DESCRIPTION

Discusses how to fight Ebola, SARS Corona, and other known or emerging human viruses by building on the successes in antiviral therapy of the past decades

Written by leading medicinal chemists from academia and industry, this book discusses the entire field of antiviral drug discovery and development from a medicinal chemistry perspective, focusing on antiviral drugs, targets, and viral disease mechanisms. It provides an outlook on emerging pathogens such as Ebola, Zika, West Nile, Lassa, and includes a chapter on SARS Coronavirus-2 causing the present pandemic.

*New Drug Development for Known and Emerging Viruses* describes the discovery and development process for antiviral agents for different classes of viruses and targets based on the experiences from the nine human viruses for which approved drugs are on the market (HIV, HCV, Influenza, RSV, HBV, HPV, HCMV, HSV, and VZV). It covers the properties and potential of 20 classes of currently approved antivirals, including combination drugs, and looks at novel antiviral strategies against emerging viruses.

- Covers the entire field of antiviral drug discovery and development
- Addresses the need for antiviral drugs to combat major health threats such as Ebola, Zika, West Nile, and SARS Coronavirus-2
- Summarizes the successes of the past 15 years in developing ground-breaking medicines against 9 major human viruses, both from the medicinal chemistry and the pharmacological angle
• Discusses practical and strategic challenges in the drug discovery and development process, including screening technologies, latency, and toxicity issues

*New Developments in Antiviral Drugs* is an important book for medicinal chemists, pharmaceutical chemists, virologists, and epidemiologists, and will be of great interest to those in the pharmaceutical industry and public health agencies.

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**ABOUT THE AUTHOR**

Helga Rübsamen-Schaeff, PhD, is founding CEO of AiCuris and the chair of AiCuris’ Scientific Advisory Board. Before founding AiCuris she served at Bayer as SVP and Head of Infectious Disease Research. Before that time, she was Scientific and Managing Director of the Georg-Speyer-Haus in Frankfurt. A chemist by training, Professor Rübsamen-Schaeff has been professor of biochemistry at the University of Frankfurt since 1988. Her research interests focus on research and development of antiviral drugs, novel resistance-breaking antibiotics, emerging infectious diseases and oncology. Prevymis, a drug against HCMV discovered under her direction has reached the market.

Helmut Buschmann, PhD, has over 25 years of international experience in drug discovery research and drug development in the pharmaceutical/biotechnology sectors in different therapeutic areas, from pain research to anti-infectives. Currently, he is Head of Chemistry, Pharmaceutical Development and Patent Affairs at AiCuris and cofounder and co-owner of RD&C Research, Development & Consulting in Vienna.

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**SERIES**

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