

MOLECULAR AND CELLULAR BIOLOGY

VOLUME 30 • AUGUST 2010 • NUMBER 16

Roger J. Davis, *Editor in Chief* (2012)
University of Massachusetts Medical School

Antony M. Carr, *Editor* (2012)
University of Sussex

John L. Cleveland, *Editor* (2014)
Scripps Florida

James Douglas Engel, *Editor* (2012)
University of Michigan Medical School

Mark E. Ewen, *Editor* (2014)
Dana-Farber Cancer Institute

Leonard P. Freedman, *Editor* (2011)
Thomas Jefferson University

J. Wade Harper, *Editor* (2013)
Harvard Medical School

David E. Levy, *Editor* (2012)
New York University School of Medicine

James L. Manley, *Editor* (2013)
Columbia University

B. Franklin Pugh, *Editor* (2012)
Pennsylvania State University

Anjana Rao, *Editor* (2012)
Immune Disease Institute, Inc.

Joel D. Richter, *Editor* (2013)
University of Massachusetts Medical School

Andrey S. Shaw, *Editor* (2013)
Washington University School of Medicine

Ali Shilatifard, *Editor* (2012)
Stowers Institute for Medical Research

Jeremy W. Thorner, *Editor* (2013)
University of California, Berkeley

EDITORIAL BOARD

Cory Abate-Shen ('12)
Peter D. Adams ('11)
Dario Alessi ('10)
Marisa Bartolomei ('11)
Michelle C. Barton ('11)
Claudio Basilio ('12)
Anton Bennett ('11)
Bradley Bernstein ('12)
Alessandro Bianchi ('12)
Douglas L. Black ('12)
Gerd A. Blobel ('12)
Tom Blumenthal ('12)
Johannes L. Bos ('10)
Emery Bresnick ('10)
Jorg Bungert ('12)
Stephen Buratowski ('12)
Michael Carey ('12)
Benoit Chabot ('11)
Junjie Chen ('12)
Melanie H. Cobb ('11)
Charles Cole ('11)
Jonathan A. Cooper ('10)
David Cortez ('12)
Jacques Côté ('11)
Martha Cyert ('12)
Chi V. Dang ('11)
Gregory David ('10)

Ann Dean ('12)
Titia de Lange ('11)
Sharon Y. R. Dent ('10)
Melvin L. DePamphilis ('10)
Robert N. Eisenman ('12)
Joaquin M. Espinosa ('12)
Gen-Sheng Feng ('11)
Steven N. Fiering ('12)
Velia Fowler ('12)
Steven M. Frisch ('11)
Xiang-Dong Fu ('11)
Michael Garabedian ('10)
William T. Garrard ('12)
Donna George ('11)
Sankar Ghosh ('12)
David S. Gilmour ('12)
Kathleen L. Gould ('11)
Patrick Grant ('12)
Lorraine J. Gudas ('10)
Deborah L. Gumucio ('12)
J. Silvio Gutkind ('12)
James E. Haber ('10)
William C. Hahn ('12)
Michael Hampsey ('10)
Hiroshi Handa ('12)
Nissim Hay ('12)
Scott Hiebert ('12)

Douglas Higgs ('12)
Philip W. Hinds ('12)
Alan Hinnebusch ('10)
Mingxia Huang ('12)
Kazuhiko Igarashi ('12)
Anthony Imbalzano ('12)
Anton Jetten ('12)
Roland Kanaar ('10)
Gerard Karsenty ('12)
Andrius Kazlauskas ('10)
Daniel J. Klionsky ('11)
Alberto R. Kornblihtt ('11)
W. Lee Kraus ('10)
Robert Krauss ('11)
Mitchell A. Lazar ('12)
Lester F. Lau ('10)
Anthony Letai ('10)
Robert E. Lewis ('11)
Michael R. Lieber ('10)
Anning Lin ('10)
Yun-Cai Liu ('12)
Gregory Longmore ('10)
Guillermina Lozano ('11)
Ben Margolis ('11)
William F. Marzluff ('12)
Oded Meyuhis ('12)
Cornelis Murre ('12)

