

# Journal of Theoretical Biology

## Guide for Authors

### Aims and Scope of the Journal

The aim of the Journal of Theoretical Biology is to publish theoretical papers, which give insight into biological processes. The biological significance should be clearly stated. Highly speculative papers not based on current biological knowledge will not be acceptable. Papers may include new experimental results, which bear on the theory being presented.

It is essential that papers be accessible to as wide a readership as possible. Every effort should be made to make the main points of the paper intelligible to biologists as a whole. Authors should thus make it clear how any mathematical models relate to the biological problems they address; detailed mathematical technicalities and experimental procedures may usually be best presented in appendices so as not to impede the exposition of the central ideas.

Brief notes may be submitted in the form of Letters to the Editor. Comment on current theoretical issues or papers published in the Journal is also welcome.

### Submission of Manuscripts

Authors are encouraged to submit to Journal of Theoretical Biology by email. For first submissions, please send a single file containing the entire manuscript in either PDF, Word or PostScript format. For revised submissions, please send a single file containing the entire manuscript in either PDF, Word or PostScript format, in addition to separate text, table and figure files in their original file format.

Submission of a manuscript implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, without the written consent of the Publisher.

Papers will be published in English. The American or the British forms of spelling may be used, but this usage must be consistent throughout the manuscript.

Great importance is attached to conciseness of presentation, so far as is consistent with clarity.

**Supplementary Data:** Deposition of large quantities of data is inappropriate in the context of printed journal articles. Such data may be held and made available by (one of) the authors or can be submitted to a specific database. For details please contact the Editor. It should then be clearly stated in the article, at an appropriate point in the text or in a separate section before Acknowledgements, which data are available and exactly how they can be obtained. Although it is unnecessary to supply full sets of such data along with the manuscript for refereeing, you may wish to submit or mention any material considered to aid the refereeing process. Such material should be clearly marked as not for publication.

Referees: Authors are invited to submit the names of five individuals who may, if necessary, be used as referees for their paper.

## **Presentation of Manuscript**

**General Presentation:** Print the entire manuscript on one side of the paper only, using double spacing and wide (3 cm) margins. (Avoid full justification, i.e., do not use a constant right-hand margin.) Ensure that each new paragraph is clearly indicated. Present tables and figure legends on separate pages at the end of the manuscript. If possible, consult a recent issue of the journal to become familiar with layout and conventions. Number all pages consecutively.

**Title Page:** provide the following data:

Title. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

**Author names and affiliations.** Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author.

**Corresponding author.** Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.

**Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Abstract.** A concise and factual abstract (not exceeding 300 words) is required for all manuscripts except letters. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand-alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list. Non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

**Keywords.** Immediately after the abstract, provide a maximum of 5 keywords, avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Acknowledgements:** Collate acknowledgements including information on grants received, in a separate section at the end of the article before the references. Do not, include them on the title page at all.

**References:** References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters "a", "b", "c", etc., placed after the year of publication. Citations may be made directly (or parenthetically). Groups of references should be listed first alphabetically, then chronologically. Examples: "as demonstrated (Allan, 1996a, 1996b, 1999; Allan and Jones, 1995). Kramer et al. (2000) have recently shown.

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications should not be in the reference list, but may be mentioned in the text. Citation of a reference as 'in press' implies that the item has been accepted for publication.

References should be listed as follows:

Cabanc, M., LeBlanc, J., 1983. Physiological conflict in humans: fatigue vs. cold discomfort. *Am. J. Physiol.* 224, R621-R628.

Collier, G. H., Rovee-Collier, C. K., 1981. A comparative analysis of optimal foraging behavior: laboratory stimulations, in: Kamil, A. C., Sargent, T. D. (Eds.), *Foraging Behavior*, Gerland, New York, pp. 39-76.

When citing an Elsevier journal, include the digital object identifier (DOI - see following paragraph for further information), if noted, from the article's title page. Please note the following examples:

Asquith, B., Bangham, C.R.M., 2003. The dynamics of T-cell fratricide: application of a robust approach to mathematical modelling in immunology. *J. Theor. Biol.* 222 (1), 53-69., doi:10-1016/S0022-5193(03)00013-4.

Kesmir, C., De Boer, R., 2003. A spatial model of germinal center reactions: cellular adhesion based sorting of B cells results in efficient affinity maturation. *J. Theor. Biol.*, doi:101016/S0022-5193(03)00010-9.

Responsibility for the accuracy of bibliographic citations lies entirely with the authors.

**Digital Object Identifier (DOI):** This is a persistent identifier which may be used to cite and link to electronic documents. The DOI consists of a unique alphanumeric character string, which is assigned to a document by the publisher upon the initial electronic publication. The DOI will never change therefore it is an ideal medium for citing Articles in Press which have not yet received their full bibliographic information. The References section, above, shows samples of DOIs included in references.

**Figure legends, figures, tables, and schemes:** Present these, in this order, at the end of the article. High-resolution graphics files must always be provided separate from the main text file. See Preparation of Illustrations

**Tables:** Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

**Appendices:** If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: (Eq. A.1), (Eq. A.2), etc.; in a subsequent appendix, (Eq. B.1) and so forth.

**Footnotes:** Footnotes should be used sparingly. Number them consecutively throughout the article, using superscript Arabic numbers. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves on a separate sheet at the end of the article. Do not include footnotes in the Reference list. Table footnotes. Indicate each footnote in a table with a superscript lowercase letter.

**Units, Symbols and Abbreviations:** All measurements should be expressed in accordance with the Systeme International d'Unites (S.I. units, International Metric System) With the exception of those used for units of measurement no abbreviation should be used without being spelt out when first introduced. Abbreviations consisting of groups of initials (such as CNS, IVP) should be written in capitals without full stops. Define abbreviations that are not standard in this field at their first occurrence in the article: in the abstract but also in the main text after it. Ensure consistency of abbreviations throughout the article.

**Mathematical formulae.** Present simple formulae in the line of normal text where possible. In principle, variables are to be presented in italics. Use the solidus (/) instead of a horizontal line,

eg.  $X_p/Y_m$

Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separate from the text (if referred to explicitly in the text).

### **Preparation of Illustrations**

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### **General points**

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Submit graphics that are disproportionately large for the content.

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Mark the appropriate position of a figure in the article

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The publisher will allow one page of free colour per article for colour figures, where its use is integral to useful illustration of the data.

**Revisions** Should authors be requested by the editor to revise the text on a manuscript, the revised version should be submitted within ten weeks. After this period, the manuscript will be regarded as a new submission.