

CONTENTS

ESTABLISHING, CHARACTERIZING AND GROWING CELLS IN CULTURE

Establishing and Characterizing Cells in Culture	1
Lewis L. Coriell	
Cell Characterization by Use of Multiple Genetic Markers.	13
Bharati Hukku, David M. Halton, Michael Mally and Ward D. Peterson, Jr.	
Characteristics of Lympho-Myelopoietic Stem Cells Isolated from Canine Peripheral Blood.	33
Dennis A. Stewart, Robert B. Bolin, Barbara A. Cheney, Joseph T. Hawkins, Keith W. Chapman and Donald R. Tompkins	
Growth Characteristics of A431 Human Epidermoid Carcinoma Cells in Serum-Free Medium: Inhibition by Epidermal Growth Factor	49
David W. Barnes	
<u>In Vitro</u> Senescence, Differentiated Function, and Transformation in Cultured Vascular Endothelial Cells.	67
Judith B. Grinspan, Stephen N. Mueller, James P. Noveral, Eliot M. Rosen and Elliot M. Levine	
Cytogenetics Effects of Cyclamates	91
Evelyn W. Jemison, Kenneth Brown, Beverly Rivers and Regina Knight	
Mammalian Cell Culture: Technology and Physiology	119
Nikos K. Harakas, Charles Lewis, Ronald D. Bartram, Bernard S. Wildi and Joseph Feder	

A High Efficiency Stirrer for Suspension Cell Culture With or Without Microcarriers.	139
Norman A. de Bruyne	
Alternative Surfaces for Microcarrier Culture of Animal Cells	151
Christine Gebb, Julian M. Clark, Michael D. Hirtenstein, Goran E. Lindgren, Bjoorn J. Lundgren, Ulla Lindskog and Per A. Vretblad	
PRODUCTS OF CELLS IN CULTURE	
Interferon Production in Microcarrier Culture of Human Fibroblast Cells	169
Victor G. Edy	
In Vitro and In Vivo Effects of Endothelial Cell-Derived Growth Factor	179
Corrine M. Gajdusek and Sandra A. Harris-Hooker	
Lymphotoxins - A Multicomponent System of Growth Inhibitory and Cell-Lytic Glycoproteins.	205
G.A. Granger, J. Klostergaard, R.S. Yamamoto, J. Devlin, S.L. Orr, D. McGriff and K.M. Miner	
Production of Gamma (Immune) Interferon by a Permanent Human T-Lymphocyte Cell Line	219
Jerome E. Groopman, Ilana Nathan and David W. Golde	
Thymic Inhibition of Myelopoietic Proliferation.	227
D.F. Gruber and G.D. Ledney	
Problems in the Bioassay of Products from Cultures HEK Cells: Plasminogen Activator.	241
Marian L. Lewis, Dennis R. Morrison, Bernard J. Mieszkuc and Diane L. Fessler	
A Simple Methodology for the Routine Production and Partial Purification of Human Lymphoblastoid Interferon	269
P.J. Neame and R.T. Acton	

USE OF RECOMBINANT DNA TECHNOLOGY

The Cloning Isolation and Characterization of a Biologically Active Human Enzyme, Urokinase, In E. Coli	281
P.P. Hung	
Cloning of the Rat Endogenous Helper Leukemia Virus DNA Sequence and Expression of the Helper Activity Encoded by the Cloned DNA Sequence in Normal Rat Kidney Cells by Microinjection	295
Stringer S. Yang, Rama Modali and Edwin Murphy, Jr.	
Analysis of CAD Gene Amplification using a Combined approach of Molecular Genetics and Cytogenetics.	319
Geoffrey M. Wahl, Virginia Allen, Suzanne Delbruck, Walter Eckhart, Judy Meinkoth, Bruno Robert de Saint Vincent and Louise Vitto	

LYMPHOCYTES IN CULTURE: A SYSTEM FOR UNDERSTANDING
IMMUNE RESPONSIVENESS

Alloreactive T Cell Clones	347
Frank W. Fitch	
Productive Murine Leukemia Virus (MuLV) Infection of EL4 T-Lymphoblastoid Cells: Selective Elevation of H-2 Surface Expression and Possible Association of Thy-1 Antigen with Viruses	365
Susanne L. Henley, Kim S. Wise and Ronald T. Acton	
Construction of Human T-Cell Hybrids with Helper Function. . .	383
Oscar Irigoyen, Philip V. Rizzolo, Yolene Thomas, Linda Rogozinski and Leonard Chess	
Cultured Human T Lymphocyte Lines and Clones as Immunogenetic Tools.	405
Dolores J. Schendel and Rudolf Wank	

USE OF CELLS IN CULTURE TO STUDY DISEASE

Long-term Persistence in Experimental Animals of Components of Skin-Equivalent Grafts Fabricated in the Laboratory	419
Eugene Bell, Stephanie Ellsworth Sher, Barbara E. Hull and Robert L. Sarber	

Angiotensin Receptors and the Control of Na^+ and K^+ Transport in Cultured Aortic Smooth Muscle and Brain Microvessel Cells.	435
Tommy A. Brock and Jeffrey B. Smith	
Antigenic Expression of Human Melanoma Cells in Serum-Free Medium	455
Thomas F. Bumol, John R. Harper, Darwin O. Chee and Ralph A. Reisfeld	
Use of Cell Culture to Identify Human Precancer.	471
Henry C. Lyko and James X. Hartmann	
Uses of Tissue Culture and Cryopreservation in Pancreatic Islet Transplantation.	489
Collin J. Weber, F. Xavier Pi-Sunyer, Earl Zimmerman, Gajanan Nilaver, Michael Kazim, Orion Hegre and Keith Reemtsma	
Mechanisms of Mediator Release from Neutrophils.	527
Gerald Weissmann, Charles Serhan, Helen M. Korchak and James E. Smolen	
INDEX	553