



Bacterial Toxin–Antitoxin Systems: Biological Functions and Mechanisms of Action

Guest Editors:

Prof. Dr. Hanna Engelberg-Kulka

Department of Microbiology and Molecular Genetics, IMRIC, The Hebrew University-Hadassah Medical School, Jerusalem, Israel

Prof. Dr. Juan Carlos Alonso

Department of Microbial Biotechnology, Centro Nacional de Biotecnología, CNB-CSIC, 28049 Madrid, Spain

Deadline for manuscript submissions:

closed (30 November 2023)

Message from the Guest Editors

Bacterial toxin–antitoxin (TA) systems encode a toxic protein and an antitoxin, which is either a protein or an RNA that counteracts the toxin. They are abundant in bacterial chromosomes and in extra-chromosomal genetic elements.

In this Special Issue, we will describe the characterized TA systems, their targets and mechanisms of action, their evolution and their roles in post-segregational killing, growth control, and programmed cell death.

Potential topics for this Special Issue will include, but are not limited to, the following:

- toxin–antitoxin systems
- toxic protein
- antitoxin
- bacterial toxins





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Jay Fox

Department of Microbiology,
University of Virginia,
Charlottesville, VA, USA

Message from the Editor-in-Chief

Toxinology is an incredibly diverse area of study, ranging from field surveys of environmental toxins to the study of toxin action at the molecular level. The editorial board and staff of *Toxins* are dedicated to providing a timely, peer-reviewed outlet for exciting, innovative primary research articles and concise, informative reviews from investigators in the myriad of disciplines contributing to our knowledge on toxins. We are committed to meeting the needs of the toxin research community by offering useful and timely reviews of all manuscripts submitted. Please consider *Toxins* when submitting your work for publication.

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, MEDLINE, PMC, Embase, CAPlus / SciFinder, AGRIS, and other databases.**

Journal Rank: JCR - Q1 (Toxicology) / CiteScore - Q1 (Toxicology)

Contact Us

Toxins Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/toxins
toxins@mdpi.com
[X@Toxins_Mdpi](https://twitter.com/Toxins_Mdpi)