Special Issue

Pertussis Toxin and Research on Pertussis Vaccine

Message from the Guest Editors

Pertussis toxin (PT) is a key virulence factor of the whooping cough agent *Bordetella pertussis*. It induces leukocytosis and immune suppression resulting in potentially critical illness in infants. Chemically or genetically toxoided forms of PT are key protective antigens of acellular pertussis vaccines. However, many aspects of PT biogenesis, structure–function relationships, intracellular trafficking within host cells, as well as the many targets and physiological and immunological consequences of PT's action in host cells and tissues remain insufficiently characterized. The aim of this SI is to re-invigorate the interest in basic studies on PT and on its use in improved pertussis vaccines to help containing the ongoing resurgence of the disease, even in the highly vaccinated populations. Submissions are welcome on following topics:

- Biogenesis and secretion of PT
- Structure–function relationships, cellular targets, and mechanism of PT action
- Receptors, intracellular trafficking, translocation of PT
- Physiological and immunological effects of PT
- Production, purification, detoxification and vaccine use of PT
- Immune responses to PT-based vaccines

Guest Editors

Dr. Camille Locht

Univ. Lille, CNRS, Inserm, CHU Lille, Institut Pasteur de Lille, U1019 – UMR9017 – CIIL – Center for Infection and Immunity of Lille, F-59000 Lille, France.

Prof. Dr. Peter Sebo

Laboratory of Molecular Biology of Bacterial Pathogens, Institute of Microbiology of the Czech Academy of Sciences, Videnska 1083, 14220 Prague, Czech Republic

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Toxins
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
toxins@mdpi.com

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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

Prof. Dr. Jay Fox
Department of Microbiology, University of Virginia, Charlottesville, VA, USA

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