

Insights: Publications

Epigenetic Regulations in Neuropsychiatric Disorders

Frontiers in Genetics, Sec. Epigenetics and Genome Architecture, Volume 10

April 3, 2019

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Precise genetic and epigenetic spatiotemporal regulation of gene expression is critical for proper brain development, function and circuitry formation in the mammalian central nervous system. Neuronal differentiation processes are tightly regulated by epigenetic mechanisms including DNA methylation, histone modifications, chromatin remodelers and non-coding RNAs. Dysregulation of any of these pathways is detrimental to normal neuronal development and functions, which can result in devastating neuropsychiatric disorders, such as depression, schizophrenia and autism spectrum disorders. In this review, we focus on the current understanding of epigenetic regulations in brain development and functions, as well as their implications in neuropsychiatric disorders.

Related People



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