## Edited for the British Pharmacological Society by

A.W. Cuthbert (Chairman) H.M. Adam (Secretary)

Margaret Day (Press Editor)

J.D. Stephenson (Assistant Press Editor)

A.M. Barrett J.S. Kellv W.G. Bisset G.M. Lees G.P. Lewis T.B. Bolton I.H.M. Main P.B. Bradley D.A. Brown E.K. Matthews J.F. Mitchell B.A. Callingham P.A. Nasmyth T.J. Crow M.W. Parkes F. de Matteis M. Sandler C.T. Dollery V. Eisen A.P. Silverman M.A. Simmonds E.W. Gill A.F. Green F.M. Sullivan D.F. Hawkins A. Ungar Margarethe Holzbauer R.A. Webster D.B. Hope

Papers will be considered for publication on all aspects of drug action, including chemotherapy.

Manuscripts (two copies) should be sent to Dr H.M. Adam, Department of Pharmacology, University of Edinburgh Medical School, 1 George Square, Edinburgh EH8 9JZ. Authors should consult the instructions inside the back cover.

The British Journal of Pharmacology is published monthly by Macmillan Journals Ltd, 4 Little Essex Street, London WC2R 3LF. Telephone: 01-836 6633.

Annual subscription £30.00 (£35.50 USA and Canada). (Payment may be made in any currency at the current exchange rate. Orders must be accompanied by remittance. Prices applicable only to orders received before 31st December 1975.)

Cheques should be made payable to Macmillan Journals Limited: Subscription Department, Brunel Road, Basingstoke, Hampshire RG21 2XS, England.

Enquiries concerning advertising space and rates should be addressed to: Advertisement Department, Macmillan Journals Limited, 4 Little Essex Street, London WC2R 3LF. Telephone: 01-836 6633.

Copyright © 1975 by the *British Journal of Pharmacology*. All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in this journal in all countries of the world.

## Drug Disposition and Pharmacokinetics

## with a consideration of pharmacological and clinical relationships

Stephen H. Curry B.Pharm. Ph.D. M.P.S. 1975. 288 pages, 67 illustrations. Paper, £4.50

This book considers an aspect of pharmacology whose importance has not hitherto been fully realised: the processes involved in the disposition and fate of drugs in the body. It will be useful to both students and postgraduates concerned with the rational investigation and application of drugs.

### Therapeutics in Neurology

Donald B. Calne B.Sc. D.M. M.R.C.P. 1975. 304 pages, 43 illustrations. £8.00

This new book emphasises the practical aspects of therapeutics and attempts to bridge the gap between the clinician and pharmacologist.

### Sequential Medical Trials

P. Armitage M.A. Ph.D. Second Edition, April 1975. 224 pages, 23 illustrations. About £5.00

The basic training for the pharmacist provides the theoretical background on which to build the practical and knowledgeable expertise necessary to deal with many of the problems that arise in hospitals related to drug usage. This book relates and develops this theoretical knowledge in terms applicable to the actual practice of hospital pharmacy.

### **Drug-induced Blood Disorders**

G. C. de Gruchy M.D. F.R.A.C.P. F.R.C.P. M.C.P.A. May 1975. 208 pages, 10 illustrations. About £6.00

This book provides an account of iatrogenic diseases which may occur to the blood and of the ill-effects of drug administration.

## **Blackwell Scientific Publications**

Oxford London Edinburgh Melbourne

# British Journal of Pharmacology

## **INDEX**

(1966 - 1973)

The eight year cumulative index (1966–1973) to the British Journal of Pharmacology is now available.

Price £10.45 (including postage)

Available from:

DEPARTMENT AS11.

MACMILLAN JOURNALS LTD.,

BRUNEL ROAD,

BASINGSTOKE, RG21 2XS,

HAMPSHIRE, ENGLAND.

Orders must be accompanied by remittance. Cheques should be made payable to Macmillan Journals Ltd. Payment may be made in any currency at the current exchange rate.

# DRUGS AND TRANSPORT PROCESSES

#### B. A. Callingham

Twenty-three original research papers given at the Biological Council Co-ordinating Committee for Symposia on Drug Action, with an edited transcript of the resulting discussion. Emphasis is on the fundamental mechanisms involved in drug action.

#### £13.00

For further details and approval copies, please write to Anne Calcott, The Macmillan Press, Little Essex Street, London WC2R 3LF.

#### MACMILLAN

### INSTRUCTIONS TO AUTHORS

Papers will be considered for publication on all aspects of drug action, including chemotherapy. A recent issue of the Journal is a good guide to style.

