

February 28, 2024

REQUEST FOR APPLICATIONS

**Building the Next Generation of STEMM Leaders in the
Field of Environmental Justice**



**NATIONAL
ACADEMIES** *Sciences
Engineering
Medicine*

GULF RESEARCH PROGRAM

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SUMMARY OF THIS FUNDING OPPORTUNITY

The National Academies of Sciences, Engineering, and Medicine's Gulf Research Program (GRP) aims to increase the scientific and environmental literacy and problem-solving skills of youth in the Gulf of Mexico region. This funding opportunity will support the next generation of STEMM (Science, Technology, Engineering, Mathematics, and Medicine) leaders in the field of environmental justice (EJ) who will be needed to confront the complex challenges to human health and the environment in the 21st century.

Specifically, the GRP is seeking proposals that provide youth with opportunities to learn about and apply STEMM in the exploration and examination of environmental hazards and their effects on the health and resilience of communities in the U.S. Gulf of Mexico region. The GRP will accept proposals from nonprofits and community-based organizations with 501(c)(3) status, which provide environmental justice programs for youth in grades 9-12. In order to best serve the youth of the region, the GRP aims to limit the overhead charges on educational grants. As such, overhead charges for this grant opportunity cannot exceed a total of 20%. This limit also applies to subawardee budgets.

A total of \$4M is available for this funding opportunity, with the number of proposals being funded dependent on the quality and quantity of applications. Applicants must request at least \$75,000 for projects, commensurate with the scope of work, that are up to 24 months in duration. The majority of the available funds will support projects that are less than \$500,000, and the remainder will support projects between \$500,000 and \$1,000,000. Applicants that request between \$500,000 and \$1,000,000 will be subject to an additional Merit Review Criterion and should focus on more transformative projects that have the potential to impact a larger number of students, teachers, classes, school districts, and/or communities.

AWARD DETAILS

- **Total funding available:** \$4 million
- **Specifications for award amount:** This funding opportunity is for projects of at least \$75,000. The majority of the available funds will support projects that are less than \$500,000, and the remainder will support projects between \$500,000 and \$1,000,000.

Applicants that request between \$500,000 and \$1,000,000 will be subject to an additional Merit Review Criterion and should focus on more transformative projects, such as impacting a larger number of students, providing a larger cohort of teachers with paid professional development opportunities, incorporating place-based education into an entire school or school district, or engaging multiple communities. All budget requests must be commensurate with the scope of work proposed.

- **Award duration:** Grants will be awarded to support projects up to 24 months in length.
- **Estimated number of awards:** Resources made available under this funding opportunity will depend on the proposals received. The majority of the available funds will support projects that are less than \$500,000, and the remainder will support projects between \$500,000 and \$1,000,000. The Gulf Research Program reserves the right to negotiate, some, one, or none of the proposals received in response to this solicitation.
- **Award notification:** Summer 2024

KEY DATES

- **February 28, 2024:** Online proposal submission opens
- **May 8, 2024:** Deadline for submissions of proposals due by 5:00 p.m. Eastern Time
- **July-August 2024:** Award selection and notification
- **October 1, 2024:** Anticipated funding start date

Online submission website: <https://gulfresearchprogram.smapply.io/>

PURPOSE OF THIS FUNDING OPPORTUNITY

The purpose of this funding opportunity is to support the development and implementation of projects that cultivate the next generation of STEMM leaders in the field of Environmental Justice (EJ). Specifically, this funding opportunity will support proposals based in education and mentorship that aim to raise awareness, expand understanding, and empower young people (grades 9-12) to apply STEMM disciplines to explore and examine the relationship between environmental hazards and their effects on the health and resilience of communities. Ultimately, the GRP expects this funding opportunity to increase the number of young people in the Gulf of Mexico region who study and work in STEMM disciplines within the field of EJ. The GRP encourages nonprofit or community-based organizations to work with young people from communities affected by environmental inequalities.

THE CHALLENGE

To address complex and evolving environmental challenges in the Gulf region, **there is a need to prepare the next generation of STEMM leaders in the field of EJ to confront the challenges of the 21st Century (e.g., climate change) and their amplification on existing challenges (e.g., environmental inequalities, health disparities).** This preparedness is particularly important for at-risk communities of people of color, who have a long-standing history of being disproportionately exposed to environmental hazards in the places where they are born, grow, play, learn, work, live, worship, and age.

WHAT WE ARE LOOKING FOR

This grant opportunity aims to support experiences that foster the development of the scientific and environmental literacy, skills, competencies, and capabilities that are critical to cultivating a next generation of STEMM leaders working towards Environmental Justice. Activities should focus on education and mentorship opportunities in the Gulf of Mexico region that provide youth with opportunities to learn about and apply STEMM in the exploration and examination of environmental hazards and their effects on the health and resilience of communities, raising awareness and building capacity among youth to pursue STEMM studies and/or careers in the field of EJ. These activities may take place in formal or informal educational settings, should target youth in the 9-12 grade range, and be complementary to formal education standards and learning objectives. Projects should be grounded in appropriate teaching methods for the goals of the project.

Applicants should carefully review the [Merit Review Criteria](#) prior to submitting an application.

PROJECT GUIDELINES

PROJECT STRUCTURE

All proposed activities should focus on STEMM education/learning opportunities that actively engage students in learning about and/or applying STEMM in addressing issues related to environmental hazards and their effects on the health and resilience of the local communities. Proposals that empower students to address historic or emerging challenges facing their communities are encouraged. The focus of this funding opportunity is programmatic activity with youth; however, proposals with complementary professional development activities for teachers and other educational and/or community development professionals will be considered. In addition:

- Applicants may propose new projects or activities based in research or experience; or propose to expand existing programming across geographic, sectoral, socioeconomic, or cultural boundaries and/or topic/discipline areas to reach a broader range of participants.
- Applicants may propose activities that pilot or test new approaches for developing and implementing educational programs that advance students' scientific and environmental literacy, skills, and competencies. This could include new partnerships between community-based organizations and academic institutions or activities that create a structure for meaningful engagement between youth and the issues and needs of their communities.
- Applicants may seek funding to sustain and expand existing programming activities if the proposal demonstrates significant positive impact(s) and anticipated programmatic growth.

- Activities currently under consideration for funding from other sources are not eligible.

PROJECT EVALUATION

All applicants will be required to include a project evaluation plan within the full proposal. The evaluation plan must be developed, and implemented, by a qualified, independent, project evaluator. Independent being defined as not associated with the Project Director or their organization.

The Gulf Research Program intends these project evaluations to:

- Help build an evidence-base that both grantees and GRP can use to understand and communicate their impact.
- Enable organizational learning and increase capacity to provide quality educational programming.
- Support the sharing of successes, challenges, and insights among funders, grantees, and stakeholders.

If awarded, Project Directors and Evaluators will participate in a Grantee Peer Learning Meeting at the close of the period of performance to present their evaluation results, grant highlights, success stories, and lessons learned with their fellow grantees and GRP staff.

ELIGIBILITY

For the purpose of this grant opportunity, applications will be accepted from all nonprofit and community-based organizations with 501(c)(3) status, which support educational, service, and/or coordination activities for youth in the 9-12 grade range.

Preference will be given to applicants with a history of working with children and youth, particularly those who work with underrepresented or underserved populations, including but not limited to racial/ethnic minorities, tribal youth, LGBTQ+ youth, students demonstrating low socio-economic status as established by the free and reduced lunch program, children with disabilities, first-generation immigrants, students from rural or remote areas, and/or students experiencing or at risk of homelessness.

Programmatic activities must occur in the United States Gulf of Mexico region.

The Gulf Research Program welcomes proposals from all nonprofit and community-based organizations with 501(c)(3) status, on behalf of qualified individuals. The applying organization will be referred to as the “applicant” hereafter. The individuals who will lead the proposed project will be referred to as “project directors” hereafter. All eligible applicants must have a valid federal tax ID number in order to apply.

Project directors usually initiate proposals that are officially submitted by their employing organizations (the applicant). When initiating a proposal, the project director typically is responsible for ensuring the proposal meets all the requirements outlined by the Gulf Research Program as well as any requirements set by the employing organizations.

