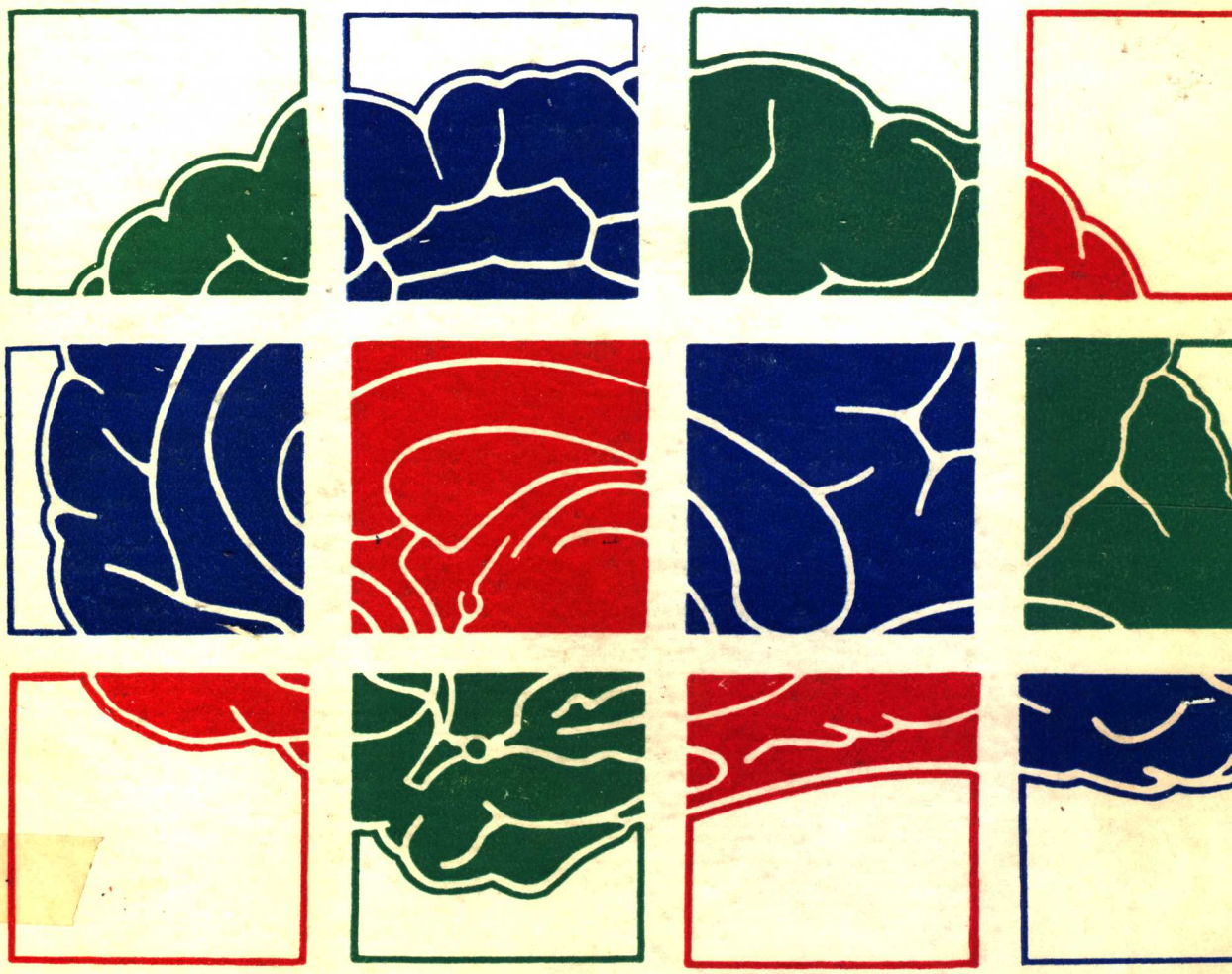
ANTIEPILEPTIC DRUGS

Edited by:

Dixon M. Woodbury
J. Kiffin Penry
Richard P. Schmidt



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EDITORS

Dixon M. Woodbury, Ph.D.

Professor and Head
Department of Pharmacology
University of Utah College of Medicine

J. Kiffin Penry, M.D.

Chief, Applied Neurologic Research Branch and
Head, Section on Epilepsy
Collaborative and Field Research
National Institute of Neurological Diseases and Stroke

Richard P. Schmidt, M.D.

Professor of Neurology and Dean
College of Medicine
State University of New York Upstate Medical Center

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James J. Cereghino, Samuel A. Cucinell, Jonas H. Ellenberg, James R. Fouts, Harvey J. Kupferberg, J. Kiffin Penry, Leon J. Sholiton, Robert E. Staples, R. R. Streiff, and B. J. Wilder.

