Special Issue

Advances in Molecular Biology Methods in Hepatology Research

Message from the Guest Editors

Recent advances in molecular biology methods have profound implications for deciphering the complexities of hepatology research, specifically in understanding liver function, disease development and novel therapies. The integration of genomic technologies such as Next-Generation Sequencing (NGS), single-cell sequencing, CRISPR-Cas9 and epigenetic studies allow for a more comprehensive analysis of the liver's genomic landscape. Similarly, advancements in single-cell proteomic techniques, including sensitive mass spectrometry and high-throughput proteomics, have made it possible to identify and quantify liver proteins at the cellular level. In addition to advances in genomic techniques, the development of advanced hepatic in vivo models and liver tissue engineering, utilizing technologies such as CRISPR-Cas9, places a clear emphasis on creating humanized organoid models. Overall, these advancements in molecular biology have propelled hepatology research to the next level, offering additional opportunities for efficient diagnosis, treatment, and prevention strategies for hepatic diseases.

Guest Editors

Dr. Dileep G. Nair

Institute of Molecular Pathobiochemistry, Experimental Gene Therapy and Clinical Chemistry (IFMPEGKC), RWTH University Hospital Aachen, D-52074 Aachen, Germany

Prof. Dr. Ralf Weiskirchen

Institute of Molecular Pathobiochemistry, Experimental Gene Therapy and Clinical Chemistry (IFMPEGKC), RWTH University Hospital Aachen, D-52074 Aachen, Germany

Deadline for manuscript submissions

closed (30 June 2025)

Current Issues in Molecular Biology

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 3.7
Indexed in PubMed

mdpi.com/si/203370

Current Issues in Molecular Biology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cimb@mdpi.com

mdpi.com/journal/cimb

Current Issues in Molecular Biology

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 3.7
Indexed in PubMed

mdpi.com/journal/cimb

MDPI

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Madhav Bhatia
Department of Pathology and Molecular Medicine, University of Otago, Christchurch 8140, New Zealand

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PMC, PubMed, Embase, CAPlus / SciFinder, FSTA, AGRIS, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).

Recognition of Reviewers:

APC discount vouchers, optional signed peer review, and reviewer names are published annually in the journal.