Activities currently under consideration for funding from other sources are not eligible.

In order to best serve the children and youth of the region, the GRP aims to limit the overhead charges on educational grants. As such, overhead charges for this grant opportunity cannot exceed a total of 20%. This limit also applies to subawardee budgets.

The Gulf Research Program requires individuals named as project director or key personnel in an application to adhere to the following:

- An individual may be proposed as project director in only one application. If an individual is proposed as project director in any application, they may also be proposed as key personnel in up to two additional applications.
- An individual not proposed as a project director in any application may be named as key personnel in up to three applications.
- It is the responsibility of each individual being named as project director or key personnel in any application to ensure that they are not named in more than three total applications.

The Gulf Research Program will not consider funding:

- Proposals for political lobbying or advocacy activities.

APPLICATION

Applicants can submit a full proposal for this funding opportunity via the online application system. Full proposals submitted by other means (e.g., mail, fax, or email) will not be considered. Full proposal materials must be submitted in English.

Project directors should review the application preparation and submission instructions and submit any questions to gulfgrants@nas.edu prior to the submission deadlines. The Gulf Research Program strives to respond to applicants' questions within two business days, but cannot guarantee that applicants' questions will be answered before submission deadlines.

Please review the Grant Agreement (see the “Grant Resources” page) prior to submitting an application to understand the terms under which the grant is offered. If selected, successful applicants are strongly encouraged to sign the Grant Agreement as presented. Per the policy of the National Academies of Sciences, Engineering, and Medicine, modifications to the Grant Agreement are only made under the most exceptional circumstances.

FULL PROPOSAL GUIDELINES

All complete proposals will be reviewed by an external review panel and evaluated using the Merit Review Criteria.

The full proposal must provide the following information:

I. Project Team:

- a. Project director
 - i. ORCID (Open Research and Contributor ID)
- b. Key personnel
- c. Applicant overview (up to 1500 words)
 - i. Describe the applicant (e.g., location, service area, mission, etc.)
 - ii. Describe the applicant's experiences with communities affected by environmental inequalities
 - iii. Describe the applicant's existing EJ-related projects for young people
- d. Involvement of project director or key personnel in other applications related to this funding opportunity

II. Project Details:

- a. **Project Title** (maximum 15 words)
- b. **Project Key words** (maximum 10 words) please highlight key features of your proposal that make it unique, as well as the grade ranges targeted
- c. **Project Summary** (maximum 250 words)
- d. **Project Timeline** (excel upload)
- e. **Project Description** (maximum 3000 words).
 - i. Discuss the proposed Environmental Justice education and/or mentoring project; (maximum 1000 words)
 - ii. Discuss how the proposed project will provide opportunities for youth to (1) learn about and apply STEMM; (2) explore and examine environmental hazards; (3) investigate and understand the effects of those hazards on the health and resilience of communities; (maximum 1250 words)
 - iii. Discuss the teaching method(s) for the proposed project, including any corresponding formal education standards and learning objectives; (maximum 750 words)
- f. **Project Evaluation** (maximum 1250 words).
 - i. Specify the intended outcomes students will experience, such as increased scientific or environmental literacy for students or increased capacity to address and solve local problems. Describe your goals and anticipated outputs and outcomes related to providing youth with opportunities to learn about and apply STEMM in the exploration and examination of environmental hazards and their effects on the health and resilience of communities; (maximum 500 words)
 - ii. Describe how you will evaluate your project. Briefly describe your data source(s), measurement tool(s), and/or procedures that will be used in the evaluation; (maximum 500 words)

- iii. Describe the qualifications of the evaluator(s). (maximum 250 words)
- iv. At the end of the application, you will have the opportunity to upload additional files, including a logic model. Uploading a logic model is not mandatory but can be helpful in communicating the goals of your project.

III. Proposed Budget

- a. Total Budget Requested
- b. **Budget Justification:** Please submit a budget justification. A [sample budget justification document](#) is provided.
- c. **Budget Form:** Download the [budget template](#). Complete this form to provide information on the proposed budget. Budget requests should be developed commensurate with the support needed to achieve the project goals. Budget requests should include competitive teacher stipends commensurate with the proposed activities, as appropriate.

