Special Issue

Epigenetic Mechanisms Underlying Brain Development and Neuronal Activity

Message from the Guest Editors

Topics of interest include, but are not limited to, the following sections:

- Mechanisms in the regulation of brain function and behavior with regard to histone modifications and DNA methylation.
- Mechanisms in the regulation of brain functional roles via RNA methylation including N6methyladenosine (m6A), 5-methylcytosine (5mC), and 5-hydroxymethylcytosine (5hmC).
- Crosstalk among transcription factors and the machinery of histone and DNA modifications during brain development at all developmental stages: cell proliferation, migration, differentiation, and circuit formation and refinement.
- Large-scale genetic or epigenetic marker discovery linked to neurodevelopmental disorders.
- Bioinformatics tools with novel statistical approaches, machine learning, neural nets or computational procedures/pipelines to provide unique insight in data interpretation for brain single cell analysis, "omics" data integration and mining.
- Review articles on the latest advances in brain epigenetic mechanisms or recent development of experimental and analytical tools for (DNA/RNA)epigenetic/omics studies with applications to neural/brain disorders and aging progression.

Guest Editors

Prof. Dr. Hehuang Xie

Dr. Anna R. Moore

Prof. Dr. Wucheng Tao

Deadline for manuscript submissions

closed (28 February 2023)



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Message from the Editorial Board

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