

References

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BOOK REVIEWS

PHILLIPS, D. M. P. (ed.): *Histones and Nucleohistones*. — Plenum Press, London and New York, 1971, 305 pp., 8 £.

The work is a welcome and successful attempt to outline the present state of knowledge on biochemistry and biophysics of histones and their complexes with nucleic acids. The study of these complexes is of great importance for the students of differentiation. Histones are often considered as candidates for the control of DNA-dependent biosynthetic reactions and particularly the selective DNA transcription. The views on the role played by histones are very controversial and so the book full of factual informations will be appreciated.

The book contains six chapters written by different authors who are all active in the research in the field they handling. The titles of the chapters give a good idea about the general set-up of the work: 1. The preparation and characterization of histones, 2. The primary structure of histones and protamines, 3. Physical and conformational studies of histones, 4. The chemical and physical properties of nucleohistones, 5. Histone biosynthesis and the cell cycle, 6. Functional and metabolic aspects of DNA-associated proteins. Each chapter is largely self-contained. All the topics are competently treated and the authors display thorough knowledge and sensitive feeling they have for the subject. The visual-type of the reader may possibly lack more illustrative material. The literature is well covered bringing together more than thousand references. Generally: very recommendable book not only for those who are interested in histones and nucleohistones, but also for those who wish to put their interpretation of complex biological phenomena on solid bases.

JAN KREKULE (*Praha*)

MOHR, H., SITTE, P.: *Molekulare Grundlagen der Entwicklung*. — BLV Verlagsgesellschaft, München 1971. 230 pp., 188 Figures (in German). DM 22.—.

This paper-back is addressed to all biologists who wish to be acquainted with present views of molecular biology and understand its limits in interpreting complex phenomena of development. It appeared in the series *Modern Biology* and the authors really proved they meant modern aspects and approaches. The main aim was to illustrate some basic dogma of molecular biology on various models. The authors succeeded in linking together a much hitherto widely dispersed material ranging from the morphogenesis of viruses to the embryogenesis in amphibians and photoperiodically determined growth of plants. The emphasis is on phytochrom mediated morphogenetic and biosynthetic events. The authors themselves are botanists but this circumstance did not influence much their choice of examples and the balance seems to be right and the material competently handled. A specialist may quibble about some details, e.g. the general picture might be even more objective when stressing still more differences (structural and functional) between eucaryotic and procaryotic cell and outlining the methodological difficulties met with in this field. To some readers different chapters may seem partly disjointed, while the same material is treated on two or three different places (the book is divided into 23 chapters, including 4 introductory ones). But we should bear in mind that the scope of the topic is inconsistent with the dimensions of the volume and the authors are to be congratulated how they overcome all these difficulties. The participation of prof. Sitte, an outstanding specialist in the field of fine structure of the cell rightly stressed the structural aspects of differentiation. The style is clear-cut and precise, avoiding all the nebulous statement and speculation. The illustrations integrate well with the text. Generally: this is an unprecedented and unique book, which surmounts the contemporary avalanche of paper-back literature.

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