IV. Other Attachments

- a. **Data Management Plan:** Data Management Plan (A description of how data will be collected, managed, stored, made accessible, and protected throughout the project. Maximum 1,500 words.) Please refer to GRP's [Data Management Policy](#) for guidance on the development of the project Data Management Plan.
- b. **Resume(s):** Resumes are required for the Project Director and every individual identified as a Project Team member. A resume may be included for the evaluator. Resumes may not exceed two pages per person. See [resume specifications](#) for additional guidance. All resumes should be combined and uploaded as a single PDF document. Do not include resumes for individuals not named as a Project Director or Project Team member.
- c. **Collaborators and Other Affiliations Form:** The purpose of this form is to help the GRP eliminate potential conflicts of interest during reviewer recruitment. Download the [Collaborators and Other Affiliations form](#) and complete it to provide information on the following:
 - i. All persons (including their current organizational affiliations) who are currently, or who have been collaborators (i.e. an individual with whom you work closely to co-design or conduct a project) or co-authors with the individual on a project, book, article, report, abstract, or paper during the 48 months preceding the submission of the application.
 - ii. The individual's own graduate and postdoctoral advisor(s) and their current organizational affiliations.
 - iii. A list of your past and current advisees (including their current organizational affiliations)
- d. **Current and Pending Support from Other Sources Form:** Download the [Current and Pending Support from Other Sources form](#). Applicants must provide information on the current and pending support of the project director, and other Project Team members, if applicable, and

upload it to the online application system. The form calls for required information on current and pending support for ongoing projects and proposals. All current project support from whatever source (e.g., federal, state, local or foreign government agencies, public or private foundations, industrial or other commercial organizations) must be listed. The proposed project and all other projects or activities requiring a portion of time of the project personnel and other senior personnel must be included, even if they receive no salary support from the project(s). The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months per year to be devoted to the project, regardless of source of support.

FULL PROPOSAL PEER REVIEW PROCESS

Only complete applications meeting the eligibility criteria will be evaluated by external reviewers based on the Merit Review Criteria (see below). Funding decisions will take into consideration the reviewer's evaluations and the program's funding availability, current portfolio, objectives, and goals. The final decision for funding will be made by the National Academies. Visit our website to see the [GRP's conflict of interest and confidentiality policies](#).

MERIT REVIEW CRITERIA

All complete full proposals will be evaluated on the basis of the Merit Review Criteria below.

Applicants should consider the Full Proposal Guidelines and Merit Review Criteria in the development of their full proposal. Reviewers may raise additional issues that are not covered by the criteria.

Relevance (30%)

- To what extent does the proposed project have the potential to increase students' STEMM principles and applications?
- To what extent does the proposed project provide opportunities for youth to learn about and apply STEMM?
- To what extent does the proposed project provide opportunities for the exploration and examination of environmental hazards and their effects on the health and resilience of communities?
- To what extent does the proposed project empower or inspire students to apply STEMM to issues of EJ?

Project Design and Feasibility (20%)

- To what extent is the proposal well designed and feasible within the criteria of this funding opportunity?

- To what extent does the proposed project have the potential to cultivate the next generation of STEMM leaders in the field of Environmental Justice?
- To what extent does the proposed project incorporate safety measures when working with potentially dangerous hazards or chemicals, when appropriate?

Teaching Approach and Learning (20%)

- To what extent does the proposed project use an appropriate teaching method?
- To what extent does the proposed project complement formal education standards and learning objectives?
- To what extent does the proposed project engage youth in an interdisciplinary exploration of affected communities so that they gain a broader, more nuanced understanding of the challenges affecting various communities?
- To what extent does the proposed project offer safe, culturally sensitive, engaging, and hopeful explorations of environmental injustices and ways to address those injustices?

Project Team (20%)

- To what extent are project team members well-qualified in their experience, knowledge, and skills to ensure the completion of a successful EJ-related project?

Budget (10%)

- To what extent is the budget commensurate with the proposed EJ-related project or program activities?

Larger Requests \$500,000 - \$1,000,000 (Unweighted)

- To what extent does the proposed project have the potential to be more transformative, such as, but not limited to, by impacting a larger number of students, training a larger cohort of teachers, incorporating environmental justice education into many classes or an entire school or school districts, and/or engaging multiple communities?

