Special Issue

Comprehensive Venom Analysis: Pioneering Research Integrating Multi-Omics Technologies

Message from the Guest Editor

The global exploration of venom and understanding of the pathophysiology of venomous bites require the use of omics approaches to characterize venom, and these omics approaches offer insights into the venom proteome, although further investigation is needed as many of these venoms have not been characterized and the full medicinal scope of these toxins is still emerging. More efforts are needed to characterize venom composition across species and within the same species. To be effective, these data-gathering studies should encompass different levels of biological information, including genomics, transcriptomics, proteomics, and metabolomics. Herein, this Special Issue of *Toxins* is specifically focused on publishing recent research activities exploring comprehensive venom analyses and pioneering research integrating proteomics, transcriptomics, and multi-omics technologies. We strongly believe that the articles published will be of great interest to evolutionary biologists studying toxins, as well as immunologists, biotechnologists, and pharmacologists working in developing next-generation therapeutics.

Guest Editor

Dr. Jacob Galan

Department of Human Genetics, School of Medicine, University of Texas Rio Grande Valley, One West University Blvd, BRBII Building, Brownsville, TX 78520, USA

Deadline for manuscript submissions

31 December 2025

Toxins

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/213106

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

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).

MDPI