

The original aim of this Ciba symposium was to review and discuss this new work and its relations to other aspects of respiratory physiology and disease. But when it was appreciated that the meeting would coincide with the centenary of the publication of the Hering-Breuer reflex, the content and direction of the symposium were expanded and a most valuable biographical review and translation into English of the Hering and Breuer papers were added.

It is appropriate that the opening scientific contribution to the symposium compares the role of inflation reflexes in man and other animals. The remainder of the first section contains contributions on afferent nervous pathways including the sensory innervation of the airways and other reflexes from the lungs which are probably responsible for many of the effects which have previously been attributed to the Hering-Breuer reflex. These include receptors responding to changes in pulmonary interstitial pressure and others to mechanical deformation of the bronchi and bronchioles.

The second section of the book contains three contributions devoted to central interactions and peripheral motor mechanisms which consider the origin of the respiratory rhythm, neurological control in relation to metabolic and behavioural requirements and the variation of respiratory motor activity in relation to varying sensory inputs. The third section concerns respiratory sensation, the stimuli, receptors and pathways involved and possible psychological aspects.

The final section concerns the relationships of these physiological aspects to clinical problems including possible mechanisms of some respiratory symptoms, the relationship of respiratory frequency to breathlessness and the effects of vagal block on the sensation arising from pulmonary disease.

Although I found the symposium a most rewarding experience, it was also salutary to discover on reading the proceedings how much one had failed to appreciate at the time and how much more valuable it is to read the proceedings at leisure and digest the wealth of information and ideas that were discussed during those three days.

J. B. L. HOWELL

DERMATOLOGY OR BIOLOGY?

An Introduction to the Biology of the Skin

Edited by R. H. Champion, T. Gillman, A. J. Rook and R. T. Sims. Pp. x+450. (Blackwell (Scientific): Oxford and Edinburgh, 1970.) 85s.

For some years now there has been a growing tendency to introduce the word "biology" into all sorts of contexts where thirty years ago it had never set foot. A host of things which previously just existed are now credited with "biological significance", symposia and books dedicated to the biology of this, that and the other are currently fashionable, and we are even witnessing the germination of a crop of new bio-subjects. It is to be hoped that the widening and freer use of the word "biology" will amount to something more than lip-service and better than prostitution. I prefer to think it represents a public expression of a widespread sense of longing to get away from the lifeless world of test-tubes and slide-rules and "back to nature", which of course is not the same thing as "back to the trees". So intense is this longing that sometimes, as in this book, it gets ahead of itself and shades into wishful thinking.

This book is based on a postgraduate course of lectures which has been given at the University of Cambridge each year since 1963. As I have implied, the reason for its being written may be more encouraging than the book itself, which is unlikely to introduce anybody to the biology of anything, though one hopes it will not actually put

anybody off. There are a few outstanding exceptions to the generally arid level of the book, particularly the chapters by Gillman on "Dermo-epidermal Interplay" and by Herbertson on "Inflammation", and the book should be read if only for the sake of these contributions. They and a few others are written about living processes as living processes, by authors whose approach to their subjects is that of the classically enthusiastic naturalist, a breed to which all true biologists have belonged and still must. These chapters and the motivation behind them would have been as welcome and comprehensible to Harvey or Pasteur or Darwin as they are to us. But these golden exceptions are few and far between in an otherwise lifeless desert of technological fluff and hack banality.

A number of the authors write as if they had just attended the course rather than given it. Some sound to be less than enthusiasts for their subjects, which they seem only to have mugged up for the purpose of filling the book. But the saddest group of contributions are those whose authors give the impression that their answer to the question "how does a seed grow into a tree?" would consist largely of a series of chemical formulae for the synthesis of chlorophyll and a page or two of equations. One can only assume that these two groups of non-biocontributors were press-ganged into the book because of shortage of local bio-talent.

The award for the most non-biological topic goes to chapter one on "Aspects of Mensuration", featuring a commendation of the new (SI) system of units (1 c.c. = 10^3 mm³, and all that). The system is fairly thoroughly pilloried by its use throughout the rest of the book. If this kind of thing had to be included in a book about biology, surely its place was at the back of an appendix rather than as the opening chapter. The gold medal for the most unbiological remark in the book goes to the opening comment in chapter eleven: "Hair . . . was evolved to protect the skin against physical trauma, cold and ultra-violet light". No reference is given for the source of this instant, three-in-one resolution of a fascinating and perennially insoluble problem of cutaneous biology. Like all truly great gaffes this one's stature grows in the marvellous absurdity of its implications the more it is pondered: evolution by natural³ selection³ according to the SI system.

In short, this book might more truthfully have been entitled "A Young Person's Guide to Modern Investigative Dermatology". But the fact that it was called "An Introduction to the Biology of the Skin" shows that the authors wished it was. And full marks for that wish.

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ASPECTS OF STEROIDS

Advances in Steroid Biochemistry and Pharmacology

Vol. 1. Edited by M. H. Briggs. Pp. xi + 517. (Academic: London and New York, October 1970.) 150s; \$21.50.

THIS volume, the first in a series, contains ten chapters devoted to various specialized aspects of the chemistry, biochemistry, physiology, pharmacology and analysis of steroids. It is not often that up to date reviews on such varied aspects of steroids are all found in one volume and for this reason alone the book will be a most welcome addition to a library or private collection. The editor has skilfully selected the topics so that the metabolism of steroids in man, animals, arthropods, marine invertebrates and plants is discussed.

There is much of interest here for the specialist in a particular field as for the beginner. Drs Vinson and Whitehouse review comparative aspects of adrenocortical function and, by way of introduction, devote some pages to a discussion of the methods utilized in a study of biosynthetic pathways, and explain how to interpret data