

## Special Issue

# Lipopolysaccharide: Bacterial Endotoxin 2023

### Message from the Guest Editor

Lipopolysaccharide (LPS) is the major molecular surface component of the outer membrane of Gram-negative bacteria. LPSs are negatively charged molecules exposed to the external environment and that provide a physical barrier that protects bacteria from antibacterial agents. The LPS lipid A released from cell surfaces of bacteria during multiplication, lysis, or death can be recognized by specific host cell receptors and is responsible for the activation of the innate immune system via the induction of inflammatory cytokines release. The uncontrolled activation of the innate immune response triggers the development of septic shock and multiple-organ failure. Thus, lipid A is one of the most potent immune-stimulators, of which the toxicity depends on its primary structure and the severity of infection. The set of articles proposed for this Special Issue will examine the structure, composition, biological activity, host interaction, and induction of the innate immunity of the Gram-negative bacterial endotoxin.

---

### Guest Editor

Prof. Dr. Susana Merino Montero

Department of Genetic, Microbiology and Statistic, University of Barcelona, 08028 Barcelona, Spain

---

### Deadline for manuscript submissions

closed (31 October 2023)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 10.0  
Indexed in PubMed



[mdpi.com/si/113545](https://mdpi.com/si/113545)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 10.0  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. José L. Quiles

Department of Physiology, Institute of Nutrition and Food Technology  
"Jose Mataix", Biomedical Research Center, University of Granada,  
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

---

### 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, PMC, MEDLINE, Embase, CAPus / SciFinder, and other databases.

#### Journal Rank:

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