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Preface

This volume is the result of a collaborative effort exerted for over two years by a large number of investigators who are interested in epilepsy and the antiepileptic drugs. The aims of this endeavor originated from deliberations of the Public Health Service Advisory Committee on the Epilepsies and the NINDS Ad Hoc Committee on Anticonvulsant Drugs. The goal was simply to create an authoritative reference work that would present in a single source all of the recent advances in knowledge concerning the antiepileptic drugs as well as an in-depth review of basic pharmacologic data from both animals and man. In addition to presenting a definitive statement of the basic pharmacologic and clinical principles of the drugs used to treat epilepsy, it was hoped that this effort would serve to stimulate further research in the field. Although the book is not intended as a manual on how to treat epilepsy, it should provide all of the currently available pharmacologic knowledge, except mechanisms of action, required by clinicians for a thorough understanding and use of the antiepileptic drugs.

New studies on both old and new drugs were already underway in several laboratories and clinics when a workshop composed of clinical and basic research investigators from diverse disciplines related to epilepsy and the pharmacology of antiepileptic drugs was held in Warrenton, Virginia, in June 1970 to consummate the plans for a work that would meet the objectives of this undertaking. It was the consensus of the participants that (1) the volume should include data from animal experimentation for support and understanding of that obtained from man, though the contributors should clearly differentiate the findings because of species differences; (2) the practical limitations of space and publication time demanded that the mechanisms of action of the antiepileptic drugs be omitted, since considerable discussion of the neuropharmacologic and neurochemical mechanisms of epilepsy would be required to thoroughly cover this important subject; (3) continuation chapters on certain topics would be necessary to present the latest unpublished findings by other investigators and to provide adequately for different interpretations of the data; (4) the book should be structured according to the classes of drugs and arranged to present the basic pharmacologic and clinical principles of each drug within the classes; and (5) the volume should contain an introductory section concerning general principles.

Contributors were selected from the participants and other investigators suggested at the workshop. It was recommended that another meeting be organized to provide an opportunity for the contributors to profit from the critical discussion of their colleagues working in the field and to learn of pertinent questions from members of the scientific audience that might otherwise go unanswered in their final contributions.

At the second meeting in Scottsdale, Arizona, September 1971, the highlights of the proposed chapters were presented and discussed, and the preliminary manuscripts were reviewed by the Editorial Board. The contributors then submitted their revised manuscripts for final approval of the Editorial Board.

This volume, then, is the result of the enthusiastic cooperation and endeavors of such multidisciplinary investigators as pharmacologists, neurologists, toxi-

cologists, pediatricians, specialists in internal medicine, and biostatisticians. For the most part, therefore, any deficiencies in the scope of the material should be credited to the editors. The material included, however, represents the views and opinions of the individual authors and does not necessarily reflect those of the Editorial Board and the National Institutes of Health. Because of the many priorities required to maintain the rapid publication schedule, it was not possible to include an in-depth discussion of all the published information on a number of the subjects. Instead, an attempt has been made to provide the pertinent references. More than half the pages of this book represent information that has not been available previously. Setting the new information in context with previously known data provides a current review of knowledge on the subject.

It has become apparent from the contributors and their colleagues that new investigative efforts are now underway. This volume should serve as the initial milepost in the more rapid development of knowledge of the biotransformation and interaction of the antiepileptic drugs and their metabolites, which has been slow in evolving. Furthermore, the new information concerning the relationship of plasma concentration to clinical control and toxicity should not only stimulate further investigation on the efficacy and toxicity of these drugs, but also should provide immediately for improved utilization of the existing drugs. Although the development of new antiepileptic drugs is a slow, tedious, and expensive process, they will be used more effectively when they appear.

If the authors and editors of this work have adequately accomplished their task, the remaining responsibility for the fulfillment of the goals set forth for this endeavor rests with the publisher, at a time when the careful production, rapid publication, and adequate distribution of such a multiauthored volume are more difficult than ever. For this accomplishment, we are indebted to Dr. Alan M. Edelson of Raven Press and his capable managing editor, Virginia B. Martin. Finally, we acknowledge the invaluable assistance of Bettie Jean Hessie, Teresina M. Williams, and Lawrence D. Smith throughout this project and the support of the National Institute of Neurological Diseases and Stroke, which made this publication possible.

