



BOOK REVIEWS

Recent Progress in Hormone Research—Vol. 46: Edited by J. H. Clark. Published 1990 by Academic Press, San Diego. 361 pp. ISBN: 0-12-571146-8. Price at June 1992: \$85.00.

This series provides a superior summary of the most recent developments in the field of hormone research. This volume covers the following main topics:

- Molecular basis of androgen insensitivity.
- Tissue-specific expression of the growth hormone gene and its control by growth hormone factor-1.
- Molecular characterization of mammalian Tachykinin receptors and a possible epithelial potassium channel.
- Guanylate cyclase receptor family.
- Insulin-like growth factor-binding proteins.
- Growth hormone receptor and binding protein.
- Mutations in the insulin receptor gene in genetic forms of insulin resistance.
- Characteristics of the cAMP response unit.
- Inhibin: role and secretion in the rat.
- Structure of the lutropin/choriogonadotropin receptor.
- Search for the gene for multiple endocrine neoplasia Type 2A.

This book would be useful for those working in the fields of biology, endocrinology, molecular biology, physics, and reproduction, as well as for advanced students.

Recent Progress in Hormone Research—Vol. 47. Edited by C. W. Bardin. Published 1991 by Academic Press, San Diego. 405 pp. ISBN: 0-12-571147-6. Price at February 1992: \$79.00.

Tools of modern science have led to enhanced understanding of biology. Nowhere is this more apparent than in the field of endocrinology and metabolism as reflected in this volume. The topics covered range from the molecular regulation of genes to current topics in clinical endocrinology. For example, studies of progesterone receptor activation of model genes emphasize that steroid hormone receptors are part of a larger class of transcription factors. As a consequence, a better understanding of how steroid receptors act can now be approached in cell-free systems. A series of chapters describe the complex regulation of LH and FSH secretion through studies of the LHRH pulse generator in intact animals. Abnormalities of this regulator in humans are also defined and newly developed LHRH-secreting neuronal cell line produced by targeted oncogenes is described providing information on the pulsatile secretion of LHRH *in vitro*. Insights into hormone-induced hypertension are now possible through the understanding of how the specificities of cortisone and aldosterone for the glucocorticoid and mineralocorticoid receptors are determined. In addition, the structure of renin suggests new approaches for the treatment of hypertension. Finally, a series of chapters relating to carbohydrate metabolism illustrate the origin of insulin-secreting cells of the pancreas, define the sulfonylurea receptor, and demonstrate the diversity of glucose transporters. Genetic analysis of the phosphoenolpyruvate carboxylkinase gene illustrates how complex hormonal regulators control intermediary metabolism.

The following main topics are covered in this volume:

- Molecular mechanism of action of a steroid hormone receptor.
- Neuroendocrine control of a human reproduction in the male.
- Immortalization of neuroendocrine cells by targeted oncogenesis.
- Neuroendocrine regulation of the luteinizing hormone-releasing hormone pulse generator in the rat.
- Gonadotropin-releasing hormone pulses: regulators of gonadotropin synthesis and ovulatory cycles.
- Steroids, receptors, and response elements: the limits of signal specificity.
- Molecular biology of human renin and its gene.
- Cellular and molecular analysis of pancreatic islet cell lineage and differentiation.
- Sulfonylurea signal transduction.