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 equally acceptable. In addition to text files, we welcome the submission of electronically prepared artwork on disk.

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 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 be given, and up to six index entries should be provided for inclusion in the subject index. 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. 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, £3.00) 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 v, w, W, s S, p p P, T r. Marginal indications and differential underlinings 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

Proceedings B welcomes the submission of papers containing colour illustrations. However, owing to the high cost of colour reproduction, a charge will be made of £300 for one colour figure, and £600 for two or more (up to a maximum of four figures). There are no page charges for Proceedings B. Exemption from charges for colour illustrations will only be made if referees decide colour is essential and if authors make an explicit case to the Editor explaining why they are unable to obtain the necessary funds.

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.

The position of each illustration should be clearly marked in the margin of the typescript.

Line drawings

If possible, authors should supply one set of unlabelled, original line drawings in addition to a set of labelled original 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 font 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 lettered glossy prints marked on the back with the authors’ names, the number of the figure and with the top and bottom indicated. If a single figure contains multiple prints, these should be mounted (ideally on flexible card). Each micrograph must include a scale bar, applied directly to the original, 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 clearly marked in the margin of the typescript.

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, 10^12 σ/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.

[September 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).

Two issues of the journal will be published in November 1995. The first will be the proceedings of the Royal Society’s Discussion Meeting on Mechanisms in vertebrate sex determination, held in May 1995, and will include the papers listed below.

R. Lovell-Badge
The molecular genetics of Sry and its role in mammalian sex determination
R. Rimini, A. Pontiggia, S. Ferrari, F. Spada, V. R. Harley, P. N. Goodfellow & M. E. Bianchi
Interaction of normal and mutant SRY proteins with DNA
P. K. Tucker & B. L. Lundrigan
The nature of gene evolution on the mammalian Y chromosome: lessons from Sry
A. McLaren
Germ cells and germ cell sex
J. Karl & B. Capel
Three-dimensional structure of the developing mouse genital ridge
M. B. Renfree, J. L. Harry & G. Shaw
The marsupial male: a role model for sexual development
The genetic basis of XX–XY differences present before gonadal sex differentiation in the mouse
E. M. Eicher, E. P. Shown & L. L. Washburn
Sex reversal in C57BL/6-J-YPOS mice corrected by an Sry transgene
The role of SOX9 in autosomal sex reversal and campomelic dysplasia
X. Luo, Y. Ikeda & K. L. Parker
The cell-specific nuclear receptor steroidogenic factor 1 plays multiple roles in reproductive function
R. R. Behringer
The Müllerian inhibitor and mammalian sexual development
E. Zanaria, B. Bardoni, B. Dabovic, V. Calvari, M. Fraccaro, O. Zuffardi & G. Camerino
Xp duplications and sex reversal
C. M. Johnston, M. Barnett & P. T. Sharpe
The molecular biology of temperature-dependent sex determination
J. A. Marshall Graves
The evolution of mammalian sex chromosomes and the origin of sex determining genes

The second issue in November will include papers on: adaptation to life without oxygen (J. R. Guest); plankton-generated chaos in the modelled dynamics of haddock (J. Horwood); the energy expenditure of free-ranging black-browed albatrosses (R. M. Bevan, P. J. Butler, A. J. Woakes & P. A. Prince); physiology and pharmacology of the oviducts of Raja and Scyllorhinus (J. Z. Young); the adaptive advantage of phenotypic memory in changing environments (E. Jablonka, B. Obrony, I. Molnár, É. Kisdi, J. Hofbauer & T. Czárán); and population extinction and optimal resource management (P. Whittle & J. Horwood).
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PHILOSOPHICAL TRANSACTIONS SERIES B

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The December issue of the journal will include the papers listed below.

A. J. Schofield & D. H. Foster
Artificial neural networks simulating visual texture segmentation and target detection in line-element images

G. B. Hartl, F. Suchentrunk, R. Willing & R. Petznick
Allozyme heterozygosity and fluctuating asymmetry in the brown hare (Lepus europaeus): a test of the developmental homeostasis hypothesis

J. J. Birmingham, N. P. Hughes & R. Treloar
Diffusion and binding measurements within oral biofilms using fluorescence photobleaching recovery methods

D. R., Fredkin, J. A. Rice, D. Colquhoun & A. J. Gibb
Persistence: a new statistic for characterizing ion channel activity

R. C. Mac Nally
On large-scale dynamics and community structure in forest birds: lessons from some eucalypt forests of southeastern Australia

R. W. Tegeder & J. Krause
Density dependence and numerosity in fright stimulated aggregation behaviour of shoaling fish

M. J. G. Gage, P. Stockley & G. A. Parker
Effects of alternative male mating strategies on characteristics of sperm production in the Atlantic salmon (Salmo salar): theoretical and empirical investigations

