Stress Response in Microbiology

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To survive adverse and fluctuating conditions, microorganisms possess mechanisms to recognise diverse environmental changes and mount an appropriate response. Microorganisms frequently react simultaneously to a wide variety of stresses and the various stress response systems interact with each other by a complex of global regulatory networks. Stress response systems can play an important role in the virulence of pathogenic organisms.

In this book, expert authors from around the world summarise the current knowledge on microbial stress response and comprehensively review the recent findings that have greatly advanced the understanding of stress response systems. Each chapter is devoted to a particular organism or group of organisms including Gram-negative bacteria, *Streptococcus*,*Neisseria*, *Listeria monocytogenes*, *Bacillus cereus*, *Salmonella*, *Yersinia*, *Vibrio*, *Mycobacterium*, mycoplasmas, yeast, *Plasmodium falciparum*, *Toxoplasma gondii*, *Leishmania*, *Trypanosoma cruzi*, *Trypanosoma brucei* and *Entamoeba histolytica*. In addition to providing an up-to-date review of current trends the authors also describe the challenges for future research and provide comprehensive reference sections. The volume represents a major collection of information and knowledge across a wide range of microorganisms and is essential reading for anyone with an interest in stress response.

A highly recommended book for anyone interested in stress response, regulatory networks, environmental microbiology or the pathogenicity of microorganisms.

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