Special Issue

Genetic Mouse Models of Human Disease

Message from the Guest Editor

Mouse models remain indispensable tools in biomedical research for uncovering the molecular mechanisms of human diseases and evaluating therapeutic strategies. Due to their genetic manipulability, short breeding cycles, and physiological similarities to humans, mouse models have facilitated key discoveries across a wide range of disorders, including cancer, inflammatory conditions, neurodegenerative diseases, and metabolic syndromes. With advances in genome editing technologies such as CRISPR/Cas9, researchers can now generate increasingly precise and disease-relevant models that mirror human pathogenesis at molecular, cellular, and systemic levels. This Special Issue aims to highlight recent developments in the generation and application of mouse models. We welcome original research and review articles focusing on novel mouse models, disease mechanism studies, genotypephenotype correlations, therapeutic testing, and translational implications. Contributions addressing the limitations and ethical considerations of mouse models, or proposing innovative strategies to enhance their relevance to human conditions, are also encouraged.

Guest Editor

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Deadline for manuscript submissions

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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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