Anthony Muslin ('12)
Carol Newlon ('12)
Timothy Nilsen ('12)
Tomoo Ogi ('11)
Eric N. Olson ('10)
Moshe Oren ('11)
Mary Ann Osley ('11)
James Palis ('12)
Cam Patterson ('12)
Craig L. Peterson ('11)
Mark R. Phillips ('10)
Sjaak Philipsen ('12)
Nicholas J. Proudfoot ('12)
Clive Price ('11)
Pere Puigserver ('10)
Paul Randazzo ('12)
Joseph C. Reese ('11)
Danny Reinberg ('12)
Ze'ev A. Ronai ('10)
Martine F. Roussel ('10)
Ananda Roy ('10)
Hyung Don Ryoo ('11)
Erik Sahai ('12)
Peter Sarnow ('10)
Charles Sawyers ('11)
David Schatz ('11)

Gregg L. Semenza ('11)
Edward Seto ('12)
Andrew D. Sharrocks ('11)
Ramin Shiekhattar ('11)
M. Celeste Simon ('11)
David Stern ('12)
Philip Stork ('10)
Brian D. Strahl ('11)
Kevin Struhl ('10)
Alex Tokar ('10)
David Tollervey ('11)
Peter Tontonoz ('12)
Cathy Tournier ('12)
Raymond C. Trievel ('12)
André Veillette ('10)
Johannes Walter ('11)
Weidong Wang ('10)
Xiao-Fan Wang ('10)
Stephen J. Weiss ('11)
Michael White ('10)
Alan J. Whitmarsh ('12)
Jeffrey Wilusz ('11)
Yue Xiong ('11)
Michael B. Yaffe ('10)
Masayuki Yamamoto ('12)
Gerard P. Zambetti ('11)

Thomas E. Shenk, *Chairman, Publications Board*
Rebecca L. Zwadyk, *Production Editor*

Barbara M. Goldman, *Director, Journals*
Jeff Herring, *Assistant Production Editor*

Molecular and Cellular Biology (ISSN 0270-7306), a publication of the American Society for Microbiology (ASM), 1752 N St., N.W., Washington, DC 20036-2904, is devoted to the advancement and dissemination of fundamental knowledge concerning the molecular biology of eukaryotic cells, of both microbial and higher organisms. Instructions to authors are published in the January issue each year; reprints are available online and from the Journals Department. The journal is published twice monthly, one volume per year. Nonmember print subscription prices (per year) are: \$1,685, U.S.; \$1,824, Canada (plus 5% GST, or 13% HST where applicable); \$1,846, Europe; \$1,899, Latin America; \$1,905, rest of world. Member print subscription prices (per year) are: \$288, U.S.; \$535, Canada (plus 5% GST, or 13% HST where applicable); \$482, Europe; \$543, Latin America; \$550, rest of world. Single copies are: \$100, nonmember; \$50, member (Canadians add 5% GST, or 13% HST where applicable). For prices of electronic versions, contact the Subscriptions Unit, ASM. Correspondence relating to subscriptions, defective copies, missing issues, and availability of back issues should be directed to the Subscriptions Unit, ASM; correspondence relating to reprint orders should be directed to the Reprint Order Unit, ASM; and correspondence relating to disposition of submitted manuscripts, proofs, and general editorial matters should be directed to the Journals Department, American Society for Microbiology, 1752 N St., N.W., Washington, DC 20036-2904. Phone: (202) 737-3600.

Claims for missing issues from residents of the United States, Canada, and Mexico must be submitted within 3 months after publication of the issues; residents of all other countries must submit claims within 6 months of publication of the issues. Claims for issues missing because of failure to report an address change or for issues "missing from files" will not be allowed.

Periodicals postage paid at Washington, DC 20036, and at additional mailing offices.

POSTMASTER: Send address changes to *Molecular and Cellular Biology*, ASM, 1752 N St., N.W., Washington, DC 20036-2904.

Made in the United States of America. Printed on acid-free paper. doi:10.1128/MCB.30.16.2010 CODEN: MCEBD4

Copyright © 2010 American Society for Microbiology. All Rights Reserved.

The code at the top of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal use or for personal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per-copy fee through the Copyright Clearance Center Inc., 222 Rosewood Drive, Danvers, MA 01923, for copying beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.