

## Special Issue

# Acute Myeloid Leukemia: From Molecular Insights to Therapeutic Innovations

### Message from the Guest Editor

Acute myeloid leukemia (AML) is a highly heterogeneous hematologic malignancy characterized by the abnormal proliferation and differentiation of myeloid progenitor cells. While genetic mutations play a crucial role in AML pathogenesis, accumulating evidence is highlighting the significance of epigenetic dysregulation in disease initiation, progression, and therapeutic resistance. DNA methylation, histone modifications, chromatin remodeling, and non-coding RNAs contribute to leukemogenesis by altering gene expression without modifying the DNA sequence. An understanding of these mechanisms could lead to new opportunities for prognostic biomarker discovery and the development of targeted epigenetic therapies. This Special Issue will bring together cutting-edge research on the role of epigenetics in AML, highlighting novel insights into disease biology, emerging therapeutic strategies, and clinical implications. We welcome original research articles, reviews, and perspectives that will advance our understanding of epigenetic regulation in AML and its potential in therapeutic intervention.

### Guest Editor

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### Deadline for manuscript submissions

20 February 2026



## International Journal of Molecular Sciences

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Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



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*International Journal of  
Molecular Sciences*  
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### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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