

Special Issue

Function and Regulation of Hyaluronan and Hyallectins in Disease

Message from the Guest Editors

Hyaluronan and its interacting proteins (hyallectins) are increasingly recognized as important molecules for homeostasis and disease. The simplicity of hyaluronan, which is a polymer of alternating sugars glucuronate and N-acetylglucosamine, is also one of the largest molecules in mammals. It contains both hydrophobic and hydrophilic properties including a net negative charge that allows it to interact with a variety of proteins and receptors that influence a host of physiological functions. These physiological functions include inflammation, intercellular structure, cellular development and differentiation, cellular signaling, cancer, and metabolism. In this Special Issue of *Biomolecules*, we would like to highlight the recent discoveries of the importance of hyaluronan in our general well-being, in diseases when it goes awry and its role in medical devices and cosmetics. We also invite a rigorous discussion of how novel advances in hyaluronan research would improve therapeutic outcomes from cancer to arthritis to pulmonary diseases. Both research papers (in particular) and reviews (both focused or general) are welcome.

Guest Editors

Prof. Dr. Edward N. Harris

Department of Biochemistry, University of Nebraska, Lincoln, NE 68588, USA

Prof. Dr. Michele T. Pritchard

Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66160, USA

Deadline for manuscript submissions

31 July 2026



Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.3
Indexed in PubMed



mdpi.com/si/237128

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)





Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.3
Indexed in PubMed



[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)



About the Journal

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.

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

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, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)