

Part I: Antiviral Drug Discovery

1. Exploring Viral and Host Targets for Antiviral Drug Discovery
2. COVID-19 Challenges and its Therapeutics
3. From Lab to Clinic: The Evolution of Reverse Transcriptase Inhibitors in HIV Treatment
4. Targeting Hepatitis C Virus Polymerase: Non-Nucleoside Inhibitors (NNIs) and Drug Resistance
5. Challenges, Progress, and Prospects of Drug Discovery to Treat Chronic Hepatitis B (CHB) Infection
6. Discovery and Development of Antiviral Therapies for Influenza Virus Infections
7. Medicinal Chemistry Strategies for the Discovery and Development of Anti-Herpesvirus Drugs
8. Opportunities and Challenges in Targeted Protein Degradation for Antiviral Drug Discovery

Part II: Antibacterial Drug Discovery

9. Molecular Mechanisms of Antibiotic Resistance
10. Overview of the Antibiotics Approved in the Last Two Decades: Retrospect and Prospect
11. Antibiotic Resistance Breakers: Current Approaches and Future Directions
12. Innovative Approaches in Developing Antimicrobial Peptides for Drug-Resistant Bacterial Infections
13. The Potential of Antibody-Antibiotic Conjugates in Combatting Bacterial Diseases
14. Phage Therapy: Current Advancements and Future Prospects in Combating Antimicrobial Resistance

Part III: Drug Discovery for Miscellaneous Pathogens

15. Antifungal Drug Resistance: Current Mechanisms and Future Directions
16. Challenges, Unmet Clinical Needs, and Novel Approaches in the Discovery of Antifungal Drugs
17. Drug Discovery against Mycobacteria: The Success and Challenges
18. Future of Drug Development for the Treatment of Mycoplasma Infections
19. Antimalarial Drug Discovery: From Novel Molecules to Clinical Development

Part IV: Next-Generation Antimicrobial Strategies

20. Computational Approaches in Antimicrobial Drug Discovery
21. Multi-Omics Approaches for Antimicrobial Drug Discovery
22. Nanomedicine as a Next-Generation Antimicrobial Therapy: New Frontiers in Fighting Microbial Infections
23. Drug Repurposing: Innovative Antimicrobial Strategies to Combat Resistance
24. Drug Combinations: A Strategy to Extend the Life of Antimicrobials
25. Ethical Imperatives in Combating Antimicrobial Resistance: A Global Perspective