## Bionetics does it for you.

## Antisera to Mouse Immunoglobulins

(HEAVY CHAIN SPECIFIC)

Monospecific antisera have been prepared for the following heavy chain classes of mouse immunoglobulins:

 $\gamma A = \gamma G1 = \gamma G2$   $\gamma G2a = \gamma G3 = \gamma M$ 

Also available: Rabbit antisera to  $\kappa$  and  $\gamma$  light chains.

Immunization was conducted with highly purified antigens as evaluated by polyacrylamide gel disc electrophoresis for biophysical homogeneity and immunoprecipitin analysis for antigenic purity. The antisera are rendered monospecific by solid phase immunoadsorption to yield products free of soluble immune complexes and unwanted immunoadsorbents.

## Specificity:

The agar gel diffusion plates pictured at right illustrate the monospecific nature of the antisera. As an example, anti- $\gamma$ G1 reacts with all 7S immunoglobulins prior to solid phase immunoadsorption but reacts only with  $\gamma$ G1 after immunoadsorption. The lack of reactivity to  $\gamma$ A and  $\gamma$ M is due to the purity of the immunogen.

These reagents are for research use only and are not for use in humans, nor for diagnostic or therapeutic use.

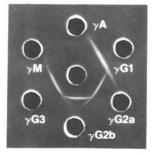
Please write for our current Price List and Catalog.



5516 Nicholson Lane, Kensington, Maryland 20795 Telephone: (301) 881-1557

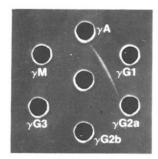
## BEFORE ADSORPTION

Center well contains unadsorbed rabbit antiserum to mouse yG1



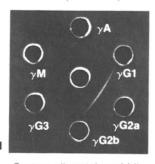
## AFTER ADSORPTION

Center well contains solid phase immunoadsorbed rabbit antiserum to mouse yG1

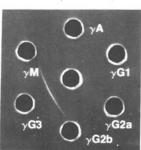


THE MONOSPECIFIC CHARACTER OF THE ANTISERA TO THE G SUBCLASSES IS PICTURED BELOW. NOTE THE STRONG SPECIFIC REACTIVITY WITH ONLY THE SPECIFIC IMMUNOGLOBULIN.

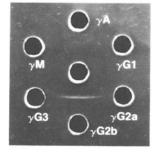
Center well contains rabbit antiserum specific for yG2a



Center well contains rabbit antiserum specific for yG3



Center well contains rabbit antiserum specific for yG2b



Similar monospecific characteristics are seen with antisera to  $\gamma A$ ,  $\gamma M$ , and antisera prepared in goat.

## Cedarlane Laboratories introduces:

## MOUSE T-CELL FUNCTION TEST KIT

Cedarlane Laboratories Limited introduces a kit which will enable the mouse immunologist to carry out functional studies with a series of three T-cell specific antisera. The kit includes all of the following reagents:



Anti-Lyt-1.2 Alloantiserum



Anti-Lyt-2.2 Alloantiserum



Anti-Thy-1.2 Alloantiserum



Low Toxicity Rabbit Complement

These reagents are included in each kit in sufficient quantities to test approximately 2 X 107 lymphocytes with each antiserum. The reagents are shipped frozen on dry ice.



CL 8950 Mouse T-Cell Function Test Kit One kit \$75.00



Direct orders or inquiries to:

**UNITED STATES:** 

**ACCURATE CHEMICAL &** SCIENTIFIC CORPORATION

28 TEC STREET, HICKSVILLE, N.Y. 11801

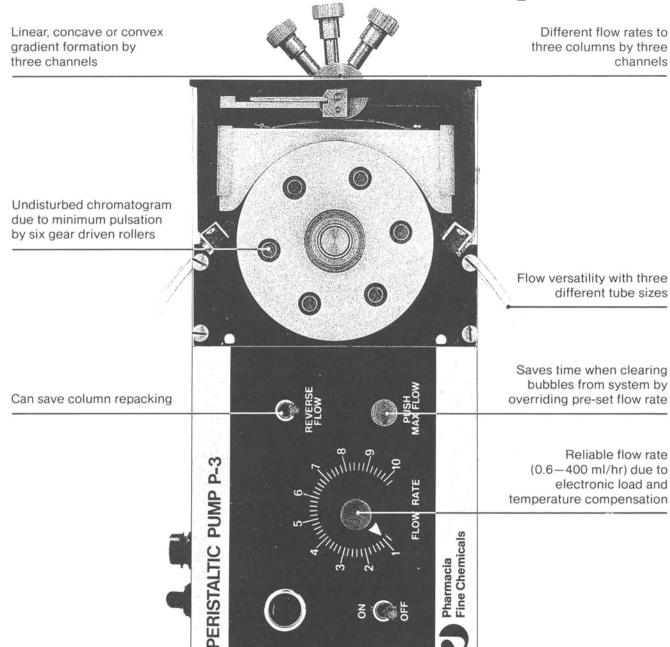
Telephone (516) 433-4900

WORLDWIDE EXCEPT U.S.



