Cohen, P., Foulkers, J.G. (ed.): **The Hormonal Control of Gene Transcription.** - Elsevier, Amsterdam - New York - Oxford 1991. 492 pp. US $ 223.00.

This book is the sixth volume of the Elsevier series "Molecular Aspects of Cellular Regulation", the general editor of which is P. Cohen. The study of the transcription regulation in eukaryotic systems is most advanced in mammalian tissues. The main advantage of the mammalian system against plant one in this regard is the existence of hormones with specific sites of synthesis and specific sites of action, which can serve as model systems of extracellular signals. The basic regulatory module of the promotor DNA region is the oligonucleotide sequence termed response element which switches the transcription on and off in response to extracellular signals, like polypeptide hormones or proteins which are the receptors of either the hormones or second messengers. The book describes the principles which are equal in the mammalian and plant systems. Even more than that, some regulatory proteins in plants and mammals are highly homologous and they are probably ubiquitous. Most of the information obtained in the mammalian systems is also applicable in the plant systems. This book is divided into six main sections and each of them consists of the chapters written by different authors. The first section provides an overview to the process of gene transription, the regulation of RNA polymerase II and cellular signal transcription. The second section describes the mechanism of the action of steroid and thyroid hormones and retinoic acid. The third section describes the control of the gene expression by the second messenger system. The fourth one provides the regulation of the transcription by polypeptide hormones. The regulation by environmental stress is discussed in the following section and the sixth section provides the review of transcriptional control of embryogenesis. The whole book has a very well equilibrated composition with regard to the ratio of the review chapters and the description of the experimental results of the authors. The plant molecular biology cannot be studied separately, without the background of the mammalian molecular biology. This holds especially for the study of the transcription control, where the results in plants are often based on those in the mammalian systems. This book provides a good background for it.

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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Volume 50. Pharmaceutical Drugs. - International Agency for Research on Cancer, Lyon 1990. 415 pp. Sw. Fr. 65.00.

The term "carcinogenic" is commonly used to denote an agent or mixture that is capable of increasing the incidence of malignant neoplasms. This IARC publication evaluates the carcinogenic risks of several groups of pharmaceutical drugs. The drugs covered include the antineoplastic and immunosuppressive agents (azacitidine, chlorozotocin, ciclosporin, prednimustine, thiotepa, trichlormethine), then the antimicrobial agents (ampicillin, chloramphenicol, nitrofural, nitrofurantoin) and other drugs (cimitidine, dantron, furosemide, hydrochlorothiazide, paracetamol). For every drug evaluated, the data on its chemical and physical properties, production, occurrence and use, and its biological data relevant to the evaluation of carcinogenic risks to humans are presented. The biological data include the results of the carcinogenicity studies in animals and the results of genotoxicity tests (gene mutations, chromosome aberrations, sister chromatid exchanges, mitotic recombinations). Two of the drugs, ciclosporin and thiotepa, are according to the IARC Working Group carcinogenic to humans.

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