Edited for the British Pharmacological Society by

A.W. Cuthbert (Chairman)

A. Ungar (Secretary)

Margaret Day (Press Editor)

J. D. Stephenson (Assistant Press Editor)

G.W. Bisset G.P. Lewis T.B. Bolton I.H.M. Main D.A. Brown I. Marshall K. Martin Julia Buckingham B.A. Callingham D.F.J. Mason T.J. Crow E.K. Matthews F. de Matteis T.C. Muir V. Eisen P.A. Nasmyth E.W. Gill Winifred Navler A.F. Green J.R. Parratt C.D. Richards A.R. Green J. Hughes M. Sandler R. Jones A.P. Silverman J.S. Kelly M.A. Simmonds R.A. Webster B.J. Large G.M. Lees P. Withrington

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

Manuscripts (two copies) should be sent to Dr A. Ungar, 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, ISSN 0007-1188.

Annual subscription UK £57.50; USA & Canada, US \$130; Rest of world, US \$120; Airmail, US \$165 (or equivalent in any other currency). (Orders must be accompanied by remittance. Prices correct at time of publication.)

Cheques should be made payable to Macmillan Journals Limited: Subscription Department, Brunel Road, Basingstoke, Hampshire RG21 2XS, England. Where appropriate, overseas subscribers may make payments into UK Post Office Giro Account No. 519 2455. Full details must accompany the payment.

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 © 1978 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.

Second class postage paid at New York, N.Y. US Mailing Agent: Expeditors of the Printed Word, Inc., Suite 1217, 527 Madison Avenue, New York, NY 10022.

International Symposium

LONG-TERM EFFECTS OF NEUROLEPTICS

A Symposium on 'Long-term effects of Neuroleptics' will be held in Monte-Carlo, Principauté de Monaco, 18-21 March 1979.

Details from:

F. Cattabeni, G. Racagni and P. F. Spano, International Menarini Foundation, Piazza del Carmine, 4-20121 Milan, Italy.

STABLE ISOTOPES Applications in Pharmacology,

Toxicology and Clinical Research

Edited by T. A. Baillie

Proceedings of a British Pharmacological Society Symposium held in January 1977 Based on the international symposium devoted to the subject of stable isotopes, the book provides the first account of their very diverse applications in the biomedical sciences.

The emphasis throughout is on the enormous scope in modern biological and medical research for the use of compounds labelled with the stable isotope of hydrogen, carbon, oxygen and nitrogen. Much of the book deals with the use of stable isotopes as tracers in metabolic studies, and the relative merits of this approach as compared with radiotracers is discussed.

1978 U.K. price £15.00 0 333 21747 0

For further information please contact Rosemary David, The Macmillan Press, Little Essex Street, London WC2R 3LF.



British Journal of Pharmacology

British Journal of Pharmacology provides up-to-date research on all aspects of drug action essential to those involved in pharmacology. Ensure you receive this information each month by taking a subscription.

Subscription Dept, Macmillan Journals Ltd, Brunel Road, Basingstoke, Hants RG212XS, England.

I enclose payment of £57.50; USA & Canada, US \$130; Rest of world, US \$120; Airmail, US \$165 (or equivalent in any other currency).

Prices correct at time of publication. Payment may be made in any currency at the current exchange rates. Orders can only be processed if accompanied by the correct remittance. Cheques should be made payable to Macmillan Journals Ltd.

Name				•										•	•			•	•	•	•			•	•	•	
Address				•	•				•			•			•				•	•	•	•		•	•	•	•
		•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•
		•							•	•	•	•		•	•					•	•	•	•		•	•	•

Registered No: 785998 England Registered Office: 4 Little Essex St., London WC2R 3L

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 A. Ungar, 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 (206×294 mm). There should be a separate title page giving the names and addresses of the authors in alphabetical order. One first name of each author may be included. 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 an abstracting journal 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 $(206 \times 294 \text{ mm})$ 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 These may be accepted if they merit priority publication and do not require revision. They may contain up to 1,200 words of text and only one figure or table. The summary should be a single paragraph. An abstract and statement should be included.

