

## Special Issue

# Advances in Molecular Pathology and Therapeutics of Bacterial Infections

### Message from the Guest Editor

Our improved knowledge of host innate immunity and the corresponding pathogen immune evasion strategies has highlighted the still unexplored aspects of the relationship between host and pathogen. Despite the dramatic reduction in the incidence of infectious diseases, new bacterial pathogens are emerging and old illnesses, such as tuberculosis, bacteria-induced pneumoniae, and diarrheas, still result in global mortality. Treatment with conventional antibiotics has been hampered by the increased rate of antibiotic resistance that often results from multidrug- or pandrug-resistant bacterial strains. In this context, pharmaceutical industries have been reducing the development of new antibiotics. A scenario is thus arising of a future where many bacterial infections could become untreatable. As a result, alternative non-antibiotic approaches are being explored in order to develop novel reliable therapies. In this Special Issue, we will provide an overview of state-of-the-art molecular mechanisms of bacterial pathogenesis and innovative therapeutic approaches to fight against bacterial infection.

### Guest Editor

Prof. Dr. Maria Lina Bernardini

Department of Biology and Biotechnology, Sapienza University of Rome, Via dei Sardi 70, 00185 Rome, Italy

### Deadline for manuscript submissions

closed (31 October 2020)



## Biomolecules

---

an Open Access Journal  
by MDPI

---

**Impact Factor 4.8**  
**CiteScore 9.2**  
**Indexed in PubMed**



[mdpi.com/si/43097](https://mdpi.com/si/43097)

*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)