

Special Issue

Recent Research on Glycosylation

Message from the Guest Editor

Protein glycosylation, including N-linked and O-linked glycosylation, plays pivotal roles in cellular processes such as protein folding, cell signaling, and immune regulation. Over the past decade, advances in glycoproteomics technologies—including mass spectrometry (MS)-based enrichment strategies and bioinformatic tools—have revolutionized the systematic characterization of glycoproteins. These innovations have enabled large-scale mapping of glycosylation sites, glycan structures, and their dynamic changes under physiological and pathological conditions. Recent high-impact studies have leveraged glycoproteomics to uncover glycosylation-associated mechanisms in cancer, infectious diseases, and neurodegenerative disorders. This review highlights cutting-edge glycoproteomic methodologies and their applications in deciphering the biological significance of protein glycosylation, offering new perspectives for therapeutic targeting and biomarker discovery.

Guest Editor

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