

New and expanded for its second edition, *Environmental Microbiology: From Genomes to Biogeochemistry, Second Edition*, is a timely update to a classic text filled with ideas, connections, and concepts that advance an in-depth understanding of this growing segment of microbiology. Core principles are highlighted with an emphasis on the logic of the science and new methods-driven discoveries. Numerous up-to-date examples and applications boxes provide tangible reinforcement of material covered. Study questions at the end of each chapter require students to utilize analytical and quantitative approaches, to define and defend arguments, and to apply microbiological paradigms to their personal interests. Essay assignments and related readings stimulate student inquiry and serve as focal points for teachers to launch classroom discussions. A companion website with downloadable artwork and answers to study questions is also available.

Environmental Microbiology: From Genomes to Biogeochemistry, Second Edition offers a coherent and comprehensive treatment of this dynamic, emerging field, building bridges between basic biology, evolution, genomics, ecology, biotechnology, climate change, and the environmental sciences.

- Builds on the First Edition with updates from the current literature and expanded references
- Establishes basic core concepts and integrates the many subdisciplines of environmental microbiology with a unified, single-author treatment
- Focuses on how information is generated and advanced in environmental microbiology – including methods, logic, and data interpretation
- New edition highlights the “omics” technology revolution in biology and its future impacts on environmental microbiology
- Emphasizes real-world habitats and the selective pressures experienced by naturally occurring microorganisms
- Covers state-of-the-art treatment of microbial diversity and “cultured” versus “non-cultured” microbial life
- Includes case studies and “Science and the Citizen” features, which tie issues in the public eye to the underlying science

About the Author

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A companion website with downloadable artwork and answers to study questions is available at: www.wiley.com/go/madsen/enviromicrobio2e

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