Special Issue

Genetics in Motor Neuron Diseases

Message from the Guest Editor

Motor neuron disease is a neurodegenerative condition that results in progressive atrophy and muscle loss as a consequence of motor neuron degeneration. Most cases of the disease are sporadic, and approximately 10% are familial. Progress has been made to identify genes implicated in familial forms of the disease and identify pathways and cellular processes that are altered by the mutations. Candidate genes with high penetrance have typically been identified through linkage analysis and next-generation sequencing, and other strategies including genome-wide association studies have been used to identify genes with low disease penetrance. The identification of genetic causes and risk factors is helpful not only in developing better models of disease and understanding the pathogenesis but also in guiding the rationale and design of new avenues for therapeutic development. This Special Issue aims to provide a broad and updated overview of the genetics of motor neuron diseases and the resulting clinical and molecular observations which may lead to new therapeutic insights for the treatment of the disease.

Guest Editor

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Message from the Editor-in-Chief

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?

Editor-in-Chief

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