

## Special Issue

# Molecular Mechanisms of Bacterial Communication and Their Control

### Message from the Guest Editors

The ability of a bacterium to colonize and adapt to an ecological niche is highly dependent on its capacity to perceive and analyze its environment, in addition to its ability to interact with its hosts and congeners.

Membrane sensors such as two-component systems are powerful tools that fulfill these functions. Bacteria use also cell-to-cell communication systems based on both the synthesis and perception of signaling molecules to synchronize their social behavior. These quorum-sensing systems control diverse functions and require the concerted actions of numerous cells in order to be productive, such as antibiotic synthesis, motility, symbiosis, biofilm maturation, sporulation, and virulence. This Special Issue welcomes researchers who wish to contribute to the publication of research articles, reviews, and opinions addressing the molecular mechanisms of bacterial communication and/or their control, leading to mechanistic or applied progress.

---

### Guest Editors

Prof. Dr. Xavier Latour

Bacterial Communication and Anti-infectious Strategies (CBSA UR 4312), University of Rouen Normandy (Normandy University), 55 rue Saint-Germain, 27000 Evreux, France

Dr. Corinne Barbey

Bacterial Communication and Anti-infectious Strategies (CBSA UR 4312), University of Rouen Normandy (Normandy University), 55 rue Saint-Germain, 27000 Evreux, France

---

### Deadline for manuscript submissions

closed (15 February 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/71725](https://mdpi.com/si/71725)

*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 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)