Special Issue

Molecular Genetics and Genomics in Brain Disorders

Message from the Guest Editor

The etiology of brain diseases and their genetics are complex and widely studied. In addition to inherited diseases caused by single gene mutations, most brain diseases are characterized by complex interactions between genes and the environment through the interaction of the brain transcriptome and its regulatory networks. The advent of next-generation sequencing technologies (NGSs) has led to the development of multi-omics, advancing our understanding of complex brain diseases at the genomic, transcriptomic, and epigenetic levels. Genetic analysis of brain diseases thus provides an important means of understanding the molecular relationships involved. In this Special Issue, we focus on the collection of in-depth analyses, utilizing molecular biology and advanced techniques of multiomics including whole genome sequencing, single-cell sequencing, DNA methylation, RNA-seq, and other methods such as genome-wide association studies (GWAS) to understand the genetic mechanisms of the key steps in human brain development, as well as the development of the diagnosis and treatment of brain diseases. We welcome your valuable insights, new data or comprehensive reviews.

Guest Editor

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

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