Special Issue

Drug-Induced Neurotoxicity and Neurodegeneration: Mechanisms, Models and Implications

Message from the Guest Editors

Drug-induced neurotoxicity and neurodegeneration are emerging as important triggers of human diseases, significantly impacting individual health and public healthcare systems worldwide. In contemporary society, the rapid development of drugs and the increasing exposure to diverse pharmaceutical agents, abused substances, and environmental toxins make a deeper understanding of the mechanisms underlying neurotoxic damage essential to develop effective mitigation strategies.

In this Special Issue, we are particularly interested in contributions on the mechanisms of drug-induced neurotoxicity and neurodegeneration at molecular, cellular and organismal levels, innovative in vitro, in vivo, and in silico models that depicts the dynamics of neuronal damage, biomarkers and altered pathways useful for early diagnosis, translational studies linking experimental findings to clinical outcomes, and putative therapeutic strategies to prevent or mitigate neurotoxic insults. Thus, this Special Issue aims to bridge the gap between experimental research and clinical practice by broadly exploring how toxic exposures affect the nervous system.

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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