

Special Issue

Neurotoxins in the Neurosciences: Molecular Mechanisms and Applications

Message from the Guest Editors

Neurotoxins are substances with very diverse chemical properties and functions, and act by very diverse mechanisms leading to either the disruption or destruction of distinct components within the nervous system, during development or in adulthood.

Neurotoxins can be naturally derived or synthetic.

Biological neurotoxins, which are effectively used by snakes, fungi and bacteria, differ in terms of the source, binding site and mechanisms of toxic action. According to their very special design and function, they are often used in experimental neuroscience, providing effective means by which certain elements of the nervous system can be accurately and efficiently targeted. As each toxin differs in action and binding site, this specificity can be used to study individual sites of the nervous system. For this reason, neurotoxins are considered excellent tools for understanding the complex nervous system. In this Special Issue, we ask experts using biological and synthetic neurotoxins in experimental research to contribute manuscripts to increase the understanding of different aspects of neurotoxins.

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