The Journal of Pharmacology and Experimental Therapeutics
A Publication of the American Society for Pharmacology and Experimental Therapeutics

Rick G. Schnellmann, Editor
Craig C. Beeson, Assistant Editor

ASSOCIATE EDITORS
Lawrence H. Lash
Robert Levi
Alan J. Lewis
Louis M. Luttrel
David S. Miller

Richard A. Morrisett
Michael J. O’Neill
Robert B. Raffa
Robert A. Roth

EDITORIAL ADVISORY BOARD
Dale G. Hoyt
Harry Ischiropoulos
Edwin K. Jackson
Kenneth M. Johnson
William J. Jusko
Peter W. Kalivas
Laurence S. Kaminsky
Jonathan L. Katz
Mark R. Kelley
Raouf A. Khalil
Lewis R. Kintner
George F. Koob
Suk-Hee Lee

Michael S. Levine
Wolfgang Löscher
Benjamin R. Lucchesi
Joseph J. Lynch
Philip R. Mayeux
Donald E. McMillan
Mark J. Millan
Gary W. Miller
Hasan Mukhtar
L. Charles Murrin
Michael Nader
Stanley Nattel
Norton H. Neff
S. Stevens Negus III
Kim A. Neve

Yasuyuki Nomura
James S. Norris
James M. O’Donnell
Patricio O’Donnell
Michael F. O’Neill
K. Sandy Pang
Achilles J. Pappano
B. Kevin Park
Diane M. Perez
Michael T. Piasek
Marina Pitzalis
Russell O. Pieper
Joseph W. Polli
John B. Pritchard
Russell A. Prough
Raymond Q. Quock

John W. Regan
J. Larry Renfro
Bryan L. Roth
Michael C. Sanguinetti
Jonathan G. Sommell
Michal Laniado
Schwartzman
Ronald Seifert
Charles N. Serhan
David R. Sibley
Theodore A. Slotkin
Philip C. Smith

Quentin R. Smith
Nikola M. Soldatov
Edward E. Soltis
Patricia K. Sonsalla
Michael D. Southall
Roger D. Spealman
Francis G. Spinale
D.N. Stephens
John L. Sutko
Csaba Szabo
Istvan Szelényi
Ronald J. Tallarida
Milt Teitler
Paul T. Tempova
Alvin V. Terry
Myron L. Toews
George J. Trachte
Hirosi Ueda
Michael R. Vasko
Sandra P. Welch
Michael Williams
Raymond J. Winquist
Jeffrey M. Witkin
Bryan K. Yamamoto
Edward J. Zambraski

BOARD OF PUBLICATIONS TRUSTEES
Brian M. Cox, Chair; Darrell R. Abernethy, P. Jeffrey Conn, Lorraine J. Gudas, Eric F. Johnson, John S. Lazo, Edward T. Morgan, Richard R. Neubig, Rick G. Schnellmann, and Darryle D. Schoepp

ASPD EXECUTIVE OFFICER: Christine K. Carrico
Managing Editor: Jill Filler
Senior Editorial Coordinator: David D. Williams
Production Coordinator: Debbie Tsamoudakis

Journal and ASPET Office: 9650 Rockville Pike, Bethesda, MD 20814-3995; telephone: 301-634-7060; fax: 301-634-7061; email: info@aspet.org; web site: www.aspet.org.

Correspondence regarding editorial matters should be addressed to Dr. Rick G. Schnellmann, Editor, The Journal of Pharmacology and Experimental Therapeutics, at the above address.

Official version: The online version of The Journal of Pharmacology and Experimental Therapeutics contains all of the information and material contained in the print version plus additional material that may not appear in print such as videos and large data sets. The online version may be more current than the print version. Where noted, the online version has been corrected in departures from the print version.

Instructions to Authors: See http://jpet.aspetjournals.org for the Instructions to Authors and the ASPET Authorship Responsibility, Financial Disclosure, and Copyright Transfer form.

Correspondence concerning subscriptions: Nonmember individual and institutional subscriptions: ASPET Subscriptions Dept., Rm. L-2310, 9650 Rockville Pike, Bethesda, MD 20814-3995; telephone: 301-634-7060; fax: 301-634-7061; email: subscriptions.aspet.org. ASPET Members: contact the ASPET office. For European site licenses and consortia, contact: David Charles, Institutional Sales & Licensing, 92 avenue du General de Gaulle, 78900 Maisons-Laffitte, France; telephone: +33-1-39-12-29-29; fax: +33-1-39-12-47-45; email: dlcharles@wanadoo.fr.

Change of address: ASPET must be notified 60 days in advance. Journals undeliverable because of incorrect address will be destroyed. Duplexed or laminated journals may be obtained, if available, from ASPET at the single copy price. Send address changes to the ASPET office.

Reprints of individual articles are available from the authors and from Infotrieve at www.infotrieve.com; please send as much citation information as possible such as journal title, volume issue, page number, year, authors, article title, etc.

Reprints in large quantities for commercial or academic use may be purchased from the publisher. For information and prices, call 301-634-7060.

Copyright Information: The Journal of Pharmacology and Experimental Therapeutics is copyrighted by The American Society for Pharmacology and Experimental Therapeutics. Photocopying of articles beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law is allowed, provided that the $20.00-per-copy fee is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Classroom photocopying is permitted at no fee, provided that students are not charged more than the cost of duplication. This consent does not extend to other kinds of copying. Reproduction of any portion of an article for subsequent republication requires permission of ASPET. Write to the ASPET office at the above address. Requests should include a statement of intended use as well as explicit specifications of the materials to be reproduced.

Disclaimer: The statements and opinions contained in the articles of The Journal of Pharmacology and Experimental Therapeutics are solely those of the individual authors and contributors and not of The American Society for Pharmacology and Experimental Therapeutics. The appearance of advertisements in the journal is not a warranty, endorsement, or approval of the products of safety. The American Society for Pharmacology and Experimental Therapeutics disclaims responsibility for any injury to persons or property resulting from any ideas of products referred to in the articles or advertisement.