Submission Formatting Guidelines for Original Research Articles

Mountaineer Undergraduate Research Review (MURR)

General Submission Format

Articles should be submitted in Microsoft Word (.docx) format, in 12 point Times or Arial font. With the exception of figure legends and references, articles should be double-spaced. Pages should be numbered, beginning with the first page.

Article Title

The article title should be 3-14 words long, written for a general audience. All significant words should be capitalized. Avoid using abbreviations in the title.

Ex.) "Impact of Acid Mine Drainage on Shallow Creek Ecosystems"

"One Sentence Significance"

The "One Sentence Significance" consists of no more than 125 characters and is meant to complement the article title and provide a quick look at the major result/significance of the article. This sentence should not simply restate the title, but serve to draw readers in to read the rest of the article.

Abstract

The article abstract is a well-written, self-contained synopsis of the entire article, comprising 160-250 words. The abstract should be written without excessive technical language and should not contain references. In general, abstracts should begin with a brief introduction to the context and motivation for the study, include a brief explanation of the hypothesis/experimental approach, and finish by describing major conclusions and their relevance to the hypothesis/field.

Article Body

The main text of the article should be between 1000 and 2500 words long, not including figure titles and legends. Unless a specific article can justify deviation from the standard format, articles should consist of the following headings, clearly identified in the text with bold-face subheadings:

Introduction
Methods
Results
Discussion
Acknowledgements (optional)
Competing Interests
References

All technical terms, abbreviations, symbols, and acronyms should be defined in the main text the first time that they are used. With the exception of the methods section, please avoid subheadings other than those outlined above. **Note: the above scheme may not apply to certain articles in the arts/humanities.**

Figures/Tables

Unless specifically instructed, figures and tables should appear in the main article text, near to where they are first referenced. Tables should be constructed using Microsoft Word's table function, and whenever possible, figures should be in a vector-based format (.ai, .pdf, .eps, .svg) to allow for resizing without resolution loss. Optimal figure resolution is 300 dpi. Color figures can be submitted in either RGB or CMYK color formats. Efforts should be made to ensure that figures and tables are clear, concise, and appropriate for the kind of data presented. Special efforts should be taken to ensure that figure text is readable at different figure sizes.

Solid lines and clearly distinguishable colors should be used; avoid using red and green shades together. SI (metric) units should be used for all measurements.

Figure/table legends should appear immediately below or beside corresponding figures: start the legend with the phrase "Figure X." or "Table X." followed by the figure/table title in bold-face, every significant word capitalized. When applicable, separate panels in a figure and label them with capital letters A-Z. In the main article text, refer to figures or tables by type, number, and panel ("Figure 2A" or "Table X").

Statistical tests, where appropriate, should be described in a dedicated subsection of the methods ("Statistical Analysis," or similar). If statistical tests are used in a figure, visual measures of uncertainty (e.g. error bars) should be included, and the specific test statistic which they represent should be noted in the figure legend. Conventions to indicate significance on the figure are at the author's discretion but should be explained in the corresponding figure legend. Sample sizes should also be reported in the figure legend.

Example of a Properly Formatted Figure:

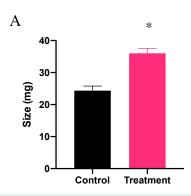


Figure 1. Treatment With X Increases Average Size of Y

(A) Treatment of embryos with concentrated X for three days resulted in significant size gain. Bars represent mean +/- SD; *p<0.05; n=20 embryos

Data/Image Processing

Regarding figure and graphic manipulation, MURR defers to standard editorial guidelines in the academic publishing community. Unnecessary digital manipulation of figures should be avoided, and if edits must be made, they should be made to an entire image/figure. Obvious attempts at data manipulation deemed influential to data interpretation will be addressed with authors.

Studies Involving Humans and Animals

MURR is in alignment with most major academic publications, in that any articles including experiments involving human or animal subjects must include a statement in the methods section informing that consent was obtained from all human subjects and identifying any committees which have authorized the use of laboratory animals. All human and animal studies must be performed in accordance with institutional and national guidelines and regulations. For more information, refer to the sources at the bottom of this document.

Gene and Chemical Names

Genes, proteins, chemicals, and other specialized names should follow conventions which are in current use by the research community. If multiple names exist and are in use for a specific gene or protein, authors may choose to use one or all known names. However, gene, protein, chemical, and other specialized nomenclature must be consistent throughout the article.

Reference and Citation Format

MURR does not specify a maximum number of references; however, authors should use good judgement and avoid exhaustive bibliographies. In general, STEM articles should contain 20-40 references. Reference number in arts/humanities articles is left to the authors' professional judgement. References should appear at the end of the article,

numbered in the order in which they appear in the article. In-text citations should appear as superscripts containing only the number of the specific reference. Multiple references in a single superscript should be separated by commas as appropriate.

The reference list at the end of the article should follow American Psychological Association (APA), 7th Edition citation style. For a quick guide to APA reference style, see the following link:

https://apastyle.apa.org/instructional-aids/reference-guide.pdf

Example of proper in-text and reference list citation:

In a landmark 2012 study, researchers at West Virginia University found that student attention span was inversely correlated with the number of coffee shops within walking distance¹.

References

1. Gee, E. G., & Smith, J. (2012). Coffee shop proximity affects student attention spans. *Nature*, 42(3), 472-479. https://www.notawebsite.org/uselessresearch

Additional/Supplementary Information

At this time, MURR would like to advise authors against including a section for additional or supplementary data—authors should instead try to incorporate all pertinent data as figures in the main article. Exceptions may be made on a case-by-case basis.

Acknowledgements

If the authors wish, they may include a brief "Acknowledgements" section at the end of the article, before the reference section. This section should be as concise as possible.

Competing Interests

All articles must include a section titled "Competing Interests" at the end, before the references sections, where the authors must disclose any competing interests. If the authors have no competing interests, they should include the statement "The authors declare no competing interests."

Further Reading

This style guide was adapted from the following journal style guidelines:

https://www.sciencemag.org/authors/instructions-preparing-initial-manuscript#

https://www.cell.com/cell/authors

https://www.nature.com/nature/for-authors/formatting-guide

https://www.lakeforest.edu/live/files/2384-biology-thesis-guide-cell-style

More information on APA Style, 7th Edition:

https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

Mountaineer Undergraduate Research Review (MURR) website:

https://undergraduateresearch.wvu.edu/home/mountaineer-undergraduate-research-review