Paper, printing, and lack of typographical errors are particularly pleasing.

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The Psychopharmacology of the Normal Human. Edited by WAYNE O. EVANS and NATHAN S. KLINE with 18 contributors. Chas. C Thomas, Publisher, Springfield, Ill. 1969. xi + 252 pp.  $16.5 \times 23.5$  cm. \$11.50.

Ordinarily, preliminary clinical trials of new drugs are carried ont in a few volunteers to study gross toxic manifestations in the human species, and the drugs are then tested immediately in the pathology for which they are designated. At best, psychopharmacological drugs cannot be assigned clear-cut areas of clinical use because such manifestations as anxiety, depression, hyperagitation, etc., may be based on diverse endogenous aberrations which frequently overlap. Even the most "normal" individual has periods of excitement, depression, or anxiety, but needs no pharmacological aids to return to a normal state. There is, however, a relatively new phenomenon that requires more study of such drugs in the normal human: this is the mass abuse of psychopharmacological drugs by millions of people who take such drugs repeatedly and over prolonged periods of time. Add to these the additional millions who use ethanol and/or nicotine habitually, and the need for more information about all these agents in the normal human becomes obvious. Such scientific study should do much to dispel hearsay rumors about the innocuous nature or the exaggerated harmfulness of psychopharmacological agents.

The first question in such a study is to delineate what is meant by "normal." This requires definitions based on many physiological and psychological factors. Normalcy obviously is not being average. To prove this, the effects of drugs on cognitive skills and feelings, on affective and cognitive changes by content analysis of speech, on jndgement distortion, driving skills, quantitative EEG patterns, and many other parameters are examined carefully.

The readers who will benefit most from this book are physiologists and psychiatrists; for the experimental psychopharmacologist this collection of articles offers many procedures which he will be able to apply in preclinical and clinical trials.

UNIVERSITY OF VIRGINIA CHARLOTTESVILLE, VIRGINIA Alfred Burger

## Additions and Corrections

## 1967, Volume 10

**D.** Rosi, G. Peruzzotti, E. W. Dennis, D. A. Berberian, H. Freele, B. F. Tullar, and S. Archer: Hycanthone, a New Active Metabolite of Lucanthone.

Page 869. In Chart I, XVIII should read XVII. Page 870. In column 1, line 31, III should read VIII.

## 1968, Volume 11

**B. R. Baker and Jeffrey A. Hurlbut:** Irreversible Enzyme Inhibitors. CXIII. Proteolytic Enzymes. III. Active-Site-Directed Irreversible Inhibitors of  $\alpha$ -Chymotrypsin Derived from Phenoxyacetamides with an N-Fluorosulfonylphenyl Substituent.

Pages 236 and 237. The legend for Figure 4 should be under the drawing at the top of column 1 on page 237, and the legend for Figure 5 should be under the drawing at the top of column 2 on page 236.

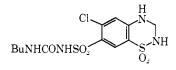
Raj Nandan Prasad, Leslie R. Hawkins, and Karin Tietje: Potential Antihypertensive Agents. II. Unsymmetrically 1,4-Disubstituted Piperazines. I.

Page 1145. In eq 2, lines 7 and 8, compounds 7 and 8 should read R = H.

Page 1147. In Table IV, the formula corresponding to compound **83** should read  $C_7H_{13}N_5O \cdot HCl$ ; the formula corresponding to compound **84** should read  $C_{13}H_{17}N_5O_2 \cdot HCl$ .

Bernard Loev and Kenneth M. Snader: Sulfonyhureas Having Diuretic Activity.

Page 1250. Structure II should be



## 1969, Volume 12

Jefferson R. DoAmaral, Erwin J. Blanz, Jr., and Frederic A. French: Antimalarial Activity of Guanylhydrazone Salts of

Aromatic Ketones. I. Primary Search for Active Substituent Patterns.

Page 22. In Table II, under  $X_1$ , compound **29** should read:  $4\text{-}CF_3$  (instead of 2-).

**A. Cammarata:** An Analysis of Biological Linear Free-Energy Relationships.

Page 314. Sincere apologies are offered by Dr. Cammarata to the Medical College of Virginia, Virginia Commonwealth University, School of Pharmacy, Richmond, Va. This institution should be recognized as having provided support during the initial phases and drafting of the report of this work.

**P. N. Green, M. Shapero, and C. Wilson:** The Synthesis and Pharmacological Properties of a Series of 2-Substituted Aminomethyl-1,4-benzodioxanes.

Page 327. At the head of Table I, insert the structure

James A. Ostrenga: Correlation of Biological Activity with Chemical Structure. Use of Molar Attraction Constants.

Pages 350-352. Equations 2, 3, 6, and 9 should be corrected to read as follows.

$$\Delta H_i \simeq (V_1 X_1 + V_2 X_2) \boldsymbol{\phi}_1 \boldsymbol{\phi}_2 (\delta_1 - \delta_2)^2 \qquad (2)$$

$$\delta = (EV)^{1/2} / V = F / V$$
 (3)

$$\Delta H_i = (n_1 V_1 + n_2 V_2) \boldsymbol{\phi}_1 \boldsymbol{\phi}_2 (\boldsymbol{\delta}_1 - \boldsymbol{\delta}_2)^2 \tag{6}$$

$$E_{t}v_{t} = (n_{1}E_{1} + n_{2}E_{2})(n_{1}V_{1} + n_{2}V_{2}) - n_{1}V_{1}n_{2}V_{2}\left[\frac{E_{1}}{V_{1}} - \frac{2(E_{1}V_{1}E_{2}V_{2})^{1/2}}{V_{1}V_{2}} + \frac{E_{2}}{V_{2}}\right] = n_{1}^{2}E_{1}V_{1} + 2n_{1}n_{2}(E_{1}V_{1}E_{2}V_{2})^{1/2} + n_{2}^{2}E_{2}V_{2} = [n_{1}(E_{1}V_{1})^{1/2} + n_{2}(E_{2}V_{2})^{1/2}]^{2} (E_{t}v_{t})^{1/2} = n_{1}(E_{1}V_{1})^{1/2} + n_{2}(E_{2}V_{2})^{1/2}]^{2} or F_{t} = n_{1}F_{1} + n_{2}F_{2}$$
(9)

Also, in Table II, the comments for the second line of data set 1V(iv) should read: Complete set: F > 4300.

**K. S. Rogers and A. Cammarata**: Superdelocalizability and Charge Density. A Correlation with Partition Coefficients.

Page 692. Temple University, School of Pharmacy, Philadelphia, Pa. should be recognized as a contributing institution for this work. Dr. Cammarata serves on the staff of this institution, and undertook jointly this work with Dr. K. S. Rogers of the Medical College of Virginia, Virginia Commonwealth University, Department of Biochemistry, Richmond,  $\mathrm{Va}_{*}$ 

Edward F. Elslager and Donald F. Worth: Antiamebic, Antinualarial, and Anthelminuic Effects of Distal Hydrazine Analogs of Azacrine, Quinacrine, and 7-{[3-(Octylamino)propyl]amino{benz[e]acridine.

Page 955. Paragraph 1, line 8 beginning with dihydromintic should read: dihydrochloride  $(III)_{i}^{13}$  and azacrine  $(IV)^{15}$  have been demonstrated to have appreciable antiprotozoal and anthelmintic activity in man.