5516-8TH LINE, R.R. 2 HORNBY, ONTARIO, CANADA LOP 1E0 Telephone (416) 878-7800

## The Pump Check what it can do for you!



The Pharmacia Peristaltic Pump P-3 is your ideal general-purpose laboratory pump for column chromatography, density gradient formation and many other biochemical techniques where reliable liquid flows are required.

Its versatility gives you convenience and saves your time and money. Let this pump work for you in your lab. Ask for detailed information today.

## **Pharmacia Fine Chemicals**

Saves bench space. Only 11 x 11 cm

Division of Pharmacia, Inc. Piscataway, New Jersey 08854 Phone (201) 469-1222



## Now you can benefit from the immunologic advances of international authorities in your field...

This three-volume set will assist you in everyday practice:

3rd edition

## HANDBOOK OF EXPERIMENTAL IMMUNOLOGY

Edited by D. M. Weir, M.D.

1,232 pages, 507 illustrations in three volumes. Price, \$98.00.

This important work offers comprehensive coverage on a wide range of techniques available to the experimental immunologist, contributed by experts in each field. This new edition has been updated on the latest standards and contains expanded sections on measurement of antibody affinity, lymphocyte separation and characterization, and new appendices on biometrics and mouse breeding techniques. The book is designed as a handbook and, for the convenience of those who are primarily concerned with only one or two of the subjects, it is also available as three separate paperback volumes, each of which contains a full list of contents and a comprehensive index to the complete work.

## Volume I. IMMUNOCHEMISTRY. 534 pages, 275 illustrations.

CONTENTS — Antigens \* Complement \* Immunoglobulins: purification and characterization \* Immunogenetics \* Antigenantibody interactions: primary interaction \* Methods for the study of the affinity and kinetics of antigen-antibody reaction \* Secondary interaction

## Volume II. CELLULAR IMMUNOLOGY. 350 pages, 140 illustrations.

 ${\tt CONTENTS-Lymphocytes * Phagocytes * Cellular antigens} \\ {\tt and products}$ 

## Volume III. APPLICATION OF IMMUNOLOGICAL METHODS. 348 pages, 92 illustrations.

CONTENTS — Immunological methods in microbiology, virology, mycology, helminthology \* Demonstration of antibodies to protozoa \* Notes on problems associated with in vitro sensitization and antigen-antibody reactions \* Techniques for the study of assay or reagins in allergic subjects \* The handling and assay of mediators in hypersensitivity reactions \* Tests of immune function \* APPENDICES

A New Book. **SPERMATOZOA, ANTIBODIES AND INFERTILITY.** Edited by Jack Cohen, D.Sc., F.I.Biol. and W. F.

Hendry, Ch.M., F.R.C.S. This unique volume is composed of thoroughly edited papers from a symposium attended by physicians, biologists, and basic scientists. In it, leaders in the field discuss numerous significant aspects of infertility, including recent advances in the diagnosis and treatment of the problem. Since several of the papers were written from the scientist's point of view, you'll gain insight into the problem's underlying principles. Find out what your British colleagues are learning — and doing —about infertility. May, 1979. 224 pp., 35 illus. Price, \$27.50.

New 2nd Edition. **NASAL ALLERGY.** By Niels Mygind, M.D. Allergic diseases of the nose and paranasal sinuses are among the most common presented in otorhinolaryngology, allergy and respiratory medicine, although no recent book has been devoted exclusively to the subject. This second edition provides comprehensive discussions on the ultrastructure, immunology, disease and therapy as it provides a guide to the practical management of these disorders. August, 1979. Approx. 377 pp., 147 illus. About \$47.50.

A New Book. **IMMUNOLOGY AT A GLANCE.** By John H. L. Playfair, M.B., B.Chir., Ph.D. December, 1979. Approx. 160 pp., 35 illus. **About \$11.50**.

