Special Issue

Neuroregenerative and Neuroprotective Strategies Based on Smart Nanomaterials

Message from the Guest Editor

During the nerve regeneration process a large number of biological events, including axonal outgrowth, spatial organization of different cell types, cell-cell interactions, and cell-matrix interactions, need to be re-assembled. Nanomaterials can be used to finely modulate nerve regeneration by localization of therapeutic factors or depletion of detrimental molecules; for physical guidance of the nerve regeneration process; to promote axon outgrowth by altering intracellular signaling cascades or perturbing intrinsic neural electric activity. This open-access Special Issue will bring together original research and review articles to highlight new discoveries, approaches, and technical developments in the field of nanomedicine for promoting axon outgrowth, nerve regeneration, and neuroprotection. The goal of the Special Issue is to summarize and enlarge the knowledge in nanomedicine-driven strategies for the treatment of injuries and diseases affecting the peripheral (PNS) and the central nervous system (CNS).

Guest Editor

Prof. Dr. Vittoria Raffa Department of Biology, University of Pisa, 56127 Pisa, Italy

Deadline for manuscript submissions

closed (15 March 2021)



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International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

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Message from the Editor-in-Chief

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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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