

IMMUNOCHEMICAL APPROACHES TO PROBLEMS IN MICROBIOLOGY

Edited by Michael Heidelberger and Otto J. Plescia,
Institute of Microbiology, Rutgers, The State University.

A volume based on a recent Symposium designed to bring together scientists representing different disciplines to consider more effective utilization of immunochemical methods in the further development of microbiology.

The scientific papers and discussion by panelists and invited audience cover the following topics: Quantitative immunochemical aspects of microbial specificity: precipitation and inhibition techniques; multiplicity and specificity of bacterial antigens; immunochemistry of viruses; so-called non-specific factors in immunity; and biosynthesis of antigens and antibodies.

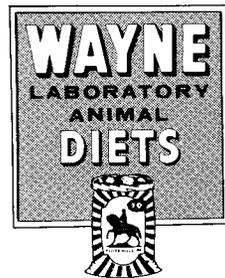
The panelists were Ö. Ouchterlony, Pierre Grabar, H. G. Kunkel, J. H. Rockey, T. Tomasi, J. R. Marrack, Paul H. Maurer, E. A. Kabat, J. Baddiley, Maclyn McCarty, James T. Park, D. L. Shrivastava, C. A. Knight, Lawrence Levine, Igor Tamm, Purnell W. Choppin, Becca Patras, Fred Karush, Raymond Latarjet, G. Biozzi, O. G. Bier, Elmer L. Becker, Otto J. Plescia, Manfred M. Mayer, Irwin H. Lepow, Robert A. Nelson, Jr., Myron A. Leon, Evelyn E. B. Smith, George T. Mills, Robert Austrian, Harriet P. Bernheimer, Brigitte A. Askonas, Felix Haurowitz, Maxwell Richter, G. J. V. Nossal, and O. Mäkelä.

402 pages with illustrations and index

\$6.00

Distributed by
Rutgers University Press
New Brunswick, N. J.

AVAILABLE
everywhere



Wayne Laboratory Animal Diets are available nationally through strategically located distribution points. Polyethylene lined, 50-lb. shipping sacks assure mill freshness and protect against outside contamination. Wayne Mouse Breeder Blox and Wayne Lab-Blox are routinely assayed biologically for estrogen and tested for Salmonella contamination. Constant formulation throughout the year is assured by exacting laboratory control. This quality and dependability is now available to you. Write for details and name of nearest Wayne dealer.

These are the quality tested Wayne Laboratory Animal Diets:
Wayne Lab-Blox (for mice, rats, hamsters, monkeys) • Wayne Mouse Breeder Blox • Wayne Guinea Pig Diet • Wayne Rabbit Ration • Wayne Dog Food.

ALLIED MILLS, INC.

"One of the world's oldest and largest exclusive manufacturers of poultry and animal diets"

110 N. WACKER DR. • CHICAGO 6, ILLINOIS
Laboratory Animal Diets Division

For Laboratory Procedures Requiring

ANIMAL BLOOD PRODUCTS

Cappel

WASHED, POOLED ANIMAL BLOOD CELL SUSPENSIONS *Stabilized*

These washed, pooled, stabilized cells, originated and prepared exclusively by Cappel, have improved and simplified the laboratory procedures in which they are required.

WASHED, POOLED SHEEP CELLS—10% Suspension
WASHED, POOLED RABBIT CELLS—10% Suspension
WASHED, POOLED CHICKEN CELLS—5% Suspension
WASHED, POOLED OX CELLS—10% Suspension
WASHED, POOLED GUINEA PIG CELLS—5% Suspension

Cappel

STERILE ANIMAL BLOOD PREPARATIONS

Obtained from clean, farm-raised, healthy animals by sterile bleeding from the jugular vein or by cardiac puncture. All whole blood products are sterile. No preservative added.

SHEEP BLOOD, CITRATED	RABBIT BLOOD, ALSEVERS
SHEEP BLOOD, ALSEVERS	RABBIT BLOOD, DEFIBRINATED
SHEEP BLOOD, DEFIBRINATED	CHICKEN BLOOD, ALSEVERS
HORSE BLOOD, CITRATED	BOVINE BLOOD, ALSEVERS
HORSE BLOOD, DEFIBRINATED	BOVINE BLOOD, DEFIBRINATED

Cappel

STERILE ANIMAL SERA, POOLED, FILTERED

Sterilized by filtration and free of all micro-organisms including PPLO. No preservatives or antibiotics are added. Nutrients are tested for ability to promote cell growth.

HORSE SERUM	FETAL CALF SERUM	RABBIT SERUM
BOVINE SERUM	SHEEP SERUM	CHICKEN SERUM
CALF SERUM	LAMB SERUM	SWINE SERUM

Specify, through your distributor, drop shipment of fresh supplies from Cappel, the largest producer of animal blood products for laboratory use. Write for catalog.



