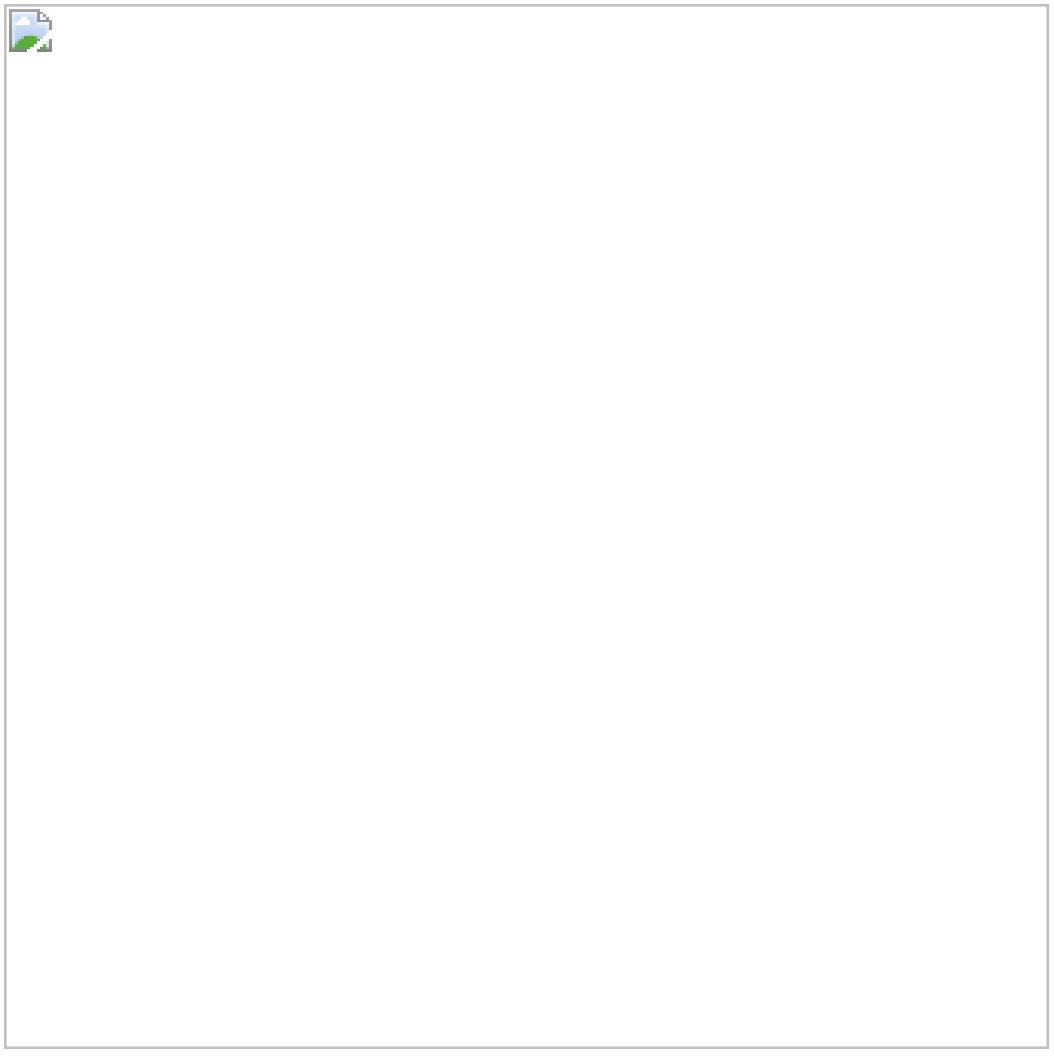

The Melanotropic Peptides. Vol. 680 of the Annals of the New York Academy of Sciences

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[Book Review]

The Melanotropic Peptides. Vol. 680 of the Annals of the New York Academy of Sciences

H VAUDRY and A N EBERLE, Editors.
New York Academy of Sciences, New York. 1993, 687 pp.

A symposium with the same title is the origin of the total of 99 papers in this volume. The 32 main papers have been classified into 10 parts.

Key Note Lecture "The Discovery of Melanotropins" (by Aaron B Lerner)

Opening Lectures
Chemistry of Melanotropins
Regulation of Biosynthesis
Regulation of Processing and Secretion
Electrophysiological Activity of Pituitary Melanotropins
Melanotropic Peptides as Pigmentary Hormones
Molecular Mechanism of Action of Melanotropins
Perspectives of Melanotropins in Therapy

The titles of the opening lectures "From Proopiomelanocortin to Cancer: Possible Role of Convertases in Neoplasia" (by Majambu Mbikay and associates), "Melanotropins as Neuropeptides" (by D de Wied) and "Melanotropins as Growth Factors" (by Fleur L Strand and associates), and of several other lectures such as "α-Melanocyte-stimulating Hormone Peptides in Host Responses: From Basic Evidence to Human Research" (by Anna Catania and James M Lipton) and "The Potential Melanotropins in the Treatment of Nervous System Diseases" (by Willem H Gispen) suggest that "melanotropic peptides" discussed in this volume are not merely pigmentary hormones but peptides with versatile actions, having wider biological implications than imagined previously.

The major proportion of the volume encompasses topics from the rapidly developing fields of molecular biological research on processing and secretion such as "Mammalian Paired Basic Amino Acid Convertases of Prohormones and Proproteins" (by Nabill G Seidah and associates), "Peptidylglycine α-Amidating Monooxygenase and Other Processing Enzymes in the Neurointermediate Pituitary" (by Betty A Eipper and associates) and "Multihormonal Regulation of Pituitary Melanotropins" (by Marie C Tonon and associates), melanotropic peptide receptors such as "Receptors for Melanocyte-Stimulating Hormone on Melanoma Cells" (by Alex N Eberle and associates) and "Cloning and Functional Characterization of a Family of Receptors for the Melanotropic Peptides" (by Roger D Cone), and melanophore-concentrating hormone such as "Chemistry of Melanin-Concentrating Hormone" (by Hiroshi Kawauchi and associates) and "Structure and Regulation of the Melanophore-Concentrating Hormone Gene" (by Jean-Louis Nahon and associates).

The final part consists of 67 short papers of varying quality covering diverse topics. However, some of the papers present attractive ideas and interesting experimental data.

Overall, this volume will provide valuable information about current trends in melanotropic peptide research for endocrinologists, dermatologists, immunologists and oncologists.

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