

# CALL FOR PAPERS

Synaptic plasticity is a neurobiological process based on structural, functional, and molecular mechanisms that allow the brain to change and adapt over time. The study of synaptic plasticity may help to disclose physiological age-related changes and could shed light on the neurobiological modifications occurring with pathological aging or neurodevelopment. In addition, a number of disorders exhibit restricted temporal windows for triggering pathophysiological cascades or symptom onset. The investigation of plasticity mechanisms in age-related disorders would ultimately allow for identification of “at-risk” individuals that may benefit from targeted interventions.

The aim of this Special Issue is to address advances in the field of synaptic plasticity abnormalities resulting from physiological and pathological age-related processes. This Special Issue welcomes human studies as well as animal studies, particularly basic electrophysiology rodent models including transgenic mice and rats. Studies on parkinsonian syndromes and movement disorders (Parkinson’s disease and atypical parkinsonisms, dystonia, and other hyperkinetic conditions) and cognitive disorders (Alzheimer’s disease, other dementias, and neuropsychiatric syndromes) will be considered. A range of possible techniques will be considered, including but not limited to the manipulation of magnetic fields and electrical activity of the brain [transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS)], functional connectivity studies [including TMS-magnetic resonance imaging (MRI), TMS-functional MRI (fMRI), TMS-electroencephalography (EEG), EEG-fMRI, quantitative EEG (qEEG) techniques], and cellular electrophysiology (intracellular recordings, patch clamp, etc.).

This Special Issue welcomes the submission of original research and review articles describing the current state-of-the-art concerning synaptic plasticity in age-related disorders.

Potential topics include but are not limited to the following:

- ▶ Synaptic plasticity tested in aging (e.g., in frail and resilient elderly populations)
- ▶ Synaptic plasticity tested in neurodevelopmental disorders (e.g., autism spectrum disorders)
- ▶ Synaptic plasticity tested in age-related disorders (e.g., movement disorders, cognitive disorders, and neuropsychiatric disorders)
- ▶ Synaptic plasticity tested in rodent models of age-related disorders

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/np/rdnba/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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