

REQUEST FOR PROPOSALS FOR

SCIENCE AND TECHNOLOGY PROJECTS

REFERENCE: FY 2019-20

PROGRAM GUIDELINES

CATALYZER RESEARCH GRANTS

**Revised on February 2020



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Introduction

The mission of the Puerto Rico Science Technology and Research Trust (the Trust) is to invest, facilitate and build capacity to continually advance Puerto Rico's economy and its citizens' well-being through innovation-driven enterprises, science and technology and its industrial base. To fulfill its objectives, the Trust shall perform the following tasks, among others:

- Increase the financing available for science and technology development activities in Puerto Rico;
- Support the commercialization of products and services based on science, technology or research;
- Foster private investments in science and technology research or development activities and projects, and in expanding high technology and multinational companies highly active in Puerto Rico;
- Increase the investment in innovations through the alliance of public and private institutions.

In light of its mission, and to further the objectives as described above, the Trust is pleased to issue this Request for Proposal (RFP) for the Catalyzer Research Grants Program (CRG) as a solicited proposal mechanism to entice the science and technology community in Puerto Rico to submit proposals for funding consideration. As such, the goal trough this RFP process is to help local researchers increase their probabilities of success in securing federal funding for their research and development activities. It is well acknowledged by scientists that R&D funding in Puerto Rico could be significantly increased if local researchers are provided with adequate resources that enable them to achieve critical milestones in their research endeavors. In particular, the CRG will provide bridge funding to help researchers accomplish the following to enhance the proposal competitiveness:

- Obtain reproducible and robust preliminary results
- Address any recommendations from previous grant reviewers to improve the R&D project to strengthen its position to obtain the grant



 Secure reagents, laboratory materials, collaborations or additional technical training necessary for the proposed goals

The purpose of the CRG Program Guidelines is to disseminate information to prospective applicants to enable them to develop and submit proposals to the Trust. As such, this document,

- Describes the types of projects for which applications will be considered;
- Describes the funding available and the process and requirements for submitting applications; and,
- Explains the criteria for evaluating proposals.

*Please, note that the Trust reserves the right to fund any or none of the proposals submitted under this RFP process.

Points of Contact

For questions about the CRG process, you might contact the Grants Advisory Team, **only** through grants@prsciencetrust.org. Answers will be provided in 48-72 hours.

Expected Results

By strengthening local researcher's position for the submission of highly competitive R&D grants (within the 15-18 months after receiving the CRG), the Program's expectations will be proposals successfully awarded from private and/or federal agencies (e.g. National Science Foundation, the National Institutes of Health, among others) in order to stimulate the development of Puerto Rico's knowledge-based economy

Eligible Applicants

The CRG is open to researchers in public and private universities, colleges, and affiliated non-profit research institutions located in Puerto Rico. Ideal candidates fall into one of the following categories:



- Junior faculty (within their first five years of their faculty appointment) with a competitive publication record, seeking to secure their first grants*
- PI's with a successful track record of securing funding in their primary research topic,
 but now embarking in a new research topic and seeking to secure a grant*
- PI's that applied for highly competitive federal funding*, that had their proposal favorably reviewed, but fell short of being funded. In this case, the PI should provide a copy of the evaluated proposal and the evaluations.

Applicants must submit a project plan designed to allow them to complete experiments suggested by previous reviewers or generate new data that will strengthen the competitiveness of the proposal.

*The CRGs seek to bridge grants from highly competitive private and/or federal R&D programs (e.g. National Science Foundation, the National Institutes of Health, among others).

**Natural persons are not eligible to submit proposals.

Although collaborations with entities outside of Puerto Rico and abroad are allowable, funding will be awarded to entities duly established in Puerto Rico for work done primarily and for the benefit of Puerto Rico.

Eligible Activities

To be eligible for funding, projects must be presented in one of the following strategic fields:

- Aerospace
- Agriculture
- Biotechnology and Natural Sciences
- Clean Technologies and/or Renewable Energy
- Clinical Trials



- Conservation Sciences
- Electronics
- Environmental Sciences
- Information and communication technologies
- Medical Devices
- Other areas that the Trust, in its discretion, determine will result in the growth of research, development and commercialization of science and technology in Puerto Rico.

