



## Molecular Research of *Escherichia coli* K-12

Guest Editors:

**Prof. Dr. Stathis Frillingos**

1. Laboratory of Biological Chemistry, Department of Medicine, University of Ioannina, Ioannina, Greece  
2. Institute of Biosciences, University Research Center of Ioannina (URCI), Ioannina, Greece

**Dr. Ekaterini Tatsaki**

Laboratory of Biological Chemistry, Department of Medicine, University of Ioannina, Ioannina, Greece

Deadline for manuscript submissions:

**closed (15 April 2024)**

### Message from the Guest Editors

Dear Colleagues,

*E. coli* is such an every-day asset in the modern molecular biology lab as a host for genetic engineering and biotechnology purposes. Most major breakthroughs in molecular biology trace back to research with *E. coli* laboratory strains. The *E. coli* K-12 lineage in particular played a key role in the establishment of *E. coli* as a model organism. The year 2022 is the centenary year of the isolation of *E. coli* K-12 at Stanford University. With a well-defined history encompassing thousands of different derivative strains, *E. coli* K-12 was instrumental in the development of the molecular biology field. It also provided one of the first genomes to be sequenced, 25 years ago—a major milestone in the field of genomics. In this Special Issue, we aim to collect original research and review articles on the function of newly characterized gene products or gene and gene–product interactions in metabolic and regulatory processes and the structural/conformational underpinnings of such processes in *E. coli* K-12, in celebration of the centennial of its appearance on the scientific scene.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## 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, CAPus / SciFinder, and other databases.

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

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

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