

June 10, 2016

Guidelines for Undergraduate Research Proposals Forensic Science/Cell and Molecular Biology Students

Please submit **only a DIGITAL COPY (by e-mail)** of your proposal by the date indicated to you via email. You will be informed if your proposal is accepted as is, or if any changes are required. Stipend funds are increasingly limited and following the guidelines will be a major consideration. We might contact you to “fix up the proposal,” you will have 48h to return the proposal to us with the requested amendments. **Non-adherence to these guidelines will result in loss of funding and dismissal from the program.**

The following **must be rigidly adhered to**:

1. A new “Proposal Template” is available on our website (<http://prismatjjay.org/for-current-students/research-proposals/>). You **must** use this template to submit your proposal. You can copy and paste into it, or work in the template directly. The main text in your proposal must be in *Arial font, size 12, double-spaced*. Please make sure you use correct scientific nomenclature, that you indicate the proper name of a term before presenting acronyms or abbreviations, and that you use proper grammar and spelling. Feel free to use JJay’s Writing Center before submitting.
 - a. Biological nomenclature: wwwnc.cdc.gov/eid/page/scientific-nomenclature
 - b. Chemical nomenclature: <http://www.iupac.org/home/publications/e-resources/nomenclature-and-terminology.html>
2. The cover page must have the title of your project, your name, your mentor’s name, and the proposal number (number of times you have submitted a proposal to PRISM). Where designated at the bottom of the cover page, indicate the approximate number of hours that you will commit to this research as the total hours per week times the number of weeks. **New students must commit a minimum of 50h and returning students must commit to a minimum of 100h/term to qualify for funding.** Please indicate the total number of words, beginning in the second page.
3. The proposal should not exceed 2,500 words of text (with additional tables, figures, etc. as needed) and must include (**with each section labeled** a, b, c, etc. and **titled** as below):
 - a. **Abstract:** In 250 words or less, include a brief project overview including a brief statement of introduction to your project; a brief statement of your project objective(s); your hypothesis; a brief statement describing your proposed work; and a summary of results to

date (if there are any) and a brief discussion of where the project is headed. **Returning students must be sure that this abstract is updated to include the most recent semester's research progress.** These abstracts may eventually be included in *The Chronicle* and therefore MUST adhere to these criteria. **Proposals may be rejected based on the abstract.**

- b. Introduction: Brief introduction on the general scientific relevance of your proposed research. Your introduction should aim to explain the basic science behind your subject of study and why it is important to study it. The introduction should also explain any technical details particular to your work or field of study. Your introduction must give your audience the information needed to understand the rest of your proposal.
- c. Hypothesis: A hypothesis is the proposed explanation or expectation of the phenomenon you are testing. It is an educated guess (meaning that it must be based on previous observations) of the anticipated results of your research. The hypothesis must be worded so that it can be tested by your research. Do this by expressing the hypothesis using your independent variable (the variable you change during your experiment) and your dependent variable (the variable you observe - changes in the dependent variable depend on changes in the independent variable). In fact, many hypotheses are stated exactly like this: "If a particular independent variable is changed, then there is also a change in a certain dependent variable."
- d. My Role and Work: Brief description of your particular role and anticipated work for this research period. This section **should not be a technical description of your work** (that's what the next section is for) but a description of what is your role in your lab, in your project, and of what you will be doing during this term.
- e. Methods and Equipment: brief description of the methods, equipment, protocols, and/or materials that **you** will be using. In this section you should aim to communicate how are the different experiments done, with what equipment, what controls are required, and how do you plan to analyze the data.
- f. Peer Mentoring: The federal grant that pays for your stipends requires that students develop mentoring skills during their training. Before your third PRISM-funded term you will receive instructions on how to fill out this section. Some of the activities involved can be: a) more senior students can serve as peer mentors to new students joining their lab; b) you can tutor students (standalone or through the MSRC or other tutoring services on-campus); c) serve as a PRISM Peer Ambassador helping us with events aimed at informing students about PRISM.
- g. Bibliography: Please be consistent in the format of your references. Please include **3-5** relevant references to your project. Unlike the social sciences and humanities, which use APA and MLA style respectively, the physical and biological sciences do not have a single

standard format for references. Each sub-discipline and even each journal has their own unique variation on how references are made, both in-text and in the bibliography. Please discuss the issue of reference style with your mentor and select a style that you will use correctly and consistently in this proposal.

4. If you have started work with your mentor, the proposal **must** include, as an Appendix, a minimum 1-page discussion on what you have accomplished up to this point in time. This section should be a discussion of your results in the context of the aims of the project. It should tell the reader what you are looking for, what you have found, what your results mean in the context of the “big picture” project, and where these results are leading you. Use figures/tables/graphs to show your data and explain them in this discussion (figures **do not count** towards the page limit). Do not include figures that are not explained. Make sure all figures include a figure number and a legend explaining what the figure is.
5. Please save the proposal using the following convention for the file name:

LastName, FirstName-SUMMER2015.docx.

Please submit a digital email attachment of the completed proposal on the date indicated to Dr. Sanabria-Valentin (esanabriavalentin@jjay.cuny.edu) or Dr. Raquel Castellanos for CJA students (rcastellanos@jjay.cuny.edu). Once your proposal has been reviewed and you received an e-mail informing you that funding for the term has been granted, please submit (within the next week) a signed copy of the proposal cover (first page only) on the day you come to the PRISM office to fill out your funding paperwork.

Again, please carefully follow items 1-6 as discussed above **as funding is limited and cannot be guaranteed.**

***If funding is granted, you will be asked to come to the PRISM office to fill out paperwork on the fourth week of June, at which point we might also ask you to submit some other materials to be included in The Chronicle.*

For more information, etc. please contact Dr. Sanabria-Valentin at
esanabriavalentin@jjay.cuny.edu or drop by the PRISM office at 5.61.00 NB.