Topical Collection

How Perinatal Stress Affects Brain Plasticity in Ontogenesis

Message from the Collection Editors

Recent advances strongly support the essential role of perinatal stress in delayed psychological, psychiatric, and neurological sequelae during ontogenesis, specifically in adolescence and adulthood. A number of animal models of perinatal stress have been developed and used to study the mechanisms of its detrimental effects on the brain, with these studies having major translational significance. The perinatal period of brain development is extremely important, since it involves the formation of the main brain structures associated with neurogenesis and gliogenesis, the maturation of synapses, as well as other essential events regulated by endocrine and immune systems and potentially vulnerable to early-life stress. Stress-induced changes involve all levels of neuroplasticity, including synaptic plasticity. This Topical Collection is aimed at the accumulation of new data regarding the effects of perinatal stress on the development of brain plasticity mechanisms at all levels of brain organization. The goal of this collection is to highlight the translational potential of these data to elucidate connections between perinatal stress and negative health outcomes.

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Message from the Editorial Board

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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