Book Review

The *alpha*-2 Adrenergic Receptors. Edited by Lee E. Limbird. Huanana Press, Clifton, New Jersey, 1988, ISBN-O-89603-135-7, 366 pp.

This book on the pharmacologically and physiologically interesting alpha-2 receptors represents a useful continuation of the series *The Receptors* (series editor, David B. Bylund), with previous monographs on opiate receptors, alpha-1-adrenergic receptors, and GABA receptors. The editor, Dr. Limbird, has directly contributed original results to the alpha-2 receptor field, and she has recruited a panel of well-known scientists to cover the biochemistry (ligand binding, receptor isolation, receptor structure), coupling to second messengers, structure–activity relationships, physiological and pharmacological functions, and receptor regulation. Specifically, the chapters by J. W. Regan on receptor identification and by R. R. Ruffulo, Jr., *et al.* on the structure–activity relationship provide a survey of the many agonist and antagonist ligands used to classify the alpha-2 adrenergic receptors. Anatomical and pharmacological evidence, available at the time of the book's publication, already supported the existence of alpha-2 receptor subtypes. However, it is only the recent cloning of two distinct alpha-2 receptor genes and additional pharmacological evidence which allowed Regan *et al.* to propose nomenclature for three alpha-2 receptor types (A, B, C) (*Proc. Natl. Acad. Sci. USA* 85:6301–6305, 1988). The insights gleaned from the cloning of these receptors will dramatically impact future alpha-2-receptor research, and it is regrettable that this information is not yet available in the book edited by Limbird. In hindsight it might be preferable to await the cloning of a receptor type and its immediate scientific spin-off before deciding on a particular receptor for in-depth review. Nevertheless, the current volume summarizes the extensive previous work on the alpha-2 receptor and its function (chapter by R. R. Ruffolo *et al.*) and regulation (chapter by P. A. Insel and H. J. Motulsky), and it should prove valuable as an information source for future studies that are aimed at linking receptor subtypes with specific adrenergic effects in their target issues.

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