

Author Guidelines for Submitting Manuscripts

Thank you for choosing to publish with the Journal of Young Investigators!

Research and Review article submissions must meet the following criteria before they can be sent out for review. Please note that while JYI has few restrictions for manuscripts, it is important that authors follow the guidelines discussed below in order to facilitate the review process for our staff of volunteers. **Manuscripts that do not meet these requirements will be returned to the author and not reviewed.** Please read the information carefully, and format your submission accordingly.

Note: JYI publishes two types of manuscripts: (1) Research articles covering original research and (2) Review articles, which summarize the research, theories, and issues surrounding a particular scientific question. Review articles will have slightly different section organization than Research articles (see below).

GENERAL REQUIREMENTS

Articles submitted to JYI must meet the following criteria:

- The manuscript must present research completed by one or more undergraduate students. Authors may be asked to provide proof of undergraduate status. Students may submit manuscripts after graduation as long as all research was conducted during their undergraduate career.
- Original research being presented in a Research manuscript must have been completed under the supervision of a mentor holding a doctoral degree or a faculty position at a post-secondary institution, other research-oriented institution, or the equivalent in industry. The mentor will be required to fill out an approval form to be submitted along with the primary author's manuscript. Any questions about this requirement may be directed to the Senior Research Editor (sre@jyi.org).
- Research must be the author's own work and may not have been previously published.

Research manuscripts submitted to JYI should contain the following sections:

TITLE PAGE

Every manuscript should begin with a title page that includes the following information:

- Title of the manuscript
- Author names, including the address of the institution with which they were affiliated during the research work.
- An indication of which author will be the corresponding author after publication, along with an email contact for that author.

ABSTRACT

Every article submitted to JYI must have an abstract that consists of a single paragraph of ~ 250 words. In the abstract, the author must summarize why the research was conducted, how it was conducted, and the major results and conclusions. In essence, it should contain an overview of the hypothesis, methods, results, conclusions and implications of the research. References are typically not cited in the abstract, since the reader expects a more thorough discussion in the body of the article.

INTRODUCTION

The author should use the introduction to summarize current literature, present the problem his or her research addresses, why this problem is significant, and how it applies to the larger field of research. If the manuscript is novel or creative in some way, it should be clearly stated. The author should address relevant studies by other researchers; however, a full history of the topic is not needed. Finally, the author must clearly state the hypothesis and briefly summarize the methods used to investigate that hypothesis.

The introduction should contain all the background information a reader needs to understand the rest of the author's paper. This means that all important concepts should be defined. **Remember:** JYI caters to an audience of professionals and undergraduates from a variety of fields. For example, an author need not define an "electron"; however, a "Cooper paired electron" does require a definition.

MATERIALS AND METHODS

The author should thoroughly describe the materials and methods used to investigate the problem and should briefly describe why these methods were used. There should be enough information provided to replicate the study. This section should contain no results, conclusions, or interpretations. Information should be grouped under appropriate subheadings (e.g. Techniques, Materials, Statistical tests, etc.). Authors should be sure to include the following information, when applicable:

- Experimental handling and care of any subjects (animals, plants, humans), including ethical guidelines followed by the author(s) in their use.
- Description of field sites (if applicable) including physical and biological features and exact location.
- Sample preparation techniques and the origins of samples and other materials (including human subjects). Note that if methods have been described elsewhere it is permissible to reference the original source in lieu of describing the methodology again. For example, “Samples were prepared using the same process described by Newton (2000).”
- Details surrounding any statistical testing used, as well as the threshold used for statistical significance.

RESULTS

Papers submitted to JYI must have separate results and discussion sections. In the results, the author should thoroughly detail the outcomes of the experiments, tests, and/or theories developed in the research. The results should be supplemented by figures and/or tables, which should be briefly explained. An effective results section will present the key results without interpreting their meaning. All interpretation and discussion of results should be saved for the discussion section.

DISCUSSION

In this section, the author should restate the problem he or she was attempting to address and summarize how the results have addressed it. The author should discuss the significance of all the results and interpret their meaning in the context of previous studies done by other researchers in the field. Potential sources of error should be discussed. Finally, the author should tie his or her conclusions into the “big picture” by suggesting the implications and applications this research might have. The author should discuss how this research affects the field, what it adds to existing research, and what future experiments could be carried out. **Remember:** This section synthesizes the whole study and should be treated as the most important part of the manuscript.

