Neural Plasticity

Hindawi

Special Issue on
Visual Plasticity in Adults

CALL FOR PAPERS

The pioneering work of Hubel and Wiesel established the concept of a critical period for visual development early in life during which sensory experience is essential to normal neural development. Although this is a fundamental concept in neurobiology, it is also now recognized that some limited plasticity remains after this period well into adulthood. During recent decades, numerous studies have shown that a range of visual functions in adult subjects can be modified as a result of intensive training (i.e., perceptual learning), transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS), visual deprivation, visual adaptation, and so on. Some of these techniques have been used for clinical therapies, such as the treatment of adult amblyopia.

This special issue aims to provide a platform to systematically update novel findings for visual plasticity in adults from the molecular and cellular level to the whole brain network, from animals to humans. Any research articles as well as review articles relating to visual plasticity in adults are welcome.

Potential topics include but are not limited to the following:

- Visual perceptual learning in adults
- Short-term visual deprivation in adults
- The effect of TMS/tDCS on visual perception in adults
- The effect of visual adaption in adults
- New techniques to modulate visual plasticity in adults
- The underlying mechanism in modulating visual functions in adults, including behavior models, neural response changes, and brain activity modifications
- The role of visual plasticity in recovering visual deficits

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

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