

Bacterial Protein Toxins

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Bacterial toxins that act inside cells interact very specifically with key components of the cell, and some even manipulate the cell in subtle ways for their own purposes. These potent toxins, described in this book, will be of interest to both microbiologists and cell biologists. Some of these toxins are conventional multidomain toxins that are self-programmed to enter cells. Others are delivered by type III mechanisms, often as a package of potent molecules. The molecular targets for all these toxins mediate signal transduction and the cell cycle to regulate the crucial processes of cell growth, cell division, and differentiation. Thus, these potent toxins are not only responsible for disease but also provide a powerful set of tools with which to interrogate the biology of the cell. In addition, such toxins may act directly to promote carcinogenesis and, hence, their study is also of interest in a wider context.

Alistair J Lax is Professor of Cellular Microbiology at King's College London, where he is Head of the Department of Microbiology within the Dental Institute. His research focuses on the novel mitogenic toxin of *Pasteurella multocida*, which activates several signalling pathways in the cell. He coauthored *Cellular Microbiology*, the first textbook on the subject, in 1999.

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UNIVERSITY PRESS
www.cambridge.org

ISBN 0-521-82091-X



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Cover photo: Bacterial morphology and interaction with erythrocytes. Courtesy of G. McLaughlin and G. Ihler.