

Call for Research Internship Proposals

The Alfred P. Sloan Foundation – UPRM Ph.D. Enrichment Program will enrich the education of 24 outstanding Ph.D. students through internships in world class research laboratories, where they will spend a minimum of 4 – 6 months. This program is dedicated to the development of strong research collaborations with world class laboratories to continue the advancement of the eight UPRM Ph.D. programs, and their positive impact on students and society. **During the first semester of the 2018 – 2019 academic year proposals will be accepted up to October 12, 2018. Proposals will be evaluated as they are received. Proposals will be evaluated and improvements may be requested as part of the review process. The proposals may be submitted to rodolfoj.romanach@upr.edu.**

These research internships will provide up to \$14,000 for students from the eight Ph.D. programs at UPRM. These awards will be made throughout the three years of the program. These are competitive research internships and students must meet the following minimum requirements for a research internship:

1. Be Ph.D. candidates in their program of study and be United States citizens. Ph.D. candidates are defined as students who have completed all courses, passed their Ph.D. doctoral exams, and have a Ph.D research proposal approved by their graduate studies committee. The only remaining requirement before graduation is the completion of the research.

2. Students have started their research at UPRM and have made progress. Students clearly show the need of a collaboration with a leading research lab to advance their current research projects through a proposal in the format described in this document. This need is presented in the format for this proposal.
3. The research internship proposal is presented to the student's graduate committee. The student graduate committee approves the research intership proposal.
4. A support letter from host laboratory that indicates the mentoring that will be provided to the UPRM student during the research at the host institution.
5. The graduate coordinator of the Ph.D. program provides a copy of the student's graduate school record.

Conformance to these minimum requirements will **not** guarantee receipt of award. Each request will be carefully evaluated, and only exceptional students will be funded.

Format for Research Internship Proposal

At least one peer-reviewed publication is expected from each proposal. Hence, the research internship proposal will follow the format of an outline for a research paper. This outline will help the evaluation committee determine the progress needed to move from an outline to a research manuscript.¹ The proposal should demonstrate that the student is well prepared for carrying out the research project at the host institution, and clearly justify how both the UPRM and host laboratory contribute to the collaboration, and potential for publication.

At any time, only one student from a UPRM research advisor will receive an internship. Once this student achieves a peer reviewed publication describing the funded collaboration, then a second student from the same UPRM research lab may apply for an internship.

The objective of the research internship is to enable collaboration with a leading research; this experience is not foreseen as a substitute for research at UPRM. Preference will be given to outstanding students who already have an accepted or completed publication, or shown significant progress at UPRM.

The following format is required:

Title:

Authors: Include authors at UPR-Mayagüez and host institution.

Introduction

Provide an opening sentence that describes concisely the objectives of the work and why it is important.

Background: Describe previous studies performed by scientists in the field. Describe previous publications by the UPRM scientists and the collaborating host lab. Describe how participation in the group meetings and other research activities at the host institution will help advance the research project.

Novelty: Describe how the proposed work advances science and technology. What should the reader watch for in this paper. What are the interesting high points? What is the advance expected over previous studies. How will science and technology be advanced?

Experimental

Describe the experiments, simulations, software development, or theoretical work performed at UPRM.

Describe the unique resources and research facilities at the collaborating laboratory, and the expected results. Explain the expected contribution of the host laboratory, indicating the role of graduate students or postdoctoral appointees who will collaborate in the study. Explain the contribution of the UPRM laboratory to this collaboration.

Results

Describe results obtained at UPRM laboratory. Explain how the proposed studies at the host institution will confirm or advance the first results at UPRM.

Criteria for Evaluation of Research Internship Proposals

The proposals will be evaluated in terms of:

1. Clarity and justification of project objectives.
2. Progress made at UPRM facilities. Potential for completion of a research paper. The evaluation will consider whether the professor or student published recently in this field. Preference will be given to students that already have an accepted or completed publication. The program is not developed to substitute research at UPRM with research in an external lab.
3. Clarity in the explanation of the contributions of UPRM and host lab. The proposal must clearly explain how the two research labs will contribute to the collaboration.
4. Support letter from host institution and plans for mentoring UPRM student.
5. Student's record as a graduate student. This program is focused on outstanding hardworking students. The program is not developed to provide a new environment to a student that has had difficulties at UPRM.

At any time, only one student from a UPRM research lab will receive an internship. Once this student achieves a peer reviewed publication describing the funded collaboration, then a second student from the UPRM research lab may apply for an internship.

Proposals will be evaluated providing an overall rating based on the five criteria presented above

References:

1. Whitesides, G. M., Whitesides' Group: Writing a Paper. *Adv. Mater.* **2004**, *16* (15), 1375-1377.