Award and Funding Information

- Funding Mechanism: Awards will be made in the form of Cooperative Agreements. This funding instrument enables the Trust to exert, as necessary, programmatic involvement before and after the award is made, including the successful monitoring of the awardee's accomplishment of mutually-agreed milestones.
 - **It is important to point out that the CRG does not allow multiple submissions by the same applicant.
 - **In the case that the Research Grants Program have more than one RFP open at the same time, applicants can only apply to one funding mechanism.
- <u>Estimated Number of Awards</u>: 8-10. Note, however, that the Trust reserves the right to fund any or none of the proposals submitted under this RFP process.
- Funding per Award: Under this solicitation, proposals may be submitted for funding up to \$70,000, indirect costs are not allowed. Applicants must specify in their applications the intended use of the grant funds in their research activity and explain how these efforts can enhance their success probabilities in obtaining federal R&D funding. Awardees will receive \$35,000 at the time of execution of the agreement. The final



disbursement of \$35,000 will be payable after grantee presents a mid-point progress report showing successful compliance with the project milestones as presented in the proposal.

Project Period: Project duration must be a minimum of twelve months but not greater than twenty four months. Funding awards are expected to be issued during the period of November-December of 2020 for proposals submitted under this solicitation. Applicants that receive funds from the Catalyzer Research Grant should submit or resubmit their proposals to a highly competitive private or federal R&D program within the next 15-18 months of the award date.

**CRGs are not renewable. Other CRGs applications from the same PI will not be considered until evidence of resubmission of the improved proposal, resulting from the original CRG, is submitted to the Trust.

**The Cooperative Agreement will be issued for 24 months, however this does not prevent the researcher to complete the project in twelve months if that was established in the proposal.

Use of Funds

These funds will be considered discretionary funds, to be used by the researchers for their work as the researchers deems appropriate. The funds are not renewable, but however the entity may request a no cost extension. Construction of research facilities and similar capital expenditures are not allowable uses of funds under this Program.

Allowable Costs

The following costs are eligible to conduct research and development efforts pertaining to an Eligible Activity as described above:



Direct Costs:

- <u>Personnel Costs</u>: salaries of key personnel to conduct the work as presented in the proposal.
- Fringe benefits: only those required by law: social security, federal and state unemployment, state disability, etc.
- <u>Consultant/Services Fees</u>: Fees for consulting services or any other type of remuneration paid to technical advisors consulted with regard to research and development.
- Materials and supplies: Item of property other than equipment, costing less than \$5,000 each.
- Equipment: Item of property that has an acquisition cost of \$5,000 or more and an
 expected service life of more than one year. Equipment purchase must be essential for
 project and must be fully justified.
- Out-of-Jurisdiction-Travel: Only if necessary for the completion of the work proposed. Must be fully justified and itemized by destination and cost. Can include travel-related costs for transportation, lodging, and meals. Allowance for air travel normally will not exceed the cost of round-trip, economy airfares. All travel must be pre-approved by the Trust. Travel should not exceed \$5,000 per award. Travel in Puerto Rico (including mileage, meals, lodging) is not allowed.

The following costs are **not** eligible:

- Unreasonable costs based on the proposed scope of work. All costs <u>must</u> be fully justified.
- Indirect costs.
- Subawards.



- Acquisition of real property.
- Costs incurred pre-award, including proposal preparation costs.
- Maternity or sick leave expenses.
- Redundancy or other terminations costs.
- Contingency costs.
- Hospitality and entertainment costs.
- Journal subscription costs.
- Relocation expenses.
- Travel in Puerto Rico, including mileage, meals and lodging.
- Direct or indirect support for any lobbying effort or for contribution to the political campaign of any candidate or for contribution to any political party or similar organization.

Info Sessions

The Trust will be holding a few briefings for those interested in submitting a proposal. These sessions will provide an overview of the submission and evaluation process as well as a forum for getting potential applicants' questions answered. Specific sessions' dates will be announced through https://prsciencetrust.org/research-grants-program.

Application Process

The Catalyzer Research Grants RFP application process consists of two phases: Letter of Intent (LOI) and Full Proposal. The LOI phase is open to all eligible applicants while the Full proposal phase is by invitation only.



Applications will be received only through our Grants application platform (powered by Wizehive) available at https://prsciencetrust.org/research-grants-program, under the section titled **Catalyzer Research Grants Program.**

User Profile

In order to gain access to the application forms the applicant must first register by creating a user profile. Information on the User Profile will be used as a statistical metric and will not be used as an evaluation criteria. The Principal Investigator must submit both the LOI and the Full proposal. The user profile must provide information about the PI as well as the contact information for the Institution's Research and Development Administrator.