For faster service, or if coupon has been removed, CALL US! Dial toll-free (800) 325-4177, ext. 10; in Missouri, call collect (314) 872-8370, ext. 10 during our regular business hours. A90664.

## MOSBY

TIMES MIRROR

THE C. V. MOSBY COMPANY 11830 WESTLINE INDUSTRIAL DRIVE ST. LOUIS. MISSOURI 63141

## ...with the help of Mosby and these Blackwell Scientific Publications.

Mail this coupon today and you'll have 30 days to evaluate your selections.

YES! I want to inspect an on-approval copy of the book(s) I've checked below.  HANDBOOK OF EMPERIMENTAL IMMUNOLOGY, (B5393-2) 3-volume set (hardcover) \$98.00  IMMUNOCHEMISTRY, (B5394-0) Vol. 1, (paperback) \$36.00  CELLULAR IMMUNOLOGY, (B5395-9) Vol. 2, (paperback) \$31.00  APPLICATION OF IMMUNOLOGICAL METHODS, (B5396-7) Vol. 3, (paperback) \$31.00  SPERMATOZOA, ANTIBODIES AND INFERTILITY, (B1094-X), \$27.50	□ Bill me □ Payment enclosed □ mastercharge # □ VISA # □ Name □ Address □ City □ Zip Code □ Zip Code
	30-day approval offer good in U.S. and Canada. Prices effective in U.S. and subject to change.
NASAL ALLERGY, 2nd edition, (B3614-0) \$47.50* IMMUNOLOGY AT A GLANCE, (B3947-6) \$11.50* A90664	Fill out coupon and mail to: THE C. V. MOSBY COMPANY, 11830 Westline Industrial Drive, St. Louis, MO 63141

# MIXAND SPIN PERCOLL TO THE PERCOLL



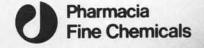
A new density gradient medium which makes centrifugation simpler, quicker and gives much greater resolution than you ever thought was possible.

- Self-generating gradients in 30 minutes or less
- Isoosmotic throughout the gradient
- Non-toxic to cells and viruses
- Does not interfere with enzyme assays or quench radioactivity
- Low viscosity for rapid isopycnic or rate zonal separations
- Suitable for cells, viruses and subcellular particles

## THE GREATEST REVOLUTION SINCE THE CENTRIFUGE

Contact Pharmacia today for a free descriptive booklet.

Pharmacia Fine Chemicals Division of Pharmacia, Inc. Piscataway, New Jersey 08854 Phone (201) 469-1222



# Intiliology Letters for the rapid publication of short reports in Immunology

Aims and Scope

The journal will provide a vehicle for the rapid publication of short, complete and definitive reports of work in all aspects of immunology. The essential criteria for publication will be clarity, experimental soundness and novelty. Results contradictory to current accepted thinking or ideas diverging from actual dogmas will be considered for publication provided that they are based on solid experimental findings. Preference will be given to papers of immediate importance to other investigators, either by their new methodology, experimental data or new ideas. Commentaries and replies related to the published reports may also be accepted provided that they are short (maximum 700 words) and scientifically relevant to the reports mentioned, in order to provide a continuing forum for discussion.

## Managing Editor: A. Bussard.

Immunologie Cellulaire, Institut Pasteur, 28, Rue du Docteur Roux, 75015, Paris France.

## Assistant Managing Editor: G. Bordenave.

Immunochimie Analytique, Institut Pasteur, 28, Rue du Docteur Roux, 75015, Paris France.

## Contents of first issue:

Biological activity of anti-brain antibodies. The effect of anti-synaptic membrane antibodies on slow and action potentials of the rat sympathetic ganglion.

by V.L. Savić, B.D. Janković and J. Horvat (Belgrade, Yugoslavia).

Ontogeny of the immuno-neuro-endocrine relationship. Early thymectomy of the chick embryo. by B.D. Janković, K. Isaković and Z. Knežević (Belgrade, Yugoslavia).

Rapid immunofluorescent detection of a viral infection in tissue culture.

by H.H. Weetall, A.A. Luderer, H.C. Orr and P.C. Probst (Corning, N.Y. and Bethesda, Md., USA).

Anti-BSA antibodies in the repertoire of the quasi-silent (a3") variants of the rabbit V<sub>H</sub> allotype of the a-locus, by P. De Baetselier, R. Hamers, C. Hamers-Casterman and W. van der Loo (St-Genesivs-Rode, Belgium).

A new kind of immunosuppression associated with erythropoiesis, by E. Conway de Macario and A.J.L. Macario (Albany, N.Y., USA).

