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VIRUS DISEASES IN LABORATORY AND CAPTIVE ANIMALS

edited by

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Martinus Nijhoff Publishing

a member of the Kluwer Academic Publishers Group

Boston/Dordrecht/Lancaster

Distributors for the United States and Canada:

Kluwer Academic Publishers
101 Philip Drive
Assinippi Park
Norwell, Massachusetts 02061, USA

Distributors for the UK and Ireland:

Kluwer Academic Publishers
MTP Press Limited
Falcon House, Queen Square
Lancaster LA1 1RN, UNITED KINGDOM

Distributors for all other countries:

Kluwer Academic Publishers Group
Distribution Centre
Post Office Box 322
3300 AH Dordrecht, THE NETHERLANDS

The figure on the cover is from Rott, R. and H.-D. Klenk, "Influenza A Viruses in Man and Animals: The Molecular Basis of Evolution, Epidemiology, and Pathogenicity." The figure appears on page 428 of this book.

Library of Congress Cataloging-in-Publication Data

Virus diseases in laboratory and captive animals / editor, Gholamreza Darai.

p. cm. — (Developments in veterinary virology)

Includes bibliographies and index.

ISBN-13: 978-1-4612-9239-5 e-ISBN-13: 978-1-4613-2091-3

DOI: 10.1007/978-1-4613-2091-3

1. Veterinary virology. 2. Laboratory animals—Diseases. 3. Wild animals, Captive—Diseases. I. Darai, Gholamreza. II. Series.

[DNLM: 1. Virus Diseases—veterinary. SF 781 V8207]

SF780.4.V56 1987

636.089 '6925—dc19

87-28110

CIP

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Softcover reprint of the hardcover 1st edition 1988

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PREFACE

The influence of basic science, particularly molecular biology, in human and veterinary medicine revolutionized thinking in many aspects and changed fundamentally and creatively the classical strategy for research and prevention of infectious diseases.

Genetic engineering and related disciplines have progressed to a remarkable degree over the last decade and now form the keystone supporting medicine. These are strong and efficient instruments for health and disease oriented research and their application gives the opportunity to receive more answers and not only more questions.

The prime objective of this book is to create new knowledge within the medical disciplines and inspire colleagues working in this field with the unity and unambiguous importance of this science and its technologies for identifying, clarifying and planning new strategies for curing and preventing disease.

This book contains original studies on the molecular biology of animal viruses. Some of the viruses discussed in this book are also hazardous to man. In this light it can be considered as a contribution to modern education on the human infectious diseases. From this point of view the book contains a chapter on Hantaan virus that causes no detectable disease in animals but hemorrhagic fever with renal syndrome has been attributed to infection of humans by this virus.

The book is addressed primarily to professional investigators, though I hope that junior and senior scientists who seek to know the actual progress in virology may also find it of interest. The study of this book will give the reader who is interested in understanding the molecular aspects and mechanisms of infectious viral diseases, a new tool for providing a clear perspective of the technology for search of the viral pathogen. Each chapter endeavoured to present concise data of those aspects of most interest to the scientist and key literature references are provided for those who wish to read further. There are some new topics that should be considered as pilot technology but their implications are not yet realized and need more investigations to be developed further.

I wish to thank all the contributors of this volume. I have the privilege of particularly thanking my friend Professor Yechiel Becker who gave me the opportunity to edit this volume in his series "Developments in veterinary virology". To my regret I did not receive two chapters which were promised. The assistance of Julia Hadar for the correction of the English text of the manuscripts, the valuable help of Jurgen Scholz and Paul Schnitzler for indexing the manuscripts, and the excellent secretarial help for careful retyping of some of the manuscripts by Barbara Holder are much appreciated.

Gholamreza Darai

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