

Special Issue

Application of Protein Toxins as Cell Biological and Pharmacological Tools

Message from the Guest Editor

Protein toxins from bacteria and plants are a serious threat to human and animal health. However, because of their intimate interactions with host cells, they have also become valuable tools to molecularly dissect cell biological functions that range from endocytosis and intracellular trafficking to cell signaling and apoptosis. Several characteristics such as ease for biochemical handling and the robustness of phenotypes are responsible for their success as cell biological tools. The in-depth understanding of their activities has, in turn, also attracted attention to their use as pharmacological tools to manipulate cellular processes that malfunction in disease situations or that can be targeted for therapeutic intervention. Cancer immunotherapy by immunotoxins or toxin subunit-based vaccines are only some of the many possibilities for using toxins in biomedical research. In this special issue of *Toxins*, primary research papers and review articles are assembled that address the aspects that are summarized above.

Guest Editor

Dr. Ludger Johannes

Cellular and Chemical Biology Unit, Institut Curie, PSL Research University, U1143 INSERM, UMR3666 CNRS, 26 rue d'Ulm, 75248 Paris CEDEX 05, France

Deadline for manuscript submissions

closed (31 October 2021)



Toxins

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/50557

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

[mdpi.com/journal/
toxins](https://mdpi.com/journal/toxins)





Toxins

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed



[mdpi.com/journal/
toxins](https://mdpi.com/journal/toxins)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Jay Fox

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

Author Benefits

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)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).