Article

New Biophysical Journal Template

First author^{1,*} and Second author²

ABSTRACT Each manuscript must be accompanied by an informative abstract of no more than 300 words. Abstracts should describe the substance of the manuscript in language non-specialists can understand, and must make clear the biological significance of the research. Reference citations are not allowed in the Abstract of a manuscript. Computational Tools and Letters articles are limited to five pages in length.

INTRODUCTION

Thanks for using Overleaf to write your article. Your introduction goes here! Some examples of commonly used commands and features are listed below, to help you get started. Leave a blank line between blocks of text to start a new paragraph—use \\ for separating tabular rows or hard line-breaks only. Abbreviations should be defined in the text at first mention.

Please also take note of the \section*{...} titles in this template: they are the required sections in a regular research Article manuscript.

In particular, the main text of regular Articles and Computational Tools manuscripts must be structured with the following sections: **Introduction**, **Materials and Methods**, **Results**, **Discussion** (or **Results and Discussion**), **Conclusion**.

Theoretical manuscripts may include just a Methods section and do not require Materials.

No particular organization structure is required for Letters.

If your manuscript is accepted, the Biophysical production team will re-format the references for publication. *It is not necessary to format the reference list yourself to mirror the final published form.*

MATERIALS AND METHODS

Capitalize trade names and give manufacturers' full names and addresses (city and state).

Sectioning commands

Use \section*{...} and \subsection*{...} to create first- and second-level headings. Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo.

Figures and Tables

Use the table and tabular commands for basic tables — see Table 1, for example. TablesGenerator.com is a handy tool for designing tables and generating the LATEX tabular code, which you can copy and paste into your article here.

You can upload a figure (JPG, PNG or PDF) using the PROJECT menu (Files. . . > Add files). To include it in your document, use the graphicx package and the \includegraphics command as in the code for Figure 1.

In addition, you can use \ref{...} and \label{...} commands for cross-references.

RESULTS

LATEX is great at typesetting mathematics:

Let $X_1, X_2, ..., X_n$ be a sequence of independent and identically distributed random variables with $E[X_i] = \mu$ and $Var[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{1}{n} \sum_{i=1}^{n} X_i$$
 (1)

¹Institution A, Address A

²Institution B, Address B

^{*}Correspondence: abx@xyz.edu

Table 1: An example table

| Code | Item | Quantity |
|------|----------------------|-----------------|
| W1 | Widgets ^a | 42 |
| G35 | Gadgets | 13 ^b |

^a This is a table note.

^b This is another table note.

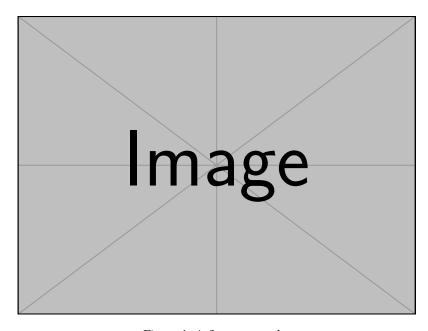


Figure 1: A figure example.

denote their mean. Then as *n* approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$. Thus concludes the explanation about Eq. 1.

You can make lists with automatic numbering . . .

- 1. Like this,
- 2. and like this.
- ... or bullet points ...
- Like this,
- and like this.
- ... or with words and descriptions ...

Word Definition

Concept Explanation

Idea Text

An example quotation:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

DISCUSSION

LATEX formats citations and references automatically using the bibliography records in your .bib file, which you can edit via the project menu. Use the \cite command to insert a citation, like this: (1) Multiple citations can be given as (2-4). You can use either BibTeX or biblatex: see the following subsections.

If your manuscript is accepted, the Biophysical production team will re-format the references for publication. It is not necessary to format the reference list yourself to mirror the final published form.

Using bibtex

This is the default. Specify your .bib file with \bibliography{sample} (the extension is unnecessary) near the end of your manuscript, where you want the references list to appear.

Using biblatex

Pass the biblatex option to the \documentclass declaration, then specify your .bib file name in the preamble: \addbibresources{sample.bib} (the extension is necessary). Write \printbibliography near the end of your manuscript where you want the references to appear.

CONCLUSION

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo.

AUTHOR CONTRIBUTIONS

Author1 designed the research. Author2 carried out all simulations, analyzed the data. Author1 and Author2 wrote the article.

ACKNOWLEDGMENTS

We thank G. Harrison, B. Harper, and J. Doe for their help.

REFERENCES

- 1. Chen, K. C., and C. Nicholson, 2000. Changes in brain cell shape create residual extracellular space volume and explain tortuosity behavior during osmotic challenge 97.
- 2. Stiles, J. R., and T. M. Bartol, 2001. Monte Carlo methods for simulating realistic synaptic microphysiology using MCell. In E. D. Schutter, editor, Computational Neuroscience: Realistic Modeling for Experimentalists, CRC Press, Boca Raton, 87-127.
- 3. el Kareh, A. W., S. L. Braunstein, and T. W. Secomb, 1993. Effect of cell arrangement and interstitial volume fraction on the diffusivity of monoclonal antibodies in tissue. Biophys. J. 64:1638–1646.
- 4. Callaghan, P. T., 1991. Principles of Nuclear Magnetic Resonance Microscopy. Clarendon Press, Oxford, first edition.

SUPPLEMENTARY MATERIAL

An online supplement to this article can be found by visiting BJ Online at http://www.biophysj.org.