

## Special Issue

# Biological Biomaterials for Regenerative Medicine

### Message from the Guest Editors

Biologically derived biomaterials present unique and well-designed molecular structures with intrinsic affinities to the complex networks involved in tissue homeostasis. Consequently, biomaterial-based engineering approaches hold tremendous potential to regenerate tissues and organs damaged by trauma or disease. The rational design of those biomaterial substrates with adequate structural and/or chemical (e.g., drugs and cell signaling molecules) cues will allow driving homeostasis and functional tissue regeneration. The ability of the engineered substrates to combine the function and fate of endogenous (e.g., endothelial and immune cells) and exogenous stem or progenitor cells can advance tissue engineering therapies into routine clinical practice. The aim of this Special Issue is to publish original research articles in advanced and effective regenerative medicine strategies. Review articles critically and systematically treating the published research and forecasting future avenues in the field and highlighting the current challenges that hinder the translation of regenerative medicine strategies into clinical practice will be considered for inclusion in this Special Issue.

### Guest Editors

Prof. Dr. Antonella Motta

Prof. Dr. Nuno M. Neves

Dr. Helena Ferreira

Prof. Dr. Rui L. Reis

### Deadline for manuscript submissions

closed (15 April 2021)



## Biomolecules

an Open Access Journal  
by MDPI

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/37762](https://mdpi.com/si/37762)

*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 9.2  
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, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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