



Pertussis Toxin and Research on Pertussis Vaccine

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

Deadline for manuscript
submissions:

closed (15 September 2021)

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





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Editor-in-Chief

Prof. Dr. Jay Fox

Department of Microbiology,
University of Virginia,
Charlottesville, VA, USA

Message from the Editor-in-Chief

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Toxins Editorial Office
MDPI, St. Alban-Anlage 66
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