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Collana	The Microbiomes of Humans, Animals, Plants, and the Environment, , 2662-611X ; ; 2
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Nota di contenuto	Introduction -- Composition of Microbiomes -- Dynamics of Microbiomes -- Holistic Fitness: Microbiomes are Part of the Holobiont`s Fitness -- Transmission of Hologenomes Between Generations: Mothers Matter Most -- Eukaryotic Microorganisms are Part of Holobionts -- Viruses are Part of the Holobiont`s Fitness and Evolution -- Genetic Variation in Holobionts -- Evolution of Holobionts: The Hologenome Concept -- Microbiomes in Medicine and Agriculture -- Microbiomes: Some Philosophical and Sociological Implications.
Sommario/riassunto	This book examines an important paradigm shift in biology: Plants and animals, traditionally viewed as individuals, are now considered to be complex systems and host to a plethora of microorganisms. After first presenting historical aspects of microbiota research, bacterial compositions of individual microbiomes and the critical analysis of current methods, the book discusses how microbial communities inside the human body are profoundly affected by numerous factors, such as macro- and micro-nutrients, physical exercise, antibiotics, gender and age. As described by current research, the author highlights how microbiomes contribute to the fitness of the host by providing nutrients, inhibiting pathogens, aiding in the storage of fat during pregnancy, and contributing to development and behavior. The author

not only focusses on prokaryotic components in microbiomes, but also addresses single-cell eukaryotes and viruses. This follow-up to the successful book The Hologenome Concept: Human, Animal and Plant Microbiota, published in 2013, provides a contemporary overview of microbiomes. It appeals to anyone working in the life sciences and biomedicine.