Special Issue

Microbial Response to Stresses, Phages and Hosts

Message from the Guest Editors

Bacteria face various environmental stresses, such as changes in temperature, pH, and nutrient availability, as well as exposure to antibiotics, phages, and host immune systems. Bacteria have evolved various mechanisms to cope with these stresses, including changes in gene expression, the production of protective molecules, and the activation of stress response pathways. Understanding these mechanisms is crucial for developing strategies to control bacterial infections and improve health outcomes. This Special Issue aims to encourage researchers to share their recent understandings of bacterial stress responses and bacterial interactions with phages and host cells through various mechanisms. We welcome original research and review articles on the following topics, including, but not limited to:

- Bacterial response pathways to abiotic stresses and antibiotics;
- Bacterial interactions with phages and host immune systems;
- Second messengers, small noncoding RNAs, and two-component systems;
- Biofilm, quorum sensing, and microbiota–host interactions;
- Application of bacterial stress response in biotechnology and agriculture.

Guest Editors

Dr. Yong Zhang

Department of Biology, University of Copenhagen, København, Denmark

Dr. Yanjie Chao

Institut Pasteur of Shanghai, Chinese Academy of Sciences, Shanghai, China

Deadline for manuscript submissions

closed (30 November 2023)

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/si/168192

Biology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biology@mdpi.com

mdpi.com/journal/biology

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/journal/biology

About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne
Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya
Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).

MDPI