

of diet on estrogenic potential and cancer. The topics covered include the analysis of the gene encoding human aromatase cytochrome *P*-450, oxysterol regulators of cellular cholesterol dynamics, steroid esterification and hormone action, estrogen actions on target cells with evidence for different effects by products of two alternative pathways of estradiol metabolism, the function of steroid binding proteins, the role of growth factors in estrogen action, the intraovarian action of estrogens, the cell-to-cell interactions involved in estrogen action, and the actions of steroids in the brain.

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

Horizons in Endocrinology, Vol. II. Edited by M. Maggi and V. Geenen. Serono Symposia Publications from Raven Press, Volume 76. Published December 1991, Raven Press, New York. Price at publication: US\$132.50. No. of pages: 380. ISBN: 0-88167-655-1.

This volume represents the *Proceedings of the Second International Meeting of Endocrinology Under 35*, held in Sienna, Italy, in 1990. A sequel to a highly successful work first published in 1988, it presents a global view of the latest breakthroughs in basic and clinical endocrinology. More than 40 of the world's most innovative investigators describe the research techniques they have developed, discuss the results of their studies, and highlight the clinical implications of their findings.

Clinical endocrinology has greatly characterized the pathologies derived from the molecular defects in the long distant cell-to-cell signaling at the level of the 'signals' (syndromes of hormonal insufficiency or overproduction), or at the level of the 'receptors' (syndromes of hormonal resistance). Pathological entities derived from disturbances in the paracrine signaling are still largely undefined, but analogically addressed the questions of the 'signals' (congenital absence or, contrarily, overexpression and excessive secretion in paraneoplastic syndromes) and the questions of the 'receptors' (mutation, absence or overexpression influencing the development of proliferative disorders). In the very near future, our better understanding of the molecular mechanisms underlying "self"-peptide presentation and the subsequent "self"-tolerance induction should also lead to a new fruitful regard on the physiopathology as well as the treatment of auto-immune disorders.

The main topics covered are: DNA recombinant technique in the diagnosis of endocrine diseases, prenatal endocrinology, immunoendocrine control of cell growth and differentiation, membrane receptors, hormonal regulation of cardiovascular functions, hormonal agonists and antagonists in clinical endocrinology. This book would be useful for those working in the fields of biology, biophysics, and the biology of reproduction, as well as for advanced students.

Plasminogen Activators: From Cloning to Therapy. Edited by R. Abbate, T. Barni and A. Tsafirri. Serono Symposia Publications from Raven Press, Volume 77. Published October 1991, Raven Press, New York. Price at publication: US\$75.00. No. of pages: 216. ISBN: 0-88167-656-X.

Plasminogen activator is a specific enzyme transforming plasminogen into plasmin. Plasminogen activators are widely distributed in tissues and can, therefore, modulate a multitude of biological activities. In addition to its widely known activity related to thrombolysis and haemostasis, plasminogen activator is involved in human and animal reproduction and embryology, inflammation, tissue remodelling, dermatology and oncology. All these topics are reviewed in this book by an international group of experts actively working in this field. Particular attention has been paid to the structure and characterization of the two types of plasminogen activator and to the function of the urokinase receptor. Two chapters are dedicated to the implications of plasminogen activator both in normal and pathological skin. In the field of oncology, the relationship between plasminogen activator and breast cancer and between plasminogen activator and leukemia are discussed in depth. An entire section of the book reviews the hormonal regulation of plasminogen activator gene expression and the complex relationship between plasminogen activator and the reproductive process. Three chapters focus on both the current understanding of fibrinolysis mechanisms and the clinical application of recombinant tissue-type plasminogen activator in cardiology. The structure and function of plasminogen activator is also covered.

The book is divided into the following main sections: cloning, molecular forms and receptors; endocrine systems and embryology; dermatology and inflammation; fibrinolysis; and oncology.

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

Gonadal Development and Function. Edited by S. G. Hillier. Serono Symposia Publications from Raven Press, Volume 94. Published March 1993, Raven Press, New York. Price at September 1993: US\$145.00. No. of pages: 331. ISBN: 0-88167-906-2.

This volume contains the *Proceedings of the IXth Workshop on the Development and Function of Reproductive Organs*, held in Peebles, Scotland in May 1992. It reviews different topics dealt with in the sessions of the meeting: recent progress in basic research on gonadal physiology with particular relevance to reproductive medicine, the cellular and molecular processes involved in human reproduction, and the applications of this research in the management of male and female infertility. The different chapters afford a tantalising glimpse of the complex and diverse cellular and molecular processes upon which human reproduction depends. Major areas covered include: gonadal differentiation; sperm and oocyte biology; control of testicular and ovarian function; transgenic manipulation of reproduction, and assisted reproduction in men and women.

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