REFERENCES

All Research and Review articles **must** contain in-text citations and a list of references, preferably in [APA, 6th edition](#). Footnotes are not permitted. References may include: research articles published in scientific journals, scholarly books (i.e., not textbooks), personal communications with scientists working in the field, or unpublished data (only data, no conclusions). Web sources must be scholarly in nature, such as official reports (e.g., NASA’s Report on the Effects of Long-Duration Space Flight on the Human Respiratory System). While all of the above sources are acceptable, the majority of references used in a paper should be peer-reviewed articles. Please direct any questions about the suitability of your references to the Senior Research Editor (sre@jyi.org).

APPENDICES

Authors are discouraged from including appendices or supplementary figures in their manuscripts.

ACKNOWLEDGEMENTS

An acknowledgement section is not required; however, most papers include a paragraph of acknowledgements. This can include thanking individuals for assistance with experiments or interpretation of data, as well as thanking funding sources.

CONFLICTS OF INTEREST/DISCLOSURE

A conflicts of interest section needs to be included whenever a potential conflict of interest exists. For example, the author(s) must disclose any association with a company, organization, or business that could financially benefit from the results of the study. This section should be detailed and explicit, declaring any conflicts regarding design, conduct and/or execution of the study.

FIGURES AND TABLES

Figures and tables are important components of scientific manuscripts. Each figure or table should clarify information from the study and must be able to stand alone from the rest of the article and still be understood by potential readers. To ensure this, authors must follow these guidelines:

- Do not include figures or tables in the body of the submitted article.
 - Submit figures as high-resolution JPEG images.
 - Submit tables in Microsoft Word or Excel format in a document separate from the rest of the manuscript.
- Submit all captions together in a document separate from the rest of the manuscript.
- All figures and tables should be ordered sequentially (1,2,3...). They should be referenced within the text in this format: “The results show [...] (Figure 2).”
- Figures and tables should be simple, clearly formatted, and indicate error using standard deviation or comparable information.
- Captions should include succinct title and description for each illustration, providing sufficient information for readers to understand each figure without being verbose.

Note: The author must have permission to use all figures submitted with the manuscript.

Review manuscripts submitted to JYI should follow similar guidelines as Research articles, with a few exceptions.

GUIDELINES FOR REVIEW ARTICLES

A literature review surveys research carried out by others in a particular area of study. In writing a Review article, the author must read and evaluate studies done by other researchers, instead of conducting a new study. These manuscripts **must** revolve around a clearly stated thesis, and should generally contain the following sections:

- Title page
- Abstract
- Introduction
- Methods: This section is optional for Review articles. If included it should cover the process used for a meta-analysis of existing literature, and may detail the author’s process for finding and selecting articles used in the paper.
- Body: Depending on the topic, the author(s) may subdivide the body portion of the manuscript into several sections. The purpose of this section is to describe and evaluate studies in detail, comparing them and discussing their implications.
- Discussion
- References
- Acknowledgements (optional)
- Conflict of interest (when applicable)

Note: Review articles should not contain Materials and Methods or Results sections.

GENERAL FORMATTING FOR ALL SUBMISSIONS

All submissions should be formatted in the following way: typewritten, double-spaced, no page numbers, no page breaks, and with no tables or figures included within the text. Equations must be written using a word processor’s equation-editor function. Authors may subdivide sections of their manuscripts as they deem necessary to effectively organize and communicate the content of the manuscript.

FILE TYPE

All submissions must be saved as a Microsoft Word file. We are unable to accept LaTeX, PDF, or other formats.

STANDARDS FOR ACCEPTANCE

JYI’s mission is to involve undergraduates in every step of the scientific publishing process and to help undergraduate research flourish. As such, the scientific quality of a manuscript is the highest priority for our editors as they review incoming papers. Quality

in structure and writing are also judged in the review process for each manuscript. Papers that are strong in all three of these categories are most likely to be accepted by JYI for publication.