

Broad Street Scientific

2021-2022 Editor Application

Application Instructions:

Hi! Thank you for your interest in the Broad Street Scientific. Please email a **PDF** of your application to broadstreetscientific@gmail.com by Sunday, October 10th, 2021 at 11:59:59 PM. If you have any questions, please contact Hrishika Roychoudhury (roychoudhury22h@ncssm.edu) or Vish Ravichandran (ravichandran22v@ncssm.edu). Please adhere to the word limit, but do not feel pressured to use all the allotted words.

Basic Information:

Name:

Grade:

Email:

Science Editor Information:

Subject Field(s): _____

(choose from: Biology, Chemistry, Engineering, Mathematics/Computer Science, or Physics – apply for as many as you wish)

Additional Items:

- Brief 1 page resume (not required, but would be helpful)
- (**REQUIRED**) Email address for an NCSSM Staff Member that can attest to your academic abilities (make sure to ask the faculty member for permission before you put his/her name down)

Science Editor Application

1. Why do you want to be a part of the *Broad Street Scientific*? (250 words max.)
2. *Broad Street Scientific* science editors are not only passionate about research and science writing, but are highly knowledgeable in the chosen field of review. What qualifies you to be an editor in your chosen field(s)? (250 words limit per subject area)
3. Science editors will be required to sit down and discuss edits with the published authors in their field. Describe your experience writing, editing, reading, or discussing scientific literature - this can include your own research or scientific writing (500 words limit).
4. **Answer this question if you were a part of the *Broad Street Scientific* staff last year.** What do you think went well with the editing process last year? What do you think could be improved upon? (250 words limit)

5. Depending on your **primary** subject of interest (you should only complete **one** review), please read a corresponding scientific paper. Thoroughly and critically review the paper, looking for proper structure, syntax, scientific paper format. Also ensure that the research is thorough and complete in identifying errors, analyzing results, etc. Then write a **brief critical review** of the study (limit of 500 words). Do NOT restate the experimental procedures. We want to see thorough understanding of the material, but more importantly, we are looking for your ability to think creatively and critically about the research's significance and implications. Be sure to also address these prompts:

1. What is the purpose of the study? What scientific problem or question was posed?
2. What were the major results?
3. How does the research advance knowledge in the subject field?
4. What questions does the study leave unanswered?
5. What errors, experimental, structural, or syntactical, were in this experiment/paper?

The papers for each category will be posted on the BSS website (<https://broadstreetscientific.ncssm.edu/staff/index.html>).

Consult the guidelines below when reading your respective papers.

Good Luck!

Summarized Siemens Guidelines for Research Papers

Introduction: the "why" section

- Review of Previous Literature
- Describe the specific problem to be solved, and provide a brief rationale for the research and why the work is important.

Materials & Methods: the "how" section

- Describe how you performed your work, giving sufficient detail so that someone trained in the field is able to understand what you did and can replicate it.
- Include the methods you used, written in a format commonly used in publications in your field of study. Do not merely restate a protocol or copy blocks of text; instead, use your own words to describe what you did, referencing key papers where appropriate.

Results: what did you find? [L] [SEP]

- Present your findings in sufficient detail so that the reader understands the results that were obtained or can follow each step of a mathematical proof.
- Describe how the results address the problem to be solved, the research question to be answered, or the hypothesis to be tested.
- Present all experiments, controls and statistical tests that show the results are reliable and statistically significant. In theoretical work, present the experimental findings against which the work was tested, the extent to which it was validated, or both. [L]
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Discussion: what do your results mean?

- Provide readers with an interpretation of the results, enabling them to understand the implication(s) of your findings.
- Describe what makes your work unique in the context of published findings and what distinguishes it from that of others in the field, or in your laboratory.

Conclusions and Future Work: what did you learn and what's next?

- Recap briefly what was learned from your research and how your work addresses the unanswered question(s) that you posed in the introduction.
- Assess the validity of the conclusions, which is an important component of any scientific report. In particular, are your conclusions fully supported by the results described in the report alone or in conjunction with prior literature?

- Determine what experiments could be performed in the future to refine your conclusions.
- Consider what questions still remain to be answered.

Miscellaneous

- Each figure/image must be accompanied by a caption with figure number and explanation. Figure and caption must be able to stand by itself.
- Each section must have a title.
- Don't forget the bibliography!