Program Evaluation (Unweighted)

- To what extent are the anticipated outputs and outcomes clearly described and appropriately aligned to the goals of the proposed project or program?
- To what extent is the evaluation design (data collection, measurement, and/or procedures) robust and commensurate with the scope of work?
- To what extent are the evaluator(s) well-qualified in their experience, knowledge, and skills to ensure the completion of a successful evaluation?

DATA MANAGEMENT POLICY

The GRP's Data Management Policy applies to this RFA. To facilitate sharing of data and information products, all applications submitted to the GRP must include a data management plan and follow FAIR guiding principles (FAIR stands for “Findable, Accessible, Interoperable, Reusable.” To learn more about FAIR guiding principles refer to the National Academies report “Open Science by Design: Realizing a Vision for 21st Century Research”).

The GRP follows the federal government's definition of data in the Office of Management and Budget (OMB) 2 Code of Federal Regulations (CFR) Section 200.315: “...the recorded factual material commonly accepted in the scientific community as necessary to validate research findings.” Information products may include documents (i.e., reports, workshop summaries, etc.), multi-media curricula for education and training (i.e., video and/or online tutorials, manuals, and handbooks, etc.), and other media and communication platforms. Even in the unlikely case in which no data or any other information products will be produced, a plan must be submitted that states “No data or information products are expected to be produced from this project.”

The GRP's [Data Management Policy](#) and [Data Management web page](#) provides information on what must be included in the data management plan submitted as part of an application.

RESEARCH INVOLVING HUMAN SUBJECTS POLICY

All projects involving human subjects must be submitted to an institutional review board (IRB) for review and either receive IRB approval or be granted exemption from human subjects regulations before an award can be made. Proposers should file their proposal with their local IRB at the same time the proposal is submitted to the Gulf Research Program so that any approval procedure determined as necessary will not delay the award process. A proposal may be submitted to the Gulf Research Program prior to receiving IRB approval or being granted exemption; however, if the proposal is selected for funding, the award will be made conditional upon IRB granting approval or exemption from human subjects regulations within 60 days of the notice of conditional award. If a proposed project involving human subjects is granted exemption from human subjects regulations [see 45 CFR §46.101(b)], the applicant must provide documentation that an IRB (or the appropriate authority other than the Project Director or Key Personnel) has declared the project exempt from the human subjects regulations. Documentation should include the specific category justifying the exemption. Organizations without internal access to an IRB must seek approval or exemption from an independent review board or other appropriate authority. Visit our website for more [information about human subjects regulations](#).

MAKING THE AWARD

SELECTION NOTICE

The GRP reserves the right to select all, some, one, or none of the proposals received in response to this solicitation.

When the evaluation of a proposal is complete, the project director will be notified that (1) the proposal has been selected for funding pending contract negotiations, or (2) the proposal has not been selected. These official notifications will be sent via email to the project director identified on the application. If a proposal is selected for award, the GRP reserves the right to request additional or clarifying information for any reason deemed necessary, including, but not limited to, indirect cost information or other budget information.

AWARD NOTICE

The GRP transmits award notices to organizations via e-mail. The award is not finalized and the National Academies of Sciences, Engineering, and Medicine is not obligated to provide any funding until a signed copy of the award agreement has been received by the Academies.

GRANT PERIODS

Upon receipt of the award notice, the awardee should note the effective date and the expiration date. The effective date is the date specified in the grant notice on or after which expenditures may be charged to the grant. Charging expenditures to the grant prior to the effective date is prohibited. The expiration date is the date specified in the grant notice after which expenditures may not be charged against the grant except to satisfy obligations to pay allowable project costs committed on or before that date. Once an award is made, the effective date cannot be changed. The expiration date may be changed as a result of approval of a request for a no-cost extension. If approved, the GRP will issue an amendment to the grant.

