

## Special Issue on **Mechanisms of Cell Damage in Neurological Diseases and Putative Neuroprotective Strategies**

# CALL FOR PAPERS

Several mechanisms of cellular damage are involved in the pathophysiology of neurological disorders such as stroke, Alzheimer's disease, Parkinson's disease, Huntington's disease, acquired immunodeficiency syndrome- (AIDS-) dementia complex, amyotrophic lateral sclerosis, and hepatic encephalopathy. These mechanisms include excitotoxicity, increases in intracellular  $\text{Ca}^{2+}$  levels, overproduction of reactive oxygen and nitrogen species, mitochondrial damage, and inflammation. They result in the death of cerebral tissue through different types of cell death, such as necrosis, apoptosis, and necroptosis. Alterations in cellular energy levels, the redox state, and  $\text{Ca}^{2+}$  concentrations reduce the protein folding capacity of the endoplasmic reticulum and lead to the accumulation and aggregation of unfolded proteins, a condition known as endoplasmic reticulum stress. Study of the mechanisms of cellular damage will allow the development of new therapeutic targets for the treatment of these debilitating diseases.

This special issue aims to publish high-quality original articles and review articles relating to the mechanisms involved in the pathophysiology of neurological diseases and possible neuroprotective strategies.

Potential topics include but are not limited to the following:

- ▶ Role of endoplasmic reticulum stress in neurological disorders
- ▶ Role of oxidative stress in neurological disorders
- ▶ Role of inflammation in neurological disorders
- ▶ Role of ion dysfunction in neurological disorders
- ▶ Characterization of pathways that protect against oxidative damage, such as Nrf2 and CREB transcription factors
- ▶ Effect of natural products on oxidative stress in relation to neurological disorders

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/omcl/mcdds/>.

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

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### **Submission Deadline**

Friday, 27 October 2017

### **Publication Date**

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