REVIEWS

Lectures on General Pathology. Edited by Sir Howard Florey. (Pp. 733.) London: Lloyd-Luke Ltd. 1954.

The Oxford medical student who has read the Honour School of Physiology receives a course in general pathology and bacteriology before proceeding to his clinical studies. The course lasts for two terms of eight weeks each, and some idea of its character is gleaned by this collection of 37 lectures given by ten teachers. Since the design is clearly that of bridging the gap between these two phases of the student's training, the lectures should be read from this angle. It is pertinent to ask whether they are given in the order published. If so, it appears strange that the early (and excellent) lectures on acute inflammation are widely separated from those on healing and chronic inflammation, which come at the end. In many chapters, too, the subject-matter is handled in a manner more suited to the advanced student: it may be that, for the purpose of publication, much detail has been added that the authors would not impose verbally on the beginner. Indeed many of the lectures contain more meat than might be considered digestible at one session, even by the most acquisitive student.

The preface emphasizes that the whole field of general pathology is not surveyed. It is true, for example, that no lectures will be found on neoplastic disease: an odd omission, in view of its importance. Since a very proper bias is to be found in general towards advanced physiology and the experimental approach, would it not be appropriate to give the student some outline of experimental work on carcinogenesis? The answer may be that, in restricting the field, it is preferable to deal in considerable detail with the fundamental aspects of inflammation, immunity, and kindred topics. There can be no quarrel with this in principle. But, in detail, is it not better for the beginner to be versed in such important circulatory disorders as embolism and infarction than to be laden with details concerning the biological effects of irradiation? There may be a good answer to this.

It must be added that the general level of treatment of the topics selected is both excellent and up to date.

The Oxford student who is sufficiently receptive to digest the contents of this book has indeed been given a flying start to his clinical work. The volume is admirably produced and beautifully illustrated.

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Biological Effects of External X and Gamma Radiation.

Part I. Edited by Raymond E. Zirkle. (Pp. xxvi + 530.) Illustrated. 58s. London: McGraw-Hill. 1954.

A great deal of experimental work was done in the United States during the war years with the aim of defining safe conditions for exposure to irradiation and of elucidating the pathogenesis and possible treatment of radiation damage. The volume under review contains the substance of a number of reports on the effects of penetrating radiation, which, even when no longer subject to security regulations, have not been easily accessible. The inevitable pressure during the war for a quick answer, and the dispersal of the authors when the war was over and often before the work was written up, is reflected in some unevenness of quality, as the editor points out. The attempts to find a biochemical basis for irradiation damage were largely negative. More valuable perhaps are the chapters on the haematological responses of rabbits to single exposures, and especially those on the effects of long-continued irradiation of mice, guinea-pigs, and rabbits for the whole of their life span. Sterilization because of damage to testis or ovary, cytopenia following bone marrow damage, and carcinogenesis were observed in all, but there were marked quantitative differences between species in the amount of radiation required to produce a similar amount of damage. The discussion of how to apply these findings to the problem of human protection leaves transparently clear the difficulties of transferring chronic toxicological data from animal experiments to man when the biological mechanisms are so imperfectly understood.

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