1. Record Nr. UNINA9910910494103321

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Titolo	Human and Animal Relationships / / edited by Axel A. Brakhage, Olaf Kniemeyer, Peter F. Zipfel
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031648533 3031648536
Edizione	[3rd ed. 2024.]
Descrizione fisica	1 online resource (283 pages)
Collana	The Mycota, A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research, , 2945-8056 ; ; 6
Altri autori (Persone)	KniemeyerOlaf ZipfelPeter F
Disciplina	579.5
Soggetti	Fungi Mycology Microbiology Medical microbiology Physiology Cytology Immunology Medical Microbiology Animal Physiology Cell Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I. Pathogens -- Chapter 1. Trinity of Environment, Animals, and Humans: A Résumé in the Case of the Fungal Order Mucorales -- Chapter 2. Pathogenicity Strategies of Candida Species During Interaction with Epithelial Cells -- Chapter 3. Malassezia Yeasts in Animals in the Next-Generation Sequencing Era -- Chapter 4. Extracellular Proteins and Their Roles in Aspergillus Fumigatus Pathogenesis -- Part II. Host-Pathogen Interaction -- Chapter 5. RNA as a Mediator of Host-Fungal Pathogenesis -- Chapter 6. The Human Gut Mycobiome and Its Potential as a Regulator of the Host’s Metabolic Health -- Chapter 7. The Host Innate Immune Response to Pathogenic

Candida Albicans and Other Fungal Pathogens -- Chapter 8. Mammalian Pattern Recognition Receptors (Prrs) Involved in Recognition of Fungi -- Chapter 9. Infection Models for Human Pathogenic Fungi -- Part III. Techniques -- Chapter 10. Transcriptomic Analyses of Host Colonisation in Fungal Pathogens of Humans -- Chapter 11. Proteomics and Its Application to the Human-Pathogenic Fungus Aspergillus Fumigatus.

Sommario/riassunto

Estimates based on sequencing data suggest that there are around 5.1 million species of fungi. Yet only a small number of fungi are harmful to animals, including humans. In addition to host-pathogen interactions, there are also mutualistic interactions between fungi and animals. Diseases caused by pathogenic fungi range from allergic reactions and superficial infections to invasive mycoses, and have a significant impact on human and animal life. Fungi are also cultivated by animals as a food source in highly developed relationships or are even involved in gut mutualism. This 3rd edition of Volume 6 of The Mycota highlights exemplary interactions between fungal pathogens and their host(s). The book is organized in three parts: Part 1 summarizes our current understanding of important pathogenic fungi such as Candida species, Malassezia yeasts, Aspergillus fumigatus and fungi of the order Mucorales. Part 2 addresses the characterization of the host response towards pathogenic fungi. It focuses on RNA as a mediator of host-pathogen interactions, the human gut mycobiome, the role of the innate immune system in fighting infections, pattern recognition receptors involved in fungal infections, and a summary of established infection models for studying host-fungal-pathogen interactions. Part 3 provides insights into the impact transcriptomics and proteomics technologies have on the research of human-pathogenic fungi. The up-to-date reviews by experts in the field provide the reader with a comprehensive overview of the various research topics in the field of human and animal relationships with fungi and will hopefully help researchers to find inspiration for their own research.