

Special Issue

Glycans in Health and Disease Molecular Insights and Clinical Implications

Message from the Guest Editor

Glycans, including heparan sulfate, are key regulators of cellular signaling, immunity, and host-pathogen interactions. Altered glycan structure or regulation contributes to diverse diseases, including infection, inflammation, cancer, and neurological disorders. This Special Issue aims to highlight the advances in glycan research, exploring their molecular roles in cellular signaling, immunity, and disease pathology. We seek studies that reveal mechanistic insights, clinical relevance, and translational potential, including innovative glycan-targeted strategies and emerging methodologies. Contributions spanning diverse glycan classes such as heparan sulfate, sialic acids, and O- or N-linked glycans are especially welcome. We welcome submissions on the following topics:

- Glycan structure, biosynthesis, and analytical approaches;
- Glycan-mediated signaling, immunity, and extracellular matrix regulation;
- Roles of glycans in infectious, inflammatory, metabolic, neurological, and malignant diseases;
- Glycan-based therapeutics, mimetics, inhibitors, and biomarkers;
- Emerging technologies advancing glycobiology research.

Guest Editor

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Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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