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a new edition of the book, which incorporates genomic and proteomic studies of the microbial world. It is clear that genomics, proteomics, and postgenomics have not changed the concept of cellular microbiology; rather, they have made the field easier to approach and more easily accessible to all scientists. These new technologies powerfully allow the study of gene and protein expression of both the pathogen and the host within the same experiment. Clearly, cellular microbiology has entered the era of "systems biology" with a resurrection of bacterial and also cellular physiology. Last but not least, the in vivo imaging revolution allows the spatiotemporal study of microbes interacting with cells, not only in tissue-cultured cells but also in ex vivo explants and in animals. All of these concepts are now included in this new edition. Exploitation of the cytoskeleton plasticity was previously discussed in many chapters. The role of the plasma membrane structure, which is now increasingly documented, is also introduced. Finally, we have crossed the boundaries of the bacterial world and included new pathogens such as viruses and new hosts such as plant cells.

The second edition of this textbook is an attempt to provide to students and scientists the vision of a new science where microbiology and cell biology merge into a mature discipline.

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