Special Issue

The Contribution of Non-Neuronal Cells in Neurodegeneration: From Molecular Pathogenesis to Therapeutic Challenges

Message from the Guest Editors

Neuron loss occurring in neurodegenerative diseases represents just the tip of the iceberg in a series of events where cells, other than neurons, actively contribute to the pathogenic mechanisms, establishing harmful non-cell autonomous processes. In this aspect, amyotrophic lateral sclerosis is paradigmatic of the most common neurodegenerative disorders, since motor neuron demise, the major event characterizing the disease, is accompanied by the activation of astrocytic and microglial cells activation, oligodendrogliopathy, blood brain barrier permeabilization, T cells, macrophages and mast cells infiltration, neuromuscular junction dismantling, muscle alterations and dyslipidemia. Furthermore, the disease can involve the impairment of neurons other than the motor ones, such as those of the frontotemporal lobe. The aim of this Special Issue is to highlight the role of non-neuronal cells in the onset and progression of different neurodegenerative diseases, such as Parkinson's, Alzheimer's and dementias, Huntington's, spinocerebellar ataxias, spinal muscular atrophy and prion diseases. For further reading, please visit the Special Issue website.

Guest Editors

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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