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Titolo	Corynebacterium diphtheriae and Related Toxigenic Species : Genomics, Pathogenicity and Applications // edited by Andreas Burkovski
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Nota di contenuto	Diphtheria and Its Etiological Agents -- Corynebacterium diphtheriae, Corynebacterium ulcerans and Corynebacterium pseudotuberculosis - General Aspects -- Comparative Genomics and Pathogenicity Islands of Corynebacterium diphtheriae, Corynebacterium ulcerans and Corynebacterium pseudotuberculosis -- Corynephages: Infections of the Infectors -- Toxin Structure, Delivery and Action -- Iron Acquisition and Iron-Dependent Gene expression in Corynebacterium diphtheria -- Assembly and Function of Corynebacterium diphtheria -- Toxigenic Corynebacteria: Adhesion, Invasion and Host Response -- Detection Methods for Laboratory Diagnosis of Diphtheria -- Diphtheria Surveillance -- History of diphtheria Vaccine Development -- Antimicrobial Susceptibility and Treatment -- Sialidases of Corynebacteria and Their Biotechnological Application -- Molecular Genetic Tools for Research in Corynebacterium diphtheria -- Diphtheria Toxin Based Molecules as Therapeutic Approaches.

## Sommario/riassunto

*Corynebacterium diphtheriae* is the classical etiological agent of diphtheria and the type strain of the genus *Corynebacterium*. While diphtheria of the respiratory tract became rare with the introduction of vaccination programs in industrialized countries, even today several thousand cases per year are reported to the World Health Organization. This shows that diphtheria is not completely eradicated and that reservoirs exist. The book summarizes the latest advances made in understanding *C. diphtheriae* and the closely related species *Corynebacterium ulcerans* and *Corynebacterium pseudotuberculosis*. Topics addressed are genomics of toxigenic corynebacteria, host-pathogen-interaction, detection, surveillance and treatment as well as application aspects.

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