



Neural Plasticity

Special Issue on

Sleep, Exercise, and Inflammation in Brain Plasticity

CALL FOR PAPERS

Brain plasticity is modulated by disease and normal behaviors, such as sleep and exercise. Inflammatory molecules and mechanisms including cerebral blood flow affect brain plasticity. Much evidence indicates that sleep and exercise alter both peripheral and central nervous systems inflammation and vice versa. Recent technological advances in neuroscience and immunology have allowed the study of underlying mechanisms that regulate brain plasticity including those modulated by waking activity and behavior. Moreover, current findings indicate a relationship between inflammation and brain plasticity-related molecules, although these mechanisms are not fully understood.

We seek original human and animal research manuscripts that explore the relationship of sleep, exercise, disease, and/or inflammation with brain plasticity. We invite investigators to contribute original high quality research and review articles that have not been published or are not currently under review by other journals or peer-reviewed conferences.

Potential topics include, but are not limited to:

- ▶ Sleep and sleep loss induced changes in mood and cognition
- ▶ Role of enhanced waking activity/sleep deprivation in modulating inflammation
- ▶ Inflammation-related molecules and mechanisms that modulate sleep and electroencephalogram power
- ▶ Effects of exercise/physical activity on brain plasticity
- ▶ Exercise/physical activity effects on inflammatory- or brain plasticity-related molecules
- ▶ Inflammatory molecules/mechanism modulating brain plasticity or cognition
- ▶ Behavior-related changes in cerebral blood flow and/or the fMRI signal
- ▶ Cerebral blood flow changes affecting brain plasticity
- ▶ Latest technologies for clinical evaluation of inflammatory mediators in brain plasticity
- ▶ Role of inflammatory-related diseases affecting brain plasticity

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

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