Special Issue

Pore-Forming Toxin Interactions with the Membrane

Message from the Guest Editor

Pore-forming toxins (PFTs) are used both to promote host defense and as key bacterial virulence factors. They disrupt lipid membranes and are difficult to target therapeutically. Understanding how PFTs engage with the membrane is critical to learning how to effectively target PFTs for therapy. While considerable progress has been made in this area, there remain key unknowns in several aspects of PFT-membrane biology. For example, how do PFTs target the membrane? What structural changes and regulatory factors are needed to recruit PFTs to the membrane? How does membrane composition impact PFT binding, oligomerization, and pore formation? How and what signals are generated by PFT interactions with the membrane and receptors? What commonalities exist between PFTs from different classes and/or organisms? This Special Issue will focus on the interaction of pore-forming toxins with cell membranes, the functional outcomes of these interactions, and membrane responses to these toxins. Nonlethal toxin-membrane interactions, and novel insights into membrane organization, are areas of especial interest.

Guest Editor

Dr. Peter A. Keyel

Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409, USA

Deadline for manuscript submissions

closed (30 September 2022)



Toxins

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/78194

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).

