

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.

Guest Editors

Dr. Daniel José Barbosa

1. Associate Laboratory i4HB—Institute for Health and Bioeconomy, University Institute of Health Sciences—CESPU, 4585-116 Gandra, Portugal
2. UCIBIO—Applied Molecular Biosciences Unit, Translational Toxicology Research Laboratory, University Institute of Health Sciences (IH-TOXRUN, IUCS-CESPU), 4585-116 Gandra, Portugal

Dr. Renata Silva

1. Associate Laboratory i4HB—Institute for Health and Bioeconomy, Faculty of Pharmacy, University of Porto, Porto, Portugal
2. UCIBIO—Applied Molecular Biosciences Unit, Laboratory of Toxicology, Department of Biological Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal

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4052 Basel, Switzerland
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Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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