

The Journal of Pharmacology and Experimental Therapeutics

A Publication of the American Society for Pharmacology and Experimental Therapeutics

Founded by John J. Abel - 1908

Michael F. Jarvis, Editor
Scott Mittelstadt, Assistant Editor
Joe Blumer, Minireviews Editor

ASSOCIATE EDITORS

Darrell R. Abernethy	Beverly Greenwood-	Lawrence H. Lash	David S. Miller	Domenico Spina
Shripad Bhagwat	Van Meerveld	Roberto Levi	Richard A. Morrisett	Jeffrey C. Stevens
Brendan Canning	Yuichi Hattori	Donald E. Mager	Timothy Ness	Kenneth D. Tew
Arthur Christopoulos	Ronald N. Hines	Gerard Marek	James M. O'Donnell	Ellen Walker
Salvatore Cuzzocrea	Ravi Iyengar	Philip R. Mayeux	Robert A. Roth	David Weinschenker
David A. Gewirtz	Raouf A. Khalil	Kathryn E. Meier	Roland Seifert	Raymond J. Winquist

EDITORIAL ADVISORY BOARD

Geoffrey W. Abbott	Brian M. Cox	Georgy Hasko	Giorgio Minotti	Uwe Rudolf
Thomas J. Abbruscato	Bryan F. Cox	Paul Heerd	Hitoshi Morikawa	Jonathan G. Scammell
Peter Abel	Brian Cummings	Susanna Hourani	Hasan Mukhtar	Michal Laniado
Edson X. Albuquerque	Ann Daly	Leonard L. Howell	S. Jamal Mustafa	Schwartzman
Bradley Andresen	M. Imad Damaj	Dale G. Hoyt	Michael Nader	Federico Sesti
Thomas M. Argentieri	William C. deGroat	John Imig	S. Stevens Negus III	Patrick Sexton
Reto Asmis	Patrick Dougherty	Edwin K. Jackson	Kim A. Neve	Shivendra D. Shukla
John Auchampach	Grant Drummond	Douglas Johns	Yasuyuki Nomura	Theodore A. Slotkin
Bork Balkan	Andrea Eckhart	William J. Jusko	Grazyna Nowak	Philip C. Smith
William A. Banks	Frederick J. Ehlert	Peter W. Kalivas	Nazareno Paolucci	Nikolai M. Soldatov
Bjoern Bauer	Alessandro Fatatis	Mark R. Kelley	Andreas	Patricia K. Sonsalla
Reina Bendayan	Steven J. Feinmark	Lewis B. Kinter	Papapetropoulos	Roger D. Speakman
Jack Bergman	Stephen F. Flaim	Thomas Kocarek	Achilles J. Pappano	Francis G. Spinale
Daniel C. Bertrand	Ryan Fryer	Wouter Koek	B. Kevin Park	Douglas Sweet
Anton Y. Bespalov	Hiroyuki Fukui	George F. Koob	Sandra Pfister	Milt Teitler
Anindya Bhattacharya	Vadivel Ganapathy	Suk-Hee Lee	Russell O. Pieper	Alvin V. Terry
Italo Biaggioni	Patricia E. Ganey	Richard Lock	Jesus Pintor	Myron L. Toews
Floyd E. Bloom	Gary Gintant	Joseph J. Lynch	Russell A. Prough	Sandra P. Welch
Jean-Marie Boeynaems	Keith Glaser	Lee Ann MacMillan-Crow	Raymond M. Quock	Daniel Wierda
Robert Brock	John R. Glowa	Rosalinde Masereeuw	Fabio Recchia	Jeffrey M. Witkin
Nancy Brown	Steven M. Grassl	Mark J. Millan	J. Larry Renfro	Bryan K. Yamamoto
Qin Chen	Perry V. Halushka	Virginia Miller	Richard Rothman	Chunxiang Zhang
Lucio G. Costa				

BOARD OF PUBLICATIONS TRUSTEES

Mary Vore, *Chair*; Randy A. Hall, Michael F. Jarvis, Kathryn E. Meier, Edward T. Morgan, Kim A. Neve, David R. Sibley, Stephen F. Traynelis, Jeffrey M. Witkin, and Judith A. Siuciak, *ex officio*

ASPET EXECUTIVE OFFICER: Judith A. Siuciak

Journals Director: Richard Dodenhoff

Peer Review Manager: Dianne King-McGavin

Editorial Coordinator: Cassie Wood

The Journal of Pharmacology and Experimental Therapeutics (ISSN 1521-0103) is published monthly online only by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995. E-mail: subscriptions@aspet.org. ASPET web site: aspet.org. Journal web site: jpet.aspetjournals.org. Subscription rates at aspetjournals.org/site/subscriptions/index.xhtml. GST Tax Number for Canadian subscribers: BN:13489 2330 RT.

Indexed or abstracted by: *Biochemistry & Biophysics Citation Index*®, *Biological Abstracts*, *BIOSIS Previews Database*, *Bio-Sciences Information Services*, *Current Awareness in Biological Sciences*, *Current Contents*®/*Life Sciences*, *EMBASE/Excerpta Medica*, *Index Medicus*, *Medical Documentation Service*®, *PsycINFO*, *Reference Update*®, *Research Alerts*®, *Science Citation Index*®, *SciSearch*®, and *SIIC Data Bases*.

Journal and ASPET office: 9650 Rockville Pike, Bethesda, MD 20814-3995. Telephone: 301-634-7060. Fax: 301-634-7061. E-mail: info@aspet.org. ASPET web site: aspet.org. Journal web site: jpet.aspetjournals.org.

Editorial matters should be addressed to Dr. Michael F. Jarvis, Editor, *The Journal of Pharmacology and Experimental Therapeutics*, at the above address.

Instructions to Authors: See jpet.aspetjournals.org for the Instructions to Authors and the ASPET Authorship Responsibility, Financial Disclosure, and Chemical Structure Statement forms.

Subscriptions: Contact the ASPET Subscriptions Dept., 9650 Rockville Pike, Bethesda, MD 20814-3995. Telephone: 301-634-7782. Fax: 301-634-7061. E-mail: subscriptions@aspet.org. See aspetjournals.org/site/subscriptions/index.xhtml for rates.

Change of IP addresses: ASPET will help institutional subscription administrators update IP address ranges as requested. Subscription administrators can make these changes at the journal site using their account user name and password.

Reprints of individual articles are available from the journal web site using the pay-per-view option for nonsubscribers.

Reprints in large quantities for commercial or academic use may be purchased from ASPET. For information and prices, call 301-634-7063.

Copyright information: *The Journal of Pharmacology and Experimental Therapeutics* is copyrighted by the American Society for Pharmacology and Experimental Therapeutics. For permission to photocopy entire articles from *The Journal of Pharmacology and Experimental Therapeutics*, see www.copyright.com or contact the Copyright Clearance Center (CCC), Inc., 222 Rosewood Dr., Danvers, MA 01923. Telephone: 978-750-8400. For permission to reprint portions of articles such as figures and tables or to reprint entire articles in a thesis or dissertation, see www.aspet.org/webforms.aspx?ekfrm=84. Photocopying or printing articles beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law is allowed, provided that the \$25.00-per-copy fee is paid through the CCC. 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.

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 or their safety. The American Society for Pharmacology and Experimental Therapeutics disclaims responsibility for any injury to persons or property resulting from any ideas or products referred to in any article or advertisement.

Copyright © 2014 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved.