

Hormones and Cell Regulation. Colloque INSERM, Vol. 210. Edited by J. E. DUMONT, J. NUNEZ and R. J. B. KING. Published 1990 by INSERM/John Libbey Eurotext, Paris, Montrouge. No. of pages: 117. ISBN 2-85598-443-2. Price: \$32.00 (softbound).

This book contains the *Proceedings of the 15th INSERM European Symposium on Hormones and Cell Regulation*, held at Mont-Saint-Odile, France, on 24–27 September 1990. This meeting was focused on two complementary areas, the first of which concerned gene regulation by nuclear receptors with studies starting from the fundamental problems of the control of gene expression and considering the modulation of genes by hormones acting directly on the nuclei. The second area concerned growth factors and their various pathways of action on proliferation.

The papers are divided into the following main sections:

- New actions of calcium;
- Growth factors;
- Molecular biology of steroid receptors.

This volume would be very useful for endocrinologists, molecular biologists, gynecologists and clinicians.

Gene Expression: Regulation at the RNA and Protein Levels. Biochemical Society Symposia, No. 55. Edited by J. KAY, F. J. BALLARD and R. J. MAYER. Published 1989 by The Biochemical Society, London. No. of pages: 204. ISBN: 0-904498-24-7.

This book contains up-to-date information on gene expression, demonstrating how its concepts have broadened in recent years. The following chapters are included:

- Gene expression and differentiation in F9 mouse embryonal carcinoma.
- Regulation of genes associated with drug metabolism.
- Cloning and expression of the genes for calpains and calpastatins.
- Peptide signals for protein degradation within lysosomes.
- Haemopoietic growth factor control of normal and neoplastic cellular proliferation.
- Nuclear pre-mRNA splicing in *Saccharomyces cerevisiae*.
- Control of mRNA stability during development of *Dictyostelium discoideum*.
- Effect of insulin-like growth factors on protein metabolism: Why are some molecular variants more potent?
- Hormonal regulation of gene expression.
- Mechanisms by which prolactin and glucocorticoids regulate casein gene expression.
- Processing of the polymeric immunoglobulin receptor.
- Experimental characterization of the autophagic-lysosomal pathway in isolated rat hepatocytes.
- The molecular chaperone concept.
- Protein folding and intracellular transport: studies on influenza virus haemagglutinin.
- Role of protein disulphide-isomerase in the expression of native proteins.
- Intermediate filament-ubiquitin diseases: implications for cell sanitization.

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

Gene Transfer and Expression. A Laboratory Manual. By MICHAEL KRIEGLER. Published 1990 by Stockton Press, New York. No. of pages: 242. ISBN: 0-333-53543-X. Price at Nov. 1990: \$39.95.

This manual presents the most advanced techniques in molecular biology and is composed of three main parts:

Gene transfer/background information:

- Eukaryotic control elements;
- Gene transfer vectors;
- Protein synthesis, processing and glycosylation.

Gene transfer/methods:

- Cells and cell lines;
- DNA transfer;
- Selection and amplification;
- Expression cloning;
- Subtractive hybridization;
- Retrovirus-mediated gene transfer;
- PCR-based expression.

Assays for gene transfer and expression.

The first part reflects current understanding of the variety and function of eukaryotic (mammalian) *cis*-acting regulatory elements, the variety of gene transfer vectors currently available, as well as what is currently understood about protein synthesis, processing and glycosylation. The second part describes techniques to introduce the gene(s) of interest into cells in culture and, finally, the third part indicates how to accomplish assay for transfer and expression. This book would be very useful for all people working in the field of genes and genomes.