# **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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## Message from the Editor-in-Chief

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