# microbiology

ORS

### vid T. Kingsbury, Ph.D.

or of Medical Microbiology

ublic Health

Naval Biosciences Laboratory

rsity of California
eley, California
tant Director, Biological,
avioral, and Social Sciences
and Science Foundation
hington, D.C.

## ald E. Wagner, Ph.D.

erly of the Department of robiology ge Washington University dical Center nington, D.C.

### vy P. Segal, M.D.

ant Professor of Medicine ersity of California e, California Physician, Infectious eases Section rans Administration Medical nter g Beach, California

Princed in the Linned Seates of America. All rights reseasoning the art 1975, he paid this publication maform or by any means or stored in a data base or rests recommends of the authorise.

A WILEY MEDICAL PUBLICATION

JOHN WILEY & SONS

New York • Chichester • Brisbane • Toronto • Singapore

" all 1989 by Herwall behavior Company, Madia, P.

# Contents

		vii
	Preface	viii
	Publisher's Note	ix
	Introduction	1
	Pretest	
1	Overview of Medical Microbiology	13
2	Basic Properties of Bacteria: Anatomy, Classification, and Physiology	19
3	Bacterial Genetics	29
4	Alfa ettanemis Vinaves. Hepatitis Vituses (Quingerille)	39
		51
5	Basic Immunology	61
6	Clinical Immunology and Serology	25
7	Indigenous Flora and Natural Barriers to Infection	73
8	Gram-Positive Cocci: Staphylococci, Streptococci, and Pneumococci	81
9	Gram-Negative Cocci: Gonococci and Meningococci	95
10	Garage Rods	103
11	Gram-Negative Rods: Facultative Enteric Rods, Bacteroides, and Pseudomonads	113
12	Gram-Negative Rods: Haemophilus, Bordetella, and the Zoonoses	123
13	3 Spirochetes	133
14	4 Mycobacterial Diseases	14

	15 Obligate Intracellular Parasites: Chlamydiae and Rickettsiae	
		151
	Miscellaneous Pathogenic Bacteria: Mycoplasma, Legionella, Corynebacterium, and Others	159
1	7 The Mycoses	167
1	Basic Properties of Viruses: Propagation, Classification, and Structure	179
1	9 Basic Properties of Viruses: Viral Replication and Genetics	187
2	O Antiviral Agents and Interferon	197
2	1 Viral Diseases: DNA Viruses	203
22	2 Viral Diseases: RNA Viruses	213
23	Miscellaneous Viruses: Hepatitis Viruses, Oncogenic Viruses, and Slow (Unconventional) Viruses	231
24	Protozoal Infections	239
25	Helminthic Infections	251
26	Approach to the Patient with Bacteremia or Septicemia	263
27	Approach to the Patient with Pneumonia	271
28	Approach to the Patient with Surgical Infection	277
29	Approach to the Patient with Urogenital Infection	285
30	Approach to the Patient with Central Nervous System Infection	297
31	Hospital-Acquired Infections and Management of the Immunosuppressed Patient	305
	Post-test	313
	Index	325