Instructions to Authors

1. GENERAL

Proceedings: Biological Sciences is published monthly. It contains announcements of important new developments in biology. Papers crossing the boundaries of subjects are particularly welcome. The normal maximum length is 4000 words including the abstract and references (plus four figures and/or tables; equivalent to five printed pages). With the same restriction on length, reviews containing original and interesting ideas, and extensions to, or criticisms of, papers already published (subject to the criteria of interest, originality and good manners) will also be acceptable. The target publication time is three months from receipt of a paper, excluding the time that the typescript is in the hands of the author. Authors are advised that papers prepared in accordance with these instructions will be given priority. Acceptance of a paper will be determined by its quality and interest.

Papers describing experiments with vertebrate animals will be accepted only if the procedures used are clearly described and conform to the British Home Office regulations for avoiding unnecessary suffering to the animals.

The format of the journal is A4 (297 mm × 210 mm), double column, with a normal text area of 255 mm × 167 mm.

2. SUBMISSION

Submitted papers must not have been published previously, nor be under consideration for publication elsewhere. Submission to Proceedings B requires that authors accept that the Editor has final authority in all matters relating to the acceptability and propriety of publication. Authors should send papers to the Proceedings B Editorial Office, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, U.K. The date of the paper’s receipt will be published if the paper is accepted. Authors are asked to include their telephone numbers, fax numbers and/or electronic mail addresses in correspondence about the paper.

Four copies of the typescript and any figures (together with one set of original drawings and prints) are required. A word count should be included. The extra copies of any photographs should be prints rather than photocopies.

Papers should be submitted initially as typescripts. After a paper has been accepted, authors should submit the final version both on disk and as a typescript. Use of the disk cannot be guaranteed, but will depend on the format, the program used and the nature of the material. MS-DOS and Macintosh disk formats are acceptable; the preferred word-processor format is Word-Perfect but documents prepared in Microsoft Word and Wordstar can be used.

3. COPY

Papers should be clearly typewritten, with double spacing throughout, on one side of the paper only, with a margin of at least 3 cm all round; all sheets should be numbered serially and securely clipped together. Typescripts must be carefully corrected by authors before being sent in. Spelling should conform to the preferred spelling of the Shorter Oxford English Dictionary. Footnotes should be avoided.

4. TITLE AND SUMMARY

It is very important that both the title and the summary should be comprehensive, and interesting, to the non-specialist. Authors are asked to make their titles as short and general as possible. The title should be typed on a separate covering sheet which should also bear the names of the authors and that of the laboratory or other place where the work has been done. Addresses for correspondence, where these differ from the place of work, should also be given, indicating to which author correspondence should be addressed, and giving telephone numbers, fax numbers and e-mail addresses. A very short title (maximum of 50 letters and spaces) suitable for page headings should also be given. The summary should not exceed 200 words, and should be precise and informative.

5. SECTIONS

Papers may be divided into sections, described by short headings. Subsections should not be used. Materials and methods sections should be marked in the margin for small type.

6. UNITS, SYMBOLS AND ABBREVIATIONS

As far as possible the recommendations contained in Quantities, units, and symbols (1975, The Royal Society, £2.50) should be followed; in particular the International System of Units (SI) should be used whenever it is practicable to do so.

Special care is necessary in differentiation between handwritten symbols of comparable shape, e.g. V v, w W, s S, p P, T r. Marginal indications and differential underlignings should be used where necessary, the normal conventions being followed where applicable, e.g. ———— to signify bold characters. Mathematical variables should be underlined.

Wherever possible, only internationally agreed abbreviations should be used; see, for example, the list of accepted abbreviations for use in the Biochemical Journal.

7. STATISTICS

As far as possible, the presentation of statistics should follow the guidelines published each year in the December issue of the Proceedings.

When referring to computer programs, authors should specify clearly the procedures used, and should quote publications that will allow the reader to ascertain how they are carried out.
8. ILLUSTRATIONS

Duplicate figures (e.g., Xerox or photographic copies, as appropriate) should be supplied with each copy. The author’s name and the number of the figure should be written on the back of all illustrations. Figures should be numbered in one sequence throughout the paper.

Colour illustrations will be included only if scientifically necessary and if the cost is met by the author (unless an acceptable case is made by the author why funds are not obtainable).

The position of each illustration should be clearly marked in the typescript thus:

Figure 2 near here

Line drawings

Any labelling necessary for the understanding of a figure should be applied directly on the original drawings before duplicate copies are taken. All lettering should be in lower case except for the initial capital letters of proper names or where capitals are essential, e.g., for chemical abbreviations. Times or a close equivalent should be used. The height of capital letters after reduction should be as close to 2 mm as possible. When in doubt use smaller rather than larger lettering.

Legends

These should be typed with double spacing on a separate sheet at the end of the paper. Figure legends should follow the style given below:

Figure 7. Time-course of changes in fibre type composition during post-stimulation recovery. (a) Type 1 fibres. (b) Type 2A fibres, including the transitional fibres (asterisks) referred to in the text. (c) Type 2B fibres. Bands indicate the range (mean ±s.d.) for the corresponding fibre type in control muscles.

Photographs

When it is essential to include photographs they should make the most efficient use of the space required. The area covered by the photographs should be restricted to the subject in question, or to a minimum representative area in photomicrographs, etc. This enables the photograph to be reproduced at the largest possible scale. The text area available in Proceedings B is 255 mm x 167 mm. Photographs will be printed with the text, not on plates.

Authors should supply unlettered, unmounted glossy prints marked on the back with the authors’ names, the number of the figure and with the top and bottom indicated. A rough set should be provided with any required lettering clearly marked. Each micrograph must include a scale bar, either applied directly to the original or marked on the rough set, with an indication of the exact length.

9. TABLES

Tables, however small, should be numbered in arabic numerals and referred to in the text by their numbers. The position of each table should be shown as follows:

| Table 3 near here |

Table headings should be a brief title only; descriptions of experimental detail should follow, starting on a new line, in parentheses. Column headings should be in lower-case lettering except for the capital initial letters of proper names. The units of measurement and any numerical factors should be placed unambiguously at the head of the column, e.g. $F$/MHz, $10^6\sigma$/m$^2$ or $q$/kJ mol$^{-1}$.

10. REFERENCES

References to the literature cited must be given in double-spaced typing, in alphabetical order at the end of the paper. They should be prepared following the style of recent issues of Proceedings B.

Reference citations in the text are made by the name and year method; references by number are not permitted.

11. PROOFS

On acceptance of a paper, the Society’s Editorial Office will inform authors when they may expect to receive proofs for checking. Because of the need for fast publication, only a few days may be available for checking proofs, so authors who may be absent from their normal address must either inform the Society of their intended whereabouts or make other arrangements for the proofs to be checked quickly. Proof corrections may be returned by fax (the number is 0171-976 1837).

Authors are liable for the cost of excessive alterations to their proofs.

12. OFFPRINTS

Fifty offprints of each paper will be supplied free of charge; further copies may be ordered at extra cost at proof stage.

13. COPYRIGHTS

In order to give the Royal Society authority to deal with matters of copyright, authors will be asked to assign to the Society the copyright in any article published in the journal. In assigning copyright, authors will not be forfeiting the right to use their original material elsewhere subsequently. This may be done without seeking permission and subject only to normal acknowledgement to the journal. However, it would be appreciated if authors would inform the Society in this event.

[June 1995]
TO APPEAR IN

PHILOSOPHICAL TRANSACTIONS SERIES B

Philosophical Transactions: series B publishes original papers in all aspects of the biological sciences, including clinical science. Papers up to 25,000 words long are welcomed, particularly those of an interdisciplinary or multidisciplinary nature. Longer papers and reviews are also invited; authors intending to submit these should consult with the Editor at an early stage in preparation. Papers will be published rapidly (normally within six months of receipt).

Future issues of the journal will include the papers listed below.

H. Wicht & R.G. Northcutt
Ontogeny of the head of the Pacific hagfish (Eptatretus stouti, Myxinoidea): development of the lateral line system

I. Gilmour, M.A. Johnston, C.T. Pillinger, C.M. Pond, C.A. Mattacks & P. Prestrud
The carbon isotopic composition of individual fatty acids as indicators of dietary history in arctic foxes in Svalbard

M. Dill & M. Heisenberg
Visual pattern memory without shape recognition

T. Preuss & B.U. Budelmann
Proprioceptive hair cells on the neck of the squid Loligo vulgata brevis: a sense organ in cephalopods for the control of head-to-trunk position

Y. Tang & H.G. Othmer
Excitations, oscillations, and wave propagation in a G-protein-based model of signal transduction in Dictyostelium discoideum

P.C. Thomson, N.A. Lavidis, J. Robinson & M.R. Bennett
Probabilistic secretion of quanta at somatic motor-nerve terminals: the fusion-pore model, quantal detection and autoinhibition

P. Upchurch
The evolutionary history of sauropod dinosaurs

P.C.L. White & S. Harris
Bovine tuberculosis in badger (Meles meles) populations in southwest England: the use of a spatial stochastic model to understand the dynamics of the disease

P.C.L. White & S. Harris
Bovine tuberculosis in badger (Meles meles) populations in southwest England: an assessment of past, present and possible future control strategies using simulation modelling

I. Seibold & A.J. Helbig
Evolutionary history of New and Old World vultures inferred from nucleotide sequence of the mitochondrial cytochrome b gene

B. Leitch, D. Shepherd & G. Laurent
Morphogenesis of the branching pattern of a group of spiking local interneurons in relation to the organization of embryonic sensory neuropils in locust

R.D. Gregory
Phylogeny and relations among abundance, geographical range and body size of British breeding birds

E.C.G.M. Hampson & S.R. Robinson
Heterogeneous morphology and tracer-coupling patterns of retinal oligodendrocytes

R.D. Ransome
Earlier breeding shortens life in female greater horseshoe bats
TO APPEAR IN

PHILOSOPHICAL TRANSACTIONS SERIES B

Philosophical Transactions: series B publishes original papers in all aspects of the biological sciences, including clinical science. Papers up to 25 000 words long are welcomed, particularly those of an interdisciplinary or multidisciplinary nature. Longer papers and reviews are also invited; authors intending to submit these should consult with the Editor at an early stage in preparation. Papers will be published rapidly (normally within six months of receipt).

The proceedings of the Royal Society’s Discussion Meeting on New uses for new phylogenies, held in December 1994, will be published in the July issue of the journal and will include the papers listed below.

M.J. Benton
Testing the time axis of phylogenies
A.B. Smith, D.T.J. Littlewood & G.A. Wray
Comparing patterns of evolution: larval and adult life-history stages and small subunit ribosomal RNA of post-Palaeozoic echinoids
R.R. Hudson & N.L. Kaplan
The coalescent process and background selection
S. Nee, E.C. Holmes & P.H. Harvey
Inferring population history from molecular phylogenies
E.C. Holmes, S. Nee, A. Rambaut, G.P. Garnett & P.H. Harvey
Revealing the history of infectious disease epidemics using phylogenetic trees
P.M. Sharp, D.L. Robertson & B.H. Hahn
Cross-species transmission and recombination of ‘AIDS’ viruses
N.H. Barton & I. Wilson
Genealogies and geography
R.S. Thorpe, A. Malhotra, H. Black, J.C. Daltry & W. Wüster
Relating geographic pattern to phylogenetic process
J.B. Losos
Community evolution in greater Antillean Anolis lizards: phylogenetic patterns and experimental tests
M.S. Hafner & R.D.M. Page
Molecular phylogenies and host–parasite cospeciation: gophers and lice as a model system
E.P. Martins
Phylogenies and comparative data: a microevolutionary perspective
W.M. Fitch
Uses for evolutionary trees
A. Meyer, P.A. Ritchie & K.-E. Witte
Predicting developmental processes from evolutionary patterns: a molecular phylogeny of the zebrafish (Danio rerio) and its relatives
C. Moritz
Uses of molecular phylogenies for conservation

Two issues of the journal will be published in August 1995. The first will be the proceedings of the Royal Society’s Discussion Meeting on Evolution of eukaryotic cellular processes. A second issue will include papers on: evolutionary history of sauropod dinosaurs (P. Upchurch); oscillations and waves in Dictyostelium discoideum (Y. Tang & H.G. Ohmer); proprioceptors controlling head position in squid (T. Preuss & B.U. Budelmann); abundance, range and body size of British birds (R.D. Gregory); and retinal oligodendrocytes (E.C.G.M. Hampson & S.R. Robinson).
FUTURE PAPERS IN PROCEEDINGS SERIES B

Proceedings: series B publishes original papers in all aspects of the biological sciences, including those of an interdisciplinary or multidisciplinary nature. Papers up to 4000 words long are welcomed, particularly announcements of important developments in biology. Reviews containing original and interesting ideas, and criticisms of papers already published, are also invited. Papers will be published rapidly (normally within three months of receipt.)

Future issues of the journal will include the papers listed below.

A. Cooper & R. A. Cooper
The Oligocene bottleneck and New Zealand biota: genetic record of a past environmental crisis

T. R. Birkhead, G. J. Wishart & J. D. Biggins
Sperm precedence in the domestic fowl

S. Gupta & A. V. S. Hill
Dynamic interactions in malaria: host heterogeneity meets parasite polymorphism

R. M. May & M. A. Nowak
Co-infection and the evolution of parasitic virulence

N. Langston & N. Hillgarth
Moults varies with parasites in Laysan albatrosses

B. Walmsley
Interpretation of ‘quantal’ peaks in distributions of evoked synaptic transmission at central synapses

S. Gavrielts & A. Hastings
Intermittency and transient chaos from simple frequency-dependent selection

T. R. Birkhead & M. Petrie
Ejaculate features and sperm utilization in peafowl Pavo cristatus

J. D. Robertson
Nitric oxide synthase inhibition blocks octopus touch learning without producing sensory or motor dysfunction

C. Juan, P. Oromi & G. M. Hewitt
Mitochondrial DNA phylogeny and sequential colonization of Canary Islands by darkling beetles of the genus Pimelia (Tenebrionidae)

I. P. Owens & P. M. Bennett
Ancient ecological diversification explains life-history variation among living birds

M. S. Witter & S. J. Lee
Habitat structure, stress and plumage development

D. L. Jenkins, C. A. Ortori & J. F. Y. Brookfield
A test for adaptive change in DNA sequences controlling transcription

R. A. Nussbaum & M. Wilkinson
Lunglessness in a radically divergent caecilian

R. Chalk, C. M. R. Albuquerque, P. J. Ham & H. Townson
Full sequence and characterization of two insect defensins: immune peptides from the mosquito Aedes aegypti

A. P. Lee, J. Klinowski, M. G. Taylor & K. Simkiss
X-ray diffraction and multinuclear solid-state NMR studies of hepatopancreas granules from Helix aspersa and Carcinus maenas

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