

Special Issue

Advances in Lipopolysaccharide (LPS)

Message from the Guest Editor

Lipopolysaccharide (LPS) has previously been known as endotoxin, which was discovered about 100 years ago. It is a glycolipid that represents the major outer membrane component of Gram-negative bacteria. LPS is rarely released in the normal living state of bacteria, but is released after bacterial cell death and rupture, artificial lysis or active cell growth and reproduction. It is not toxic in itself. Recently, the physiological role of LPS through mucosa (e.g., the site of symbiotic bacteria) has been reviewed, and a wide variety of useful activities have been identified, such as anti-tumor, anti-radiation, anti-infection, alleviation of posterior cataract, and relieving asthma. It has also become clear that LPS regulates homeostasis through oral and/or transmucosal administration rather than vascular administration. A paradigm shift is indeed taking place regarding the physiological role of LPS. These activities of LPS could be due to its regulatory role of mainly innate immunity.

Guest Editor

Dr. Gen-Ichiro Soma

Control of Innate Immunity Collaborative Research Association, FROM
KAGAWA 3F, Bio laboratory, 2217-16, Hyashi-cho Takamatsu-shi,
Kagawa 761-0301, Japan

Deadline for manuscript submissions

closed (31 July 2023)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/130706

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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 9.0
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 (Organic Chemistry)