

# THE BIOLOGICAL BULLETIN

PUBLISHED BY  
THE MARINE BIOLOGICAL LABORATORY

## Editorial Board

GEORGE J. AUGUSTINE, University of Southern  
California

RUSSELL F. DOOLITTLE, University of California  
at San Diego

WILLIAM R. ECKBERG, Howard University

ROBERT D. GOLDMAN, Northwestern University

EVERETT PETER GREENBERG, Cornell University

MICHAEL J. GREENBERG, C. V. Whitney Marine  
Laboratory, University of Florida

JOHN E. HOBBIE, Marine Biological Laboratory

LIONEL JAFFE, Marine Biological Laboratory

HOLGER W. JANNASCH, Woods Hole Oceanographic  
Institution

WILLIAM R. JEFFERY, University of Texas at Austin

GEORGE M. LANGFORD, University of  
North Carolina at Chapel Hill

LOUIS LEIBOVITZ, Marine Biological Laboratory

GEORGE D. PAPPAS, University of Illinois at Chicago

RUDOLF A. RAFF, Indiana University

SIDNEY K. PIERCE, University of Maryland

HERBERT SCHUEL, State University of New York at  
Buffalo

VIRGINIA L. SCOFIELD, University of California at  
Los Angeles School of Medicine

LAWRENCE B. SLOBODKIN, State University of  
New York at Stony Brook

KENSAL VAN HOLDE, Oregon State University

DONALD P. WOLF, Oregon Regional Primate Center

*Editor:* CHARLES B. METZ, University of Miami

*Associate Editor:* PAMELA L. CLAPP, Marine Biological Laboratory

APRIL, 1988

Printed and Issued by  
LANCASTER PRESS, Inc.

PRINCE & LEMON STS.  
LANCASTER, PA