

## Special Issue

# Hyaluronic Acid in Human Medicine

### Message from the Guest Editor

Hyaluronic acid (HA) is an acidic, non-sulfated glycosaminoglycan that is intensively studied as biodegradable and biocompatible material for scaffolding, regenerative medicine, and clinical applications. The main functions of HA are hydration, space-filling capacity, lubrication, and forming of the framework through which cells migrate. It also contributes to fetal healing of wounds, i.e., rapid healing without a scar, and tissue elasticity. During the degradation of HA, which is accelerated under pathological conditions, its long molecules are cleaved into smaller fragments of low molecular weight. Bioactive functions in the inflammatory reaction, angiogenesis, or its role in cancer progression and reactive oxygen species scavenging vary for different fractions of HA.

In tissue engineering, HA is considered a promising material thanks to its biocompatible, biodegradable, and bioresorbable properties, as well as its chemical traits and high level of technical processing.

---

### Guest Editor

Dr. Jakub Suchánek

Department of Dentistry, Faculty of Medicine in Hradec Kralove, Charles University and University Hospital Hradec Kralove, 500 05 Hradec Kralove, Czech Republic

---

### Deadline for manuscript submissions

closed (10 April 2022)



## Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.3  
Indexed in PubMed



[mdpi.com/si/71049](https://mdpi.com/si/71049)

*Biomolecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomolecules@mdpi.com](mailto: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)