BOOK REVIEW

Nečas O.: CYTOSKELET. Academia, Praha 1991, techniques in vitro, study of cytoskeletal toxins and 251 pp. ISBN 80-200-0116-6. In Czech.

The book Cytoskelet written by the very well known domestic specialist Oldřich Nečas (with contributions from J. Bártek, J. Hašek, E. Streiblová and V. Viklický) is the first monograph concerning the cytoskeleton to have been published in the former Czechoslovakia. There is much current research upon the cytoskeleton and thus analytical data are stressed more than synthetic. From this point of view the book is very important.

The first chapter introduces very briefly the development of cytoskeletal concept. The second concerns the cytoskeletal principle in relation to functional organization of cell. The authors define basic structural components as well as the basic functions of cytoskeleton and outline its evolution.

The third chapter is extensive and describes informatively the methods used in the study of the cytoskeleton including immunocytology, electron microscopy, isolation, microinjection, simulation genetic methods.

There are several chapters upon the basic components of the cytoskeleton such as microtubules, microfilaments, intermediary filaments, membrane and nuclear cytoskeleton. The function of the cytoskeleton in cellular movement as well as in cellular division is well described. The last chapter deals with the cytoskeleton of the cancer cell. The book is supplemented by addenda (most recent data discovered during the preparation of the book) and an extensive bibliography.

The authors are renowned specialists in the field and the book is well-written (complemented by informative illustrations), containing all relevant information. Therefore I thoroughly recommend this book for students, as well as for specialists, wishing to discover the interesting world of cellular and tissue microstructures.

F. Weyda