

## Research Paper Guidelines

PennScience: Journal of Undergraduate Research welcomes **original student research** in any field of science such as the life sciences, physical sciences, engineering fields, and mathematics. Here are some rough guidelines to what we are looking for in research article submissions:

Natural Science:

- Hypothesis based testing with data
- Graphs and images for the data analysis
- Updates on personal research conducted in independent studies or research groups
- Should not be solely a literature review or an expository essay.

Good Example:

<http://journals.plos.org/ploscompbiol/article/file?id=10.1371/journal.pcbi.1000173&type=printable>

Bad Example (No data, but a historically important article):

<http://cs.brynmawr.edu/Courses/cs380/fall2012/CrickCentralDogma1970.pdf>

Physical Science, Math, and Engineering:

- Updates on research projects, coding projects, and individual research in large collaborations
- Research conducted in independent studies
- Data on research conducted from what has been designed
- Does not need to be as statistically rigorous or data driven as natural science counterparts.
- Should not be solely a literature review or an expository essay.

Good Example:

<http://web.stanford.edu/group/fisher/research/publications/130.pdf>

Bad Example (Just a literature review):

<http://www.nature.com/nature/journal/v541/n7636/full/541161a.html>