B. K. Davis
Significance of strand configuration in self-replicating RNA molecules

The proceedings of the Royal Society’s Discussion Meeting on Current understanding of intracellular signalling pathways, held in July 1995, will be published in the January 1996 issue. The proceedings will include papers on: signal transduction from membrane receptors to the nucleus: MAP kinases and AP-1 (M. Karin); reconstruction of a novel signalling cascade responding to extracellular stress (J. R. Woodgett); dynamics and organization of MAPK pathways in yeast (B. Errede); signal transduction by inflammatory cytokines interleukin 1 and tumour necrosis factor (J. Saklatvala); Jaks in cytokine signalling (J. N. Ihle); DNA-dependent protein kinase: deciphering its roles in transcription, site-specific recombination and DNA repair (S. P. Jackson); Jaks, Stats and signal transduction in response to interferons and other cytokines (I. M. Kerr); IRS-1 and its relatives (M. White); regulation of gene expression by insulin (D. K. Granner); the nuclear response to cAMP: a key role for transcription factor CREM (P. Sassone-Corsi); phosphoinositide 3-kinases can be downstream of heterotrimeric G-proteins and upstream of the monomeric G-protein rac (L. Stephens); the family of PI-3 kinase enzymes (M. D. Waterfield); interactions of Ras and PI-3 kinases (J. Downward); and ceramide: an intracellular mediator of apoptosis and growth suppression (Y. A. Hannun).
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.

M. Wilkinson & J. M. Benton
Sphenodontid phylogeny and the problems of multiple trees

M. Muller
A novel classification of planar four-bar linkages and its application to the mechanical analysis of animal systems

P. Marrow, J. M. McNamara, A. I. Houston, I. R. Stevenson & T. H. Clutton-Brock
State-dependent life history evolution in Soay sheep: dynamic modelling of reproductve scheduling

M. Cusack & A. Williams
Chemico-structural degradation of Carboniferous lingulid shells

J. K. Colbourne & P. D. Hebert
The systematics of North American Daphnia (Crustacea: Anomopoda): a molecular phylogenetic approach

R. A. Johnstone
Multiple displays in animal communication: 'backup signals' and 'multiple messages'

P. Eggleton, D. E. Bignell, W. A. Sands, N. A. Mawdsley, J. H. Lawton, T.

G. Wood & N. C. Bignell
The diversity, abundance and biomass of termites under differing levels of disturbance in the Mbalmayo Forest Reserve, southern Cameroon

A. J. A. Stewart & D. R. Lees
The colour–pattern polymorphism of Philaenus spumarius (L.) (Homoptera: Cercopidae) in England and Wales

A. N. Hodgson, S. Ridgway, G. M. Branch & S. J. Hawkins
Spermatozoan morphology of 19 species of prosobranch limpet (Patellogastropoda: Patellidae) with a discussion of patellid relationships

K. R. Jensen
Phylogenetic systematics and classification of the Sacaglossa (Mollusca, Gastropoda, Opisthobranchia)

T. C. Lacalli
Frontal eye circuitry, rostral sensory pathways, and brain organization in amphioxus larvae: evidence from three-dimensional reconstructions

R. A. D. Cameron, L. M. Cook & J. D. Hallows
Land snails on Porto Santo: adaptive and non-adaptive radiation
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. Blarer, M. Doebeli & S. C. Stearns
  Diagnosing senescence: inferring evolutionary causes from phenotypic patterns can be misleading

C. D. Bull, N. B. Metcalfe & M. Mangel
  Seasonal matching of foraging to anticipated energy requirements in anorexic juvenile salmon

P. N. Brotherton & A. Rhodes
  Monogamy without biparental care in a dwarf antelope

M. M. Lambrechts, P. Perret & J. E. Blondel
  Adaptive interpopulation differentiation in timing of egg laying in a bird results from variation in photoresponsiveness

T. R. Birkhead & F. Fletcher
  Male phenotype and ejaculate quality in the zebra finch Taeniopygia guttata

T. N. Sherratt, P. J. DeBarro, C. P. Brookes, O. David & N. Maclean
  Spatial and temporal genetic variation in British field populations of the grain aphid Sitobion avenae (F.) (Hemiptera: Aphididae) studied using RAPD-PCR

M. J. Morgan & C. W. Tyler
  Mechanisms for dynamic stereomotion respond selectively to horizontal velocity components

W. G. Hill & H. A. Babiker
  Estimation of numbers of malaria clones in blood samples

J. A. Davies, S. Korneev, S. E. Blackshaw & K. Kaiser
  cDNA libraries from identified neurons

K. J. Gaston & T. M. Blackburn
  Mapping biodiversity using surrogates for species richness: macro-scales and New World birds

A. R. Parker
  Discovery of functional iridescence and its coevolution with eyes in the phylogeny of Ostracoda (Crustacea)

S. Yachi
  How can honest signalling evolve: the role of handicap principle

L. A. Wauters, J. Suohon & A. A. Dhomdt
  Fitness consequences of hoarding behaviour in the Eurasian red squirrel

C. R. Brown, M. B. Brown & B. Rannala
  Ectoparasites reduce long-term survival of their avian host

S. A. Hodges & M. L. Arnold
  Spurring plant diversification: are floral nectar spurs a key innovation?

A. Cockburn, D. J. Green, M. L. Hall, H. Osmond & P. O. Dunn
  Increased opportunities for cuckoldry may be why dominant male fairy-wrens tolerate helpers

I. R. Stevenson & D. R. Bancroft
  Fluctuating trade-offs favour precocial maturity in male Soay sheep
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