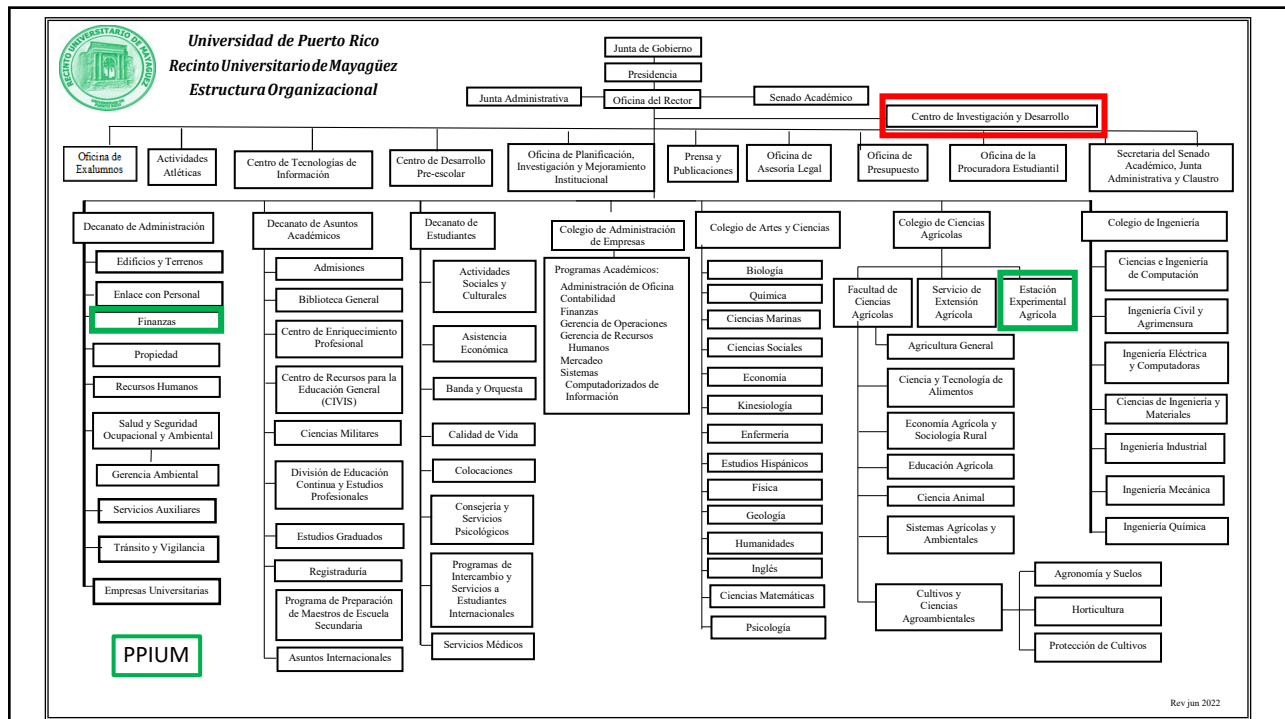# How to submit research proposals at UPRM

Overview of research aspects targeting new faculty
31 October 2024

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Associate Dean – College of Arts & Sciences

Where to start?

- Before you invest a lot of time and energy into developing any proposal, you should define what your goal is:

    - **Seed funding to obtain preliminary data?**
        - Go for internal funding, smaller foundation or professional association grants
        - Go for a new/early investigator type grant
        - It might be worth waiting a year to get one or two publications under your belt to document your expertise in the area

    - **Do you already have publications and preliminary work in the area you are proposing?**
        - Then circumstances are right for a Federal grant proposal

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- Identify your research agency/funding source
    - Subscribe to newsletters
    - UPR Central Administration – published opportunities
    - Local support:
        - PRST: https://prsciencetrust.org/research-grants-program/
        - HUMA PR: https://fphpr.org/subvenciones/
    - Some examples of Federal agencies: www.grants.gov
        - NASA: https://nspires.nasaprs.com/external
        - NSF: https://new.nsf.gov/funding/getting-started
        - NEH: https://www.neh.gov/grants/listing
        - NOAA: https://research.noaa.gov/partnerships-funding/
    - **FUNDFIT** - https://app.fundfit.ai/login/

FUNDFIT
https://app.fundfit.ai/login/

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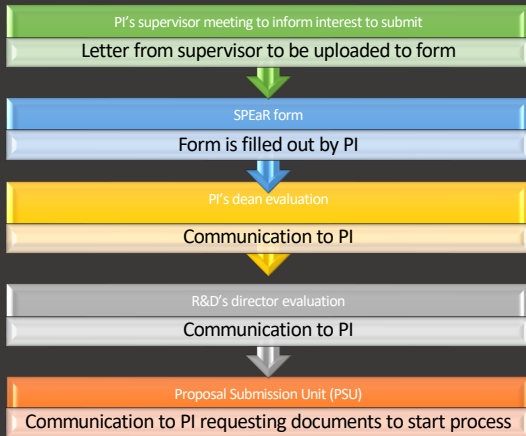
You identified the call for proposal, what's next?

