

THE AMERICAN JOURNAL OF Tropical Medicine and Hygiene

(ISSN 0002-9637)

Editor, W. D. TIGERTT
15 Charles Plaza - Suite 2202
Baltimore, Maryland 21201

Associate Editor, JAMES R. MURPHY
Assistant Editor, ELIZABETH H. JOHNSON

Editorial Board

RONALD L. ANTHONY	LLEWELLYN J. LEGTERS
A. S. BENENSON	STEVEN R. MESHNICK
DONALD S. BURKE	FRANKLIN A. NEVA
CHARLES H. CALISHER	ROBERT E. SHOPE
ALLEN W. CHEEVER	METTE STRAND
DAVID F. CLYDE	DIANE W. TAYLOR
DANIEL H. CONNOR	HAROLD TRAPIDO
JOEL M. DALRYMPLE	BRYCE C. WALTON
JAMES L. HARDY	THOMAS H. WELLER
DAVID P. JACOBUS	THOMAS M. YUILL
RODNEY C. JUNG	

PAUL C. BEAVER, *Editor Emeritus*

The American Journal of Tropical Medicine and Hygiene is published monthly and consists of two complete sequentially numbered volumes each calendar year.

Correspondence concerning business matters, subscriptions, and membership should be addressed to The American Society of Tropical Medicine and Hygiene, 8000 Westpark Drive, Suite 130, McLean, VA 22102; telephone (703) 790-1745, FAX (703) 790-9063.

Manuscripts of articles for publication and books for review should be sent to the Editor, W. D. Tigertt, 15 Charles Plaza - Suite 2202, Baltimore, Maryland 21201, USA.

The subscription price for the pair of volumes is \$105.00 per year in the USA, \$110.00 per year in Canada and Mexico, and \$170.00 elsewhere. The price of single copies, when available, is \$17.00 in the USA and \$18.00 elsewhere.

New subscriptions and renewals are entered to begin with the January issue of the current year. Should any issue of the current year be out of print at the time the subscription order is received, the pro rata value of such numbers will be refunded.

Subscriptions should be renewed promptly. The publisher cannot guarantee to supply back issues on belated renewals.

Change of address. Members of the Society should notify the Secretary of any change in address. All other subscribers should notify the publisher 60 days in advance. Copies of the *Journal* that are undeliverable because of an incorrect address will be destroyed. Duplicates of such copies may be obtained (if available) from the publisher at the regular price of single issues.

OFFICERS OF THE

American Society of Tropical Medicine and Hygiene

<i>President</i>	<i>Councilors</i>	<i>Term Expires</i>
JOHN R. DAVID	GENE HIGASHI	1990
<i>President-Elect</i>	DYANN WIRTH	1990
SCOTT B. HALSTEAD	RUTH S. NUSSENZWEIG	1991
<i>Scientific Program Chairman</i>	JEFFREY F. WILLIAMS	1991
THOMAS P. MONATH	DICKSON DESPOMMIER	1992
<i>Secretary-Treasurer</i>	STEPHANIE L. JAMES	1992
JONATHAN I. RAVDIN	DONALD J. KROGSTAD	1993
University of Virginia	REBECA RICO-HESS	1993
School of Medicine		
P.O. Box 419		
Charlottesville, VA 22908		
<i>Editor, Tropical Medicine and Hygiene News</i>		
KARL A. WESTERN		

Published by ALLEN PRESS, INC., 1041 New Hampshire Street, Lawrence, Kansas 66044
Second-class postage paid at Lawrence, Kansas

Copyright © 1990, by The American Society of Tropical Medicine and Hygiene
Made in USA

THIS PUBLICATION IS PRINTED ON ACID-FREE PAPER.