Letters of Intent (LOI)

Interested applicants must first submit a LOI. The applicant will have the option to apply under one of the following categories: **New submission to a federal grant** and **Resubmission to a federal grant**. LOIs under both categories must provide the following information:

- Description of the Research or Technology to be developed, including the current status of the project, significance and innovation (7,000 characters with spaces).
- Rationale for funds requested including the project's plan and the goals expected to be accomplished with the Trust funds (3,500 characters with spaces).
- Description of the Project Management Team (5,600 characters with spaces) including the involvement of third parties when applicable.
- Specify the federal/private grant (s) to which the applicant plans to submit or resubmit
 a proposal.

LOIs under Resubmission to a federal grant must also include:



• Information about the Unapproved Federal/Private Grant to which the applicant want to resubmit a proposal, including the score received and a summary of the most important comments of the reviewers.

LOIs are only to be submitted electronically through the Grants Application Platform at https://prsciencetrust.org/research-grants-program, under the section titled Catalyzer Research Grants Program. No other forms of LOI submission (including .pdf or MSWord documents, etc.) will be accepted. Attachments to the LOI will not be reviewed.

If the Puerto Rico Science, Technology & Research Trust finds that the project proposed in the LOI is responsive to the selection criteria and have the potential to contribute to the strategic research and technology areas of interest of the Trust, the applicant will be invited to submit a Full Proposal.

**Please note that an invitation to submit a Full Proposal will not constitute intent to award.

Full Proposals

Proposal Format

Proposals must be submitted using the Grants application platform available through the Trust website. Only applicants invited to submit a full proposal will have access to the application form. Key personnel curriculum vitae documents, support letters, figures, and bibliography (see *Proposal Content* section) should be included as attachments through the same application platform.

Confidential Information

The Trust discourages the inclusion of confidential/proprietary information as part of the proposal. Patentable ideas, trade secrets, privileged or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in applications only when such information is necessary to convey an understanding of the proposed project.

If the application includes such information, clearly mark each line or paragraph on the pages containing the proprietary/privileged information with a legend similar to: "The following contains



proprietary/privileged information that (name of applicant) requests not be released to persons outside the Trust, except for purposes of review and evaluation."

Proposal Content

The following information will be requested during proposal submission:

- Title: include project title, proposing institution, name and contact email of principal investigator.
- Abstract (1,500 characters with spaces): A brief technical summary including project background, significance, main objectives and expected outcomes. The abstract of awarded proposals will be published in the Trust website.
- Project Background (4,000-5,000 characters with spaces): Explain the proposed research project background and significance. How is this work novel and unique? Describe similar, related, and competing efforts being carried out worldwide and how your proposed research will contribute to the field. Please cite any relevant work.
- Project Status (4,000-6,000 characters with spaces): Describe the status and progress of the project. Include preliminary data and describe how this data supports the hypothesis to be tested and the feasibility of the project. Include information about any significant funding supporting this research at the moment.
- Statement of Work (SOW): Aims, milestones and timetable (8,000-10,000 characters with spaces): Include a Statement of Work with specific aims, approach, and quarterly technical performance milestones for a project duration of 6-12 months. Milestones should also include the plan for submission of R&D proposal (s) no later than 3-6 months after the end of the SRGP award. In addition to the narrative, please include a timetable or Gantt chart summarizing the work plan.
- Rationale for CRG application (2,000-3,000 characters with spaces): Include a brief
 discussion of why this funding mechanism is particularly adequate for the idea and how
 will it help you to secure federal funding within the next 15-18 months.



- Project Management and Environment (3,000-4,000 characters with spaces): Provide a brief summary of the project team members, including their relevant skills, role and time commitment to the proposed project. Describe the resources (e.g. equipment and facilities) that will be used to conduct the proposed work. If resources are to be accessed from third-party collaborators, provide evidence of third party's support to the Project (e.g. Letter of support).
- Budget Narrative (1,500-2,500 characters with spaces) and Budget Table: In the budget narrative justify the uses of funds for the proposed timeline. Indirect costs are not allowed under this program.

Proposals under the category **Resubmission to a federal grant** must also include the following information:

Summary of reviewers' comments for the unapproved federal/private grant (3,000-4,000): Summarize the most important comments of the reviewers, per evaluation criteria, and include specific responses addressing the major weakness identified.

Please include the original feedback from reviewers or summary statement sent by the federal/private agency.

