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AIMS AND SCOPE

BIOCHEMICAL PHARMACOLOGY is an international journal which publishes original research in the form of full-length papers, short communications, rapid communications, invited commentaries and meeting reports. Contributors are asked to note that the Editors will in general accept contributions in English only.

Research with intact animals, cells, subcellular components, enzymes and model systems is acceptable if it defines the mechanism of drug action. Studies concerned with antimicrobial and antiviral agents are welcomed, as well as descriptive mathematical models including those involving computer techniques. The use of drugs to elucidate physiological and behavioural mechanisms in the living organism is also acceptable.

In general, papers which record concentrations of drugs and metabolites in body fluids will not be accepted, unless they define biochemical and biophysical mechanisms. The Editors however reserve the right to publish any papers of major interest in the field. The journal publishes the following types of communication:

(1) **Full-length Papers.** These consist of a body of work presenting original findings relating to the question proposed by the investigators undertaking the research.

(2) **Short Communications.** These consist of an original body of work of narrower scope but of the same quality as the above. By definition, these papers are shorter than full-length manuscripts. The last paragraph of the communication should summarize the findings of the research.

(3) **Rapid Communications.** These promote rapid dissemination of timely and significant observations within the scope of the journal. Manuscripts must be submitted in English and will be judged as appropriate for publication as rapid communications on the basis of their immediate importance. They should be written to emphasize clearly the novel aspects of the research. These criteria will be applied strictly. In order to speed up the publication of rapid communications, authors are encouraged to use the special laysheets available from any of the Regional Editors.

(4) **Commentaries** are short commissioned review articles (3000–5000 words in length). They are designed to be editorial statements on selected topics, and should *not* be exhaustive reviews. Primarily, Commentaries are intended to stimulate thought. They can be controversial, and can either focus on areas subject to much activity, or draw attention to relatively neglected fields in which there are both the opportunity and the need for research in biochemical pharmacology. Particularly welcome will be Commentaries in which authors present their personal view on the state of the subject on which they are reporting, and give their view as to where in the near or distant future the subject may be moving. Authors are especially encouraged to take issue with popular dogmas. The Commentary series is edited by Professor C. Norman Gillis.

In order to increase the exchange of information and ideas, the Journal will also publish Comments on a Commentary, in which selected, highly qualified authorities are invited to offer their own observations on Commentary articles, which will be published in the same issue of the Journal, and thus provide some alternative thoughts on important areas of research. For further information see *Biochem Pharmacol* 31, 2568 (1982).

While the final decision on selection of authors for either Commentaries or Comments on a Commentary will be made at the discretion of the editor, suggestions from readers will be welcome. These should be addressed to: Professor C. N. Gillis, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, Connecticut 06510.

(5) **Meeting Reports.** The journal is prepared to publish as preliminary communications short, factual two-page summaries of selected papers from small meetings or conferences. The meetings should be those where attendance is by invitation and all papers to be published will be refereed. Organizers who wish to have their meetings published in this way should contact the appropriate Regional Editor.

Policy concerning availability of materials

It is understood that by publishing a paper in *Biochemical Pharmacology* the authors agree to make freely available to colleagues in academic research any of the cells, nucleic acids, antibodies, etc. that were used in the research reported and that are not available from commercial suppliers.

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- S. KRÄHENBÜHL, J. STUCKI 1583 Mitochondrial function in carbon tetrachloride-induced
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- TOM SEDDON, IAN MICHELLE 1657 Comparative drug metabolism of diazepam in hepatocytes
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- R. TIMOTHY MULCAHY, JERRY J. GIPP, 1667 Cytotoxicity and glutathione depletion by 1-methyl-2-
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- JAMES N. MACLEOD 1673 Growth hormone regulation of hepatic drug-metabolizing
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- LIVIU CLEJAN and ARTHUR I. CEDERBAUM 1779 Synergistic interactions between NADPH-cytochrome P-450 reductase, paraquat, and iron in the generation of active oxygen radicals
- NGUYEN T. BUU 1787 Vesicular accumulation of dopamine following L-DOPA administration
- CEZARY WATAZA, AGATA BUDZIEJSKA and ZOFIA JÓŹWIĄK 1793 Alloxan-induced alterations in composition and dynamics of red blood cell membranes. I. Effect of alloxan on intact red blood cells and isolated erythrocyte membranes
- ANGELO BENEDETTI, PETER GRAF, ROSELLA FULCERI, ANDREA ROMANI and HELMUT SIES 1799 Ca^{2+} mobilization by vasopressin and glucagon in perfused livers. Effect of prior intoxication with bromotrichloromethane
- SIGURD WERNER 1807 Photoaffinity labelling of mitochondrial NADH: ubiquinone reductase with pethidine analogues
- MARCO FERRALI, LUCIA CICCOLI and MARIO COMPORTI 1819 Allyl alcohol-induced hemolysis and its relation to iron release and lipid peroxidation
- CATHERINE L. CIOFFI and ESAM E. EL-FAKAHANY 1827 Differential sensitivity of phosphoinositide and cyclic GMP responses to short-term regulation by a muscarinic agonist in mouse neuroblastoma cells. Correlation with down-regulation of cell surface receptors
- MICHAEL J. LIND, ALAN T. MCGOWN, JOHN A. HADFIELD, NICHOLAS THATCHER, DEREK CROWTHER and BRIAN W. FOX 1835 The effect of ifosfamide and its metabolites on intracellular glutathione levels *in vitro* and *in vivo*
- ISAO MATSUOKA, NORIMICHI NAKAHATA and HIRONORI NAKANISHI 1841 Inhibitory effect of 8-bromo cyclic GMP on an extracellular Ca^{2+} -dependent arachidonic acid liberation in collagen-stimulated rabbit platelets
- STEWART A. METZ 1849 Blockade by lipoxygenase inhibitors of Ca^{2+} -dependent insulin secretion from permeabilized rat islets. A molecular mechanism distinct from that of α_2 -adrenergic agonists

