



an Open Access Journal by MDPI

Toxins and Immunology

Guest Editor:

Prof. Dr. Jean Marc Cavaillon French National Research Agency (ANR, Paris), 75012 Paris, France

Deadline for manuscript submissions: closed (31 December 2018) Message from the Guest Editor

Toxinology and immunology have been closely linked since their respective births, when Behring and Kitasato demonstrated that serotherapy was effective against diphtheria, when Roux and Yersin discovered its dreadful toxin, and when Ramon described the anatoxin that allowed the elaboration of an effective vaccine, and discovered the use of adjuvant to boost the antibody response. Toxins are part of the bacterial arsenal and are responsible for danger of venoms. Elaboration of neutralizing specific antibodies is part of the immune defense, and the use of serotherapy remains of great help in the case of venom poisoning. Some toxins behave as superantigens and trigger immune cells in a very specific fashion. However, scientists have also diverted its main property to use it as a weapon against tumor cells. Finally, the existence of IgE against toxins may explain their maintenance through evolution despite their side effect in allergy.

The aim of this Special Issue is to offer an overview of the current knowledge in the interaction between toxins and the immune system.









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, peerreviewed 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, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/toxins toxins@mdpi.com X@Toxins_Mdpi