

THE JOURNAL OF General Physiology

FOUNDED BY JACQUES LOEB

Honorary Editors

L. R. BLINKS JOHN H. NORTHROP

Editor

PAUL F. CRANEFIELD

Editorial Board

VINCENT ALLFREY	BERTIL HILLE	A. K. SOLOMON
CLAY M. ARMSTRONG	PHILIP A. KNAUF	CHARLES F. STEVENS
FRANCIS D. CARLSON	L. J. MULLINS	ROGER C. THOMAS
C. M. CONNELLY	JOHN C. PARKER	RICHARD W. TSIEN
ROBERT S. EISENBERG	CARL PFAFFMANN	ANNEMARIE WEBER
ARTHUR L. FINN	FLOYD RATLIFF	JENS OTTO WIETH
WILLIAM A. HAGINS	STANLEY G. SCHULTZ	VICTOR J. WILSON
S. HAGIWARA	ROBERT SHAPLEY	

THE JOURNAL OF GENERAL PHYSIOLOGY IS THE OFFICIAL ORGAN OF THE
SOCIETY OF GENERAL PHYSIOLOGISTS

AND IS EDITED IN COOPERATION WITH THE SOCIETY

VOLUME 74 • NUMBER 4 • OCTOBER 1979

TIMOTHY WEBSTER *Copyediting and Production*

INFORMATION FOR SUBSCRIBERS *The Journal of General Physiology* is published monthly, and all subscriptions are on a full calendar year basis. The subscription price per year (2 volumes) is \$60 (\$80, 1980) (postage surcharge Europe only, \$8 net; \$14, 1980).

Remittances should be made by draft or check on New York, or by postal money order, payable to *The Journal of General Physiology*, The Rockefeller University Press, Post Office Box 5108, Church Street Station, New York 10249. Inquiries about subscriptions, single copies, and back numbers of the *Journal* should be addressed to the Order Service of The Rockefeller University Press at 1230 York Avenue, New York 10021. Claims for nonreceipt of issues will be honored when received within 3 months of mailing for U.S.A. subscribers, 6 months for foreign subscribers. Subscriptions and back issues, from Vol. 1 on, are available also in *microfiche* and *microfilm* ; write to Order Service for price list. Printed back copies through 1975 are available from Walter J. Johnson, Inc., 355 Chestnut Street, Norwood, N. J. 07648.

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 \$1.00 per article, through the Copyright Clearance Center, Inc., P.O. Box 765, Schenectady, New York 12301, 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.

Second-class postage paid at New York, N. Y., and at additional mailing offices. Copyright © 1979 by
The Rockefeller University Press, 1230 York Avenue, New York, N. Y. 10021 *Made in the United States of America*