

This book would be useful for neuroendocrinologists, endocrinologists, neurobiologists, and general clinicians.

**Animal Growth Regulation.** Edited by D. R. CAMPION, G. J. HAUSMAN and R. J. MARTIN. Published 1989 by Plenum Publishing, New York. No. of pages: 423. ISBN: 0-306-42978-0. Price: \$85.00.

The biotechnological advances of recent years have put us on the brink of unprecedented gains in animal productivity. Manipulation of animal growth rate and composition of gain is now possible by a variety of techniques. Examples include ingestion of beta-adrenergic agonists, injection of somatotropin, castration, immunization, and gene insertion. *Animal Growth Regulation* addresses modern concepts of growth regulation with an emphasis on agriculturally important animals. This emphasis is not exclusive, as many situations exist in which the only information available was generated in other species, and this information has been included for the sake of clarity and completeness.

The involvement of peptides coded by protooncogenes and of negative growth regulators, such as transforming growth factor- $\beta$ , represents an emerging area of molecular biology wherein basic knowledge offers potential exploitation for growth manipulation. Opportunities also exist for regulation of protein turnover, especially from the standpoint of protein degradation. Therefore, a place was reserved for these topics in order to provide relevant basic knowledge.

The book covers the following main topics:

- Placental regulation of fetal growth;
- Endocrinology of bone formation;
- Endocrine regulation of adipogenesis;
- Autocrine, paracrine, and endocrine regulation of myogenesis;
- The expression of protooncogenes in skeletal muscle;
- Regulation of myofibrillar protein gene expression;
- Regulation of growth by negative growth regulators;
- Skeletal muscle proteases and protein turnover;
- Regulation of protein turnover;
- Energy balance regulation;
- Central regulation of growth hormone secretion;
- Mechanisms of action for somatotropin in growth;
- Regulation of somatomedin production, release, and mechanism of action;
- Sexual differentiation and the growth process;

- Potential mechanisms for repartitioning of growth by  $\beta$ -adrenergic agonists;
- Gene transfer for enhanced growth of livestock;
- Status of current strategies for growth regulation.

The book would be useful for people working in a wide range of disciplines including biochemistry, anatomy, histology, physiology, endocrinology, and nutrition.

**Turner syndrome.** Edited by R. G. ROSENFELD and M. M. GRUMBACH. Published 1990 by Marcel Dekker, New York. No. of pages: 552. ISBN: 0-8247-8108-2. Price \$150 (U.S.A. and Canada); \$180 (elsewhere).

Fifty-one years ago, Henry Turner described seven phenotypic females exhibiting short stature, sexual infantilism, webbing of the neck, low posterior hairline, and increased carrying angle of the elbow. Over the ensuing five decades, it has become apparent that the syndrome which now bears his name is a surprisingly common chromosomal disorder. Its incidence has been estimated to be between 1/2000 and 1/5000 live-born phenotypic females, and as many as one in fifteen spontaneous abortions have karyotypes consistent with classical Turner syndrome.

Early recognition of the cardinal clinical features of Turner syndrome, combined with appropriate chromosomal analysis and thorough diagnostic evaluation, permits effective and compassionate counseling of the child and family, prompt recognition of associated disorders, and timely institution of therapy directed at promoting growth and normalizing secondary sexual development. Although the underlying pathogenesis of many of the phenotypic characteristics of Turner syndrome remains uncertain, effective clinical care of these patients requires careful integration of therapy directed toward a wide variety of primary and associated abnormalities.

The following main sections are included in this book:

- Genetics, organogenesis, and incidence;
- Natural history and associated abnormalities;
- Growth hormone secretion and bone cartilage development;
- Endocrine treatment;
- Intellectual and psychological development.

This book would be useful for general clinicians, endocrinologists, gynecologists, andrologists, and biologists.