

Medical  
and  
Public Health  
Laboratory  
Methods

# Medical and Public Health Laboratory Methods

*(Successor to Fifth Edition of Laboratory  
Methods of the United States Army)*

EDITED BY

**JAMES STEVENS SIMMONS, S.B., M.D., PH.D., DR.P.H., S.D. (HON.)**

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AND

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Chief, Division of Chemistry and Physics, Army Medical  
School, Washington, D.C., 1932-1936 and 1939-1942*

*Illustrated with 115 Engravings and 9 Coloured Plates*

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**HENRY KIMPTON**

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Printed in America

DEDICATED TO  
ALL LABORATORY WORKERS,

Past and present, who, by their untiring  
efforts, have contributed so much in the  
fields of medicine and public health.



## P R E F A C E

Thirty-eight years ago when the United States Army was being mobilized for World War I, Surgeon General Gorgas asked members of his staff to prepare a small pocket manual for use by medical officers and technicians working in the medical and sanitary laboratories of our rapidly expanding military installations. This little booklet, which was called "Medical War Manual No. 6, Laboratory Methods of the United States Army," was published in 1918 by Lea & Febiger. It was not intended as a comprehensive text on laboratory procedure, but as a convenient guide to certain important methods which were new at that time. The book soon became popular, both in Army laboratories and among civilian workers. In 1919 a second and somewhat larger pocket edition was prepared, and by the end of the War the publishers were receiving orders for this book from all parts of the world.

Since that time, three new editions have been printed and at each printing the book has been rewritten and expanded to cover more completely the various aspects of laboratory work required by the professions of medicine and public health. The Third Edition was edited by Colonel Charles F. Craig, and the Fourth and Fifth Editions, which appeared in 1935 and 1944 respectively, were edited by Simmons and Gentzkow. In both instances the book was completely rewritten and included more than 800 pages. The Fifth Edition, like the first, was prepared to meet a war-time need. Published in 1944 during World War II, it was widely used in all of our military laboratories and in many of the laboratories of our allies.

During the post-war years the use of the book has continued, and it is still considered a valuable publication by many civilian and military workers in medical and public health laboratories in various parts of the world. Therefore, when the supply of the Fifth Edition ran out several months ago, the Editors decided to prepare another edition revised and rewritten to include important new information made available since 1944. It was further decided that, because of the broader scope and wider application of the book, it should be given a more appropriate name. For this reason, the present volume appears under the title: *Medical and Public Health Laboratory Methods*—(Successor to *Laboratory Methods of the United States Army*).

The book consists of fifty-two chapters dealing with important specialized information about various laboratory subjects, each written by an expert in his field. The chapters are arranged in eleven parts, as

follows: Clinical Pathology, Chemistry, Mycology, Bacteriology, Rickettsiae and Filterable Viruses, Protozoology, Helminthology, Entomology, Pathology, Special Veterinary Methods, and Statistical Methods. It is intended for use both in hospital diagnostic laboratories and in laboratories dealing with military and community health problems.

The Editors are grateful to each of the many individuals who have helped in the development of this book through each of its five previous editions. They also wish to thank all the individuals who have worked on the present edition, bearing the new title. We hope that the book will continue to serve the cause of both military and civilian medicine and public health in the future—even more effectively than it has done in the past.

JAMES STEVENS SIMMONS  
CLEON J. GENTZKOW

---

Dr. James Stevens Simmons died suddenly on July 31, 1954, while this edition was in preparation.

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