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

Guest Editors:

Dr. Nadia D'Ambrosi

Department of Biology, University of Rome Tor Vergata, Rome, Italy

Dr. Savina Apolloni

Department of Biology, Tor Vergata University of Rome, 00133 Rome, Italy

Dr. Mauro Cozzolino

Institute of Translational Pharmacology, National Research Council, Rome, Italy

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Message from the Guest Editors

Dear Colleagues,

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 is paradigmatic of the most common sclerosis 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.













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Editors-in-Chief

Prof. Dr. Alexander E. Kalyuzhny

Neuroscience, UMN Twin Cities, 6-145 Jackson Hall, 321 Church St SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

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