1. Identify your needs for the project.

2. Discuss your needs and time commitments with **Department Chair** as soon as they identify new funding, awards, and fellowship opportunities. It is important that the department commits to redistributing the academic load **BEFORE** submitting a proposal.

3. Make an appointment with the **Associate Dean for Research** to discuss needs for the project and institutional commitments as soon as possible (i. e. when considering submitting a proposal).

4. Depending on the funding source, decide what route to use:
    i. Main Campus SRO office that submits proposals is the R&D Center (CID).
    ii. Federal Department of Agriculture (USDA) through Agricultural Experiment Station (EEA) (researchers associated with Ag Sciences-only).
    iii. University Intramural Practice (PPIUM).

Steps for submitting a proposal to CID

PI's supervisor meeting to inform interest to submit
Letter from supervisor to be uploaded to form

SPEaR form
Form is filled out by PI

PI's dean evaluation
Communication to PI

R&D's director evaluation
Communication to PI

Proposal Submission Unit (PSU)
Communication to PI requesting documents to start process

1. Identify needs, commitments and institutional support
2. Get all your commitments in writing (letters from directors, Deans, Chancellor, etc.)
3. Negotiate your release time
4. Complete the SPEaR form for Research Deans (letter of intent)
5. Get approval to submit your proposal to PSU

SPEaR - Submission and Proposal Evaluation and Review

Letter of Intention Form

Submission of a new research proposal to the R&D Center requires this letter of intent form (LOI) to be submitted by the PI to the PI's Associate Dean of Research. The LOI will be evaluated for recommendation and submission to the R&D Center for approval. It is thus strongly recommended that the PI submits this LOI form and get it approved well BEFORE he/she spends considerable time working on the proposal.

Remember that the **complete proposal** must be submitted to R&D's Pre-Award office at least 10 days before the submission deadline.

Hi, Matías J. When you submit this form, the owner will see your name and email address.

* Required

Project Summary

1. Funding agency *

Enter your answer

2. Upload Request for Proposal (RFP) document (Non-anonymous question⊡) *

⊤ Upload file

File number limit: 1 Single file size limit: 10MB Allowed file types: PDF

3. Upload PI's department chair approval (pdf letter) (Non-anonymous question⊡) *

⊤ Upload file

File number limit: 1 Single file size limit: 10MB Allowed file types: PDF

4. Type of proposal *

○ Single Institution
○ Cooperative agreement
○ Sub-award received from another organization
○ Collaborative agreement
○ Memorandum of understanding or similar
○ Major Research Instrumentation (MRI)
○ Other

Microsoft 365

What is SPEaR form?
SPEaR - Submission and Proposal Evaluation and Review

6. What type of proposal will be submitted
8. Due date
9. Insert due date
10. Title
11. Team composition. Include universities and departments of each of the researchers.
12. Brief description of the tasks for each researcher in this project.
13. Telephone number of PI
14. Address the gap in knowledge and advances in research, education and service and the potential for impactful findings of the proposed research.
15. Expected project budget (approximate value).
16. Will the budget include a subaward to an external organization?
17. Write the name of the institution receiving the subaward
18. Does the project involve the purchase of items considered equipment by sponsor agency, remodeling or construction of facilities?
19. Invoicing period and financial reporting (from terms and conditions in the request for proposal).
21. Does this proposal include indirect costs?
23. Does the proposal require institutional commitment as matching funds?

Work WITH the CID staff

1. Contact the Proposal Submission Unit (PSU) (psu@uprm.edu), at least 15 **business** days before proposal is due

2. Submit **Proposal Intake Form** (https://www.uprm.edu/cid/psu/#PSUFaq4) at PSU. Pre-award service agreement and compliance screening questionnaire

3. Request an appointment with the Research and Development Center (CID) to start the process in the platform (StreamLyne Research)

4. Work with CID staff to prepare your proposal, especially the budget

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Proposal submission: *StreamLyne Research*

Library Services Supporting the Research Lifecycle

Funding applications

Specialized consultations related to:

- Registration of ORCID (Open Researcher and Contributor IDentifier) and updating your record

- Creation of Biographical Sketch via SciENcv (Science Experts Network Curriculum Vitae)

- Development of Data Management Plans

- Plagiarism Detection Software

- Open Access and Data Sharing Policies and Mandates
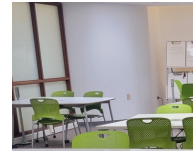
- Authorship and Publication

Spaces available

- Collaborative spaces to meet with colleagues to design and write proposals.
- After careful consideration and negotiation, space can be included in the *Facilities, Equipment, and Other Resources* section.

Contact Details

Phone 787-832-4040 x. 2309 & 5900

Web https://libguides.uprm.edu/gric

Email gric@uprm.edu

Basic Grantsmanship

- Write to your audience: each agency represents a different audience based on their **agency mission and priorities**
- Be clear and concise
- Use a mix of lay and technical language (avoid jargon, but use their terminology)
- Be well organized
- In general, 3rd person is preferred by reviewers
- Background/literature review—make sure that you know exactly what is happening in your field
- This is a *persuasive argument*—sell your idea
- **Do not wait until the last minute!** Well written proposals take time to develop and revise

Before you begin

- Your proposal needs to have a strict **outline** that starts with the specific granting agency guidelines
- Use **bolded sub-headings** representing agency defined requirements to help break-down the outline—then fill it in with your information
- Important to **use the agency's own terminology** for these sub-headings and in the narrative
- Remember to follow page limits and **formatting requirements** (font size and type, line spacing, etc.)
- Determine the **budget first** to know what you can accomplish in your goals—do not promise to do more than time and money allow!

