

physiology text for college classes where a correlated emphasis on anatomy is desirable.

RECENT PROGRESS IN HORMONE RESEARCH: *Proceedings of the Laurentian Hormone Conference 1955. Vol. XII. Edited by Gregory Pincus. \$10, 453 pp., Academic Press, Inc., October 1956.*

The twelfth annual Laurentian Hormone Conference was held in Colorado to facilitate attendance by investigators in the western part of the United States. As is usually the case, the published conference report supplies up to date authoritative information about the current interests and activities of some of the outstanding researchers in the field. The fourteen papers are grouped under four headings: Hormone biosynthesis and metabolism, Hormones and metabolism, Pituitary hormones, and Sex hormones. The first category deals largely with observations that will be of greater interest to the chemist than to the clinician. Studies of reactions involved in the synthesis of thyroid, adrenal medullary and steroid hormones are described in some detail. The remaining categories are of more general interest. The discussion of the current status of aldosterone, introduced by Luetscher and including extensive comments by several others, is one of the high points of the volume. Krahl's paper, reviewing the relationship of insulin to protein synthesis and growth, is of considerable interest. A routine clinical laboratory method for the determination of urinary gonadotropins is described in detail by Albert who analyses critically alternative procedures. This chapter should be of considerable value to hospitals and clinical laboratories. Studies of hormonal control of melanin pigmentation are reported, as are certain aspects of male and female sex hormones particularly with relation to chemical changes, libido and reproduction. A paper describing clinical disorders of pituitary function leads to some critical evaluation of the use of available hormones in the effort to increase growth rates.

This volume should be read not only by investigators, but also by clinicians who have occasion to prescribe some of the hormones discussed at the meeting.

THE ADRENAL CORTEX. *By I. Chester Jones, B.Sc., Ph.D. \$7.00, pp. 316, Cambridge University Press, London.*

In his monograph, I. Chester Jones undertakes to discuss the adrenal cortex in all species of vertebrates. By far the largest segment—approximately one-half of the book—is properly devoted to mammals, the species in which these glands have been most extensively studied.

In this first portion of the book the author has done an excellent job of summarizing succinctly and clearly an immense quantity of material. He writes well, evaluates the many separate investigative findings critically, and presents a thoughtful synthesis. The chapters on the adrenal steroid hormones, their biosynthesis, and the control of adrenocortical secretion are particularly well executed. The majority of his discussions are remarkably up to date, although it is inevitable that there are occasional instances in which very recent reports have not been included. This applies, for example, to the discussion of aldosterone. Occasionally, however, such as in the brief paragraph on fat metabolism, work of less recent date has not been mentioned. A more serious defect is the incompleteness of material covered. In this present monograph striking lacunae are evident; one such is the omission of any discussion of the influence of adrenal hormones on blood pressure apart from a statement that tension falls after adrenalectomy; another is the failure to mention the influence of adrenal steroids on the course of infection, and but cursory mention of their relationship to antibody formation and immunity. A third is that the interconnections of thyroid and adrenal cortex are ignored, although sixteen pages are devoted to adrenal gonadal relationships. Most disappointing is the chapter on clinically encountered abnormalities of adrenal cortical function. This section is limited to seven pages which necessitates little more than outline presentation of the several disease states. Even in this outline several of the statements require qualification. The claim certainly demands modification that Waterhouse-Friderichsen syndrome is acute adrenal insufficiency, and that in all cases massive hemorrhage into the adrenals occurs. Indeed, many are of the opinion that the syndrome is the result of overwhelming sepsis alone, since instances of the clinical condition have been reported in which the adrenals at autopsy have shown no lesions. The statement that changes in gonadal function necessarily occur in Addison's disease also needs revision in the light of the number of successful pregnancies now on record in Addisonian patients on satisfactory maintenance. Finally, the failure to mention hyperaldosteronism is an obvious oversight.

From the point of view of the clinician the second half of the book, devoted to fish, amphibia, reptiles, birds and the platypus, is of limited interest. Tantalizingly little is known of the function of the adrenal cortex in many of these species.

Without more such information the variations of the gross and microscopic anatomy of the glands has at present little physiological interest and remains simply a cataloguing.