

MOLECULAR PHARMACOLOGY

A Publication of the American Society for Pharmacology and Experimental Therapeutics

P. Jeffrey Conn, Editor

ASSOCIATE EDITORS

Randy D. Blakely, Joël Bockaert, H. Alex Brown, Paul Dent, Alfred L. George, Steven Grant, Richard B. Kim, Dianne M. Perez, Gary L. Johnson, *Minireview Editor*

EDITORIAL AND ADVISORY BOARD

Myles Akabas	Daniel J. Fernandes	Candace Johnson	Laurence Miller	Lorenz Poellinger
Carmen J. Allegra	Michael Freissmuth	Eric F. Johnson	Graeme Milligan	Yves G. Pommier
Yehuda G. Assaraf	Yoshiaki Fujii-	Marcelo Kazanietz	T. J. Murphy	Morton Printz
Jacques Barhanin	Kuriyama	Brian K. Kobilka	Stefan R. Nahorski	Alvaro Puga
Tamas Bartfai	James C. Garrison	Herman Koepsell	Neil M. Nathanson	Linda C. Quattrochi
Bruce Bean	Robert I. Glazer	Ping-Yee Law	Mark T. Nelson	John J. Reiners, Jr.
Jeffrey L. Benovic	Catherine Godson	L.M. Fredrik Leeb-	Eric J. Nestler	Ian J. Reynolds
Nigel J.M. Birdsall	Frank J. Gonzalez	Lundberg	Richard R. Neubig	Michael A. Rogawski
Kendall J. Blumer	Michael M. Gottesman	Stephen B. Liggett	Kim A. Neve	Elliott M. Ross
Gary M. Bokoch	Robert M. Graham	Thomas M. Lincoln	Robert A. Nicholas	Arnold E. Ruoho
Michel Bouvier	Lee M. Graves	Joel Linden	Sanjay K. Nigam	Elaine Sanders-Bush
Christopher Bradfield	F. Peter Guengerich	Richard B. Lock	R. Alan North	Thue W. Schwartz
William A. Catterall	Heidi Hamm	Sophie Lotersztajn	Paul Ortiz De	Jill Siegfried
Richard B. Clark	R. Adron Harris	Robert L. Macdonald	Montellano	Shivendra V. Singh
Jonathan B. Cohen	John R. Hepler	Peter MacKenzie	Robert E. Oswald	Paul C. Sternweis
John W. Daly	John Hickman	David Manning	Krzysztof Palczewski	David J. Waxman
Erik De Clercq	Susan Band Horwitz	Donald H. Maurice	Eric M. Parker	David S. Weiss
David L. Dewitt	Stephen B. Howell	Andrew McCammon	Gavril W. Pasternak	Jurgen Wess
George Dubyak	Robin Irvine	James O. McNamara	Tarun Patel	Michael M. White
Ronald S. Duman	Karl H. Jakobs	Kathryn E. Meier	Gary Perdeu	Keith Williams
Frederick J. Ehler	Jonathan Javitch	Martin Michel	Jean-Philippe Pin	Richard D. Ye

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

ASPET EXECUTIVE OFFICER: Christine K. Carrico

Journals Director: Richard Dodenhoff
Senior Editorial Coordinator: Dan Collinge

Managing Editor: Jill Filler
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. Paul A. Insel, 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 <http://molpharm.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 20814-3998; telephone: 301-634-7029; fax: 301-634-7099; email: staff@dues.faseb.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, 78600 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. 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 nondelivery 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 of individual articles are available from the authors and from Infotrieve at www.infotrieve.com; otherwise call 800-422-4633, fax 310-208-5971, or email orders@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 301-634-7063.

Copyright Information: *Molecular Pharmacology* 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 *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 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.