Agency Specific Grant Proposal Guides (GPG)

- The funding opportunity announcement (RFP, NOFO) is the **BIBLE** when it comes to directions for writing your proposal
- Sometimes the only direction that they will give you is to refer to the "Grant Proposal Guide" for the agency on how to prepare the narrative (e.g. NSF PAPPG) https://www.nsf.gov/pubs/policydocs/pappg22_1/index.jsp
- These guides are long (often several hundred page)—be prepared to search the document to find the area that talks about narrative preparation

Agency Cover Sheet	**Facilities & Equipment**
Project Summary	**Budget & Budget Justification**
Project Narrative	**References Cited**
Introduction	**Biographical Sketch**
Goals/Objectives	**Current & Pending Support**
Methodology	**Supplementary Documentation**
Timetable	
Potential problems & alternative strategies	**Other**: Intellectual Property/Tech Transfer; Project Management Plan; Post-Doc Mentoring Plan; RCR Plan, Data Management/Sharing
Evaluation Plan	

Key Points for Successful Grant Writing

1. Start early!
2. Get institutional support
3. Select topic carefully
4. Provide preliminary Data/Results
5. Include valid, developed, sound methods & procedures

6. Fit the established format
7. Proposal must be well organized and complete
8. Keep peer review & selection in mind
9. Proposal writing is hard work!

If at first, you don't succeed…Try again!

First things first

- Always start off by stating your project's overarching goal, hypothesis, and targeted objectives

- Program officers want to see exactly what your project is about in the first paragraph—if they have to wait until the end of a rambling 2 pages of introduction before seeing this, they may stop reading.

- Objectives should be hypothesis driven (designed to test and support your hypothesis)

Get to know your program officers

- As soon as you know what program or directorate of an agency that you want to apply to, start communication with the **Program Officer** (PO or PD)
- Ensure that your idea aligns with program focus
- Recommend a specific review group to add
- They can act as your advocate in the review process
- Start by emailing them, send a white paper (2-page) or brief description of what you want to do
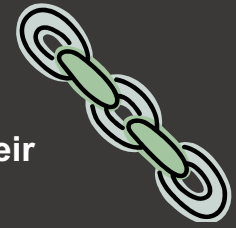
Goals vs. Objectives

GOALS:
- Overarching, Long-Range direction
- Broad statement of targeted outcome

OBJECTIVES:
- Break goal down into smaller, definable units
- Provide specific, measurable actions to achieve the goal

Writing effective objectives

Objectives also cannot depend upon one another for their completion.

1. We will synthesize protein Y for the first time in history
2. Then we will take protein Y and analyze it for compositional changes
3. Then we will insert protein Y into capsid C to cure skin cancer

Since the rest of the experiment is contingent upon a risky procedure—all is lost if objective 1 fails

Writing effective objectives

Make sure that they are **SMART**! (www.cdc.gov)

S—Specific
M—Measurable
A—Achievable
R—Realistic
T—Time Bound

Objectives that are not SMART invite reviewer criticism such as:

"The scope is too ambitious"

"It is not clear that the applicant can complete the objectives in the given time frame"

"The objectives are not easily measurable, resulting in speculative outcomes"

Vague, poorly written objective

To educate 30 patients about diabetes self-care.

Does not address:

Who is involved?
What are the desired outcomes?
How will success be measured?
When will the outcome occur?

Well-written objective
By the end of the first year of the project, 30 low-income diabetic patients aged 65 or older will attend a series of 3 hour-long diabetic self-care trainings and will show improvement in knowledge regarding self blood glucose monitoring, insulin administration, and diabetic nutrition as measured by pre- and post-test survey.

One more note regarding your objectives

- Make sure to link your objectives back to the goals and objectives of the agency and program that you are applying to in your narrative

- Example:

Our goal is to decrease bovine mortality due to mastitis, *in line with the USDA NIFA Basic Research program goal of improving animal health by decreasing the incidence of common diseases*. To achieve this goal, we have designed the following specific objectives…

You submitted your proposal, then what ?

1. Agency rejects or awards your project
2. PSU receives notification and conditions of the award
3. PI starts the process of requesting account creation
4. CID budget office creates your account in UFIS and FRS (two numbers)

With account number you start your project:

- Hire personnel (Human Resources)
- Request your release time or buy-out
- Process tuition payments for students
- Assign research assistantships
- Pay administrative staff
- Purchase stuff (requisicion and PO)
- Service contracts
- Travel requests
- Other processes for your project

- **Awards are made to the INSTITUTION**
- **The PI executes the project**
- **The University puts the money forward; hence, it is university money subject to ALL regulations of UPR**

Thank You !

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