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CHARITABLE TRUST

Application Instructions and Checklist For Partners in Science 2.0

PRIOR TO PREPARING THE PARTNERS IN SCIENCE 2.0 APPLICATION CAREFULLY READ INSTRUCTIONS ON HOW TO PROCEED

1. Should you have any questions related to this program or application, contact Angela Little for advice (angelaL@murdocktrust.org).

2. Invitations to submit proposals will be sent to all eligible institutions in Feb. for a submission deadline of May 1.

3. The Grants Administrator will register as a user in the Submittable grants portal.

4. **Using Partners in Science 2.0 Application Link in the email invite**, the Grants Administrator will complete and submit the Partners in Science 2.0 Eligibility form. If eligible, you will be invited to complete and submit a full application.

5. Login to the Submittable grants portal to complete the Partners in Science 2.0 Application. As the Grants Administrator begins the application process, it is important to invite collaborators, those who will assist in completing the application (see instructions at the top of the online form on how to invite others as collaborators). The Grants Administrator and invited Collaborators will be able to work together in developing the application, and the Grants Administrator will ultimately be responsible for submitting the proposal on behalf of the institution.

   Sections include:
   a. Organization Name and Location
   b. Contact Information for Principal Investigator 1, Vice President for Research, President, and Principal Investigator 2 (optional)
   c. Project Title (incorporate "Partners in Science" within your title)
   d. Project Summary (Tell us about the project for which you are requesting Trust support.)
   e. Project Cost (Amount Requested and Total Project Cost - will be the same amount.)

6. Continue the Partners 2.0 Application by downloading the Proposal Narrative (Section A) form (found on Partners in Science webpage: (https://murdocktrust.org/sector-scientific-research/partners-in-science-program/). Up to 19 pages may be added, numbering them starting with page 2 and continuing to a maximum of page 20. Sections B-H should be completed on these added pages. Information to guide you in addressing these sections is found in this document under Instructions for Completing the Partners in Science 2.0 Application.

7. The completed Proposal Narrative (a single PDF file) will be uploaded in the Project Documents section.

8. Other **REQUIRED** supporting documents will be uploaded in the Project Documents section:
    a. **Biographical sketches** (NIH or NSF style) for the PI associated with each project identified for Cohort 1.
    b. **Letter of support from the Vice President for Research/ Provost/ Dean**

9. **SUGGESTED REVIEWERS** – We are taking a pause from this requirement. Please upload a blank excel file in this "required" field when applying.

10. Other **OPTIONAL** supporting documents will be uploaded in the Project Documents section:
    a. **Letter(s) of support from schools and/or school districts** that have agreed to participate in the program.
    b. If appropriate, **Letter(s) of support from organizations or individuals** that are deemed critical to the program.

INSTRUCTIONS FOR COMPLETING THE PARTNERS IN SCIENCE 2.0 APPLICATION

Project Title
You will be asked to provide a project title. Please incorporate "Partners in Science" within your title. This can be as simple as "Partners in Science Program at ____ University".

Section A.
Provide the following proposal information within the space provided: Research location(s), the number of partnerships over the three years (please specify how many in-service teachers and pre-service teachers), and Lead PI (proposal lead). May request 3-4 new partnerships for each year of the three-year grant. Continue the research proposal by adding pages behind the Partners in Science 2.0 Narrative document. Up to 19 additional pages (numbering them 2,3, etc., up to a maximum of page 20) may be added using the format specified below (Sections B-H). Use a font no smaller than 10 pt. in preparing the application.

Section B.
Teacher Recruitment and Selection Parameters
Please outline a recruitment plan with as much specificity as possible. The types and/or names of schools and school districts from which teachers will be recruited. Sites that plan to include a combination of pre- and in-service teachers need to discuss how the group will be managed to be appropriate and relevant to all and to allow for all the participants to be fully engaged. A small amount for transportation (gas, parking) may be budgeted to allow for the inclusion of more rural partners or lower income partners to be able to participate in in-person research on campus. In order to recruit teachers from very rural areas, it may be necessary to include in the budget funding for housing while considering a hybrid approach to research (for example—four weeks in person and four weeks virtual).

