Molecular Pharmacology

A Publication of the American Society for Pharmacology and Experimental Therapeutics

Founded by Avram Goldstein—1965

P. Jeffrey Conn, Editor

ASSOCIATE EDITORS
Paul Dent, Alfred L. George, Steven Grant, Lee M. Graves, Richard B. Kim, Dianne M. Perez, Hugo Rosen, Stephen F. Traynelis

David R. Sibley, Minireview Editor

EDITORIAL AND ADVISORY BOARD

Myles Akabas                           Frederick J. Ehler                                    Peter Kalivas
Jacques Barhanin                       Daniel J. Fernandes                                 Marcelo Kazanietz
Giuseppe Battaglia                       Michael Freissmüth                                     Brian K. Kobilka
Jeffrey L. Benovic                       Yoshiaiki Fuji-Kuryama                                 Herman Koepsell
Nigel J.M. Birdsall                     Ulrik Gether                                         Rakesh Kukreja
Randy D. Blakely                        Robert J. Glazer                                     Ping-Yee Lee
Julie Blendy                             Catherine Godson                                     L.M. Fredrik Leeb-Lundberg
Kendall J. Blumer                        Frank J. Gonzalez                                    Henry Lester
Michel Bouvier                           Michael M. Gottesman                                 Lian Li
Thomas P. Burris                        Robert M. Graham                                     Stephen B. Liggett
William A. Catterall                    Jennifer R. Grandis                                  Thomas M. Lincoln
Srikumar Chellappan                     Randy Hall                                           Richard B. Lock
Arthur Christopoulos                    R. Adron Harris                                     Sophie Lotersztajn
Richard B. Clark                         John R. Hepler                                     Peter MacKenzie
Phillip A. Dennis                        Peter J. Houghton                                   Sridhar Mani
David L. Dewitt                           Kenneth A. Jacobson                                  David Manning
George Dubyak                             Andrew Jenkins                                      Donald H. Maurice
Ronald S. Duman                          Eric F. Johnson                                    Andrew McCammon

AND

Alvaro Puga
James McCubrey
James O. McNamara
Kathryn E. Meier
Martin Michel
Laurence Miller
Graeme Milligan
Neil M. Nathanson
Richard R. Neubig
Kim A. Neve
Robert A. Nicholas
Sanjay K. Nigam
R. Alan North
Robert E. Osvald
Krzysztof Palczewski
Gavril W. Pasternak
Tarun Patel
Jean-Philippe Pin

Richard D. Ye

BOARD OF PUBLICATIONS TRUSTEES

James E. Barrett, Chair; P. Jeffrey Conn, Randy A. Hall, Michael F. Jarvis, Eric F. Johnson, John S. Lazo, Edward T. Morgan, David R. Sibley, Mary Vore, and Jeffrey M. Witkin

ASPET EXECUTIVE OFFICER: Christine K. Carrico

Journals Director: Richard Dodenhoff
Managing Editor: Jill Filler
Senior Editorial Coordinator: Dan Collinge

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; journal web site: molpharm.aspetjournals.org.

Editorial matters should be addressed to Dr. P. Jeffrey Conn, Editor, Molecular Pharmacology, at the above address.

Official version: The online version of Molecular Pharmacology 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 departure from the print version. The online version of Molecular Pharmacology officially published by the American Society for Pharmacology and Experimental Therapeutics is the definitive version and, to the extent any difference exists, will prevail over the print version.

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

subscriptions: Contact the ASPET Subscriptions Dept., 9650 Rockville Pike, Bethesda, MD 20814-3995; telephone: 301-634-7782; fax: 301-634-7061; email: subscriptions@aspet.org. For multi-site and consortia sales in Europe, contact: David Charles, eLicensing, 92 avenue du Général de Gaulle, 78600, Maisons-Laffitte, France; telephone: +33-1-39-12-29-29; fax: +33-1-39-12-47-45; email: dc.elicensing@organge.fr.

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

Issue replacement policy: Domestic subscribers—Claims for non-delivery of issues must be made within three (3) months of issue mail date. Foreign subscribers—Claims for nondelivery of issues must be made within six (6) months of issue mail date. Missing Issues

(domestic and foreign)—ASPET will not honor refunds or replacement requests made outside of the claim time period. Up to two (2) issues will be replaced free of charge per subscription year.

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

Copyright information: Molecular Pharmacology is copyrighted by the American Society for Pharmacology and Experimental Therapeutics. For permission to photocopy or use material electronically from Molecular Pharmacology, see www.copyright.com or contact the Copyright Clearance Center (CCC), Inc., 222 Rosewood Dr., Danvers, MA 01923; telephone: 978-750-8400. 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 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. 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 Molecular Pharmacology 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 © 2010 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved. Printed in the U.S.A.