D. M. W.
J. K. P.
R. P. S.

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Contributors

IRWIN P. BAUMEL, PH.D.
Research Associate, Department of Neurology, Yale University School of Medicine, New Haven, Connecticut 06510

HAROLD E. BOOKER, M.D.
Associate Professor of Neurology, University of Wisconsin Medical School, Madison, Wisconsin 53706

JOSEPH T. BROCK, M.D.
Clinical Director, New Castle State Hospital, New Castle, Indiana 47362

RONALD A. BROWNING, PH.D.
Postdoctoral Fellow, Department of Pharmacology, The Pritzker School of Medicine, University of Chicago, Chicago, Illinois 60637

ROBERT A. BUCHANAN, M.D.
Associate Director, Clinical Therapeutics Section, Clinical Investigation Department, Research and Development Division, Parke, Davis & Company; Assistant Clinical Professor of Pediatrics and Communicable Diseases, University of Michigan Medical Center, Ann Arbor, Michigan 48106

FRITZ BUCHTHAL, M.D.
Professor of Neurophysiology, University of Copenhagen; Chief, Laboratory of Clinical Neurophysiology, University Hospital (Rigshospitalet), 2100 Copenhagen, Denmark

ALLAN R. BURKETT, B.S.
Assistant Research Biochemist, Chemical Pharmacology Section, Pharmacology Department, Research and Development Division, Parke, Davis & Company, Ann Arbor, Michigan 48106

MILTON T. BUSH, B.Chem., PH.D.
Professor of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37203

JAMES J. CEREGHINO, M.D.
Staff Neurologist, Applied Neurologic Research Branch, Collaborative and Field Research, National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, Maryland 20014

TSUN CHANG, M.S.
Senior Research Biochemist, Chemical Pharmacology Section, Pharmacology Department, Research and Development Division, Parke, Davis & Company, Ann Arbor, Michigan 48106

RICHARD F. CHENG, D.D.S., PH.D.
Research Associate, Biochemical Research Laboratory, Research Foundation, Children's Hospital of the District of Columbia, Washington, D.C. 20009

JAMES J. COATSWORTH, M.D.
Instructor of Medicine (Neurology), University of Washington School of Medicine; Attending Physician, University Hospital, Seattle, Washington 98105

SAMUEL A. CUCINELL, M.D.; LTC, MC
Chief, Clinical Research Branch, Medical Research Division, Biomedical Laboratory, Edgewood Arsenal, Maryland 21010

MOGENS DAM, M.D.
Assistant Neurologist, Departments of Neurology and Neurosurgery, University Hospital (Rigshospitalet), 2100 Copenhagen, Denmark

M. del CERRO, M.D.
Associate Professor of Brain Research and Neurology, University of Rochester School of Medicine and Dentistry, Rochester, New York 14620

WESLEY A. DILL, B.S.
Research Scientist, Chemical Pharmacology Section, Pharmacology Department, Research and Development Division, Parke, Davis & Company, Ann Arbor, Michigan 48106

FRITZ E. DREIFUSS, M.B., M.R.C.P., M.R.A.C.P.
Professor of Neurology, University of Virginia School of Medicine, Charlottesville, Virginia 22901

JONAS H. ELLENBERG, PH.D.
Mathematical Statistician, Section on Mathematical Statistics, Office of Biometry, Collaborative and Field Research, National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, Maryland 20014

EDWARD FINGL, PH.D.
Professor of Pharmacology, University of Utah College of Medicine, Salt Lake City, Utah 84112

JAMES R. FOUTS, PH.D.
Chief, Pharmacology and Toxicology Branch, National Institute of Environmental Health Sciences, National Institutes of Health, Research Triangle Park, North Carolina 27709

BRIAN B. GALLAGHER, M.D., PH.D.
Associate Professor of Neurology, Yale University School of Medicine; Director, Seizure Clinic, Yale-New Haven Hospital, New Haven, Connecticut 06510

GILBERT H. GLASER, M.D., Med.Sc.D.
Professor and Chairman of Neurology, Yale University School of Medicine; Chief, Neurology Service, Yale-New Haven Medical Center, New Haven, Connecticut 06510

ANTHONY J. GLAZKO, PH.D.
Section Director in Chemical Pharmacology, Pharmacology Department, Research and Development Division, Parke, Davis & Company, Ann Arbor, Michigan 48106

LOUIS S. GOODMAN, M.D.
Professor of Pharmacology, University of Utah College of Medicine, Salt Lake City, Utah 84112

JOHN R. GREEN, M.D.
Assistant Professor of Medicine (Neurology), University of Washington School of Medicine; Director, Seizure Clinic, University Hospital, Seattle, Washington 98105

RICHARD H. HAMMER, PH.D.
Associate Professor of Pharmaceutical Chemistry, University of Florida College of Pharmacy, Gainesville, Florida 32601

JOHN C. HOUCK, PH.D.
Professor of Child Health and Development (Biochemistry), George Washington University School of Medicine; Scientific Director, Research Foundation, Children's Hospital of the District of Columbia, Washington, D.C. 20009

