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LABORATORY TECHNIQUES IN RABIES

# LABORATORY TECHNIQUES IN RABIES

THIRD EDITION

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## PREFACE

*During the 18 years that have elapsed since the publication of the first edition of Laboratory Techniques in Rabies enormous progress has been made in improving methods of vaccine production and in developing new assay procedures and diagnostic techniques. These advances have been kept under constant review by meetings of research groups and of the WHO Expert Committee on Rabies, and in 1966 a second edition of the monograph was published incorporating a number of new chapters, while other chapters were revised and brought up to date.*

*Since that time, the pace of research on viral techniques has quickened, bringing many advances that have greatly benefited work with the rabies virus. A third edition of the monograph has therefore become necessary. This edition includes some 20 new chapters in which are described techniques for the tissue culture of rabies virus and several new quantitative assay procedures applied to this virus, such as complement fixation and haemagglutination, as well as electron microscopy for structural and replicative studies. Many of the chapters retained from the previous edition have been extensively revised.*

*Particularly noteworthy is the inclusion of descriptions of the production and testing of recently developed vaccines, the production of antirabies immunoglobulin of human and animal origin, and the concentration and purification of the rabies virus. Most of the techniques described have already stood the test of time, but a few, such as the production of duck embryo and tissue-culture vaccines for use in man, should be considered provisional until more laboratories have had an opportunity to determine their practicability. Their inclusion was felt to be warranted by the wide interest that such techniques have aroused and the relative dearth of publications about them. It is therefore hoped that this revised edition will be useful not only to laboratories specialized in the production and testing of biological products for use in man and animals but also to workers interested in fundamental research on the rabies virus.*

*Proofs of this third edition of Laboratory Techniques in Rabies were examined by the WHO Expert Committee on Rabies in December 1972 and a number of suggestions were made for minor changes in the text and for the inclusion of some additional material. Where this new material could not be incorporated in the existing text it has been added in the form of appendices at the end of the book.*

*The World Health Organization gratefully acknowledges the collaboration of the many eminent specialists who have contributed to this volume.*

