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Cellular Entry of Binary and Pore-Forming Bacterial Toxins

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Deadline for manuscript submissions:

closed (30 July 2017)

Message from the Guest Editor

Dear Colleagues,

Bridging cellular membranes is a key step in the pathogenic action of both binary and pore-forming toxins. The former use their translocation domains, containing various structural motifs, to ensure efficient delivery of the toxic component into host cell, while the latter act on cellular membrane itself. In either case, the integrity of the membrane is compromised via targeted protein–lipid and protein–protein interactions triggered by specific signals.

This Special Issue presents recent advances in characterizing functional, structural and thermodynamic aspects of the conformational switching and membrane interactions involved in the cellular entry of bacterial protein toxins. Deciphering the physicochemical principles underlying these processes is also a prerequisite for the use of protein engineering to develop toxin-based molecular vehicles capable of targeted delivery of therapeutic agents to tumors and other diseased tissues.

Dr. Alexey S. Ladokhin
Guest Editor



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Special Issue



Editor-in-Chief

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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.

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