

Large-Scale Mammalian Cell Culture

Edited by

Joseph Feder and William R. Tolbert

*Monsanto Company
St. Louis, Missouri*

1985



ACADEMIC PRESS, INC.

Harcourt Brace Jovanovich, Publishers

Orlando San Diego New York Austin
London Montreal Sydney Tokyo Toronto

Contents

<i>Contributors</i>	vii
<i>Preface</i>	ix
The Large Scale Cultivation of Hybridoma Cells Producing Monoclonal Antibodies <i>J. R. Birch, P. W. Thompson, K. Lambert, and R. Boraston</i>	1
Use of Cellular Microencapsulation in Large-Scale Production of Monoclonal Antibodies <i>Randall G. Rupp</i>	19
The Use of a Ceramic Matrix in a Large Scale Cell Culture System <i>Bjorn K. Lydersen, James Putnam, Ernest Bognar, Michael Patterson, Gordon G. Pugh, and Lee A. Noll</i>	39
Applications of the Mass Culturing Technique (MCT) in the Large Scale Growth of Mammalian Cells <i>Peter C. Brown, Maureen A. C. Costello, Robert Oakley, and James L. Lewis</i>	59
Panel Discussion 1	73
Regulatory Considerations for Products Derived from the New Biotechnology <i>John C. Petricciani</i>	79
Experience in the Cultivation of Mammalian Cells on the 8000 1 Scale <i>A. W. Phillips, G. D. Ball, K. H. Fantes, N. B. Finter, and M. D. Johnston</i>	87

Perfusion Culture Systems for Production of Mammalian Cell Biomolecules	97
<i>William R. Tolbert, C. Lewis, Jr., P. J. White, and Joseph Feder</i>	
Cellular and Biochemical Aspects of Human Tumor Cell Growth and Function in Hollow Fiber Culture	125
<i>M. C. Wiemann, B. Creswick, P. Calabresi, J. Hopkinson, and R. S. Tutunjian</i>	
Continuous Production of Monoclonal Antibodies by Chemostatic and Immobilized Hybridoma Culture	127
<i>Subhash B. Karkare, Philip G. Phillips, Deborah H. Burke, and Robert C. Dean, Jr.</i>	
Panel Discussion 2	151
<i>Index</i>	157