



## Stress Response Effectors and Strategies in Probiotics

Guest Editor:

**Dr. Daniela Fiocco**

Department of Clinical and  
Experimental Medicine,  
University of Foggia, Via Napoli,  
20, 71122 Foggia, Italy

daniela.fiocco@unifg.it

Deadline for manuscript  
submissions:

**28 February 2022**

### Message from the Guest Editor

Dear Colleagues,

Probiotics are gaining increasing attention thanks to the health-promoting activities associated to their dietary intake, and to their occurrence and persistence in the gut microbiota. According to the specific type of stress, probiotic cells have been found to respond by i) up-regulating chaperones that stabilize, refold, and/or prevent precipitation of denaturing proteins; ii) producing proteolytic enzymes to degrade irreversibly damaged structures; iii) activating diverse detoxifying systems; and iv) modulating cell membrane lipid composition and surface adhesion properties.

Insight into the molecular mechanisms carried out by probiotics to cope with stress shall increase our overall knowledge of the cellular strategies to overcome stress, thereby providing a paradigm for general cell stress response. Moreover, from a more applicative point of view, such studies may help to rationalize the use of beneficial microbes and to improve their efficacy.

This Special Issue aims to collect original research articles and reviews covering recent advances related to the stress response mechanisms in probiotics.

Dr. Daniela Fiocco  
Guest Editor





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

1. Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy  
2. International Research Center  
for Food Nutrition and Safety,  
Jiangsu University, Zhenjiang  
212013, China

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) 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, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *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.

## 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, CAPlus / SciFinder, and many other databases.

**Journal Rank:** JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

---

*International Journal of Molecular  
Sciences*  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
Fax: +41 61 302 89 18  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
🐦@IJMS\_MDPI