

## ■ Instructions for *BMC Bioinformatics* authors

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### Software articles

We encourage authors of software applications, tools or algorithm implementations to publish descriptions of their code using the Software article type.

### Availability of software to reviewers and other researchers

The software application/tool described in the manuscript must be available for testing by reviewers in a way that preserves their anonymity. If published, software applications/tools must be freely available to any researcher wishing to use them for non-commercial purposes, without restrictions such as the need for a material transfer agreement. Because weblinks frequently become broken, *BMC Bioinformatics* strongly recommends that all software applications/tools are included with the submitted manuscript as [additional files](#) to ensure that the software will continue to be available.

*BMC Bioinformatics* recommends, but does not require, that the source code of the software should be made available under a suitable open-source license that will entitle other researchers to further develop and extend the software if they wish to do so. Typically, an archive of the source code of the current version of the software should be included with the submitted manuscript as a supplementary file. Since it is likely that the software will continue to be developed following publication, the manuscript should also include a link to the home page for the software project. For open source projects, we recommend that authors host their project with a recognized open-source repository such as [bioinformatics.org](http://bioinformatics.org) or [sourceforge.net](http://sourceforge.net)

### Should a description of a website be submitted as a Software article or a Database article?

Descriptions of websites and web-based tools should be submitted as Software articles if the intention is that the software that drives the website will be made available to other researchers to extend and use on other websites. On the other hand, if a website's

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functionality is closely tied to a specific database then the article should instead be submitted as a Database article.

Advice Fantastic  
Giveaways

## Manuscript sections for Software articles

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Manuscripts for Softwares submitted to *BMC Bioinformatics* should be divided into the following sections:

- [Title page](#)
- [Abstract](#)
- [Background](#)
- [Implementation](#)
- [Results](#)
- [Discussion](#) (if applicable)
- [Conclusions](#)
- [Availability and requirements](#)
- [List of abbreviations used](#) (if any)
- [Authors' contributions](#)
- [Acknowledgements](#)
- [References](#)
- Figure legends (if any) - see Figure legends section in [main document](#)
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The **Accession Numbers** of any nucleic acid sequences, protein sequences or atomic coordinates cited in the manuscript should be provided, in square brackets and include the corresponding database name; for example, [EMBL:AB026295, EMBL:AC137000, DDBJ:AE000812, GenBank:U49845, PDB:1BFM, Swiss-Prot:Q96KQ7, PIR:S66116].

The databases for which we can provide direct links are: EMBL Nucleotide Sequence Database ([EMBL](#)), DNA Data Bank of Japan ([DDBJ](#)), GenBank at the NCBI ([GenBank](#)), Protein Data Bank ([PDB](#)), Protein Information Resource ([PIR](#)) and the Swiss-Prot Protein Database ([Swiss-Prot](#)).

### Title page

This should list the title of the article. The full names, institutional addresses, and email addresses for all authors must be included on the title page. The corresponding author should also be indicated.

### Abstract

This should not exceed 350 words and should be structured into separate sections headed Background, Results, Conclusions. Please do not use abbreviations or references in the abstract.

### Background

The background section should be written to be comprehensible to researchers without specialist knowledge in the area concerned. It should clearly described the relevant context and the specific issue which the software described is intended to address.

### Implementation

This should include a description of the overall architecture of the software implementation, along with details of any critical issues and how they were addressed.

## **Results and Discussion**

The Results and Discussion may be combined into a single section or presented separately. They may also be broken into subsections with short, informative headings. In any case what should be described is the functionality of the software together with data on how its performance and functionality compare with and improve on functionally similar existing software. There should then be a discussion of the intended use of the software, and the benefits that are envisioned together, if possible, with an outline for the planned future development of new features.

## **Conclusions**

This should state clearly the main conclusions of the article and give a clear explanation of the importance and relevance of the software.

## **Availability and requirements**

Lists the following:

- **Project name:** e.g. My bioinformatics project
- **Project home page:** e.g.  
<http://sourceforge.net/projects/mged>
- **Operating system(s):** e.g. Platform independent
- **Programming language:** e.g. Java
- **Other requirements:** e.g. Java 1.3.1 or higher, Tomcat 4.0 or higher
- **License:** e.g. GNU GPL, FreeBSD etc.
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e.g. licence needed

## **List of abbreviations**

If abbreviations are used in the text, either they should be defined in the text where first used, or a list of abbreviations can be provided, which should precede the authors' contributions and acknowledgements.