Quantitation of neutrophil infiltration in vivo,

by A.C. Issekutz and H.Z. Movat (Toronto, Ont., Canada).

The use of polyvinyl alcohols as tolerogenic carriers for suppression of anti-hapten IgE antibody responses, by W.Y. Lee and A.H. Sehon (Winnipeg, Canada).

Cytotoxic effect of anti-lymphocytic globulin on leukaemic myeloblasts,

by M.F. Heyworth and S.C. Truelove (Oxford, U.K.).

The effect of antibodies to mononucleotides on RNA synthesis in vitro,

by O.V. Matarova and D.M. Goldfarb (Moscow, USSR).

Cytotoxicity of an antiserum to an acidic protein present in mesodermal macrophages.

by L.I. Persson, C. Wikkelsø and L. Rönnbäck (Göteborg, Sweden).

Immunosuppressive and contraceptive effects of testosterone and cyproterone acetate in guinea pigs, by M. Vojtíšková, M. Poláčková, V. Vicklický and Z. Pokorná (Prague, Czechoslovakia).

Natural killing of human fibroblast cell lines differing in interferon-sensitivity, by K. Ohmon, M. Kawata, K. Okumura, T. Kuwata and T. Tada (Chiba, Japan).

Publication Schedule and Subscription Information: Volume I in 6 issues (First issue scheduled for July 1979) Subscription Price: US \$75.50/Dfl. 155.00 incuding postage.

## **ELSEVIER/NORTH-HOLLAND BIOMEDICAL PRESS**

For further information and/or free sample copy please write to:

In the USA and Canada: JOURNAL INFORMATION CENTER, Elsevier's Science Division, 52 Vanderbilt Ave., New York, NY 10017

In all other countries: ELSEVIER/NORTH-HOLLAND BIOMEDICAL PRESS, P.O. Box 211, AMSTERDAM 1000 AE. The Netherlands

Please send your orders to the Amsterdam address

The Dutch guilder price is definitive. US \$ prices are subject to exchange rate fluctuations.

# Anti-Human Fibronectin (Cold-Insoluble Globulin, LETS Protein) MADE IN GOAT OR RABBIT

Available as Anti-Serum, IgG fraction, F(ab')<sub>2</sub> fragments, Fluorescein, Rhodamine, Peroxidase and Ferritin Conjugates.



Specialists in Fluorescein, Rhodamine, Ferritin, Peroxidase and Custom Conjugations and of Conjugated F (ab')<sub>2</sub> Fragments or Fab Fragments of Antiserums.

## Cappel Laboratories, Inc.

Cochranville, PA 19330 Phone: (215) 593-6914 Toll Free: (800) 523-7620

## from Williams & Wilkins Clinically

## Two New Additions to The Clinical Concepts In Medicine Monograph Series

## **CLINICAL CONCEPTS OF INFECTIOUS DISEASES** Second Edition

Edited by Leighton E. Cluff, MD and Joseph E. Johnson, III, MD

The thirty-two contributing authors of Clinical Concepts of Infectious Diseases have brought their considerable experience and expertise to its writing under the editorship of Drs. Cluff and Johnson.... The result is a compendium of information no clinician should be without.

Contents Epidemiology and Pathogenesis of Infectious Diseases: Introduction. Clinical Epidemiology. Microbial Determinants of Infection. Phagocytic System. Circulatory Immune System. Secretory Immune System. Cellular Immune System. Immunologic Consequences of Infection. General Problems of Infectious Diseases: Introduction. Fever and Acute Phase Reactions. Microbemia and Microbial Shock. Dermatological Manifestations of Infection. Hematological Manifestations of Infection. Recovery from Infection. Specific Problems of Infectious Diseases: Introduction. Opportunistic and Wound Infections. Influenza and Other Viral Respiratory Infections. Streptococcal Infections and Complications. Acute Pulmonary Infections. Chronic Pulmonary Infections: Tuberculosis and Histoplasmosis. Infectious Diarrheas. Viral Hepatitis. Urinary Tract Infections. Venereal Infections (Sexually Transmissable Disease). Meningitis and Encephalitis. Infectious Mononucleosis. Infective Endocarditis. Management and Prevention of Infectious Disease: Introduction. Antimicrobial Therapy. Systemic Mycoses and Antifungal Therapy. Antiviral Therapy. Untoward Consequences of Antimicrobial Therapy. Isolation of the Infected Patient. Immunization Procedures. Tabulation and Other References of Infectious Diseases: Introduction. Tabulation of Infectious Diseases. Selected References. Index.

