

Special Issue

Molecular Mechanisms Driving Liver Disease: From Cellular Stress to Therapeutic Targets

Message from the Guest Editor

Liver diseases, including MASLD, alcoholic liver disease, fibrosis, cirrhosis, and hepatocellular carcinoma, pose a major global health burden. Although progress has been made, key molecular mechanisms remain unclear. Emerging insights into stress responses, immune crosstalk, lipid metabolism, and gene regulation are reshaping our understanding and highlighting new therapeutic opportunities. This Special Issue aims to explore the molecular and cellular basis of liver diseases, bridging basic and clinical research. We welcome original studies and reviews addressing mechanisms and translational strategies for diagnosis, prevention, and therapy. Topics include ER stress and unfolded protein response, mitochondrial dysfunction, stellate cell activation, hepatocyte-immune interactions, non-coding RNAs, epigenetic and transcriptomic changes, drivers of MASLD/MASH, gut-liver axis, molecular pathways of hepatocellular carcinoma, single-cell and spatial omics, and drug target discovery. We look forward to your contributions.

Guest Editor

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Message from the Editor-in-Chief

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