



**AJRSA**

## **American Journal of Rising Scholar Activities**

A Purdue University, peer and editor reviewed,  
undergraduate STEM research and activities journal

### Expectations for Paper Describing Faculty-Directed Lab Work

Students preparing this type of paper will have generally completed an experience with the Louis Stokes Alliance for Minority Participation (LSAMP), Summer Undergraduate Research Program (SURF), or other self-initiated participation in a faculty member's research program. The purpose of this paper should be to describe the work within the lab that the student was able to assist and participate with. This piece should be both descriptive and reflective, and it should typically be between 2,000 and 4,000 total words in length. The document should be in past tense, passive voice, and third person. It should utilize technical writing style. Although other sections can be included, the paper should include, at minimum:

**Abstract** – A short description of the entire paper with the student's responsibilities and contribution clearly summarized. Additionally, a short description of the learning experience should be included. The abstract should be between 250 and 300 words long.

**Keywords** – Three to six words that are descriptive of the overall experience should be listed.

**Introduction** – This section should introduce the faculty member, their lab and its objective, the time frame of the work, and who the student directly interacted with. The introduction should include a plan of development for the balance of the paper and be roughly 10% of the work.

**Problem Statement** – This section should describe, in detail, the work performed by the student. The results of the student's efforts and their contribution to the on-going work in the lab should be described. The research contribution piece should generally be about 30% of the work.

**Research Contribution** – This section should describe, in detail, the work performed by the student within their assignment. The results of the student's efforts and their contribution to the employer's operations should be described. The organizational involvement piece should represent roughly 45% of the overall paper.

**Summary & Conclusions** – This section should restate the specific contribution of the student in a concise manner and describe how that work will be utilized in the faculty member's lab moving forward. Future effort that will be planned resulting from the student's contribution should be described. The summary and conclusions should be roughly 15% of the paper.

**Acknowledgements** – The student should identify and thank the faculty member, graduate students, other undergraduates, or anyone else that assisted in making the overall experience worthwhile.

**References** – The student should cite at least three non-web references in name (date) format within the paper and use APA6 format for the bibliography.

Tables and Figures – The student should include at least one table and one figure within the paper with proper captioning.

Writing Process and Editorial Review – The student should produce a draft paper of the experience as quickly as possible following the conclusion of the lab work. If the faculty member wants to review the paper, it is the student's responsibility to see that the review is accomplished, and the faculty member is satisfied with the description of the work. The student will participate in peer editing during the seminar after the experience. The student is responsible for responding to the peer comments and improving the paper. The student will then need to respond to the editors' comments prior to publication. The student will receive a proof-copy before publication. This will be the final opportunity to make changes and improvements before publication.