



an Open Access Journal by MDPI

# **Recent Advances in Proteoglycans**

Guest Editor:

### Dr. Khaled A. Elsaid

School of Pharmacy, Chapman University, Orange, CA, USA

Deadline for manuscript submissions: closed (31 December 2020) Message from the Guest Editor

Proteoglycans are a ubiquitous family of heavily glycosylated proteins with distinct forms and functions. Over the past 20 years, advancements in elucidating various structural subtypes and identifying cellular locations of proteoglycans have led to the development of a complex classification system for proteoglycans. Proteoglycans can localize either intracellularly as components of secretory granules being anchored to the cell surface or by spanning the cell membrane in addition to being localized in the pericellular region as components of the basement membrane. The largest class of proteoglycans is, however, secreted into the extracellular space. These secreted proteoglycans are key structural components of cartilage, blood vessels, and the central nervous system and have the canonical role of maintaining the architecture of various tissues. In addition, secreted proteoglycans can interact with various receptors either as ligands or via their ability to interact with the natural ligands of these receptors, resulting in indirect regulation of receptor activation.









an Open Access Journal by MDPI

# **Editors-in-Chief**

#### Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

#### Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

### 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.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

## **Contact Us**

*Biomolecules* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/biomolecules biomolecules@mdpi.com X@Biomol\_MDPI