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Toxin and Immunotoxin Based Therapeutic Approaches

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Deadline for manuscript submissions:

closed (30 September 2021)

Message from the Guest Editors

In 1900, Paul Ehrlich, who was studying ricin and abrin at the time, discovered antibodies and paved the way to immunotherapy. After 120 years, Ehrlich's insight into the therapeutic potential of immunotargeting is still a source of inspiration for many scientists. One of the most studied antibody-based targeting strategies is the carrying of powerful toxins. The generated molecules immunotoxins, chimeric proteins obtained by coupling bacterial or plant toxins and antibodies through chemical linking or genetic engineering. Immunotoxins functionally designed to eliminate the cells responsible for pathological conditions, and they find applications in several fields, ranging from cancer to immunological diseases or pain control. Despite the lack of specificity, even native toxins find clinical application, but the use of unconjugated toxin is limited to loco-regional treatments.

This Special Issue focuses on toxins and immunotoxins having clinical potential. We hope to give the reader a comprehensive overview of new toxin delivery strategies and toxin-based experimental disease models, both in vitro and in vivo.













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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, 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.

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