

Editor-in-Chief

Sharona E. Gordon

Associate Editors

Richard W. Aldrich
José D. Faraldo-Gómez
Henk L. Granzier
Merritt Maduke
Eduardo Ríos
Kenton J. Swartz

Consulting Editor

Lesley C. Anson

Perspectives Editor

Olaf S. Andersen

Guest Editors

Alessio Accardi
Toby W. Allen
Olga Boudker
Anna Menini
Christopher Miller
Joseph A. Mindell
Richard L. Moss
Mark T. Nelson
Edward N. Pugh, Jr.
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
Toby W. Allen
Frances Ashcroft
Robert S. Balaban
Diana M. Bautista
Bruce P. Bean
Francisco Bezanilla
Rikard Blunck
Olga Boudker
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
Torben Clausen
Daniel H. Cox
Jianmin Cui
Cynthia Czajkowski
Thomas E. DeCoursey
Lucie Delemotte
Robert T. Dirksen
Michael Duchon
David Fedida
Michael Fill
Lucy R. Forrest
David C. Gadsby
Alfred L. George, Jr.
Teresa Giraldez
Ana Maria Gomez
Miriam B. Goodman
Claudio F. Grosman
Andrew L. Harris
H. Criss Hartzell
Katherine Henzler-Wildman
Donald W. Hilgemann
Bertil Hille
Frank T. Horrigan
Toshinori Hoshi
Jochen S. Hub
Tzyh-Chang Hwang
León D. Islas
Meyer B. Jackson
Vincent Jacquemond
Vasanthi Jayaraman
Timothy Jegla
Youxing Jiang
Stephen W. Jones
H. Peter Larsson
Ramon Latorre
Amy Lee
Henry A. Lester
Richard S. Lewis
Emily R. Liman
Christopher J. Lingle
Polina V. Lishko
Zhe Lu
Jianhong Luo
Karl L. Magleby
Anna Menini
Andrea L. Meredith
Joseph M. Metzger
Christopher Miller
Joseph A. Mindell
Justin Molloy
Anna Moroni
Richard L. Moss
Ruth Murrell-Lagnado
Angus Nairn
Erwin Neher
Mark T. Nelson
Keir C. Neuman
Simon Newstead
Crina M. Nimigeon
Brian O'Rourke
Yasushi Okamura
Lawrence G. Palmer
Diane M. Papazian
Ian Parker
Cristina Paulino
Thomas Holm Pedersen
Eduardo Perozo
Geoffrey S. Pitt
Stephan Pless
Régis Pomès
Murali Prakriya

Catherine Proenza
Edward N. Pugh, Jr.
Michael Pusch
Indira M. Raman
Michael Regnier
Johannes Reiser
Gail A. Robertson
Janice Robertson
Tamara Rosenbaum
Brad S. Rothberg
Benoit Roux
Renaë Ryan
Timothy A. Ryan
Jon T. Sack
Michael C. Sanguinetti
Luis Fernando Santana
Laurent Schild
Avner Schlessinger
Ru-Chi Shieh
Fred J. Sigworth
Karin Sipido
Lucia Sivilotti
Dirk J. Slotboom
Eric Sobie
R. John Solaro
Randy Stockbridge
Byung-Chang Suh
Sergei Sukharev
Lukas Tamm
Justin W. Taraska
D. Peter Tieleman
Doug Tobias
Francesco Tombola
Susan Treves
Matthew C. Trudeau
Stephen Tucker
Sarah Veatch
Alan S. Verkman
KeWei Wang
David M. Warshaw
James N. Weiss
Gary Yellen
William N. Zagotta
Alexandra Zahradníková
Hailin Zhang
Jie Zheng

Preflight Coordinator

Laura Smith

Preflight Editor

Rochelle Ritacco

Copy Editors

Casey Dalrymple
D. Aaron McIlhenny

Production Editor

Samantha Wolner

Production Manager

Camille Clowery

Production Designer

Erinn A. Grady

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



Executive Director

Susan King

Assistant Director, Finance

Laura Bisberg

Business Development Director

Gregory Flynn Malar

Director of Editorial Development

Rebecca Alvania

Director of Publishing Technologies

Robert J. O'Donnell

Director of Communications and Marketing

Rory Williams

Advertising Sales Director

Lorna Petersen

Executive Assistant to Executive Director;

Office Administrator

Demantie (Sati) Motieram

Assistants to the Finance Director

Sarah S. Kraft

Ann Travers

Marketing Associate

Laraine Karl

Journal of General Physiology (ISSN 0022-1295) is published monthly by Rockefeller University Press, 950 Third Avenue, New York, NY 10022. Periodical postage paid at New York, NY and additional mailing offices.

2018 Subscription Rates

Institutional Rates

	Tier 1	Tier 2	Tier 3	Tier 4
Online	\$1,320	\$1,570	\$1,940	\$2,470
Print + Online	\$2,620	\$2,900	\$3,350	\$4,270

For more information, please contact our subscription office.

Phone: +1 800-633-4931

Outside the US & Canada: +1 205-995-1567

Fax: +1 205-995-1588

email: rupress@subscriptionoffice.com

Advertising Requests

Phone: 212-327-8880

Fax: 212-319-1080

email: petersl@rockefeller.edu

Permission Requests

email: permissions@rockefeller.edu

Media Requests

email: news@rockefeller.edu

Postmaster

Send address changes to *Journal of General Physiology*, Subscription Office, P.O. Box 361, Birmingham, AL 35201-0361.