Special Issue

Neuroregulatory Factors in Neurodevelopmental Plasticity: From Stem Cell Differentiation to Neural Circuit Maturation

Message from the Guest Editor

Neurodevelopment is a finely tuned process in which neural stem cells proliferate, differentiate, migrate, and mature to integrate functional circuits, involving several regulatory processes that are coordinated in time and space. Among these processes are transcriptional programs, epigenetic mechanisms, and extracellular/intracellular signals, among others, all of which have crucial roles in determining neuronal fate, migration, synaptic formation, and plasticity. The dysregulation of these processes underlies a broad spectrum of neurodevelopmental disorders, from intellectual disabilities to autism spectrum conditions and motor impairments to psychiatric disorders. This Special Issue, invites original research articles and reviews that address the cellular and molecular mechanisms shaping the developing nervous system in health and disease in order to bring together cutting-edge studies that explore the dynamic interplay between intrinsic and extrinsic factors driving brain development and maturation. Contributions expanding our understanding of how regulatory mechanisms shape the nervous system are welcome.

Guest Editor

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

Editor-in-Chief

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