Special Issue

Cross-Talk between Toxins and Channels

Message from the Guest Editor

Ion channels are indispensable constituents of a biological membrane. The conduction of ions across the membrane at very fast rates and a high degree of ion selectivity forms the basis of the biological activity of a living cell, including electrical excitability, intracellular signaling pathways, and intercellular communication. There is another world of organic toxins, which bind the channels, thus affecting their function. The most studied are peptide toxins from venomous animals and small organic ligands from poisonous plants, symbiotic bacteria, or dinoflagellates. The toxins structurally mirror the bioactive sites of the target channels, providing a remarkable example of the evolution of prey and predator at the molecular level. This Special Issue aims to bring together the latest research on animal and plant toxins to study the structure–functional relations of the channels, and their regulatory role in different physiological processes.

Guest Editor

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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

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