Cappel is a trademark

Cappel Laboratories

ANIMAL BLOOD PRODUCTS • TISSUE CULTURE REAGENTS • DIAGNOSTIC REAGENTS

West Chester, Pennsylvania

DIVISION OF B-D LABORATORIES, INC.

IN CANADA: Becton, Dickinson & Co., Canada, Ltd., Toronto 10, Ont. FOR EXPORT: Becton, Dickinson & Co., S. A., Colon, Panama

P

ROBLEM:

count 6,000 cells per second



S

ONLY SOLUTION:

the Coulter Counter®



Patented in U.S.A., Great Britain, France, Germany, Japan, Brazil and throughout the world.

NON-OPTIC!

Electronically counts, sizes red or white blood cells, tissue cultures, bacteria, protozoa . . . 1 by 1!

Speed: unprecedented. Accuracy and reliability: unparalleled.

Economy: substantial. Customary "count"

tedium: eliminated. A few reasons why the Coulter Counter is standard in over 1500 hospitals and research centers.

Learn why the Coulter Counter is accepted as a major breakthrough in cell analysis. Write today for complete details.



Trade Mark

COULTER ELECTRONICS

2525 North Sheffield Avenue, Chicago 14, Illinois

Call collect: EAstgate 7-8025

Hyland Laboratories
4501 Colorado Blvd.
Los Angeles 39, Calif.

Please send Tissue Culture catalog to

Name _____

Organization
or Firm _____

Street _____

City _____ Zone _____ State _____

**SEND FOR HYLAND'S
LATEST LISTING OF**

TISSUE CULTURE COMPONENTS

Of special interest is unique *Newborn Agamma Calf Serum*, which provides an excellent protein source for cell propagation and is recommended for detection, propagation and study of many viruses. This specially processed serum, from which gamma-globulin has been completely removed by fractionation technics, provides an unusually high content of alpha- and beta-globulins. In virus studies, it has shown no inhibition of Types I, II and III polio viruses. This serum is available in both liquid and dried form in a variety of practical sizes.

Other bovine specialties include: *Newborn Calf Serum* (liquid or dried), which is derived from 1- to 4-day-old calves and, because of high alpha-globulin content, is more stimulatory to cell growth than serum from more mature animals; non-toxic *Fetal Calf Serum* (liquid); *Bovine Amniotic Fluid* (liquid or dried); *Bovine Embryo Extract* (dried); *Bovine Embryo Extract, Ultrafiltrate* (liquid); *Bovine Serum* (liquid or dried); *Bovine Serum, Ultrafiltrate* (liquid).

Chicken Serum (liquid or dried) is available in large pools for polio testing. Our line also embraces other serums and serous fluids, ultrafiltrates, balanced salt solutions and synthetic media. We welcome your inquiries about special formulations or preparations of particular interest to you.

HYLAND LABORATORIES



4501 Colorado Blvd., Los Angeles 39, Calif.

*Coordinates a great
many viewpoints . . .*

Elek: STAPHYLOCOCCUS PYOGENES AND ITS RELATION TO DISEASE

" . . . the merging of ideas from different sources is of proven value and for this reason it was felt that a monograph on *Staphylococcus pyogenes* might serve a useful purpose. At the outset it was my hope and endeavor to provide a comprehensive bibliography of the most important papers concerned with this pathogen. It soon became evident, however, that even this limited aim is beyond fulfillment, and if I have failed through error or omission, I can but offer my sincere apologies.

"It is comparatively easy to be dogmatic (and right) about matters which have become clarified through more recent work. Many aspects of staphylococci are, however, still *sub judice* and it was felt better to refrain from judgement and to present the facts and claims as they appear. The expression of an opinion on such matters is merely to expose a personal bias, due to one's own inadequate experience in the field. What is important, however, is to lay bare the gaps in our knowledge. This I have tried to do, for nothing is more dangerous than to believe that we know, when in fact we are ignorant."—*from the preface*

CONTENTS—Historical survey. Problems of taxonomy. Morphology and staining reactions. Metabolism. Antigenic structure and serological classification. Staphylophages and lytic phenomena. The distribution of staphylococcus pyogenes in nature. Staphylocoagulase. Diffusible products of staphylococci with action on tissue constituents. Virulence and disease. Resistance to staphylococcal infection and immune phenomena. Effects of physical agents. Antiseptics and chemotherapeutic agents. Antibiotics. Clinical problems of staphylococcal infection.

By STEPHEN D. ELEK, M.D., D.Sc., Ph.D., D.P.H.,
Professor of Bacteriology in the University of London,
Consulting Bacteriologist to St. George's Hospital

1959 • 784 pp., 44 figs. • \$15.00

Publishers of Medical and Scientific Books and Periodicals



**WILLIAMS
& WILKINS
COMPANY**

BALTIMORE 2, MD.