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In order to give appropriate credit to each author of a paper, the individual contributions of authors to the manuscript should be specified in this section.

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We suggest the following kind of format (please use initials to refer to each author's contribution): AB carried out the molecular genetic studies, participated in the sequence alignment and drafted the manuscript. JY carried out the immunoassays. MT participated in the sequence alignment. ES participated in the design of the study and performed the statistical analysis. FG conceived of the study, and participated in its design and coordination and helped to draft the manuscript. All authors read and approved the final manuscript.

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### **Acknowledgements**

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### **References**

All references must be numbered consecutively, in square brackets, in the order in which they are cited in the text, followed by any in tables or legends. Reference citations should not appear in titles or headings. Each reference must have an individual reference number. Please avoid excessive referencing. If automatic numbering systems are used, the reference numbers must be finalized and the bibliography must be fully formatted before submission.

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## Links

Web links and URLs should be included in the reference list. They should be provided in full, including both the title of the site and the URL, in the following format:

### **The Mouse Tumor Biology Database**

[[http://tumor.informatics.jax.org/cancer\\_links.html](http://tumor.informatics.jax.org/cancer_links.html)]

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1. Koonin EV, Altschul SF, Bork P: **BRCA1 protein products: functional motifs.** *Nat Genet* 1996, **13**:266-267.

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2. Orengo CA, Bray JE, Hubbard T, LoConte L, Sillitoe I: **Analysis and assessment of ab initio three-dimensional prediction, secondary structure, and contacts prediction.** *Proteins* 1999, **43**(Suppl 3):149-170.

*In press article*

3. Kharitonov SA, Barnes PJ: **Clinical aspects of exhaled nitric oxide.** *Eur Respir J*, in press.

*Published abstract*

4. Zvaifler NJ, Burger JA, Marinova-Mutafchieva L, Taylor P, Maini RN: **Mesenchymal cells, stromal derived factor-1 and rheumatoid arthritis [abstract].** *Arthritis Rheum* 1999, **42**:s250.

*Article within conference proceedings*

5. Jones X: **Zeolites and synthetic mechanisms.** In *Proceedings of the First National Conference on Porous Sieves: 27-30 June 1996; Baltimore*. Edited by Smith Y. Stoneham: Butterworth-Heinemann; 1996:16-27.

*Book chapter, or article within a book*

6. Schnepf E: **From prey via endosymbiont to plastids: comparative studies in dinoflagellates.** In *Origins of Plastids. Volume 2*. 2nd edition. Edited by Lewin RA. New York: Chapman and Hall; 1993:53-76.

*Whole issue of journal*

7. Ponder B, Johnston S, Chodosh L (Eds): **Innovative oncology.** In *Breast Cancer Res* 1998, **10**:1-72.

*Whole conference proceedings*

8. Smith Y (Ed): *Proceedings of the First National Conference on Porous Sieves: 27-30 June 1996; Baltimore*. Stoneham: Butterworth-Heinemann; 1996.

*Complete book*

9. Margulis L: *Origin of Eukaryotic Cells*. New Haven: Yale University Press; 1970.

*Monograph or book in a series*

10. Hunninghake GW, Gadek JE: **The alveolar macrophage.** In *Cultured Human Cells and Tissues*. Edited by Harris TJR. New York: Academic Press; 1995:54-56. [Stoner G (Series Editor): *Methods and Perspectives in Cell Biology*, vol 1.]

*Book with institutional author*

11. Advisory Committee on Genetic Modification: *Annual Report*. London; 1999.

*PhD thesis*

12. Kohavi R: **Wrappers for performance enhancement and oblivious decision graphs.** *PhD thesis*. Stanford University, Computer Science Department; 1995.

*Link / URL*

13. **The Mouse Tumor Biology Database**  
[[http://tumor.informatics.jax.org/cancer\\_links.html](http://tumor.informatics.jax.org/cancer_links.html)]

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