

- Neuropeptide tyrosine (NPY) in human cardiovascular innervation;
- NPY in peripheral non-adrenergic neurons;
- NPY receptors and their interactions with other transmitter systems;
- Studies on the neurochemical mechanisms underlying the neuroendocrine actions of neuropeptide Y;
- Synthetic fragments and analogs of NPY are ligands at NPY receptors in the rat cerebral cortex;
- Y1 and Y2 receptors for NPY—the evolution of PP-fold peptides and their receptors;
- The inhibitory actions of NPY and galanin on [³H]norepinephrine release in the central nervous system: relation to a proposed hierarchy of neuronal coexistence;
- Neuropeptide Y in the modulation of autonomic nervous function;
- Roles of noradrenaline, adenosine 5'-triphosphate, and neuropeptide Y as possible sympathetic co-transmitters in some model tissues—new evidence and open questions;
- Tissue differences in the effects of neuropeptide Y, adenosine, and noradrenaline at the second messenger level;
- Neuropeptide tyrosine (NPY) and sympathetic cardiovascular control;
- On the role of NPY in central cardiovascular regulation;
- The role of neuropeptide Y (NPY) in control of anterior pituitary hormone release in the rat;
- Hypothalamic NPY: a local circuit in the control of reproduction and behavior;
- Neuropeptide Y in the hypothalamus;
- Neuropeptide Y modulates neurogenic mechanisms in the smooth musculature of the reproductive tract;
- Hypothalamic neuropeptide Y and galanin: functional studies of coexistence with neuroamines;
- NPY catecholamine interactions in the central nervous system;
- Neuropeptide Y and the circadian system;
- Effects of NPY on memory processing and ingestive behaviors;
- Alterations in neuropeptide Y in neurological disorders;
- Neuropeptide Y: biological and clinical studies;
- Neuropeptide Y—possible involvement in depression and anxiety.

This book is very useful for people working in molecular biology, endocrinology, biology of reproduction, physiology and for advanced students.

Andrology and Human Reproduction. Sero Symposia, Vol. 47. Edited by A. NEGRO-VILAR, A. ISIDORI, J. PAULSON, R. ABDELMASSIH and M. P. P. DE CASTRO. Published 1988 by Raven Press, New York. No. of pages: 357. ISBN: 0-88167-374-9. Price February 1989: US\$105.00.

The fields of andrology and human reproduction have experienced great and exciting advances in recent years. To cover in detail the most relevant topics dealing with reproductive functions in health and disease, the Pan American Congress of Andrology Organization and Ares-Serono Symposia jointly sponsored an *International Symposium on Andrology and Human Reproduction*, which took place in Sao Paulo, Brazil on 4–6 May 1987 and congregated many of the most renowned experts in the areas of andrology, endocrinology, fertility and sterility.

The book is divided into 7 sections covering the following topics:

- New techniques for assessment of conventional semen parameters; new parameters of semen analy-

sis; bioassays for male infertility; evaluation of the female gamete; comments to some basic problems in andrology;

- Artificial methods to induce pregnancies; results of super-ovulation gametes and embryos transfer; the role of IVF in male infertility;
- Intrauterine insemination by husband; new concepts in the physiology of LHRH and on its role in pulsatile gonadotropin secretion; pulsatile gonadotropin and sex steroid secretion in men; gonadotrophic control of human spermatogenesis; progesterone receptor blockade by RU-486: a model for progesterone receptor deficiency in infertile women; serum LH and alpha-subunit secretory pattern after surgical and chemical castration; some clinical applications of LHRH and its analogs for diagnosis and therapy;
- Local regulatory factors in the testis; local factors in reproduction, on the role of epididymal factors in sperm fertility; antibodies to sperm and infertility; the infertile couple: definitions and standards;
- The role of adrenergic and neuropeptidergic systems in the regulation of male sexual behavior; erectile dysfunction: what is the actual responsibility of the masked organic factors?; prosthetic treatment of erectile dysfunction;
- Hormonal treatment of male infertility; non hormonal medical treatment of male infertility; an endocrine approach for the treatment of the infertile woman; utilization of CO₂ laser for operative laparoscopy; human pre-embryos freezing technique;
- WHO's approach to the management of the infertile couple; unilateral testicular obstruction in subfertile males; treatment of organic male sexual dysfunction.