•SHOP BY MAIL

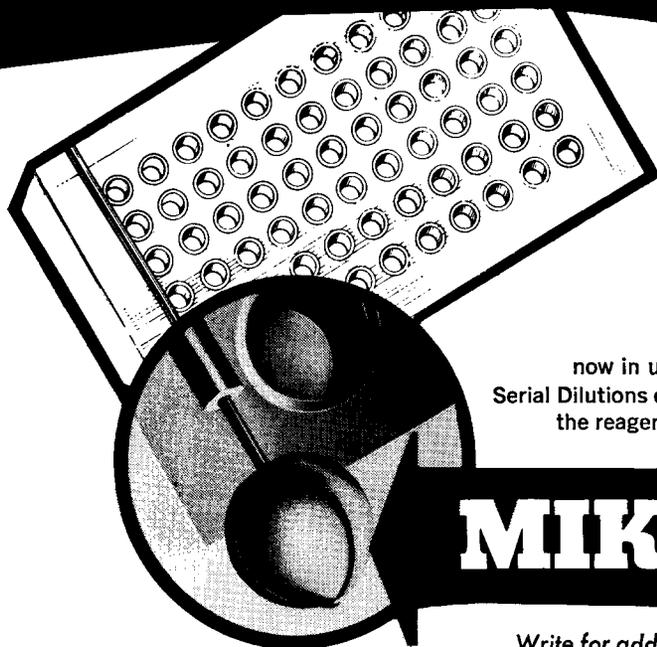
THE WILLIAMS AND WILKINS COMPANY
Baltimore 2, Md.

Please send the following on approval:

Name _____ (Please print)
Address _____
City _____ Zone _____ State _____

Payment enclosed. Bill me.

Shopping by mail is an easy, time-saving way to select books for your personal library.



The MIKROTIT, microtitrator, manual spiral-loop dilution technique simplifies and accelerates serological titrations.

6 loops can be handled at one time

**RAPID ACCURATE
A MUST FOR VIROLOGY
AND SEROLOGY**

now in use in most leading laboratories
Serial Dilutions can be rapidly done using 1/10th the reagent of the older pipette techniques

MIKROTIT

Write for additional information

INTERCONTINENTAL SCIENTIFIC CORP.

23 West 60th Street New York 23, N. Y.

THE JOURNAL OF IMMUNOLOGY

Information for Subscribers

Published monthly, beginning January, 1929. (From 1916-1925, and in 1928 Volumes I-X, inclusive, and Vol. XV published bi-monthly.)

The subscription price is \$18.00 per year in U.S.A.; \$18.50 in Canada; \$19.50 elsewhere. Single copies, when available, are \$2.25 in U.S.A.; \$2.50 elsewhere. The subscriptions of members of the American Association of Immunologists are included in the membership dues and are handled by the Association's Treasurer, Dr. Calderon Howe, Columbia University College of Physicians and Surgeons, New York, N. Y. All other subscriptions should be sent to the publishers.

Change of address: Publisher must be notified 60 days in advance. Journals undeliverable because of incorrect address will be destroyed. Duplicates can be obtained (if available) from the publisher at the regular price of single issues.

New subscriptions and renewals are entered to begin with the first volume of the year when subscription is received. Should any issue of the current volume be out of print at the time the subscription order is received, the pro-rata value of such numbers will be refunded to the subscriber.

Subscriptions should be renewed promptly: To avoid a break in your series, subscriptions should be renewed promptly. The publishers cannot guarantee to supply back issues on belated renewals.

Correspondence concerning all business matters should be addressed to

THE WILLIAMS & WILKINS COMPANY

Publishers of Scientific Books and Periodicals
BALTIMORE 2, MARYLAND, U. S. A.



WHY NOT?...MOTHER WILL NEVER KNOW!

A sweltering day. One sweet bite of coolness. Then, decision. Surely a *little* dirt won't hurt. After all, children usually get by taking chances. Usually. But Nutritional Biochemicals doesn't. And couldn't. Biochemicals *have* to be pure. Lives depend on it. The biochemicals a research lab or a hospital orders are perfect . . . or useless. Nutritional Biochemicals stocks 2600 pure biochemicals. Ships them daily all over the world. In short, N.B.Co. has a vested interest in purity. And, N.B.Co.'s worldwide volume brings you pure biochemicals at exceptionally low prices.

Send for our FREE 2600 item catalog. Or call us today at MONTrose 2-0214, Cleveland, Ohio.

NUTRITIONAL BIOCHEMICALS CORPORATION
21010 Miles Avenue • Cleveland 28, Ohio
24-Hour Delivery in the U.S.A. • Slightly Longer Anywhere Else

Send for our free June, 1961 Catalog containing more than 2600 items. Fill out coupon and mail today for your copy.

Name _____ J1
Organization _____
Address _____
City _____
State _____ Zone _____

