———————— **Book Reviews** ————————————————————————————

Hybridoma techniques, EMBO, EKMB Course 1980, Basel. Cold Spring Harbor: Cold Spring Harbor Laboratory 1980. 65 pp., 3 figs., 4 tabs.

Köhler and Milstein (1975) were the first to devise a procedure for generating hybridoma lines secreting antibodies to a chosen antigen. Major contributions since the first description of B lymphocyte fusion have been the introduction of polyethylene glycol as fusion agent and the construction of a rat myeloma line and of the Ig-negative mouse myeloma lines.

In 1980 the EMBO, SKMB held a course on hybridoma techniques in Basel. The manual was written by members of the Basel Institute for Immunology (M. Schreier, G. Köhler, H. Hengartner, C. Berek, M. Trucco, L. Forni) and members of the Roche Project of Applied Immunology (T. Staehelin, J. Stocker, B. Takacs). This collection of experimental protocols provides detailed information on the following methods: cell fusion, cloning, testing for antibody specificity and antibody subclass, separation of Ig and IgG subclasses by affinity chromatography on protein A-sepharose, labeling of Ig with C-leucine, labeling of cell surface antigens and immuno-precipitation, SDS-Polyacrylamide gel electrophoresis, iso-electric focusing, immunofluorescence (membrane staining), large-scale production of monoclonal antibodies, mycoplasma screening and clearing, and freezing and thawing of cells. An appendix gives information on cells available from the Salk cell distribution center.

This manual is an excellent introduction to hybridoma techniques. Cellular and molecular biologists and immuno-biologists will find this book most valuable.

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McKay, R.; Raff, M. C.; Reichardt, L. F. (eds.): Cold Spring Harbor Reports in the Neurosciences, Vol. 2: Monoclonal Antibodies to Neural Antigens. Cold Spring Harbor: Cold Spring Harbor Laboratory 1981. 282 pp., 120 figs., 30 tabs.

This volume presents summaries of talks given at a meeting held at the Banbury Conference Center of the Cold Spring Harbor Laboratory in the autumn of 1980. This meeting dealt with the application of hybridoma technology in studying the nervous system.

After an introduction by the editors, the first section deals with defining neural cell types and cell lines: subpopulations of glial cells, NG2 marker, HLA expression, identifiable leech neurons. Monoclonal antibodies from catecholamine-neuro-transmitter-synthesizing enzymes, neurotransmitter substances, intermediate filament subunits, thyrotropin receptors, through to glial growth factor are described in the second section. Eleven papers discuss the use of monoclonal antibodies in studying the function of the synapse, the retinal cells and the neuromuscular junction. The authors describe new methods and techniques in detail and report results which indicate that these methods are important in the neurosciences.

This book will make very interesting reading for those immunologists, cell biologists, membrane biochemists and physiologists interested in the neurosciences.

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