HARVEY J. KUPFERBERG, PH.D.
Pharmacologist, Applied Neurologic Research Branch, Collaborative and Field Research, National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, Maryland 20014

HENN KUTT, M.D.
Associate Professor of Neurology and Pharmacology, Cornell University Medical College; Associate Attending Neurologist, The New York Hospital, New York, New York 10021

MARGARET A. LENNOX-BUCHTHAL, M.D.
Research Associate, Institute of Neurophysiology, University of Copenhagen, 2100 Copenhagen, Denmark

G. J. MANNERING, PH.D.
Professor of Pharmacology, University of Minnesota Medical School, Minneapolis, Minnesota 55455

RICHARD H. MATTSON, M.D.
Associate Clinical Professor of Neurology, Yale University School of Medicine; Director, Epilepsy Center, Veterans Administration Hospital, West Haven, Connecticut 06516

E. W. MAYNERT, M.D., PH.D.
Professor of Pharmacology, University of Illinois College of Medicine, Chicago, Illinois 60680

HARRY MEINARDI, M.D., PH.D.
Director of Research, Instituut voor Epilepsiebestrijding, Heemstede, The Netherlands

J. GORDON MILLICHAP, M.D.
Professor of Neurology and Pediatrics, Northwestern University Medical School; Pediatric Neurologist, Children's Memorial Hospital, Chicago, Illinois 60614

J. KIFFIN PENRY, M.D.
Chief, Applied Neurologic Research Branch and Head, Section on Epilepsy, Collaborative and Field Research, National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, Maryland 20014

GABRIEL L. PLAA, PH.D.
Professor and Chairman of Pharmacology, University of Montreal Faculty of Medicine, Montreal 250, Quebec, Canada

ROGER J. PORTER, M.D.
Staff Associate, Section on Epilepsy, Applied Neurologic Research Branch, Collaborative and Field Research, National Institute of Neurological Diseases and Stroke, National Institutes of Health, Bethesda, Maryland 20014

E. H. REYNOLDS, M.D., M.R.C.P.
Lecturer, Department of Neurology, Institute of Psychiatry, and King's College Hospital Medical School; Hon. Senior Registrar, Medical Research Council Clinical Research Centre, London, England; formerly, Visiting Assistant Professor of Neurology, Yale University School of Medicine, New Haven, Connecticut 06510

J. PRESTON ROBB, M.D., C.M.
Professor of Neurology, McGill University Faculty of Medicine; Neurologist-in-Chief, Montreal Neurological Hospital, Montreal 112, Quebec, Canada

ELAINE SANDERS-BUSH, PH.D.
Assistant Professor of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37203

RICHARD P. SCHMIDT, M.D.
Professor of Neurology and Dean, College of Medicine, State University of New York Upstate Medical Center, Syracuse, New York 13210

ALLAN L. SHERWIN, M.D., PH.D.
Associate Professor of Neurology, McGill University Faculty of Medicine; Associate Neurologist, Montreal Neurological Hospital, Montreal 112, Quebec, Canada

LEON J. SHOLITON, M.D.
Associate Professor of Medicine, University of Cincinnati College of Medicine; Chief, Metabolism Section, Veterans Administration Hospital, Cincinnati, Ohio 45220

R. S. SNIDER, PH.D.
Professor of Brain Research and Anatomy, University of Rochester School of Medicine and Dentistry, Rochester, New York 14620

ROBERT E. STAPLES, PH.D.
Head, Section on Reproduction and Ontogenesis, Pharmacology and Toxicology Branch, National Institute of Environmental Health Sciences, National Institutes of Health, Research Triangle Park, North Carolina 27709

R. R. STREIFF, M.D.
Associate Professor of Medicine (Hematology), University of Florida College of Medicine; Clinical Investigator, Medical Research, Veterans Administration Hospital, Gainesville, Florida 32601

EWART A. SWINYARD, PH.D.
Professor of Pharmacology and Dean, College of Pharmacy; Professor of Pharmacology, College of Medicine, University of Utah, Salt Lake City, Utah 84112

MICHAEL D. WATERS, PH.D.
Research Associate, Cellular Biology Section, Biomedical Research Branch, Bureau of Air Pollution Sciences, Environmental Protection Agency, Research Triangle Park, North Carolina 27514

B. J. WILDER, M.D.
Associate Professor of Medicine (Neurology), University of Florida College of Medicine; Clinical Investigator, Medical Research, Veterans Administration Hospital, Gainesville, Florida 32601

C. DEAN WITHROW, PH.D.
Associate Professor of Pharmacology, University of Utah College of Medicine, Salt Lake City, Utah 84112

DIXON M. WOODBURY, PH.D.
Professor and Head of Pharmacology, University of Utah College of Medicine, Salt Lake City, Utah 84112

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