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Titolo	Understanding Host-Microbiome Interactions - An Omics Approach : Omics of Host-Microbiome Association // edited by Ravindra Pal Singh, Ramesh Kothari, Prakash G. Koringa, Satya Prakash Singh
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Descrizione fisica	1 online resource (XVI, 368 p. 45 illus., 35 illus. in color.)
Disciplina	610.28
Soggetti	Biomedical engineering Microbial genetics Microbial genomics Microbiology Microbial ecology Bacteriology Biomedical Engineering/Biotechnology Microbial Genetics and Genomics Eukaryotic Microbiology Microbial Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I: Next generation sequence technology -- 1. Development of diverse sequencers machines for analysing host microbial communities -- 2. Metagenomics, metatranscriptomics and metaproteomics tools for unveiling microbiome of hosts -- 3. Challenges for analyzing large amount of data generated from diverse next generation sequence technology -- Part II: Plant microbiome -- 4. Finding function of the plant phyllospheric microbial communities through metagenomics and metatranscriptomics analysis -- 5. Metagenomics and metatranscriptomics studies of the plant rhizosphere -- 6. Unraveling plant microbe interactions by using next generation sequencing technologies -- 7. Modulation of microbiome in order to increase health and growth of the host -- 8. Plant-bacterial interaction in heavy

metal environmental -- 9. The microbiome of the estero salado mangrove -- 10. Metagenomics of endophytic microbial communities of plant -- Part III: Animal microbiome -- 11. Advancements in molecular techniques and bioinformatics for understanding the rumen microbiome -- 12. Ecology and evolution of the termite gut microbiota -- 13. Microbial quality of insects -- 14. Insect gut microbiome and its potential for biotechnological application -- 15. Microbiome modulate behaviour of animal.-Part IV: Human microbiome. - 16. Gut bacterial diversity of the tribes population of world -- 17. Modulation of gut microbiome by different types of food habit -- 18. Diversification of microbial communities of human skin and their role in defense -- 19. Insight into microbiome of human milk via -omics technologies -- Part V: Marine microbiome. - 20. Multi-omic approaches for mapping interactions among marine microbiomes.

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### Sommario/riassunto

This book offers up-to-date information on different microbiomes, their community composition and interactive functions with the host, bringing together information from diverse research reports to provide an overview of the rapid developments in meta-omics technologies. It is a valuable resource for scientists, researchers, postgraduate and graduate students interested in understanding the impact and importance of next generation sequencing technologies on different hosts and their microbiomes.

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