantitatively measured. In recent years, noninvasive brain stimulation (NIBS) techniques including repetitive transcranial magnetic stimulation, paired associative stimulation, and transcranial direct current stimulation have been extensively applied to induce or modulate cortical plasticity in the human brain. Despite bearing the limitation of interindividual variability, NIBS may induce predictable associative plasticity in the system level of the cerebral cortex. This special issue aims to provide an opportunity to discuss achievements and perspectives on this topic. We are inviting investigators to submit original research papers and review articles.

Potential topics include, but are not limited to:

- Studies of spike-timing dependent plasticity in humans
- Noninvasive brain stimulation with an associative conditioning
- Neurorehabilitation relevant to associative learning
- Aberrant cortical associative plasticity in neuropsychiatric disorders
- Novel insights into the pathophysiology of neuropsychiatric disorders by application of paired associative stimulation
- Neuroanatomy or neuroimage relevant to associative plasticity
- Clinical studies of associative plasticity
- Modeling of associative plasticity

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/np/niap/.

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Manuscript Due
Friday, 9 September 2016

First Round of Reviews
Friday, 2 December 2016

Publication Date
Friday, 27 January 2017