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Titolo	Oxidative Stress in Microbial Diseases // edited by Sajal Chakraborti, Tapati Chakraborti, Dhruvajyoti Chattopadhyay, Chandrima Shaha
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Descrizione fisica	1 online resource (xx, 566 pages) : illustrations
Disciplina	616.39
Soggetti	Oxidative stress Medical microbiology Infectious diseases Bacteriology Apoptosis Oxidative Stress Medical Microbiology Infectious Diseases Malalties emergents Estrès oxidatiu Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Role of reactive oxygen species in the correlation between host and microbes -- Blood biomarkers of oxidative stress in human and canine leishmaniosis -- Reactive Oxygen and Nitrogen Species in the Oral Cavity -- Role of gut microbiota in combating oxidative stress -- Role of ROS in T. cruzi intracellular development -- Arginase: a prospective regulator of oxidative stress during microbial pathogenesis -- Oxidative stress as a determinant of antimicrobial action, resistance and treatment -- The biological impact of oxidative metabolism in trypanosomatid parasites: what is the perfect balance between reactive species production and antioxidant defenses? -- Oxidative Stress: A boon or bane for Trypanosomatids diseases? -- Redox regulatory circuits as targets for therapeutic intervention of bancroftian filariasis:

biochemical, molecular and pharmacological perspectives -- Oxidative stress and antioxidant defense mechanism in the human enteric protozoan parasite *Entamoeba histolytica* -- Oxidative Stress in Protozoan Parasites: A Close Surveillance of Proteases and Endogenous Protease Inhibitors in Host-Parasite Interaction -- Oxidative Stress and Antioxidants in Host Defense in Leishmaniasis -- Oxidative Stress in *Entamoeba histolytica* -- Oxidative stress regulation in *Giardia lamblia* -- Role of reactive oxygen species in infection by the intracellular *Leishmania* parasites -- Oxidative Stress and Brucellosis -- Oxidative stress and Antioxidant Supplementation on immunity in Hansen's Disease (Leprosy) -- Neonatal septicemic *Escherichia coli* protease (SsIE) induces macrophage activation and polarization through induction of ROS and NO -- Oxidative Stress, Pathophysiology and Immunity in Brucellosis -- Oxidative Stress in *Candida albicans* Infection -- Advances on Metabolism and Disposition of Benzimidazoles Antihelmintic in *Fasciola Hepatica* -- Oxidative stress in malarial diseases: Plasmodium-human host interactions and therapeutic interventions -- Exploring endoperoxides as leishmanicidal compounds -- Photodynamic therapy against bacterial biofilm: role of reactive oxygen species -- Potentials of phytopharmaceuticals for treating microbiological and oxidative stress induced type ii diabetes -- Modulation of the host-parasite redox metabolism to potentiate antimalarial drug efficiency -- Mechanistic and Structural Insights into Oxidative Stress in Malaria and anti-malarial drug metabolism -- Oxidative stress inducers as potential anti-leishmanial agents.

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#### Sommario/riassunto

This book discusses recent advances in our understanding of the role of oxidants in microbial pathophysiology, providing valuable insights into the complex role of reactive oxygen species (ROS) in host-microbial interactions. The various chapters take readers through the function of ROS in infections ranging from viral to bacterial, and describe how microorganisms have developed complex strategies to not only avoid contact with phagocyte-derived oxidants, but also protect themselves from injury when oxidants are encountered. Featuring the latest research in the field of this timely book is a ready reference for scientists looking to develop new anti-microbial drugs.

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