Special Issue

Advanced Research in Neurogenesis and Neuroinflammation

Message from the Guest Editor

Neurogenesis refers to the process by which neural stem cells (NSCs) go through multiple stages of proliferation and differentiation, resulting in the generation of new neurons within the brain. These newly formed neurons integrate into the neural networks, playing a crucial role in the management of various brain functions such as learning and memory. The phenomenon of adult neurogenesis introduces a unique type of plasticity to the brain, enabling it to adapt over time. However, the generation of new neurons tends to decrease with age and is influenced by a range of intrinsic and extrinsic factors such as genetics, epigenetics, age, physical activity, dietary habits, sleep quality, sex hormones, and life experiences. An impaired capacity for generating new neurons has been associated with cognitive impairments in several neurodegenerative conditions. Inflammation is another significant key factor affecting altered neurogenesis. While short-term inflammation may be advantageous, chronic or excessive neuroinflammation can hinder neurogenesis.

Guest Editor

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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