British Journal of Pharmacology

VOLUME 64 NUMBER 2 OCTOBER 1978

SHORT COMMUNICATION

HOSOTANI, T. & MISU, Y. Further evidence for the prevention by guanethidine of noradrenaline efflux from rabbit ventricular slices induced by a low external sodium concentration

PAPERS

- 167 HUIDOBRO, F. Antidiuretic effect of morphine in the rat: tolerance and physical dependence
- 173 McKIRDY, H.C. & MUIR, T.C. An investigation of the role of ganglia in the innervation of the rat anococcygeus muscle: an electrical and mechanical study
- 185 FLETCHER, J.R. & RAMWELL, P.W. E. coli endotoxin shock in the dog; treatment with lidocaine or indomethacin
- 193 COSTAIN, D.W. & GREEN, A.R. β-Adrenoceptor antagonists inhibit the behavioural responses of rats to increased brain 5-hydroxytryptamine
- 201 DEAKIN, J.F.W. & GREEN, A.R. The effects of putative 5-hydroxytryptamine antagonists on the behaviour produced by administration of tranylcypromine and L-tryptophan or tranylcypromine and L-DOPA to rats
- 211 ENGINEER, DINAZ M., MORRIS, H.R., PIPER, PRISCILLA J. & SIROIS, P. The release of prostaglandins and thromboxanes from guineapig lung by slow reacting substance of anaphylaxis, and its inhibition
- 219 IMPICCIATORE, M. Occurrence of H₁- and H₂-histamine receptors in the guinea-pig gall bladder in situ
- 223 PLOMP, GERDA J.J. & VAN REE, JAN M. Adrenocorticotrophic hormone fragments mimic the effect of morphine in vitro
- 229 HAYASHI, SHIGEHIRO & TODA, NOBORU Age-related changes in the response of rabbit isolated aortae to vasoactive agents
- 239 FREDHOLM, BERTIL B. & HEDQVIST, PER Release of ³H-purines from [³H]-adenine labelled rabbit kidney following sympathetic nerve stimu-

- lation, and its inhibition by α -adrenoceptor blockade
- 247 GULATI, O.D. & PANCHAL, D.I. Some observations on the development of adrenergic innervation in rabbit intestine
- 253 BELL, C. & STUBBS, A. Localization of vasodilator dopamine receptors in the canine hindlimb
- 259 ARBILLA, SONIA & LANGER, S.Z. Differences between presynaptic and postsynaptic α-adrenoceptors in the isolated nictitating membrane of the cat: effects of metanephrine and tolazoline
- 265 CHERNECKI, W., DAS, P.K., DHALLA, N.S. & SHARMA, G.P. Cardiovascular effects of acebutolol following coronary artery occlusion and reperfusion in anaesthetized dog
- 273 WRAAE, O. The pharmacokinetics of lithium in the brain, cerebrospinal fluid and serum of the rat
- 281 EDVINSSON, L. & HARDEBO, J.E. Demonstration of 5-hydroxytryptamine receptors through inhibition by methergoline in cat pial arteries in vitro
- 285 BRANCH, ROBERT A., COLE, EDWARD, HORTH, CHARLES E., JACKSON, LYNNE, RAMSAY, LARRY E. & SHELTON, JOHN The influence of sodium and potassium supplements on the diuretic responses to frusemide administration in normal subjects
- 293 DREW, G.M. Pharmacological characterization of the presynaptic α-adrenoceptors regulating cholinergic activity in the guinea-pig ileum
- 301 BORN, GUSTAV V.R. & KOVACS, IREN B. Inhibition by N-acetyl neuraminic acid of platelet thrombogenesis induced by laser injury to rat and hamster venules
- 305 BENEDICT, C.R., FILLENZ, M. & STAN-FORD, CLARE Changes in plasma noradrenaline concentration as a measure of release rate
- 311 LINSCHEER, WILLEM G. & RAHEJA, KRISHAN L. Effects of somatostatin on gastric acid secretion and on lipid and carbohydrate metabolism in the rat
- 315 DUSTING, G.J., MONCADA, S. & VANE, J.R. Recirculation of prostacyclin (PGI₂) in the dog