



DNA Transfer from Bacteria to Eukaryotes

Guest Editor:

Dr. Shen Q. Pan

Department of Biological
Sciences, National University of
Singapore, Singapore 117558,
Singapore

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editor

Dear Colleagues,

It is well known that bacteria transfer their genes to eukaryotes horizontally to acquire novel traits and adapt to their environments. Understanding the molecular mechanisms underlying the transfer of DNA from bacteria to eukaryotes has both theoretical and applied implications. Firstly, this process plays a significant role in the evolution and adaptation of organisms, contributing to genetic diversity and the emergence of new traits. It can lead to the acquisition of beneficial genes, such as antibiotic resistance in bacteria, which has profound implications for health and disease management. Additionally, studying these mechanisms enhances our knowledge of the symbiotic relationships between different life forms and can lead to advances in biotechnology, including the development of novel genetic engineering tools. Insights into DNA transfer processes also offer the potential for innovative treatments and therapies by harnessing the power of gene transfer for beneficial purposes, thereby advancing our understanding of life's complexity and the interconnectedness of different biological domains.





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, CAPlus / SciFinder, and other databases.

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

Contact Us

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

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

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI