

Journal of Cellular Biochemistry

Formerly Journal of Supramolecular Structure and Cellular Biochemistry

EDITORS

In the United States

C. FRED FOX, Molecular Biology Institute, University of California, Los Angeles, CA 90024

In Europe

MAX M. BURGER, Friedrich Miescher Institute, P.O. Box 2543, CH-4002, Basel, Switzerland

EDITORIAL BOARD

RICHARD ANDERSON, Department of Cell Biology, University of Texas Health Science Center, Dallas, TX 75235

ARTHUR BLUME, Physiological Chemistry, Roche Institute of Molecular Biology, Nutley, NJ 07110

RALPH BRADSHAW, Department of Biological Chemistry, University of California, Irvine, CA 92717

DENNIS D. CUNNINGHAM, Department of Microbiology, University of California, Irvine, CA 92717

MICHAEL EDIDIN, Department of Biology, Johns Hopkins University, Baltimore, MD 21218

FREDERICK A. EISERLING, Department of Bacteriology, University of California, Los Angeles, CA 90024

ELLIOT ELSON, Department of Biological Chemistry, Washington University School of Medicine, St. Louis, MO 63110

WERNER W. FRANKE, Institute of Experimental Pathology, German Cancer Research Center, 69 Heidelberg 1, West Germany

IAN GIBBONS, Pacific Biomedical Research Center, University of Hawaii, Honolulu, HI 96822

IRA GOLDFINE, Professor in Residence, Medicine, Mt. Zion Hospital, San Francisco, CA 94115

EUGENE GOLDWASSER, Department of Biochemistry, University of Chicago, Chicago, IL 60637

CURTIS HARRIS, Laboratory of Human Carcinogenesis, National Cancer Institute, Bethesda, MD 20205

HARVEY HERSCHMAN, Department of Biological Chemistry, University of California, Los Angeles, CA 90024

R. COLIN HUGHES, National Institute for Medical Research, London NW7 1AA, England

TONY HUNTER, Molecular Biology and Virology Laboratory, Salk Institute, San Diego, CA 92138

KARL ILLMENSEE, Laboratoire de Differentiation Cellulaire, 1223 Geneva, Switzerland

EDWARD KELLENBERGER, Biozentrum der Universität Basel, Klingelbergstrasse 70, CH-4056 Basel, Switzerland

JOHN H. LAW, Department of Biochemistry, University of Arizona, Tucson, AZ 85721

HAROLD MOSES, Department of Cell Biology, Vanderbilt University School of Medicine, Nashville, TN 27232

GARTH L. NICOLSON, Department of Tumor Biology (108), University of Texas, Houston, TX 77030

DALE L. OXENDER, Department of Biological Chemistry, University of Michigan, Ann Arbor, MI 48109

ROBERT POYTON, Department of Molecular, Cellular, and Developmental Biology, University of Colorado, Boulder, CO 80309

JEAN PAUL REVEL, Division of Biology, 156-29, California Institute of Technology, Pasadena, CA 91125

PHILLIPS W. ROBBINS, Massachusetts Institute of Technology, Cambridge, MA 02139

RUSSELL ROSS, Department of Pathology, University of Washington, Seattle, WA 98195

DAVID SABATINI, Department of Cell Biology, New York University Medical School, New York, NY 10016

MILTON SAIER, Department of Biology, University of California, San Diego, La Jolla, CA 92037

ERIC SHOOTER, Department of Neurobiology, Stanford University School of Medicine, Stanford, CA 94305

ROBERT D. SIMONI, Department of Biology, Stanford University, Stanford, CA 94305

CHARLES STILES, Department of Microbiology, Harvard Medical School, Boston, MA 02115

HANS THOENEN, Max-Planck-Institut für Psychiatrie, Abteilung Neurochemie, Am Klopferspitz 18 a, D-8033 Martinsried bei München, West Germany

GEORGE TODARO, Oncogen, 3005 First Avenue, Seattle, WA 98121

ANTTI VAHERI, Department of Virology, University of Helsinki, SF-00290 Helsinki, Finland

JAMES WATSON, Department of Pathology, University of Auckland Medical School, Auckland, New Zealand

IRVING WEISSMAN, Department of Pathology, Stanford University School of Medicine, Stanford, CA 94305

DAVID WILSON, Department of Biochemistry, Cornell University, Ithaca, NY 14853

KAREL W. A. WIRTZ, Laboratory of Biochemistry, Transitorium, Utrecht, The Netherlands

H.G. WITTMANN, Max-Planck-Institut für Molekulare Genetik, Ihnestr. 63-73, D-1000 Berlin 33 (Dahlem), West Germany

MANAGING EDITOR, 1990 ABSTRACT SUPPLEMENT

BETTY J. HANDY, UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Alan R. Liss, Inc. for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$00.50 per copy, plus \$00.25 per page is paid directly to CCC, 27 Congress Street, Salem, MA 01970, 0730-2312/90 \$00.50 + .25.

Journal of Cellular Biochemistry (ISSN 0730-2312) is published monthly by Alan R. Liss, Inc., 41 East 11th Street, New York, NY 10003, a division of John Wiley & Sons, Inc. Send subscription inquiries to: John Wiley & Sons, Inc., Subscription Department, 7th Floor, 605 Third Avenue, New York, NY 10158.

Subscription Price: Volumes 42, 43, and 44 (12 issues), plus Supplement 14 (6 volumes), 1990: \$789 in US; \$942 outside US. All subscriptions outside the U.S. will be sent by air. Payment must be made in US dollars drawn on a US bank. **Change of Address:** Please forward to the subscriptions address listed above six weeks prior to move; enclose present mailing label with change of address. **Claims for Missing Issues:** Claims for undelivered copies will be accepted only after the following issue has been received. Please enclose a copy of the mailing label or cite your subscriber reference number in order to expedite handling. Missing copies will be supplied when losses have been sustained in transit and where reserve stock permits. Send claims to John Wiley & Sons, Inc., Customer Service, 605 Third Avenue, New York, NY 10158. If claims are not resolved satisfactorily, please write to Timothy B. King, Vice President, Marketing and Sales, John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158. **Cancellations:** Subscription cancellations will not be accepted after the first issue has been mailed. **Postmaster:** Send address changes to **Journal of Cellular Biochemistry**, Susan Malawski, Director, Subscription Fulfillment and Distribution, John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158.

Indexed by: Current Contents/Life Sciences-Science Citation Index (SCISEARCH) • Chemical Abstracts • Index Medicus • BIOSIS Data Base • Excerpta Medica • Information Retrieval, Ltd. • Cambridge Scientific Abstracts • Institute for Scientific Information-Soviet Union • Current Opinion in Orthopedics • Current Opinion in Cell Biology • Current Opinion in Rheumatology.

The paper on which this journal is printed adheres to the requirements for library/archival stability.

Printed in the United States of America.

Copyright © 1990 Alan R. Liss, Inc.