Identify the qualities of a successful Partner such as educational background, full-time middle school or high school science teacher, education in the applicable science, and so on.

Section C.
Site Cohort Integration

Involvement in science journals and relevant meetings are part of the learning process and connection with the scientific community. What activities will the research institution offer and plan to support the Partners as a cohort as they transition their identities from teacher to teacher-researchers? How will the research institution create a successful research experience for in-service teachers (RET), and how will you differentiate the experience for any involved pre-service teachers? Discuss the qualifications/experience of the leader (ex. Program manager) to lead this effort.

Section D.

Intended Outcomes and Longer-Term Impact

- Suggest direct or indirect ways this partnership might benefit the partners and their students.
- Suggest direct or indirect ways this partnership might benefit the mentor, their lab, and their work.
- To the extent possible, suggest the direction that future interactions or collaborations [i.e. visiting the classroom, inviting students to the lab after the two summers of research are completed] might take.

Section E.

Site Team

- Include the lead PI (can be a mentor, can also be a science education faculty member).
- For all 3 cohorts, include each Co-PI (mentor) leading a project along with their lab make-up and size.
    - Ex. How many Postdocs, lab techs, grad students, undergrad students, etc. Will be in the lab, alongside the partner teacher?
    - If the PI is not directly mentoring the teacher in the lab, clarify which senior lab member will be interacting with the partner on a day-to-day basis.
- Separately attach a biographical sketch (NIH or NSF format) for the PI associated with each project for Cohort 1. Please make sure to include each PI's most recent publications. (One PDF file containing all biographical sketches for PIs in Cohort 1.)

Section F.

Research Opportunities

For each research opportunity for each potential partnership of Cohort 1 (to start Year 1) provide:

- A brief abstract (~200 words) of the research project.
- The question or hypothesis to be addressed.
- The importance/significance of the research.
- The experimental design for both summers (including data collection methods and analysis).
    - Be sure to address the activity of the teacher in each of the two 7- to 8-week sessions.
- Assuming the research is successful, in what journal(s) will the PI seek publication?

For Cohorts 2 and 3 (to start Years 2 and 3): Identify potential Mentors, including a brief description of their research and a potential question to be addressed.

In March of the following year(s), respectively, to receive funds for Year 2 (Cohort 2) and Year 3 (Cohort 3), a progress report will be required. The report will include an opportunity to discuss learnings from the previous year, the plans for the following summer of research (Section F), and the biographical sketches (NIH or NSF style) for each mentoring PI.

Section G.

Classroom Innovation Grant (CIG)

The CIG aims to provide funding to support in-service teachers in the program to do authentic inquiry (research)

projects in the classroom. After two summers of research, in-service teachers are encouraged to request support from the research institution to purchase equipment/supplies to enable the implementation of an inquiry-based unit or project in the classroom.

- Each institution should include in the budget between $3,750-$7,500 for each in-service teacher to apply for this grant.
- Describe a process on how to encourage and award funds for the Classroom Innovation Grant. Direct application to the two summers of research is not necessary; however, the applicant should demonstrate how the process of science will be used to increase hands-on inquiry experiences for students in the classroom.
- Describe how CIG proposals will be evaluated to promote high-quality and thoughtful projects.
- Discuss ideas for evaluating the impact of the Classroom Innovation Grant on a teacher's classroom.
    - Will the institution have CIG awardees present/share after implementing their project?
- Consider ways to promote community impact post CIG implementation
    - Ex. Requiring CIG awardees to share during a state or national Science Teacher Association conference.

Section H.

Proposed Budget & Budget Explanation

Below is a **sample budget** to be used as a guideline. Assume for each year, all approved expenses for that cohort will be paid by the Trust. In other words, Year 1 expenses will include the two-year cycle for Cohort 1. Please pay attention to the eligible and ineligible costs notes below.

- Please include a budget explanation after your budget table.

Note: The per-teacher cost must not exceed $37,500 for the two summers. For example, if you are recruiting 12 teachers, your total amount requested should not exceed $450,000. Adjustments to the budget may be necessary to fit within the parameter.