If additional time beyond the performance period and the established expiration date is required to assure adequate completion of the original scope of work with the funds already made available, the awardee may apply for a one-time, no-cost extension of up to six months. A formal request must be submitted to the GRP at least 45 days prior to the expiration date of the grant. The request must explain the need for the extension and include an estimate of the unobligated funds remaining and a plan for their use. This one-time extension will not be approved solely for the purpose of using the unliquidated balances.

POST-AWARD MANAGEMENT

COORDINATION WITH GRP

After the award is conferred, grantees shall coordinate with the GRP to formally initiate the project. GRP staff will periodically request status meetings during the project implementation phase to discuss progress and any unanticipated developments that may affect the project outcomes as specified in the grant agreement. These interactions will help ensure successful management of the grant.

REPORTING REQUIREMENTS

After an award is conferred, the grantee shall provide an annual financial report to the GRP to report on grant expenditures to date under the grant. The grantee shall provide an annual written report to the GRP to report on activities being carried out under the grant, including but not limited to project accomplishments to date and grant expenditures. No later than 60 days after the expiration of the award, the grantee shall provide in writing a final grant report. The final grant report shall address the original objectives of the project as identified in the grant proposal, describe any changes in objectives, describe the final project accomplishments, and include a final project accounting of all grant funds.

If awarded, Project Directors and Evaluators will participate in a Grantee Peer Learning Meeting at the close of the period of performance to present their evaluation results, grant highlights, success stories, and lessons learned with their fellow grantees and GRP staff.

DATA MANAGEMENT

Implementation of a data management plan will be monitored through the annual and final report process. All data, including modeled and observational data when available, shall be made available with minimal delay to the GRP for each dataset, through submission to the [Gulf of Mexico Research Initiative Information and Data Cooperative \(GRIIDC\)](#) and/or other appropriate national repositories as approved by GRIIDC for use by intermediate and end-users. Even when no data or any other information products will be produced, a plan must be submitted that states “No data or information products are expected to be produced from this project.” Please see the GRP’s [Data Management Policy](#) and [Data Management web page](#) for more information on this requirement.

SCIENTIFIC INTEGRITY

A fundamental purpose of the GRP is to facilitate the advancement of knowledge and the application of science to address challenges relevant to the GRP’s mission. All activities of the GRP will be conducted to meet the highest standards of scientific integrity. All grantees have a responsibility to use the funds wisely.

GRANT TERMS AND CONDITIONS

Please review the Grant Agreement prior to submitting an application. It is the policy of National Academies of Sciences, Engineering, and Medicine to entertain potential modifications to the Grant Agreement only under the most exceptional circumstances. Rather, successful applicants are strongly encouraged to sign the Grant Agreement as presented.

- [View a sample grant agreement if the applicant is a public institution.](#)
- [View a sample agreement if the applicant is a private institution.](#)

ABOUT THE GULF RESEARCH PROGRAM

The GRP is a division of the National Academies of Sciences, Engineering, and Medicine—a private, nonprofit organization with a 150-year history as an independent advisor to the Nation on issues of science, engineering, and medicine. The GRP was founded in 2013 as part of legal settlements with the companies involved in the 2010 Deepwater Horizon disaster, and received an endowment to carry out studies, projects, and other activities in the areas of research and development, education and training, and monitoring and synthesis.

The GRP seeks to enhance offshore energy safety, environmental protection and stewardship, and human health and community resilience in the Gulf of Mexico and beyond. It focuses its work on the Gulf of Mexico and other outer continental shelves of the United States where there is hydrocarbon production, and on their coastal zones; specifically, this includes the areas of the Southcentral region of Alaska that are or could be impacted by activities (e.g., drilling, production, and transportation) associated with hydrocarbon production in the offshore. Where appropriate, the GRP’s work may extend farther inland or into adjacent seas.

The GRP uses four strategic approaches to “catalyze, implement, and track positive impact in the Gulf of Mexico and beyond”¹:

1. Advance science and understanding
2. Bridge knowledge to action
3. Build partnerships and engage networks
4. Monitor for progress and change

¹ National Academies of Sciences, Engineering, and Medicine. 2020. *Gulf Research Program: 2020-2024 Strategic Plan*, pp. 3-4. Available at https://www.nationalacademies.org/cache_of9e/content/4885770000227383.pdf. Retrieved April 24, 2021.