

**Editor-in-Chief**

David Eisner

**Associate Editors**

Hen L. Ranzier  
Christopher J. Lingle  
Joseph A. Mindell  
Jeanne Nerbonne  
Eduardo Ríos

**Consulting Editor**

Olaf S. Andersen

**Guest Editors**

Alessio Accardi  
Toby W. Allen  
Bruce P. Bean  
Olga Boudier  
Vincent Jacquemond  
Christopher J. Lingle  
Anna Menini  
Christopher Miller  
Joseph A. Mindell  
Richard L. Moss  
Mar T. Nelson  
Lawrence S. Palmer  
Edward N. Pugh, Jr.  
Janice L. Robertson  
Dirk J. Slotboom  
D. Peter Tieleman

**Managing Editor**

Meighan E. Schreiber  
phone (212) 327-8615  
email: jgp@rockefeller.edu

**Editorial Advisory Board**

Alessio Accardi  
Christopher A. Ahern  
Richard W. Aldrich  
Toby W. Allen  
Arun Anantharam  
Frances Ashcroft  
Robert S. Balaban  
Diana M. Bautista  
Bruce P. Bean  
Francisco Bezanilla  
Rikard Blunck  
Olga Boudier  
Michael D. Cahalan  
Stephen C. Cannon  
Anne Carlson  
Nancy Carrasco  
William A. Catterall  
Sudha Chakrapani  
Baron Chanda  
Edwin R. Chapman  
Tsung-Yu Chen  
Heping (Peace) Cheng  
Colleen Clancy  
Christine Cremo  
Jianmin Cui  
Cynthia Czajkowski  
Thomas E. DeCoursey  
Lucie Delemotte  
Robert T. Dirksen  
Michael Duchon  
Jose M. Eltit  
David Fedida  
Michael Fill  
Karen Fleming  
Robert J. French  
Rachelle Gaudet  
Alfred L. George, Jr.  
Ulrik Gether  
Teresa Giraldez  
Ana Maria Gomez  
Miriam B. Goodman  
Claudio F. Grosman  
Andrew L. Harris  
H. Criss Hartzell  
Katherine Henzler-Wildman  
Ryan Hibbs  
Cecilia Hidalgo  
Donald W. Hilgemann

Bertil Hille  
Heedeok Hong  
Toshinori Hoshi  
Jochen S. Hub  
Tzyh-Chang Hwang  
León D. Islas  
Meyer B. Jackson  
Vincent Jacquemond  
Vasanthi Jayaraman  
Timothy Jegla  
Youxing Jiang  
Susy Kohout  
Nagomi Kurebayashi  
Johanna Lanner  
H. Peter Larsson  
Ramon Latorre  
Amy Lee  
Henry A. Lester  
Richard S. Lewis  
Emily R. Liman  
Polina V. Lishko  
Isabel Llano  
Zhe Lu  
Ellen Lumpkin  
Merritt Maduke  
Karl L. Magleby  
Alicia Mattiazzi  
Anna Menini  
Andrea L. Meredith  
Joseph M. Metzger  
Lorin Mylescu  
Mirela Mylescu  
Christopher Miller  
Justin Molloy  
Anna Moroni  
Richard L. Moss  
Ruth Murrell-Lagnado  
Angus Nairn  
Erwin Neher  
Mark T. Nelson  
Keir C. Neuman  
Simon Newstead  
Crina M. Nimigeam  
Brian O'Rourke  
Yasushi Okamura  
Yasuko Ono  
Lawrence G. Palmer  
Diane M. Papazian  
Medha Pathak  
Cristina Paulino  
Eduardo Perozo  
Geoffrey S. Pitt  
Stephan Pless  
Jennifer Pluznick  
Régis Pomes  
Murali Prakriya  
Catherine Proenza  
Edward N. Pugh, Jr.  
Michael Pusch  
Indira M. Raman  
Padmini Rangamani  
Michael Regnier  
Gail A. Robertson  
Janice L. Robertson  
Tamara Rosenbaum  
Brad S. Rothberg  
Benoit Roux  
Timothy A. Ryan  
Jon T. Sack  
Luis Fernando Santana  
Laurent Schild  
Avner Schlessinger  
Show-Ling Shyng  
Fred J. Sigworth  
Karin Sipido  
Lucia Sivilotti  
Dirk J. Slotboom  
Eric Sobie  
R. John Solaro  
Dimitrios Stamou  
Randy Stockbridge  
Byung-Chang Suh  
Sergei Sukharev  
Justin W. Taraska  
Doug Tobias  
Francesco Tombola  
Susan Treves  
Matthew C. Trudeau  
Stephen Tucker  
Jolanda van der Velden  
Valeria Vásquez  
Sarah Veatch  
David M. Warshaw  
Alexandra Zahradniková  
Hailin Zhang  
Jie Zheng

**Senior Pre-proof Editor**

Laura Smith

**Pre-proof Editor**

Rochelle Ritacco

**Production Editor**

Andrew Lo Bello

**Production Manager**

Camille Clowery

**Production Designer**

Erinn A. Brady

*Journal of General Physiology* and the Society of General Physiologists have a long-standing collaborative relationship.

Copyright to articles published in this journal is held by the authors. Articles are published by Rockefeller University Press under license from the authors. Conditions for reuse of the articles by third parties are listed at <http://www.rupress.org/terms>

Print ISSN 0022-1295  
Online ISSN 1540-7748

**Rockefeller University Press**

