

- (14) G. Bucolo and H. David, *Clin. Chem.*, **19**, 476 (1973).
 (15) N. Bucher, P. Overath, and F. Lynen, *Biochim. Biophys. Acta*, **40**, 491 (1960).
 (16) K. K. Carroll, *Can. J. Biochem.*, **42**, 79 (1964).
 (17) M. C. Craig, R. E. Dugan, R. A. Muesing, L. K. Slakey, and

- J. W. Porter, *Arch. Biochem. Biophys.*, **151**, 128 (1972).
 (18) V. P. Dole and H. Meinertz, *J. Biol. Chem.*, **235**, 2595 (1960).
 (19) C. D. Goodwin and S. Margolis, *J. Biol. Chem.*, **248**, 7610 (1973).
 (20) N. Bucher and K. McGarrahan, *J. Biol. Chem.*, **222**, 1 (1956).

Additions and Corrections

1977, Volume 20

C. Robin Ganellin: Relative Concentrations of Zwitterionic and Uncharged Species in Catecholamines and the Effect of N-Substituents.

Page 580. Corrected values for Table I are given (only those columns where errors occurred are shown).

pH 7.4		pH 8.4			
Z ⁺	Z ⁻	Z ⁺	Z [±]	Z ⁰	Z ⁻
95.5	0.02	67.3	20.3	11.2	1.2
96.1	0.008	70.6	23.4	5.4	0.6
96.6	0.005	73.9	21.1	4.5	0.4
96.4	0.006	72.6	22.2	4.7	0.4
96.3	0.004	72.2	24.1	3.4	0.3

Walter J. Gensler,* C. D. Murthy, and Marion H. Trammell: Nonenzymizable Podophyllotoxin Derivatives.

Page 635. For contributing authors, C. D. Murthy should be C. A. Murthy.

James L. Kelley,* Carl A. Miller, and Helen L. White: Inhibition of Histidine Decarboxylase. Derivatives of Histidine.

Page 509. In column 1 the equation should read

$$\% I = \left[1 - \frac{\text{CPM (+ inhibitor)}}{\text{CPM (- inhibitor)}} \right] \times 100$$

George E. Wright* and Neal C. Brown: Inhibitors of *Bacillus subtilis* DNA Polymerase III. Structure-Activity Relationships of 6-(Phenylhydrazino)uracils.

Page 1182. In Table I the following footnote should be added to compounds 1, 10, 25-28, and 32: these azo compounds are completely reduced to hydrazinouracils under assay conditions (see Experimental Section). Also, compound 27 should have substituents 3'-Br-4'-OH.

Book Reviews

Antihypertensive Drugs with a Central Action. Progress in Pharmacology. Volume 1. No. 1. By P. A. vanZwieten. Gustav Fischer Verlag, Stuttgart. 1975. 17 × 24 cm. 63 pp. \$16.40.

This small volume presents a concise overview of the pharmacology of centrally acting antihypertensive agents.

After a brief outline of the physiology of regulation of arterial blood pressure and the etiology of hypertension, the mode of action of each of the commonly recognized classes of antihypertensive agents is discussed.

The experimental procedures used to study the central actions of antihypertensive agents are reviewed and their physiological and pharmacological basis is explained in the second chapter.

The chapter headed "Antihypertensive agents with a central action; structure-activity relationship" does not undertake an in-depth review of the medicinal chemical literature; only six structures related to clonidine are mentioned. Other centrally acting agents discussed are methyl-Dopa, a heterogeneous group including reserpine, cocaine, amphetamine, tricyclic antidepressants, and MAO inhibitors that act indirectly through their various effects on central norepinephrine levels, and the more recently discovered benzodioxanyl-2-hydroxyethylpiperidine derivatives related to pimoizide.

The chapter on mechanism of action is very well written and provides an extensively documented "guided tour" through the pharmacological literature describing the multiple factors that have been implicated in explaining the actions, both central and peripheral, of clonidine and methyl-Dopa.

Subsequent chapters discuss drugs that influence brain norepinephrine, the comparison between central and peripheral α -adrenergic receptors, evidence pro and con for the central antihypertensive action(s) of β -adrenergic blocking agents, and

the clinical utilization of centrally acting antihypertensive drugs.

This book should be helpful to all medicinal chemists interested in antihypertensive research. It presents a concise overview that will be useful to the nonexpert. Chemists more familiar with the field will find this volume valuable for the perspective it gives to the complex interactions of this heterogeneous group of antihypertensive agents with the various physiological mechanisms that regulate blood pressure.

The bibliography is extensive. It is to be hoped that this valuable work will be kept up to date with timely revisions or supplements.

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Prolactin 1976. By D. F. Horrobin. Eden Press, Montreal. 1976. 208 pp. 15.5 × 21.5 cm. \$20.00.

The present volume is the fourth book on human and mammalian prolactin that the author has written in the past 4 years. The author's first book, "Prolactin Physiology and Clinical Significance", published in 1973, is a review of the research on prolactin up until the end of 1972. Each succeeding year the author has written a review of the new material which has appeared each year since the first book. "Prolactin 1976" is intended to review all of the new material published in 1975. The "Index Medicus" was used as a primary source of the papers reviewed in this book.

The review covers new developments in several aspects of prolactin physiology including isolation, assays, control of secretion, effects of drugs, receptors, effects on reproduction and