

BOOK REVIEWS

Collan Y, Romppanen T, eds. MORPHOMETRY IN MORPHOLOGICAL DIAGNOSIS. Symposium on morphometry in morphological diagnosis. Koli, Finland: Kuopio University Press, 1982: 219 pages.

The book contains the papers which were presented at the Symposium of Koli, Finland in September 1981 and deal with the stereological methods used in clinical and experimental pathology. The papers are presented under two headings, as follows: "Introduction in morphometry" discussing the methodology, and "Free papers" dealing with the applied science. Included are also the names and addresses of the participants.

The papers of the first division, which may be addressed also to a layman, introduce the reader to the fundamentals of the stereological theory and practice and discuss the use of automatic and semiautomatic devices. The beginners will find particularly interesting the chapter covering the exercises which give the reader useful practice in pathology.

The papers of the second part deal with the examples from pathology where stereology is presented as a valuable tool used by the pathologist in differential diagnosis and reproducibility of the histopathological results. Of great interest are the articles dealing with the routine use of morphometry in pathologic evaluation of ovarian and mammary tumours, proliferative mesothelial disease and quantitative analysis of islets of the diabetic pancreas. Index of connectivity can serve as a diagnostic measure of architectural disorganization in chronic liver disease. In addition, important reproducible data are obtainable by stereological studies of colonic adenomata, squamous cell carcinoma of the uterine cervix, kidney biopsies and so on.

The book excels in the clarity of style and copious reference material. It should be included in the reference library of every physician, biologist and researcher, who in his practice finds the theoretical principles insufficient to cope with the problems of diagnosis, and wishes to base them on the recent quantitative data.

The book is essential for the pathologists, who, thanks to the morphometric information, will soon be able to "describe what they see and not only what they think they see", as wrote the editor Y. Collan in the Introduction.

Olga Vraspir-Porenta

"Mechanical Design in Organisms" by S.A. Wainwright, W. D. Biggs, J.D. Curry and J.M. Gosline, published in 1976 by Edward Arnold (at £ 10.-), or the Halstead Press in the U.S. (at \$ 20.95). This book is extremely well-done and is of importance to those working in the fields of bioengineering or biomedical research, whether with animals, humans, or plants. It updates and extends the scope of the classic 1917 work by D'Arcy W. Thompson, "On Growth and Form" (Abridged edition by J.T. Bonner, Cambridge University Press, 1961).

B.B. Mandelbrot has written a new book, "Fractal Geometry of Nature", W.H. Freeman and Co., San Francisco, CA (1982). Price is around \$ 20.00.

A mathematical book of possible interest to stereologists is "Decomposition of Superpositions of Density Functions and Discrete Distributions" by Pal Medgyessy, John Wiley and Sons (Halstead Press) 1977. Also obtainable from Adam Hilger Ltd. or Akademiai Kiado, Budapest. The author first treats unimodality and its various attributes, then discusses density functions and discrete distributions (multimodal). Numerical methods are given in the Appendix. 308 pages.

Ervin E. Underwood