Special Issue

Neurotoxic Effects of Animal Venoms: Molecular Mechanisms and Prevention

Message from the Guest Editor

Animal venoms contain components that affect various stages of nerve impulse transduction, including the release of the neurotransmitter, its interaction with the receptor, signal transmission in the nerve fiber, and other stages. Some mechanisms of neurotoxic action are well described, e.g., the interaction of snake postsynaptic neurotoxins with nicotinic acetylcholine receptors. However, not all the details of the interaction have been elucidated. Other mechanisms are not as clear and require more detailed study. Currently, the standard treatment for animal envenoming is antivenom therapy. However, a huge number of neurotoxins are small proteins or peptides, which creates problems in obtaining anti-serum. In this Special Issue, we plan to consider the structures of new neurotoxins and their biological targets, the mechanisms of interaction of neurotoxins with targets, possible ways to prevent the neurotoxic effects of animal venoms, and the molecular mechanisms of such anti-neurotoxic effects. Original articles, reviews, comments, etc. on various aspects of the neurotoxic effects of animal venoms are invited.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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