Manuscripts (two copies) should be sent to Dr H.M. Adam, Department of Pharmacology, University of Edinburgh Medical School, 1 George Square, Edinburgh, EH8 9JZ, from whom copies of the full Instructions to Authors, published in *Br. J. Pharmac*, **50**, 3-23, may also be obtained. Specific points to note are:

- 1. Manuscript should be typed in double spacing on one side of paper not larger than A4 (206 x 294 mm). There should be a separate title page giving the names and addresses of the authors in alphabetical order. A short title of not more than 50 letters should also be suggested.
- 2. Statement Papers are accepted only if accompanied by a statement that they have not been and will not be published in whole or in part in any other Journal.
- 3. Summary (2 copies) This should be a short summary of results and conclusions arranged in numbered paragraphs.
- 4. Abstract (2 copies) An abstract of about 100 words suitable for inclusion in *International Abstracts of Biological Sciences* should be typed on a separate sheet, giving the author's name and address and the title of the paper.
- 5. Figures These should not be larger than A4 (206 x 294 mm) and may be in the form of original drawings, recorded tracings or high quality photographic prints made from them. Negative prints of kymograph tracings (black on white) should be provided, and both ordinates and abscissae should be calibrated. Lettering on figures should be inserted in pencil. Symbols which are to appear in figures or legends should be chosen from the following:



Photographs and photomicrographs should be printed on glossy paper and should be larger than the size required for reproduction.

- 6. Tables These should not have more than 85 characters to a line (counting spaces between columns as 4 characters) and certainly not more than 110 characters to a line, unless absolutely unavoidable. Figure legends and tables should be typed on separate sheets of paper.
- 7. References These should be collected in alphabetical order at the end of the paper. They should include the authors' names, year of publication (in brackets), title of article, title of publication (abbreviated in accordance with the fourth edition of the World List of Scientific Periodicals), volume number and first and last page numbers. References to books should in addition, include the names of editors, the edition number, where appropriate, and the town of origin and name of publisher.

Two page proofs will be supplied, one of which may be retained by the authors. The other should be corrected immediately and returned to the Press Editor. Corrections should be kept to a minimum.

Twenty-five reprints will be supplied to the authors free of charge. Additional reprints can be purchased. A reprint order form, which should be returned promptly, will be sent out with the proofs. No reprints of abstracts are supplied.

Short Communications Exactly as for full papers, except that the Summary should only be a single paragraph. There must not be more than 1,200 words in the communication and only one figure or one table.

## **British Journal of Pharmacology**

#### VOLUME 53 NUMBER 3 MARCH 1975

page

#### Systematic Pharmacology

317 CHAWLA, NARESH, JOHRI, M.B.L., SAXENA, P.N. & SINGHAL, K.C. Cholinergic mechanism in central thermoregulation in pigeons

#### Autopharmacology

- 323 JONES, MARGARET E.L. & SPRIGGS, T.L.B. Noradrenaline and motor transmission in the vas deferens of the mouse
- 333 MINATOYA, H. & SPILKER, B.A. Lack of cardiac or bronchodilator tachyphylaxis to isoprenaline in the dog
- 341 BURDEN, D.T. & PARKES, M.W. An investigation of the tachycardia produced by intracerebroventricular injections of isoprenaline in mice
- 349 SLOTKIN, T.A. Effects of reserpine on the adrenal medulla of the spontaneously hypertensive rat
  - 357. RUBIN, R.P. & WARNER, W. Nicotine-induced stimulation of steroidogenesis in adrenocortical cells of the cat

#### **Drug Mechanisms**

- 363 ROBINSON, D.A., TAYLOR, J.G. & YOUNG, J.M. The irreversible binding of acetylcholine mustard to muscarinic receptors in intestinal smooth muscle of the guinea-pig
- HUGHES, J., KOSTERLITZ, H.W. & LESLIE, FRANCES M. Effect of morphine on adrenergic transmission in the mouse vas deferens. Assessment of agonist and antagonist potencies of narcotic analgesics
- 383 COX, B.M., GINSBURG, M., WILLIS, JULIA & DAVIES, J.K. The offset of morphine tolerance in rats and mice
- NESHEIM, BRITT-INGJERD. Action of  $\beta$ -adrenoceptor antagonists on the response to isoprenaline in the oestrogen dominated rabbit uterus
- 403 NESHEIM, BRITT-INGJERD, OSNES, J.-B. & ΦYE, I. Role of cyclic adenosine 3',5'-monophosphate in the isoprenaline-induced relaxation of the oestrogen dominated rabbit uterus

#### Miscellaneous

- 409 EVANS, D.P. & THOMSON, D.S. Inhibition of immediate hypersensitivity reactions in laboratory animals by a phenanthroline salt (ICI 74,917)
- 419 SHORT COMMUNICATIONS
- 431P PROCEEDINGS OF THE BRITISH PHARMACOLOGICAL SOCIETY, London, 8-10 January, 1975.