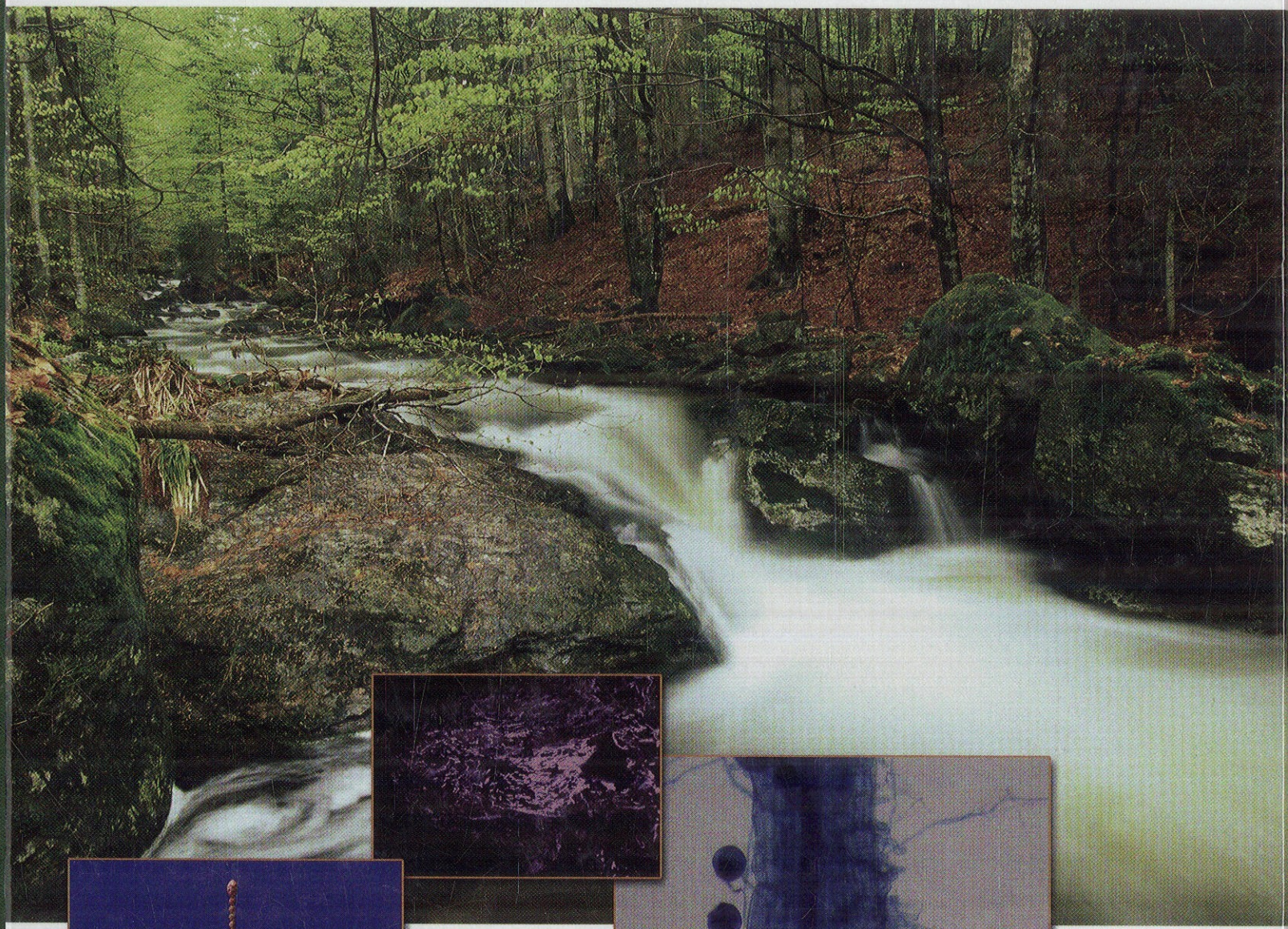
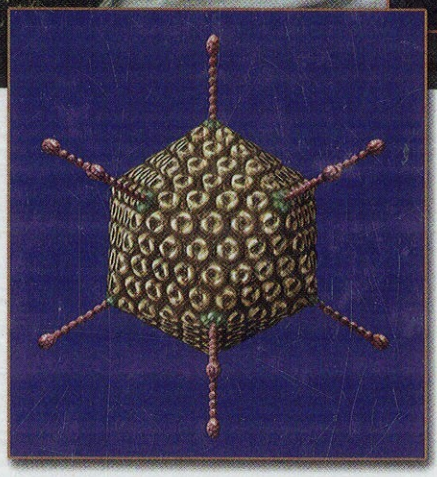
Environmental MICROBIOLOGY

Second Edition





Raina M. Maier ~ Ian L. Pepper ~ Charles P. Gerba

AP

Contents

9. Microscopic Techniques

Timberley M. Roane, Ian L. Pepper and Raina M. Maier

10. Cultural Methods

Ian L. Pepper and Charles P. Gerba

11. Physiological Methods

Todd R. Sandrin, David C. Herman and Raina M. Maier

12. Immunological Methods

Scot E. Dowd, Marilyn J. Halonen, and Raina M. Maier

13. Nucleic Acid–Based Methods of Analysis

Deborah T. Newby, Elizabeth M. Marlowe and Raina M. Maier

Part IV
Microbial Communication, Activities, and Interactions with Environment and Nutrient Cycling

14. Biogeochemical Cycling

Raina M. Maier

19. Microbial Transport

Deborah T. Newby, Ian L. Pepper and Raina M. Maier

Part V
Remediation of Organic and Metal Pollutants

20. Microorganisms and Organic Pollutants

Raina M. Maier

21. Microorganisms and Metal Pollutants

Timberley M. Roane, Christopher Rensing, Ian L. Pepper and Raina M. Maier

Part VI
Water- and Foodborne Pathogens

22. Environmentally Transmitted Pathogens

Charles P. Gerba

23. Indicator Microorganisms

Charles P. Gerba

Part VII
Wastewater Treatment and Disinfection

24. Wastewater Treatment and Biosolids Reuse

Charles P. Gerba and Ian L. Pepper

25. Drinking Water Treatment

Charles P. Gerba

26. Disinfection

Charles P. Gerba

Part VIII
Urban Microbiology

27. Domestic and Indoor Microbiology

Charles P. Gerba and Ian L. Pepper

28. Microorganisms and Bioterrorism

Ian L. Pepper, Christopher Y. Choi and Charles P. Gerba

29. Risk Assessment

Charles P. Gerba