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- M. LAGARDE, M. M. BOUTILLON, M. GUICHARDANT, J. P. LELLOUCHE, J. P. BEAUCOURT, A. VANHOVE and R. GRÉE 1863 Further studies on the anti-thromboxane A_2 activity of monohydroxylated fatty acids
- PHILIPPE MAVIER, ANNE-MARIE PREAUX, JEAN ROSENBAUM, ELIE SERGE ZAFRANI and DANIEL DHUMEAUX 1865 Toxicity of polymorphonuclear neutrophils against hepatocytes: protective effect of heparin
- V. LONGO, G. M. PACIFICI, G. PANATTONI, F. URSINO and P. G. GERVASI 1867 Metabolism of diethylnitrosamine by microsomes of human respiratory nasal mucosa and liver
- MARGOT BENGTSOON and DONALD R. MATTISON 1869 Gonadotropin-dependent metabolism of 7,12-dimethylbenz(a)anthracene in the ovary of rhesus monkey
- CATHERINE MYTILINEOU and PETER DANIAS 1872 6-Hydroxydopamine toxicity to dopamine neurons in culture: potentiation by the addition of superoxide dismutase and N-acetylcysteine

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- 1877 Endothelin, a novel endothelium-derived peptide. Pharmacological activities, regulation and possible roles in cardiovascular control

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YOKO NAKAJIMA, AKIO HOSHI,
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- 1885 Enhancing effect of bromovinyldeoxyuridine on antitumor activity of 5'-deoxy-5-fluorouridine against adenocarcinoma 755 in mice. Correlation with pharmacokinetics of plasma 5-fluorouracil levels

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- 1897 The effect of hypoxia and of energy depletion on 1,4-dihydropyridine binding sites in rat cardiac membrane fragments

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ERIC J. NESTLER and JOHN F. TALLMAN

- 1909 Sodium and potassium regulation of guanine nucleotide-stimulated adenylate cyclase in brain

MARGIE L. CLAPPER
and KENNETH D. TEW

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- 1923 Investigation of the role of serum lipoprotein-associated peroxides in Adriamycin
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LARISA MUSIC,
KARIN MÜLLER-DECKER,
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- 1941 Mechanistic aspects of the synergistic antiviral effect of xanthates and monocarbonic acids

JOSÉE SRAER, MARCELLE BENS
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- 1947 Dual effects of cyclosporine A on arachidonate metabolism by peritoneal macrophages. Phospholipase activation and partial thromboxane-synthase blockage

RIA BERNAERTS, CLAUDE DESGRANGES
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-)-5-(2-Bromovinyl)uridine requires phosphorylation by the herpes simplex virus (type 1)-induced thymidine kinase to express its antiviral activity

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MICHAEL KNEHR, KARIN POST,
FRANZ OESCH,
ANNE-FRANÇOISE BOITEUX-ANTOINE,
SYLVIE FOURNEL-GIGLEUX,
JACQUES MAGDALOU
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- 1963 Effect of hypolipidemic compounds on lauric acid hydroxylation and phase II enzymes

ALICIA S. MISTCHENKO,
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- γ
- on adenovirus replication and late transcription

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- 1979 Mechanism by which warfarin binds to human serum albumin. Stopped-flow kinetic experiments with two large fragments of albumin

