

dwindling plant genetic resources serve a worldwide purpose. The slide series can help to open and broaden minds.

H. F. Linskens, Nijmegen

Davidson, E.H.; Firtel, R.A. (eds.): UCLA Symposia on Molecular and Cellular Biology. New Series, Vol. 19: Molecular Biology of Development. New York: Alan R. Liss 1984. xxv + 685 pp., several figs. and tabs. Hard bound £ 73.00.

This book is the result of a symposium held at Steamboat Springs, Colorado on April 1–7, 1984, emphasizing some of the major conceptual problems of development. As a consequence, the book is a very diverse, and yet substantial compendium of recent research utilizing a variety of experimental systems to solve developmental questions. The coverage of the *Xenopus*, *Drosophila*, and *Dictyostelium* systems is excellent, and is well-represented by the major laboratories in the field. The coverage of plant systems however, though very nicely done by the participants, is very minimal in the context of the total effort represented by the book. Although, as the editors point out, it is not possible to include everything, some work with yeast and other aspects of *Drosophila* could have been included; however, these omissions do not detract greatly from the volume. It would also have greatly enhanced the volume if there was an introductory chapter or summary with well-deliberated discussions of the interrelatedness of the findings reported (both within and between systems).

However, even without this, the book is a very useful up-to-date reference work which should prove a helpful aid to all biologists.

J. G. Scandalios, Raleigh

Dustin, P.: Microtubules (2nd totally rev. edn.). Berlin, Heidelberg, New York, Tokyo: Springer 1984. xviii, 482 pp., 175 figs. Hard bound DM 159.–

The second, totally revised edition of 'Microtubules' by P. Dustin intends, as stated in the introduction, "to give a good overall view of all the fields in which microtubules are important".

So it does in 12 chapters: starting with the historical background (chapter 1) it describes in detail structure and chemistry of tubulins and microtubules (chapter 2), their general physiology, the variety of structures formed by microtubules, the microtubule poisons and the role of microtubules in cell shape, cell movement and cell secretion (chapters 3–8). Separate chapters are devoted, not only to mitosis (chapter 10), but also to nerve cells (chapter 9) and the significance of microtubules in pathology and medicine (chapter 11). It closes with a postscript and outlook (chapter 12) and an addendum of recent papers up to the first half of 1983. Many figures have been added or replaced. In addition, a wealth of detailed information is presented, including a bibliography of about 2,400 references.

Though the relation of microtubules with microfilaments is discussed in chapters 7 and 10, dealing with, respectively, cell movement and mitosis, the relation of microtubules with other cytoskeletal elements could have been discussed more extensively. The cytoskeleton as a concept is only mentioned in

chapter 12. – Postscript and Outlook. Also, a more extensive description of current immunological techniques would have been useful. The insertion of recent papers and reviews in an addendum is exemplary. One of the most striking abilities of the living cell is its capacity to build up a variety of structures, with functions to match, from a limited number of relatively simple elements. Pierre Dustin has succeeded very well in showing that tubulins and microtubules are used as such elements.

The second edition of 'Microtubules' is a must for everyone interested in microtubules.

J. Derksem, Nijmegen

MacMahon, B.; Sugimura, E. (eds.): Coffee and Health. Banbury Report No. 17. Cold Spring Harbor: Cold Spring Harbor Laboratory 1984. 259 pp., many figs. and tabs. Hard bound \$ 57.–

Humans have been drinking coffee for as long as they have been smoking cigarettes and drinking alcoholic beverages. Approximately 5 million tons are produced annually in some 50 coffee-growing nations. The problem of coffee and health came under discussion during the Banbury Center Conferences in 1983.

Banbury Report 17 contains papers and discussions which view this problem from several aspects: the chemistry of coffee, instant coffee and decaffeinated coffee; the mutagenicity and the carcinogenicity of coffee; coffee and heart disease.

This book provides a good overview of these topics. The problems of coffee carcinogenesis and mutagenesis are discussed intensively. The conclusion arrived at is that at the present time there is no reason to state that coffee is carcinogenic with respect to the human being.

After reading this book I am drinking my cup of coffee with more pleasure than before. This book is useful to food chemists, nutritionists, physicians, biochemists and geneticists.

F. H. Herrmann, Greifswald

Announcement

Genetic Engineering of Animals, an Agricultural Perspective

As part of the conference series on genetic engineering of the College of Agricultural and Environmental Sciences of the UCD, in cooperation with the Council for Research Planning in Biological Sciences, an international conference will be organized from September 9 to 12, 1985.

The program will appeal to a broad audience in animal research, and will try to increase awareness of how genetic engineering may aid further research efforts and animal agriculture. Live demonstrations will highlight the program.

Further information: Carroll Miller, The College of Agricultural and Environmental Sciences (N), University of California, Davis, CA 95616, USA. Phone (916) 752-6435.