Proposed Budget			
Cohort Beginning	**Year 1**	**Year 2**	**Year 3**
New Partnerships	4 (__PS,__IS)	4 (__PS,__IS)	4 (__PS,__IS)
Teacher Stipends (for two summers)	$46,000	$46,000	$46,000
Mentor Stipends (for two summers)	$48,000	$48,000	$48,000
Travel to the January and August conferences	$4,000	$4,000	$4,000
Lab Supplies	$12,000	$12,000	$12,000
Classroom Innovation Grant (CIG)	$15,000	$15,000	$15,000
Peer-reviewed publication (up-to $8,000 over three years).	$2,500	$2,500	$2,500
Other (specify)			
Project-related indirect costs (up-to 20 percent)	$22,500	$22,500	$22,500
Totals	**$150,000**	**$150,000**	**$150,000**
Total Award Requested			**$450,000**

Note: For the **sample budget** (above), the total grant award is $450,000 and includes a one-year no-cost extension after Year 3, in order for cohort 3 to complete the two-year cycle. Also, in this example, the teacher stipend is calculated based on two in-service teachers ($6,500/summer) and two pre-service teachers ($5,000/summer).

Eligible Costs:

- In-service summer stipends, up to $6,500 per teacher per summer, for eight weeks of full-time participation. Pre-service summer stipends, up to $5,000 per student per summer, for eight weeks of full-time participation.
- Faculty summer stipends, up to $7,500 for up to eight weeks of full-time participation in the research. If stipend support is also being paid from other sources, or for a shorter period, a prorated reduction in this proposal is also appropriate. Mentors (or Senior Lab Member) must be available during the entire 8 week duration each summer to offer support/guidance to teacher partners.
    - In the special circumstance that a mentor has multiple partners during an overlap of consecutive cohorts, the request for that mentor's stipend may increase up to $10,000 during that overlap year.
- Travel costs: roundtrip travel to Vancouver, WA, and Portland, OR for the two required conferences. The mentor is invited to the January Research Symposium. In the sample, the funds are for local travel. Depending upon your location, expenses may be higher due to air travel.
- Lab Supplies: up to $1,500/partnership/summer
- Classroom Innovation Grant – See full details above
- Other: special and unusual expenses, not listed above, that are essential in the performance of the research.
- Up to 20 percent of the budget each year may be proposed by the coordinating institution to support the salary for an administrative assistant directly.

Ineligible costs:

- Faculty and student academic year stipends, postdoctoral stipends, and graduate student stipends.
- Teacher tuition costs.
- Books and journals.
- Travel expenses to scientific meetings.

UPLOAD THE COMPLETE PROPOSAL NARRATIVE (SECTIONS A-H), REQUIRED DOCUMENTS, AND OPTIONAL DOCUMENTS

Upload the complete Proposal Narrative (Sections A-H), as one PDF file, in the Project Document section. The complete proposal Narrative includes the following:

1. Section A, Research Location(s), the number of partnerships over the three years (please specify how many in-service teachers and pre-service teachers), and Lead PI (proposal lead)
2. Section B, Teacher Recruitment and Selection Parameters
3. Section C, Site Cohort Integration
4. Section D, Intended Outcomes and Longer-Term Impact
5. Section E, Site Team
6. Section F, Research Opportunities
7. Section G, Classroom Innovation Grant (CIG)
8. Section H, Proposed Budget & Budget Explanation

Upload all other supporting documents in the Project Documents section:

1. **Required**:
    a. **Biographical sketches** (NIH or NSF style) for the PI associated with each project identified for Cohort 1.
    b. **Letter of support from the Vice President for Research/ Provost/ Dean**

c. **Suggested Reviewers List –** Again**,** please upload a blank excel file in this "required" field when applying. We are taking a pause on this requirement.

2. **Optional**:
   a. **Letter(s) of support from schools and/or school districts** that have agreed to participate in the program.
   b. If appropriate, **Letter(s) of support from organizations or individuals** that are deemed critical to the program.

IRS Status—Select one
   a. Nonprofit
   b. Government Entity