

# MOLECULAR PHARMACOLOGY

EDITOR: RAYMOND J. DINGLELINE, *Emory University*

ASSOCIATE EDITORS: P. JEFFREY CONN, *Emory University*  
MICHAEL M. GOTTESMAN, *National Institutes of Health*  
BRIAN K. KOBILKA, *Stanford University*  
KENNETH P. MINNEMAN, *Emory University*  
EDWARD T. MORGAN, *Emory University*

MANAGING EDITOR: WENDY M. WILEY

EDITORIAL ASSISTANT: ESMERALDA GALÁN

## EDITORIAL AND ADVISORY BOARD

NIGEL J. M. BIRDSALL, *National Institute for Medical Research, Mill Hill, United Kingdom*

RANDY D. BLAKELEY, *Vanderbilt University*

JOËL BOCKAERT, *Centre National de la Recherche Scientifique, France*

EDWARD BRESNICK, *University of Massachusetts Medical Center*

JOAN HELLER BROWN, *University of California, San Diego*

MARC G. CARON, *Duke University*

CHARLES CHAVKIN, *University of Washington*

JOHN W. DALY, *National Institutes of Health*

STEVEN K. FISHER, *University of Michigan*

ALFRED G. GILMAN, *University of Texas Southwestern Medical Center, Dallas*

ROBERT I. GLAZER, *Georgetown University*

FRANK J. GONZALEZ, *National Cancer Institute*

F. PETER GUENGERICH, *Vanderbilt University*

JAMES R. HALPERT, *University of Arizona*

HEIDI HAMM, *University of Illinois College of Medicine*

R. ADRON HARRIS, *University of Colorado Health Sciences Center, Denver*

STEPHEN B. HOWELL, *University of California, San Diego*

PAUL A. INSEL, *University of California, San Diego*

KARL H. JAKOBS, *University of Essen, Germany*

ERIC F. JOHNSON, *The Scripps Research Institute*

DENNIS R. KOOP, *Oregon Health Sciences University*

ROBERT J. LEFKOWITZ, *Duke University*

LEE E. LIMBIRD, *Vanderbilt University*

THOMAS M. LINCOLN, *University of Alabama at Birmingham*

JOEL LINDEN, *University of Virginia*

ROBERT L. MACDONALD, *University of Michigan Medical Center*

RONALD P. MASON, *National Institute of Environmental Health Sciences*

MARK L. MAYER, *National Institutes of Health*

JAMES O. MCNAMARA, *Duke University*

RICHARD J. MILLER, *University of Chicago*

GRAEME MILLIGAN, *University of Glasgow, Scotland*

T. J. MURPHY, *Emory University*

CHARLES E. MYERS, JR., *University of Virginia Health Sciences Center*

S. R. NAHORSKI, *University of Leicester, United Kingdom*

DAVID L. NELSON, *Lilly Research Laboratories*

ERIC J. NESTLER, *Yale University*

RICHARD R. NEUBIG, *University of Michigan*

KIM A. NEVE, *Veterans Affairs Medical Center, Portland*

ALLAN B. OKEY, *University of Toronto, Canada*

PAUL ORTIZ DE MONTELLANO, *University of California, San Francisco*

GERRY S. OXFORD, *University of North Carolina at Chapel Hill*

ERIC M. PARKER, *Bristol-Myers Squibb Company*

ALAN POLAND, *University of Wisconsin*

MICHAEL A. ROGAWSKI, *National Institutes of Health*

DARRYLE D. SCHOEPP, *Eli Lilly and Company*

GARY L. STILES, *Duke University*

CATHERINE D. STRADER, *Merck Research Laboratories*

PALMER TAYLOR, *University of California, San Diego*

TODD A. VERDOORN, *Vanderbilt University*

MICHAEL J. WARING, *University of Cambridge, England*

DAVID J. WAXMAN, *Boston University*

GARY L. WESTBROOK, *Vollum Institute*

MICHAEL M. WHITE, *Medical College of Pennsylvania*

STEVEN A. WRIGHTON, *Lilly Research Laboratories*

## BOARD OF PUBLICATIONS TRUSTEES

KENNETH E. MOORE, Chairman

KAY A. CROKER, Executive Officer

WILLIAM O. BERNDT

D. CRAIG BRATER

DAVID B. BYLUND

WILLIAM A. CATTERALL

MARLENE L. COHEN

RAYMOND J. DINGLELINE

JOHN A. HARVEY

RAYMOND F. NOVAK

MARCUS M. REIDENBERG

*About the cover:* Depiction of cross-sectioned stereo views of the 5-HT<sub>2A</sub> receptor complexes with ergonovine (cyan) and ergotamine (red). The helical backbones for transmembrane domains 3, 4, 6, and 7 are shown in yellow. A mutagenesis strategy was used to demonstrate the importance of receptor residues F340 and D155 (shown in gray) for docking with the ergoline nucleus. From Choudhary, M. S., N. Sachs, A. Uluer, R. A. Glennon, R. B. Westkaemper, and B. L. Roth. Different ergoline and ergopeptide binding to 5-hydroxytryptamine<sub>2A</sub> receptors: Ergolines require an aromatic residue at position 340 for high affinity binding. *Mol. Pharmacol.* 47:450–457 (1995).