## 1978/545 pages/11 illustrations/\$22.50

## **CLINICAL CONCEPTS OF IMMUNOLOGY**

By Robert H. Waldman, MD

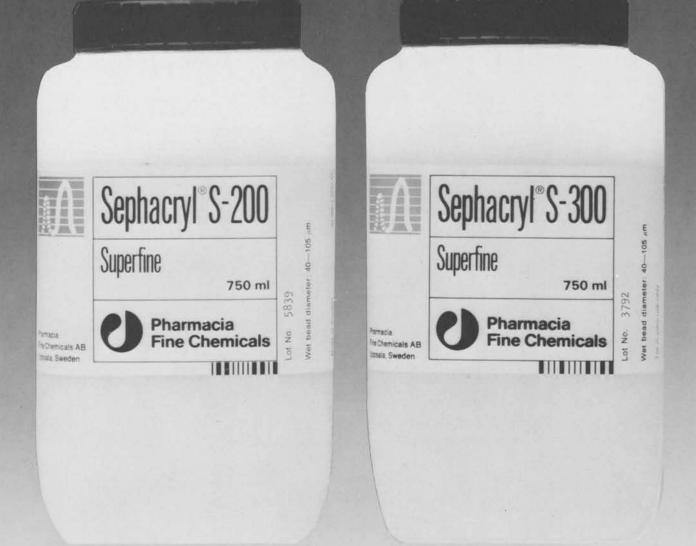
A concise yet comprehensive reference covering the basic science and the concepts of immunology as it relates to clinical practice. Written in a clear and readable style, Clinical Concepts of Immunology is a primary reference of the important clinical correlations of basic immunology and, as such, belongs in the library of every specialist who must deal with the complex diagnosis and treatment of patients with immunologic disorders.

Contents The Immune Systems - An Introduction. Cell-Mediated Immunity: Congenital Deficiency States in Cell-Mediated Immunity. Cell-Mediated Immunity — Acquired Deficiency States. Tumor Immunology. Transplantation Immunology. Passive Enhancement of Cell-Mediated Immune Response. Diseases of Aberrancy of Cell-Mediated Immunity. Humoral Immunity: Function of the Humoral Immune System. The Complement System. Humoral Deficiency States. Passive Enhancement of Humoral Immunity. Active Immunization. Immune Complex Diseases. Autoantibodies and Human Disease. The Acute Allergic Response — Mediators of Acute Inflammation. Drug Allergy. Section of the Phagocytic Sys tem: The Phagocytic System and Host Resistance to Microbial Disease. The Neutrophil In Abnormal Host Resistance Neutropenia and Abnormal Chemotax. Miscellaneous: Immunologic Aspects of the Spleen. Immunohematology. Non-Specific Immunity. Interferon and the Immune System. Evaluation of Patients with Immunologic Diseases. Index.

1979/263 pages/32 illustrations/\$19.50

••••	
Yes, please send me:	Williams & Wilkins — Dept 221 P.O. Box 1496 Baltimore, Md 21203
copy(ies) of CLINICAL CONCEPTS OF INFECTIOUS DISEASES, 2nd edition, by Cluff & Johnson (1655-5) at \$22.50 each.  copy(ies) of CLINICAL CONCEPTS OF IMMUNOLOGY by Waldman (8656-1) at \$19.50 each	All books sent on 20-day approval. Save postage and handling by enclosing payment with order. Maryland residents please add 5% sales tax. Prices subject to change without notice. Prices outside the U.S. slightly higher.
	<b>CREDIT CARD PURCHASE</b> (Check one) $\square$ VISA $\square$ Master Charge
name	
	card # expiration date
address	TOLL-FREE TELEPHONE ORDERING (9 am to 4 pm) For ordering with or without charge card, call: 1-800-638-0672.
city state zip code	Maryland residents call collect: 528-4221.

## Spot the Difference



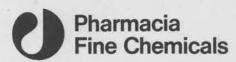
## Sephacryl® the different medium for gel filtration

- Faster separations: Sephacryl has speed and resolution to spare; separates proteins 5–10 times faster than conventional media.
- Faster packing: Sephacryl is pre-swollen, ready-to-use and packs fast.

Use Sephacryl S-300 Superfine for separations up to an exclusion limit of 1.5 million for globular proteins; ideal for serum proteins. Use Sephacryl S-200 Superfine up to an exclusion limit of 250,000 for globular proteins.