This book would be useful for andrologists, endocrinologists, clinicians, oncologists and those working in biology of human reproduction.

Multimodal Treatment of Ovarian Cancer. Monograph series of the European Organization for Research and Treatment of Cancer (EORTC), Vol. 20. Edited by P. F. CONTE, N. RAGNI, R. ROSSO and J. B. VERMORKEN. Published 1988 by Raven Press, New York. No. of pages: 351. ISBN: 0-88167-476-1. Price April 1989: US\$ 111.50.

Ovarian carcinoma is one of the most important causes of cancer death among gynaecological malignancies and in the last years considerable progress has been made in the improvement of the survival rate of patients with this disease. One of the reasons for this is early diagnosis, as well as more efficient treatment with new drugs.

This book contains up-to-date information and covers the following topics divided into 7 main sections:

- Tumor biology: critical analysis of prognostic factors of ovarian cancer; steroid hormone receptors in human ovarian tumors; tumor cell kinetics: a new prognostic factor in ovarian cancer; colony forming cell assays: clinical correlations;
- Diagnosis and staging: ovarian tumor antigens: targets for diagnosis, monitoring and therapy; radio-immunoscintigraphy in ovarian cancer; nuclear magnetic resonance in ovarian cancer; diagnosis and screening of ovarian malignant tumors: a possible role for the echotomography;
- Early ovarian cancer: cooperative randomized clinical trial for stage I ovarian carcinoma (OC); the European experience; management; multimodality treatment: the U.S. experience; ovarian tumours of borderline malignancy; limited surgery in non-epithelial and in epithelial OC;

- Surgery: surgical cytoreduction for advanced ovarian cancer; tumor aggressiveness and surgical results; prognostic and therapeutic value of second surgery in epithelial ovarian carcinoma; biological and clinical significance of lymph node metastases in ovarian carcinoma; lymphadenectomy in ovarian carcinoma: techniques and complications;
- Radiotherapy: radiotherapy in ovarian cancer; a reassessment after 20 years of experience; problems and premises;
- Advanced ovarian cancer (AOC): *in vitro* chemosensitivity and survival of patients with previously untreated AOC; cisplatin and carboplatin in combination chemotherapy; combination chemotherapy in AOC; chemotherapy of AOC; carboplatin: the present position;
- New therapeutic modalities: pathologic complete responses in advanced epithelial ovarian cancer: prognostic factors for long-term survival; intraperitoneal chemotherapy; monoclonal antibody 791T/36-ricin A chain immunotoxin in treatment; interleukin-2; LHR agonist treatment; pharmacologic reversal of drug resistance in ovarian cancer.

This volume would be useful for oncologists, gynecologists, endocrinologists, reproductive biologists, general clinicians and advanced students.

Affinity Labelling and Cloning of Steroid and Thyroid Hormone Receptors. Edited by H. GRONEMEYER. Published 1988 jointly by Ellis Horwood Ltd, Chichester, U.K. and VCH Verlagsgesellschaft, mbH, Weinheim, F.R.G. No. of pages 322. ISBN: 0895-73579-2. ISSN: 0930-3367. Price: US\$125.00.

This book describes the exploration of a pathway—sometimes stony and tedious—that leads from the identification and characterization of some members of a family of transcriptional regulatory proteins to the initiation of their functional analysis. Along the way some old questions have been answered but, more importantly, it has become possible to ask new types of questions which were hidden beyond the scientific horizon a few years ago.

The book is divided into three main sections concerning steroid and thyroid hormone receptors: techniques used in affinity labeling studies; applications of affinity labeling techniques; cloning and functional analysis; covering the following topics: estrogen receptor; glucocorticoid receptor; the chicken progesterone receptor; human progesterone receptor; androgen receptor; thyroid receptor; affinity labeling of estrogen receptors; affinity labeling of glucocorticoid receptors and applications; glucocorticoid receptor mutants; photoaffinity labeling of the chicken progesterone receptor; photoaffinity labeling of the human progesterone receptor; molecular weight determination of the androgen receptor by affinity labeling techniques; photoaffinity labeling of thyroid hormone receptors; the superfamily of nuclear receptor genes—DNA cloning strategies; the nuclear receptor family—cloning, structure and function; analysis of the human glucocorticoid receptor gene promoter; characterization of a *c-erbA*-thyroid hormone receptor cDNA and its viral homologue.

