

VIRAL AND RICKETTSIAL INFECTIONS OF MAN

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Preface

So much has been learned of viral and rickettsial infections during the 6 years since the second edition of this book was published as to make the need for a new edition almost imperative. In this short interval, several new groups of viruses have been discovered, and the recognition of their position in relation to a variety of infectious processes has gradually unfolded. Several viruses, which were known earlier, have been found to have common properties that were previously unsuspected and to possess common antigenic components which have necessitated their reclassification in definite groups. Tissue cultures have emerged as highly valuable and widely useful materials for the investigation of viral agents, and the discovery of the cytopathogenic effects of many viruses has resulted in the development of technics which in several instances make the use of intact animals less rewarding than the employment of *in vitro* procedures. Important changes in several conceptual schemes have appeared because of the acquisition and the integration of new information on a broad base. Some unifying concepts have been developed, particularly regarding the mechanism of virus multiplication, which serve to diminish if not to abolish the significance of differences between various categories based largely on distinctions among their host species.

All of the contributors to this book have concurred with the view of the editors that, because of the remarkable growth of knowledge bearing on viral and rickettsial infections, an attempt at revision of the second edition would undoubtedly have been inadequate. Therefore, they have graciously undertaken the tedious and time-consuming task of preparing an entirely new book.

This edition is the result of the efforts of 44 contributors, some 14 more than participated in the preparation of the second edition. All of the contributors were selected because of their eminence and experience in this field

of investigation and because of their special fitness to describe and discuss authoritatively the knowledge available in a particular sector. The editors have not attempted to delineate the material considered or the information covered in the several chapters and have carefully avoided influencing either the views or the conclusions of the authors. In spite of the full freedom of the contributors to write as they thought best, it is remarkable how small and infrequent are the areas of disagreement and how minor the issues when occasionally they occur.

The present volume contains 46 chapters, some 7 more than the second edition. Three of the new chapters deal with common features of viruses and the infections they induce. These are: "Biochemistry of the Virus-Infected Cell," "Virus-Host Cell Relation" and "Chemotherapy and Virus Infection." Two other new chapters are devoted to groups of viruses that have been discovered since the second edition appeared: ECHO viruses and Adenoviruses. The earlier chapter on "Viral Encephalitides" has been supplanted by 4 chapters concerning "Arthropod-Borne Animal Viruses" and the infections they induce. The previous chapter on poliomyelitis has been expanded to 3 chapters: "Poliomyelitis," "Poliomyelitis: Pathogenesis and Histopathology" and "Poliomyelitis: Control." One chapter on a recently identified disease, "Hemorrhagic Fever," has been added.

Four chapters included in the second edition are not represented separately in this book. Hemagglutination by viruses is included in the chapter on "Virus-Host Cell Relation." Diagnosis of viral and rickettsial infections is considered in the several chapters dealing with specific disease entities. Epidemic keratoconjunctivitis is discussed in relation to the viruses which most commonly are associated with the syndrome, i.e., Adenoviruses. Rift Valley fever is described in the chapter on

"Miscellaneous Arthropod-Borne Virus Infections of Man."

Because of the very large number of references, some of those that were chiefly of historical interest and were included in the second edition have been deleted from the reference lists. Such references are identified by the absence of parentheses about either the author's name or the year of publication.

This book is designed, as were the previous editions, to provide comprehensive information relative to viral and rickettsial infections which meets the needs of graduate students of biology, including those who are preparing for a career in medicine. It is hoped that it will also prove useful to physicians, teachers and investigators in the biologic sciences.

The Rockefeller Institute
New York

The National Foundation has, as with previous editions, generously provided support for the preparation and the publication of this volume. Because of this continuing aid it will be possible to distribute the book at a price considerably below that which would normally be required.

The editors are deeply grateful to all of the contributors for the large effort they expended on and the care and the thought they gave to the preparation of manuscripts, the selection of references and the development of illustrative material. They are grateful also for the generous spirit of wholehearted co-operation that has characterized this collaborative undertaking throughout the lengthy process of its development.

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FRANK L. HORSFALL, JR., M.D.

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