

1. Record Nr.	UNINA9910682563603321
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Titolo	Textbook of Microbiology and Immunology [[electronic resource] /] / by Subhash Chandra Parija
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-19-3315-4
Edizione	[4th ed. 2023.]
Descrizione fisica	1 online resource (XXX, 1111 p. 1 illus.)
Disciplina	616.9041
Soggetti	Medical microbiology Immunology Bacteria Virology Microbial genetics Medical Microbiology Microbial Genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I. General Microbiology -- 1. Introduction and History of Microbiology -- 2. Classification, Nomenclature and Taxonomy of Microbes -- 3. Microscopy -- 4. Sterilisation and Disinfection -- 5. Microbial Genetics -- 6. Human Normal Microbial Flora and Microbiome -- 7. Microbial Infections -- 8. Diagnostic Methods in Microbial Infections -- 9. Genomics, Proteomics and Molecular Biology in Microbiology -- Part II. Immunology -- 10. Immunity -- 11. Structure and Function of Immune System -- 12. Antigen -- 13. Antibodies -- 14. Complement System -- 15. Antigen–Antibody Reactions -- 16. Immune Response -- 17. Hypersensitivity -- 18. Autoimmunity -- 19. Immunodeficiency Diseases -- 20. Immunology of Transplantation and Malignancy -- 21. Immunohaematology and Immunoprophylaxis -- Part III. Bacteriology -- 22. Introduction to Bacteriology -- 23. Antimicrobial Therapy -- 24. Laboratory Diagnosis of Bacterial Diseases -- 25. Staphylococcus -- 26. Streptococcus, Enterococcus and Pneumococcus -- 27. Neisseria and Moraxella -- 28. Corynebacterium and Coryneform Bacteria -- 29. Bacillus -- 30. Mycobacterium

tuberculosis -- 31. Mycobacterium leprae, Mycobacterium lepraemurium and Non-tuberculosis Mycobacteria -- 32. Actinomycetes -- 33. Clostridium -- 34. Non-Sporing Anaerobes -- 35. Coliforms -- 36. Salmonella and Shigella -- 37. Yersinia, Pasteurella and Francisella -- 38. Pseudomonas, Burkholderia and Acinetobacter -- 39. Vibrio, Aeromonas and Plesiomonas -- 40. Haemophilus and Bordetella -- 41. Brucella -- 42. Campylobacter and Helicobacter -- 43. Treponema, Borrelia and Leptospira -- 44. Rickettsiaceae, Orientia, Ehrlichia and Coxiella -- 45. Mycoplasma and Ureaplasma -- 46. Chlamydia and Chlamydophila -- 47. Miscellaneous Bacteria -- Part IV. Virology -- 48. Introduction to Viruses -- 49. Antiviral Agents -- 50. Laboratory Diagnosis of Viral Diseases -- 51. Bacteriophages -- 52. Poxviruses -- 53. Herpesviruses -- 54. Adenoviruses -- 55. Picornaviruses -- 56. Orthomyxoviruses -- 57. Paramyxoviruses -- 58. Arboviruses (Arthropod-borne Viruses) and Rodent-borne -- 59. Rhabdoviruses -- 60. Hepatitis Viruses -- 61. Retrovirus -- 62. Slow Virus and Prion Diseases -- 63. Oncogenic Viruses -- 64. Miscellaneous Viruses -- Part. V Mycology -- 65. Introduction to Mycology -- 66. Superficial, Cutaneous and Subcutaneous Mycoses -- 67. Systemic Mycoses and Opportunistic Infections -- Part VI. Applied and Clinical Microbiology -- 68. Bacteriology of Water, Milk, Air and Food -- 69. Biomedical Waste Management -- 70. Healthcare-Associated Infections -- 71. Infective Syndromes: A System and Organ-Based Approach -- 72. Quality Assurance in Diagnostic Microbiology -- Glossary -- Further Readings -- Index.

## Sommario/riassunto

The fourth edition of "Textbook of Microbiology and Immunology" is an extensively revised edition, a healthy mixture of the old and the new contents. Many of the old traditional chapters have been retained with addition of new information along with the inclusion of new chapters more in line with the on-going changes in the syllabus and concepts in Medical Microbiology. While doing so, this book has blended the traditional organism-based learning and a syndrome based approach to infectious disease, together with the introduction of new and modified chapters incorporating the latest information in this field. The book provides an extensive coverage of fundamental topics in general and medical microbiology. The book also lays due emphasis on clinical microbiology with special focus on syndrome based approach to infectious diseases. It includes the basic concepts of microbiology as well as the recent updates and developments in the field of medical microbiology. All the topics have been incorporated in seven major sections: General microbiology, Immunology, Bacteriology, Virology, Mycology, and Applied and Clinical Microbiology. The dynamic nature of medical sciences with new guidelines and new diagnostic methods coming into the arena necessitates the incorporation of new information in each new edition of a book. This facet has been addressed with the inclusion of recent information on the various aspects of microbiology, infectious diseases and immunology, in the fourth edition of the Textbook of Microbiology and Immunology, which makes it one of the most authoritative and informative textbooks in medical microbiology. The book is an effort to inform and engage a wide spectrum of readers including medical students, both undergraduates and postgraduates, and residents, and faculty. It aims to be a must-have companion book for graduate and advanced undergraduate as well as postgraduate students of medical microbiology, general and allied microbiology, and of immunology.