neuroglia

an Open Access Journal by MDPI

Regenerative Medicine: The Mechanism and Role of Neuroglia after Spinal Cord Injury

Guest Editors:

Dr. Chih-Wei Zeng
Department of Molecular Biology, UT Southwestern Medical Center, 6000 Harry Hines Blvd, Dallas, TX 75390, USA

Dr. Jan Kaslin
Australian Regenerative Medicine Institute, Monash University, Clayton, VIC, Australia

Deadline for manuscript submissions:
closed (30 April 2024)

Message from the Guest Editors

After damage, neuronal production can be re-established to restore specific functions in the central nervous system (CNS). In adult neurogenesis, neurons are generated and integrated into the circuits system in the vertebrate brain. Adult neurogenesis not only supports learning and memory but also regenerates neurons lost to disease or injury in some species. Therefore, understanding the mechanism(s) and role of neuroglia involved in neuronal regeneration can bring fundamental insight into cell plasticity, reprogramming and stem cell fate in the physiological condition, thus providing a context for the therapeutic repair of lesions and reversal of degenerative events.

The purpose of this Special Issue is to focus on unraveling (1) the different roles of the neuroglia, which might have different roles and mechanisms involved in reprogram process after spinal cord injury (SCI); (2) a better understanding of mechanisms underlying neurogenesis and neuron integration in order to develop therapeutic strategies at the cellular level. We believe that this Special Issue can provide new insight into the current understanding of neurogenesis and