All the chapters have been written by leading researchers in this field and this book would be useful for people working in biology, endocrinology, physiology, biochemistry and molecular biology.

Neuroendocrine Control of the Hypothalamo-Pituitary System. Taniguchi Symposia on Brain Sciences, No. 11. Edited by HIROO IMURA. Published 1988 jointly by Japan Scientific Societies Press and S. Karger AG, Basel, Switzerland. 250 pages, 77 Figs, 15 Tables. ISBN: 3-8055-4883-4. Price: £66.90, DM 176,000, US\$98.00.

During the last 20 years several important contributions have been made to elucidate the complex mechanism controlling the hypothalamo-pituitary system. Firstly, the discovery of hypothalamic hypophysiotropic hormones, beginning with the identification of thyrotropin-releasing hormone in 1969, has greatly facilitated our understanding of the hypothalamic control of anterior pituitary function. Secondly, the discovery of a variety of neuropeptides, including opioid peptides, vasoactive intestinal polypeptide and galanin, has further boosted the interest of researchers in exploring the intrahypothalamic mechanism regulating secretion of posterior pituitary hormones and hypophysiotropic hormones. Immunohistochemical technique and radioimmunoassay of neuropeptides have been of great help in elucidating neuroendocrine anatomy and physiology of the hypothalamus. Thirdly, the introduction of recombinant DNA technology has opened a new horizon in research of the hypothalamo-pituitary system by clarifying the structure and expression of neuropeptide precursor genes. The introduction of these genes into cultured cells or fertilized ova has led to a rapid increase in our knowledge of tissue specific expression of certain neuropeptide precursor genes in a given neuronal cell.

This book attempts to provide state of the art information on the fundamental mechanism controlling the hypothalamo-pituitary system. Emphasis is placed on the molecular biology of neuropeptides, peptidergic mechanisms in the control of pituitary function, neuron-glia interaction and some aspects of clinical neuroendocrinology.

The following topics are covered divided into three main sections:

- Intrahypothalamic mechanism in the regulation of pituitary function: the mammalian GnRH gene, a central role in mammalian reproduction; a cyclic AMP-regulatory region in the human vasoactive intestinal polypeptide/peptide histidine methionine-27 gene; feedback- and hypoglycemia-induced regulation of secretion and synthesis of ACTH and CRF; central regulation of stimulus-induced ACTH secretion, characterization of hypophysial-portal plasma CRF and AVP concentration profiles; intracellular regulatory mechanisms of LHRH secretion and the onset of female puberty; control of LHRH secretion in women and female rats; regulation of dopamine synthesis *in vitro* in rat tubero-infundibular dopaminergic neurons by hormones and neurotransmitters; role of galanin and related peptides in prolactin and GH secretion in the rat; opioid peptides and neuroendocrine function in man; thyroid hormone metabolism in the pituitary and brain and its possible role in neuroendocrine control.
- Hypothalamic control of anterior pituitary function: the mechanisms of action of prolactin on gonadotropin release; inhibitory regulation by the central nervous system of the growth hormone secretion from the rat anterior pituitary; physiological role of short loop-feedback GH autoregulation in producing a 3HR-pulsatile GH secretory pattern in conscious male rats; GRF and somatostatin in the regulation of GH secretion; growth hormone neurosecretory dysfunction.
- Neurohypophysial hormones; neuronal-glia interactions and synaptic remodelling in the control of magnocellular neurosecretory activity; pituitary control of posterior pituitary secretion; vasopressin, physical stress potentiates but emotional stress suppresses its secretion; oxytocin release during suckling, parturition, stress and hyperosmolality in the rat.

This book would be useful for endocrinologists, neurobiologists, biochemists, physiologists and those working in the field of molecular biology.