Special Issue

Antibodies for Innovative Studies of Bacterial Toxins

Message from the Guest Editors

In microbiology, the term "toxin" refers to any substance of microbial origin capable of disrupting host-cell metabolism, often with harmful consequences for the affected organism. Since the isolation of the diphtheria toxin at the end of the 19th century, bacterial toxins have been recognized as key virulence factors responsible for causing diseases. Antibodies are crucial and ubiquitous molecules in the immune system. This unique specificity makes antibodies highly attractive for various applications, including studying in vitro and in vivo toxin pathways, detecting and diagnosing bacterial toxins, and developing therapeutic interventions. The main aim of this Special Issue is to provide an update on the role of antibodies in neutralizing bacterial toxins, contextualizing the intoxication process, and exploring how antibodies can be leveraged as therapeutic tools. It will cover the use of antibodies in understanding toxin pathways and their application in diagnosing diseases caused by toxin-producing bacteria.

Guest Editors

Dr. Roxane Maria Fontes Piazza

Laboratório de Bacteriologia, Instituto Butantan, São Paulo 05503-900, Brazil

Dr. María M. Amaral

Laboratorio de Fisiopatogenia, Departamento de Fisiología, Instituto de Fisiología y Biofísica Bernardo Houssay (IFIBIO Houssay-CONICET), Facultad de Medicina, Universidad de Buenos Aires, Buenos Aires 1121, Argentina

Deadline for manuscript submissions

28 February 2026



Toxins

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/216134

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

mdpi.com/journal/ toxins





Toxins

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 8.2 Indexed in PubMed



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).

