

# JCB

THE JOURNAL OF CELL BIOLOGY

## EDITOR-IN-CHIEF

IRA MELLMAN

## EDITORS

DON W. CLEVELAND  
PIER PAOLO DI FIORE  
ELAINE FUCHS  
ALAN HALL  
LOUIS F. REICHARDT  
RANDY SCHEKMAN  
KENNETH M. YAMADA  
JUNYING YUAN

## NEWS EDITORS

NICOLE LEBRASSEUR  
WILLIAM A. WELLS  
RUTH WILLIAMS

## REVIEWS EDITORS

KAREN DELL  
LOUIS F. REICHARDT

## EDITORIAL BOARD

NORMA ANDREWS  
BEN BARRES  
HUGO BELLEN  
ANDREW BELMONT  
VANN BENNETT  
JEFFREY BENOVIC  
JUAN BONIFACINO  
TONY BRETSCHER  
MARIANNE BRONNER-FRASER  
ERIC J. BROWN  
KENNETH CLINE  
PASCALE COSSART  
CAROLINE DAMSKY  
PIETRO DE CAMILLI  
ELISABETTA DEJANA  
RAY DESHAIES  
DAVID DRUBIN  
WILLIAM EARNSHAW  
ROBERT EISENMAN  
SCOTT EMR  
WERNER FRANKE  
HIRONORI FUNABIKI  
LARRY GERACE  
MARK GINSBERG

GILLIAN GRIFFITHS  
ULRICH HARTL  
REBECCA HEALD  
NOBUTAKA HIROKAWA  
ERIKA HOLZBAUR  
ARTHUR HORWICH  
ALAN RICK HORWITZ  
M. ANDREW HOYT  
MARTIN HUMPHRIES  
ED HURT  
KENNETH JACOBSON  
GERARD KARSENTY  
HYNDA KLEINMAN  
TEYMURAS KURZCHALIA  
ARTHUR D. LANDER  
JEANNE LAWRENCE  
YURI LAZEBNIK  
VERONIQUE LEFEBVRE  
LESLIE LEINWAND  
RICHARD LEWIS  
LAURA MACHESKY  
JOAN MASSAGUE  
JACOPO MELDOLESI  
TOM MISTELI

RANDALL T. MOON  
SEAN MUNRO  
JODI NUNNARI  
ANDRÉ NUSSENZWEIG  
LESLIE PARISE  
MARK PEIFER  
ANNE RIDLEY  
CONLY RIEDER  
DANIEL B. RIFKIN  
DAVID RON  
MICHAEL RUDNICKI  
JOSHUA SANES  
TRINA SCHROER  
MARTIN SCHWARTZ  
JEAN SCHWARZBAUER  
RON VALE  
DAVID L. VAUX  
GRAHAM WARREN  
CLARE WATERMAN-STORER  
LOIS WEISMAN  
TIM YEN  
MARINO ZERIAL  
YIXIAN ZHENG

## MANAGING EDITOR

MIKE ROSSNER

Phone: 212-327-8881  
Fax: 212-327-8576  
email: rossner@rockefeller.edu

## EDITORIAL ASSISTANTS

LINDSEY HOLLANDER  
SATI MOTIERAM  
KARL RAMOS  
EMILY TAYLOR

Phone: 212-327-8581  
Fax: 212-327-8576  
email: jcellbiol@rockefeller.edu

## COPYEDITING AND PRODUCTION

email: jcb@rockefeller.edu

**PREFLIGHT COORDINATOR**  
LAURA SMITH

**COPY EDITORS**  
CAMILLE CLOWERY  
SHAUNA O'GARRO  
LESLIE WALKER

**PRODUCTION EDITOR**  
GREGORY E. KOUTROUBY

**NEWS PRODUCTION EDITOR**  
GREG S. BOUSTEAD

**COPY EDITING COORDINATOR**  
MARY VASQUEZ

**PRODUCTION COORDINATOR**  
ERINN A. GRADY

**PRODUCTION DIRECTOR**  
ROBERT J. O'DONNELL



THE APPEARANCE OF THE CODE AT THE BOTTOM OF THE FIRST PAGE OF AN ARTICLE IN THIS JOURNAL INDICATES THAT THE PUBLISHER GIVES CONSENT FOR INDIVIDUAL COPIES OF THAT ARTICLE TO BE MADE FOR PERSONAL OR INTERNAL USE. THIS CONSENT IS GIVEN ON THE CONDITION, HOWEVER, THAT—FOR COPYING BEYOND THE LIMITED QUANTITIES PERMITTED UNDER SECTIONS 107 OR 108 OF THE U.S. COPYRIGHT LAW—THE COPIER PAY THE STATED PER-COPY FEE, FOR THIS JOURNAL \$8.00 PER ARTICLE, THROUGH THE COPYRIGHT CLEARANCE CENTER, INC., 222 ROSEWOOD DRIVE, DANVERS, MA 01923, PHONE: 978-750-8400, A NONPROFIT ORGANIZATION. 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.

COPYRIGHT © 2006 BY THE ROCKEFELLER UNIVERSITY PRESS, 1114 FIRST AVENUE, NEW YORK, NY 10021-8325.

PRINT ISSN: 0021-9525 ONLINE ISSN: 1540-8140

WWW.JCB.ORG