When you use Sephacryl, the difference is clear. Find out more about Sephacryl from your usual supplier of Sephadex®, Sepharose® and other separation media.

Pharmacia Fine Chemicals Division of Pharmacia, Inc. Piscataway, New Jersey 08854 Phone (201) 469-1222



## VECTOR LABORATORIES, INC.



**INTRODUCES** 

BIOTINYL - LECTINS BIOTINYL - ANTIBODY

FOR USE IN THE HIGHLY-SPECIFIC, ULTRA-SENSITIVE

## **BIOTIN/AVIDIN SYSTEM**

## NEW SANDWICH TECHNIQUE

PRINCIPLE: Avidin, a 68,000 molecular weight glycoprotein found in eggs, has an extraordinary affinity\* for the small molecular weight vitamin, Biotin. Coupling Biotin to any protein gives that protein the ability to bind Avidin. Avidin conjugated with Ferritin, Fluorescein, Rhodamine or Horseradish Peroxidase can be used to localize Biotinyl-Antibody or Biotinyl-Lectins after they have bound to their receptors.

\*Over one million times higher than most antigen-antibody interactions.

THE BIOTIN/AVIDIN SYSTEM has several advantages over direct coupling of the marker to antibody.

- Improved Sensitivity
- Reduced non-specific binding
- Elimination of steric hindrance problems
- Instantaneous complex formation
- High complex stability
- Simultaneous use of several markers
- Biological processes unaffected
- Wide applicability

## **BAS** REAGENTS INCLUDE:

Biotinyl-Anti-immunoglobulin antibody

**Biotinyl-Lectins** 

Fluorescein-Avidin

Rhodamine-Avidin

Horseradish Peroxidase-Avidin

Ferritin-Avidin

Agarose-Bound Avidin

These [B4S] Reagents are available individually or in kit form.

## INQUIRE ABOUT OUR CUSTOM BIOTINYLATION SERVICE.

For further information and a catalog of **B4S** Reagents and over 100 Lectins and related Biochemicals, please phone or write:

## **VECTOR LABORATORIES, INC.**

1479 ROLLINS ROAD **BURLINGAME, CALIFORNIA 94010** (415) 348-3737

## Transplantation is the journal that uses today's research to bring tomorrow into better focus



Researchers and clinicians who need to know what's going on in immunology have long looked to *Transplantation* to find out. In its pages can be found the vitally pertinent information you want as you look for answers to the critical problems of rejection, tissue matching, immunization, and infection.

Hematology, endocrinology, genetics, and embryology are just a few of the specialties in *Transplantation's* cross-disciplinary coverage. Each issue contains formal in-depth papers, as well as brief reports on research from around the world.

As a subscriber to *Transplantation* you can expect to find only the latest information; you will know you are getting the best news first.

## WILLIAMS & WILKINS

please type or print

428 East Preston Street Baltimore, Maryland 21202 ☐ Yes, enter my subscription for one year of Transplantation's monthly coverage of what's new in immunology. I enclose payment of \$50.00.

## Melloni's Illustrated Medical Dictionary

Just published the ideal medical reference for

- office
- lab
- clinic
- library

Color highlights

**Outstanding illustrations** 



Clear, concise definitions

Numerous tables and charts

For the person whose job requires knowledge of health science terminology, **Melloni's** is the reference to turn to. Medical words, definitions, concepts — all are explained clearly and quickly in a unique visual format. Readers get a concise and rapidly comprehended store of knowledge. Retention is improved, too, because with **Melloni's** they're not just reading a definition, they're seeing it!

One reviewer said,

"If a dictionary could ever get on a best seller list, Melloni's should! Readable, interesting format, beautiful illustrations — highly recommended!"



1979/532 pages/27,085 entries/2,537 illustrations/\$16.50



## Williams & Wilkins

Publishers of medical and scientific books for 80 years.

Yes, please send me \_\_\_\_\_\_ copy(ies) of the exciting new MELLONI'S ILLUSTRATED MEDICAL DICTIONARY at \$16.50 each, on 20-day approval. (If purchased in Maryland, please add 5% sales tax.)

W	'illia	ms
&	Wil	kins

Name

Library

Address

.

Zip

□ check enclosed □ bill me □ VISA □ MASTER CHARGE TOLL-FREE TELEPHONE ORDERING: call 1-800-638-0672.

State

In Maryland call collect: 528-4221.

Dept. 280 P.O. Box 1496 Baltimore, Maryland 21202