MAKOTO TANAKA, MAKOTO MURAMATSU and HIRONAKA AIHARA	1985	Alteration of cyclic GMP metabolism by CD-349, a novel calcium antagonist, and by sodium nitroprusside in bovine intrapulmonary artery and vein
VICRAM GUPTA, SHIVENDRA V. SINGH, HASSAN AHMAD, RHEEM D. MEDH and YOGESH C. AWASTHI	1993	Glutathione and glutathione <i>S</i> -transferases in a human plasma cell line resistant to melphalan
ROGER A. LEWIS and LAURA LINK	2001	Phosphorylation of arabinosyl guanine by a mitochondrial enzyme of bovine liver
KOHI HANASAKI, TOHRU NAGASAKI and HITOSHI ARITA	2007	Characterization of platelet thromboxane A ₂ /prostaglandin H ₂ receptor by a novel thromboxane receptor antagonist, [³ H]S-145
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LINUS L. SHEN	2042	A reply: "Do quinolones bind to DNA?"—Yes
H. PATRICK FLETCHER, SUSANNE NOBLE and GEORGE R. SPRATTO	2045	Effect of the acetylcholinesterase inhibitor, soman, on plasma levels of β -endorphin and adrenocorticotrophic hormone (ACTH)
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M. ZUCCHETTI, C. V. CATAPANO, S. FILIPPESCHI, E. ERBA and M. D'INCALCI	2069	Temozolomide induced differentiation of K562 leukemia cells is not mediated by gene hypomethylation
ERIC MULTON, JEAN-FRANÇOIS RIOU, DOMINIQUE LEFEVRE, JEAN-CHARLES AHOMADEGBE and GUY RIOU	2077	Topoisomerase II-mediated DNA cleavage activity induced by ellipticines on the human tumor cell line N417
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MAARTEN E. A. REITH, ILDIKO ZIMANYI and CATHY A. O'REILLY	2091	Role of ions and membrane potential in uptake of serotonin into plasma membrane vesicles from mouse brain

- JUAN PRUÑONOSA, MARIA LUISA SAGRISTÁ and JORGE BOZAL 2099 Inactivation of low- K_m rat liver mitochondrial aldehyde dehydrogenase by cyanamide *in vitro*. A catalase-mediated reaction
- D. LISON, B. KNOOPS, C. COLLETTE and R. LAUWERYS 2107 Comparison of the effects of auranofin and retinoic acid on plasminogen activator activity of peritoneal macrophages and Lewis lung carcinoma cells
- C. R. OLIVEIRA, M. C. P. LIMA, C. A. M. CARVALHO, J. E. LEYSEN and A. P. CARVALHO 2113 Partition coefficients of dopamine antagonists in brain membranes and liposomes
- C. M. CARVALHO, C. R. OLIVEIRA, M. P. LIMA, J. E. LEYSEN and A. P. CARVALHO 2121 Partition of Ca^{2+} antagonists in brain plasma membranes
- MICHAEL HAURAND and LEOPOLD FLOHÉ 2129 Leukotriene formation by human polymorphonuclear leukocytes from endogenous arachidonate. Physiological triggers and modulation by prostanoids
- CHRISTINE A. GARHART, M. SAWKAT ANWER and LOUIS SHUSTER 2139 Cocaine-induced changes in perfusion pressure and bile flow in perfused rat livers
- YUKIO OZAKI, YUKI MATSUMOTO, YUTAKA YATOMI, MASAAKI HIGASHIHARA, TOSHITSUGU KARIYA and KUME SHOJI 2147 Effects of five anion channel blockers on thrombin- and ionomycin-activated platelet functions
- A. ERMAN, B. CHEN-GAL and J. ROSENFELD 2153 The role of eicosanoids in cyclosporine nephrotoxicity in the rat
- RADHEY S. GUPTA, ARVIND CHOPRA and ALAN B. TROTT 2159 Development of a specific assay for cardiac glycoside-like compounds based on cross-resistance of human cell mutants
- JANE E. MACKIE and GERALD S. MARKS 2169 Synergistic induction of δ -aminolevulinic acid synthase activity by *N*-ethylprotoporphyrin IX and 3,5-diethoxycarbonyl-1,4-dihydro-2,6-dimethyl-4-isobutylpyridine
- ROB LEURS, AALT BAST and HENDRIK TIMMERMAN 2175 High affinity, saturable [^3H]mepyramine binding sites on rat liver plasma membrane do not represent histamine H_1 -receptors. A warning
- RAMENDRA N. PANDEY, ARTHUR P. ARMSTRONG and PAUL F. HOLLENBERG 2181 Oxidative N-demethylation of *N,N*-dimethylaniline by purified isozymes of cytochrome P-450
- MAI-ANH PHAM, JACQUES MAGDALOU, MURIEL TOTIS, SYLVIE FOURNEL-GIGLEUX, GÉRARD SIEST and BRUCE D. HAMMOCK 2187 Characterization of distinct forms of cytochromes P-450, epoxide metabolizing enzymes and UDP-glucuronosyl-transferases in rat skin
- ANDERS HELANDER and BENNY JOHANSSON 2195 Inhibition of human erythrocyte and leukocyte aldehyde dehydrogenase activities by diethylthiocarbamic acid methyl ester. An *in vivo* metabolite of disulfiram
- MARY ANN McELIGOTT, LEE-YUH CHAUNG and ALBERT BARRETO, JR. 2199 Effects of a beta-adrenergic agonist on protein turnover in muscle cells in culture
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