
Book reviews

Shay, J.W. (ed): Techniques in Somatic Cell Genetics. New York London: Plenum Press 1982. xxvi + 541 pp., several figs., several tabs. Hard bound \$ 49.50.

I have found this book really useful. It contains 35 papers by leading scientists in cell biology and genetics. Each chapter documents in detail the latest technique or techniques used in studying somatic cells. As explained by the authors, the methods have only been included after repeated use by themselves. Technical advances in such areas as transfer mediated by microinjection, uptake of isolated nuclear DNA, liposomes, erythrocyte ghosts, mitochondria, chromosomes, and fusion of cells and cell fragments, are treated. Correspondingly, methods for cell fractionation and purification of cell fragments (nucleoplasts, cytoplasts, mitoplasts, microcells, microcytospheres, microcells, minisegregants, chromosomes) are given, and systems and methods for fusion/uptake induction as well as recombinant screening (genetic selective systems, selection based on use of biochemical inhibitors, nonselective isolation by flow sorting) are described. Special attention is given to methods of analyzing extranuclear genes (isolation and characterization of cytoplasmic mutations of antibiotic resistance, transfer of mutations via cell fusion, fusion of cell fragments, and uptake of mitochondria/mitochondrial DNA). Also, techniques for chromosome analysis, detection of specific DNA sequences in cell hybrids and transfectants, as well as methods of genetic analysis using isozyme markers as monitors of chromosome segregation, are included. The topic of monoclonal antibodies has been consciously excluded from the scope of the book and the reader is referred to several comprehensive reviews that have appeared recently. The concluding chapter by D. L. Slate and F. H. Ruddle lists the areas of research in cell genetics that are likely to show rapid progress within the next few years. The reason for publishing the 1 paper on plant cell hybridization methods together with 34 others dealing with techniques on animal cells escapes the reviewer's understanding. Although well-written, the paper of H. Binding and R. Nehls is necessarily a brief summary of many techniques used in plant somatic cell genetics and

unlike the other articles in the volume, it can not be used as a recipe or protocol source. It also seems doubtful that the presence of the review in question will be a sufficient reason for inducing plant biologists to buy the book – it costs about 50 USA dollars.

The book represents a very good description of the art of animal cell genetics. It will be an excellent source of technical information for both those about to enter the field of somatic cell genetics and for those already in it. Y. Gleba, Kiev

Sindermann, C.J.: Winning the Games Scientists Play. New York London: Plenum Press 1982. 304 pp., 3 figs. Hard bound \$ 19.14.

When I saw the title, which twice relates playing to scientific research, I was at first indignant, then offended. But upon reading the entire book, my judgement softened: it is the simple truth, so true that another reviewer could call the book "autobiography of just about every scientist in the country". Carl Sindermann, director of the Sandy Hook Marine Laboratory in New Jersey, and presently also Professor of Oceanography at the University of Rhode Island, wrote with the background of the everyday life of a scientist and stresses the importance of interpersonal strategies in science. Professional men and women who wish to make a career in science can obtain here first hand information on scientific strategy: the scientist as a writer, performer, chairman, producer, organizer, negotiator, congress visitor, in getting and using power. Special attention is given to ethics in science, the role of women and men in daily laboratory life, and to the handling of bureaucracy and bureaucrats.

I cannot say it is an entertaining book, but it is useful to anyone interested in attaining prominence and success. There are a lot of intimate advice and tips, normally only given confidentially to sons and sons-in-law and not disclosed to everybody. H.F. Linskens, Nijmegen