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Collana	The Mycota, A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research, , 2945-8056 ; ; 13
Disciplina	579.5
Soggetti	Fungi Mycology Microbiology Genomics Microbial genetics Molecular biology Cytology Microbial Genetics Molecular Biology Cellular Microbiology
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Part I: Genome sequences and beyond -- Chapter 1: Starship discovery: a collaborative approach to uncover massive transposable elements -- Chapter 2: The three-dimensional chromatin architecture in fungi -- Chapter 3: Fungi from extreme environments-genome sequences and beyond -- Part II: Cell and developmental biology -- Chapter 4: Recent advances in high-throughput genetics in fungi -- Chapter 5: Genome-wide A-to-I RNA editing during sexual reproduction in filamentous ascomycetes -- Chapter 6: A symphony of roles for codon usage in fungal genomics -- Chapter 7: Epigenetic regulation in early-diverging fungi -- Part III: Biotechnology -- Chapter 8: Fungal diversity related to plant biomass degradation -- Chapter 9: Genomes and genomics of the genus Trichoderma -- Part IV: Interactions-Symbioses, Mutualisms, and Pathogens -- Chapter 10: Genomic innovation and virulence

evolution in the emerging human fungal pathogen *Candida auris* --
Chapter 11: General trends of genomic signatures of the
ectomycorrhizal symbiosis in fungi: a comparison across multiple
lineages.

Sommario/riassunto

This fully revised 3rd edition of *Fungal Genomics* highlights the impact of genomics on the field of fungal biology in four sections: Part I Genome Sequences and Beyond: Examines the impact of genome-based information and techniques on research ranging from the discovery of giant transposons to the analysis of less-studied extremotolerant fungi as well as studies of three-dimensional chromatin organization in fungi. Part II Cell and Developmental Biology: Explores advances in high-throughput genetics/genomics and RNA editing in fungi, the role of codons in gene regulation, and the analysis of epigenetic regulation in early-diverging fungi. Part III Biotechnology: Covers the search for plant biomass-converting enzymes in fungal genomes and work with industrially important fungi. Part IV Interactions - Symbioses, Mutualisms, and Pathogens: Explains the genomic analysis of the emerging human pathogen *Candida auris* as well as genomic signatures in ectomycorrhizal fungi. This book is a must-read for anyone interested in the exciting field of fungal genomics.
