



Application of Protein Toxins as Cell Biological and Pharmacological Tools

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)

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.





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)