Appendix Material (not included in within characters limit established for full proposals):

- Key Personnel Curriculum Vitae: (4 pages maximum per person, NIH, NSF or equivalent bio-sketch format encouraged).
- Support Letters: Provide any letters necessary to demonstrate the support of key collaborators and consultants included in the application. This section must also include a letter of institutional commitment from authorized personnel that acknowledges support for the application, describes any institutional support (e.g. resources, intellectual environment, administrative structures, etc.) available to the research team, and, if applicable, includes information regarding matching funds or in-kind support for the application. In-kind support in the form



of faculty time-release is highly encouraged.

• Figures: Include only relevant figures mentioned in the text.

Bibliography: if applicable.

Evaluation Criteria

Applications will be reviewed for completeness and for responsiveness to this program. Incomplete or non-responsive applications will not be considered.

Proposal review will be carried out according to the following criteria:

- Project Status: Is the application contingent upon the researcher submitting a plan to secure federal funding? Is the current status of the project suitable to secure federal funding within the next 15-18 months? In the case that the PI had applied for competitive federal funding, does the submitted application address the comments and suggestions of its previous peer review?
- Approach and Technical Merit; Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Does the plan identify key milestone(s) to be reached during the funding period?
- Innovation/Relevance: Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches, instrumentation, or interventions? Are they novel to one field or novel in a broad sense? Will scientific knowledge, technical capability, and/or clinical practice be improved?
- Investigator(s): Are the applicant's capability and experience commensurate and relevant to the proposed work? Do they have sufficient expertise to execute the proposed project and show meaningful results? Do they established adequate collaborations (if specified)? In the case of a PI/Team entering a new research



topic, do they have a strong track record that would support their lack of experience in the new area? Is the institutional support, equipment, facilities, or other physical resources available to the investigators adequate for the project proposed?

• Budget Justification: Are the budget, project duration, and level of effort proposed appropriate for the CRG (15-18 months to submission or re-submission)? Is clearly stated how the award will benefit the project and enhance the proposal to obtain a highly competitive federal award?

Selection Process

Award recommendation decisions will be made by the Trust's Board of Trustees, based on the advice of an External Peer Review Committee (EPRC) and the Scientific Revision Board (SRB).

The EPRC will be comprised of experts in areas of relevance to the funding priorities of the Trust and appropriate to the topics covered by the letters of intent selected for the second round of applications. To ensure a fair and open competition, EPRC members will not take part in the review and selection deliberations involving any situation which could create a clear conflict of interest. EPRC members will be required to sign a *Conflict of Interest and Confidentiality Statement* and respect the confidentiality of the information provided in proposals.

The role of the SRB is to provide technical, administrative, and scientific expertise in order to help the Puerto Rico Science, Technology & Research Trust's Grants Program determine which research projects better fit its funding priorities as an organization. They will revise the top ranked proposals and provide recommendations on which research projects we should present to the Board of Trustees for funding.

Final grant funding approval, however, is bestowed upon the Board of Trustees. The Trust reserves the right to: a) select for award all, some, or none of the proposals received and b) select portions of individual proposals for awards.



Scoring

The Trust utilizes a 9-point rating scale (1 = exceptional; 9 = poor), similar to the NIH's rating scale. Each reviewer assigned to an application evaluates the proposal's strengths and weaknesses within each review criteria and scores each separately. In addition, each reviewer to an application gives a preliminary overall impact score for that application. The preliminary scores are used to determine which applications will be discussed in full at the EPRC panels. For each application that is discussed, a final impact score is given by all eligible EPRC members (i.e. without conflicts of interest), including the assigned reviewers. Each member's score reflects his/her evaluation of the overall impact that the project is likely to have based on the Trust priorities and requirements.

Feedback to Applicants

All applicants will receive a copy of the CRG Review and Critique form. Copies will not include the reviewer's names or any other identifying information. These materials will be sent directly to the principal investigator.

Funds, Due Diligence and Contractual Terms

The Trust will use a Cooperative Agreement as the funding mechanism to award funds. Prior to receiving funding, selected grantees must successfully complete a due diligence review to the Trust's satisfaction and thereafter enter into an agreement setting forth the material terms of the award.

Negotiation Prior to Award of Contract

The Trust reserves the right to negotiate each and every aspect of any proposal received in response to this RFP. In addition, the Trust may require additional cost data or documentation prior to award of a grant that may result from this RFP. The Trust reserves the right to negotiate all terms and conditions of a final contract whether or not such terms and conditions are specified by this RFP.