

THE JOURNAL OF
Pharmacology
 AND EXPERIMENTAL THERAPEUTICS

FOUNDED BY JOHN J. ABEL 1909

*Official Publication of The American Society for
 Pharmacology and Experimental Therapeutics, Inc.*

EDITOR

Eva King Killam

ASSISTANT EDITOR

Mannfred A. Hollinger

EDITORS FOR SPECIFIC FIELDS

Analgesia and Drug Abuse

Joseph Cochlin

Autonomic Pharmacology

Charles O. Rutledge
 Robert E. Stitzel

Behavioral Pharmacology

Roger T. Kelleher

Cardiovascular Pharmacology

Henry R. Besch, Jr.
 Michael J. Brody
 Benedict R. Lucchesi

Cell Pharmacology

Toshio Narahashi
 George B. Weiss

Chemotherapy

H. George Mandel

Developmental Pharmacology

Bernard L. Mirkin

Drug Metabolism and Disposition

Edward Bresnick

Gastrointestinal Pharmacology

Thomas F. Burks

Immunopharmacology

Sydney Spector

Neuropharmacology

Lewis S. Seiden
 Wallace D. Winters

Pulmonary Pharmacology

Mannfred A. Hollinger

Renal Pharmacology

William O. Berndt

Toxicology

Curtis D. Klaassen

EDITORIAL ADVISORY BOARD

Martin W. Adler
 Edson X. Albuquerque
 Edmund G. Anderson
 Leslie E. Bailey
 John A. Bevan
 C. Paul Bianchi
 Leslie C. Blaber
 David A. Blake
 John R. Blinks
 Floyd E. Bloom
 Theodore M. Brody
 Theodore J. Cicero
 E. E. Daniel
 William C. de Groat
 Linda Dykstra
 Hugh L. Evans
 James A. Ferrendelli
 Lawrence J. Fischer
 William W. Fleming
 Shri N. Giri
 Dora B. Goldstein
 Frank R. Goodman

Charles W. Gorodetzky
 Robert Z. Gussin
 Anthony J. Hance
 Harold F. Hardman
 Louis S. Harris
 John A. Harvey
 Philip C. Hoffmann
 Jordan L. Holtzman
 Stephen G. Holtzman
 Jerry B. Hook
 David M. Jacobowitz
 Donald R. Jasinski
 Alain F. Junod
 Conan Kornetsky
 Edwin A. Kroeger
 Wayne Levin
 John C. McGiff
 Donald E. McMillan
 Jerry Mitchell
 Perry B. Molinoff
 W. H. Morse
 Mary J. Mycek
 Robert A. Neal

Achillos J. Pappano
 William A. Pettinger
 Larissa A. Pohorecky
 James W. Putney, Jr.
 Arthur Raines
 G. Alan Robison
 C. R. Ross
 Betty I. Sasyniuk
 Arnold Schwartz
 Eric J. Simon
 Roger P. Smith
 Robert I. Taber
 A. E. Takemori
 Thomas R. Tephly
 C. D. Thron
 U. Trendelenburg
 Betty M. Twarog
 Norman J. Uretsky
 Richard M. Welch
 David P. Westfall
 Martin M. Winbury
 Vincent G. Zannoni

BOARD OF PUBLICATIONS TRUSTEES

NORMAN WEINER, *Chairman*; DANIEL L. AZARNOFF, EVA KING KILLAM, NORMAN KIRSHNER,
 KENNETH C. LEIBMAN, GILBERT J. MANNERING, WALTER MODELL,
 PAUL L. MUNSON, IRWIN M. WEINER

EXECUTIVE OFFICER OF THE SOCIETY

HOUSTON BAKER 1311-1142

JPETAB

COPYRIGHT © 1979 BY THE WILLIAMS & WILKINS COMPANY