

Special Issue

Genetics of Pediatric Neuro-Oncology

Message from the Guest Editor

This Special Issue seeks to showcase the latest advances in the genetic and genomic characterization of pediatric brain tumors. By integrating diverse data types—genomic, transcriptomic, and epigenomic—we aim to highlight novel insights into tumor pathogenesis, classification, and therapeutic vulnerabilities.

We are particularly interested in studies that employ genetic/genomic, integrative multi-omics, single-cell, or spatial technologies, as well as systems biology approaches. Research applying machine learning or artificial intelligence to multi-modal datasets, or that uncovering the mechanisms of resistance and tumor evolution, will be featured prominently.

We welcome original research, reviews, and perspectives spanning basic, translational, and clinical domains. Submissions may focus on germline/somatic alterations, biomarkers, functional genomics, the tumor microenvironment, or precision medicine strategies. Contributions that bridge data science and pediatric neuro-oncology are especially encouraged.

Guest Editor

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Deadline for manuscript submissions

15 February 2026

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About the Journal

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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