Special Issue

AI and Neurogenomics: Innovations in Precision Medicine for Brain Disorders

Message from the Guest Editors

The advent of artificial intelligence (AI) in genomic medicine has allowed the development of innovative protocols for the evaluation of patients, diagnosis, and management. In genomic medicine, the integration of these new technologies lays the basis for the automated evaluation of big genomic data. In fact, machine learning algorithms can help in decoding genomic variants associated with several brain diseases. Neurogenomics has demonstrated that the integration of genomic evaluation supports the application of precision medicine to patients affected by both multifactorial and mendelian neurological disorders, such as Alzheimer's, Parkinson's, schizophrenia, and neuromuscular disorders. By integrating multi-omics data—genomics, transcriptomics, and epigenomics—AI models have demonstrated interesting abilities. The application of AI models, under strict human control, supports the identification of disease-associated biomarkers, helps in the prediction of patient-specific responses to treatments, and accelerates drug discovery.

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Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

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