

REQUEST FOR APPLICATIONS

**BUILDING THE NEXT GENERATION OF STEM
LEADERS IN THE FIELD OF ENVIRONMENTAL JUSTICE**

*The National
Academies of* | SCIENCES
ENGINEERING
MEDICINE

GULF RESEARCH PROGRAM





TABLE OF CONTENTS

SUMMARY OF THIS FUNDING OPPORTUNITY	3
PROJECT GUIDELINES	5
APPLICATION SUBMISSION AND REVIEW	6
MAKING THE AWARD	9
POST-AWARD MANAGEMENT	10
BACKGROUND	11

Visit the Gulf Research Program on the web for more [information about this funding opportunity](#).

SUMMARY OF THIS FUNDING OPPORTUNITY

The [Gulf Research Program](#) (GRP) is developing new programming around health and community resilience that prioritizes the needs and challenges of at-risk communities¹ that disproportionately live in unsafe and unhealthy environments. This funding opportunity seeks to build the future leaders needed to confront the complex challenges to human health and the environment in the 21st century.

The purpose of this funding opportunity is to support programs that cultivate the next generation of STEMM (Science, Technology, Engineering, Mathematics, and Medicine) leaders in the GRP's geographic regions² in the field of environmental justice (EJ). The GRP is accepting proposals from nonprofits and community-based organizations (CBOs) with 501(c)(3) status that have EJ programs. Preference will be given to nonprofits and CBOs that have existing EJ projects or programs for children and youth (5 to 24 years old).

The GRP expects to award up to six proposals under this funding opportunity. Applicants may request up to \$250,000 per year for up to five years.

KEY DATES

- July 12, 2021: Online proposal submission opens
- August 23, 2021: Deadline for submissions of full proposals due by 5:00 p.m. Eastern Time
- September – October 2021: Award selection and notification
- November – December 2021: Anticipated funding start date

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

THE CHALLENGE

EJ is based on the principle that “all people and communities are entitled to equal protection of environmental and public health laws and regulations.”³ The foundation of these laws and regulations are informed by STEMM studies that provided the evidence on environmental inequalities and subsequent health disparities between communities of different characteristics (e.g.,

1 For purposes of this funding opportunities, at-risk communities are those that are vulnerable, underserved, under-resourced, or otherwise marginalized.

2 The GRP focuses its work in the Gulf of Mexico and the adjacent coastal regions of the five Gulf States (Alabama, Florida, Louisiana, Mississippi, and Texas). The GRP also works in other areas of the outer continental shelf of the United States where there is offshore drilling, hydrocarbon production, and transportation, and in adjacent coastal regions. This includes coastal areas of the Southcentral region of Alaska.

3 Bullard RD. 1996. “Environmental Justice: It’s More Than Waste Facility Siting.” *Social Science Quarterly*, 77(3):493.

race) and/or circumstances (e.g., income). For example, the first Executive Order (EO) 12898⁴ (1994) to acknowledge EJ was informed by over two decades of studies in the social sciences, geography, chemistry, environmental sciences, health, and statistics that consistently found a relationship between the location of environmental hazards (e.g., landfills, toxic waste facilities) and racial (e.g., African American) and/or economic (e.g., low-income) status.⁵

Recent disasters (e.g., COVID-19 pandemic, Hurricanes Laura and Beta, Winter Storm Uri) have elevated environmental justice in the public discourse and exposed the environmental, social, and health inequities within at-risk communities. At the federal level, several actions (e.g., EO13990⁶, EO14008⁷) have highlighted EJ-related issues, such as the importance of identifying solutions and informing policy with science, protecting the environment, improving public health, and tackling the climate crisis.

In order to tackle the complexity of EJ issues in the 21st century, there is a need to prepare and expand the next generation of STEMM leaders in the field of EJ to confront the challenges that at-risk communities are facing from existing environmental hazards (e.g., environmental inequalities, health disparities) and the exacerbation of these hazards due to climate change. This need is particularly important for BIPOC (Black, Indigenous, and People of Color) communities that 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.

THE PURPOSE

This funding opportunity will support programs that cultivate the next generation of STEMM leaders in the GRP's geographic region (i.e., coastal regions of the five Gulf Coast states that border the Gulf of Mexico and the Southcentral region of Alaska) in the field of EJ. The GRP is accepting proposals from nonprofits and CBOs with 501(c)(3) status that have EJ programs. Preference will be given to nonprofits and CBOs that have existing EJ projects or programs for children and youth (5 to 24 years old). Partnerships with other organizations, institutions, academia, etc. are encouraged.

Specifically, this funding opportunity will support proposals that (1) provide children and 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; and/or (2) raise

4 Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations was the first of its kind to direct the federal government (i.e., Environmental Protection Agency, Health and Human Services, Housing and Urban Development, and the Department of Transportation) to address environmental justice through programming, policies, and activities. For more information, visit <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>.

5 Lave & Seskin (1970); Freeman (1972); Burch (1976); Melosi (1981); United Church of Christ (1987); Robinson (1991); Brown & Mikkelsen (1990); Brown (1992); Bryant & Mohai (1992); Mohai & Bryant (1992); Bullard (1990, 1993); Bullard & Wright (1993); Been (1994)

6 "Executive Order 13990 of January 20, 2021, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," Federal Register, 86(14): 7037-43, <https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf>.

7 "Executive Order 14008 of January 27, 2021, Tackling the Climate Crisis at Home and Abroad," Federal Register, 86(19): 7619-33, <https://www.govinfo.gov/content/pkg/FR-2021-02-01/pdf/2021-02177.pdf>.

awareness and build the capacity among children and youth to pursue STEMM studies and/or careers in the field of EJ. The GRP encourages nonprofits and CBOs to work with children and youth from communities affected by environmental inequalities.

Examples of activities that would be in line with this funding opportunity include projects or programs that engage and educate children and youth through community-based monitoring/citizen science, community mapping, summer camps, science fairs, youth conferences or workshop series, afterschool programs, workforce training, etc. Applicants are encouraged to be creative and innovative with their proposals.

DELIVERABLES

Each project will produce the following deliverables:

1. A final report that
 - a. Describes the EJ activities and how they were implemented.
 - b. Describes the children and youth who participated in the EJ activities.
 - c. Assesses outcomes of the implemented EJ activities.
 - d. Summarizes feedback from children and youth about their participation in the EJ activities.
 - e. Discusses successes and challenges in developing and implementing the EJ activities, and how challenges were overcome.
 - f. Identifies potential next steps or follow-on activities.
2. Products (e.g., manuals, workshop report, toolkits) or access to products (e.g., website, mobile app, online map, student videos) that were produced from the EJ activities.

The GRP will share these deliverables with other nonprofits and CBOs interested in building capacity among children and youth in the STEMM disciplines within the field of EJ and working with at-risk (e.g., BIPOC) communities that are affected by environmental inequalities.

GRP grantees are also required to adhere to internal GRP reporting requirements (i.e., progress reports, financial reports). For more information, see “Reporting Requirements.”

PROJECT GUIDELINES

ELIGIBILITY

The GRP will accept proposals from nonprofits and CBOs with 501(c)(3) status. Partnerships with other organizations, institutions, academia, etc. are encouraged.

The applying organization will be referred to as the “applicant” hereafter. The individual who will lead the proposed project will be referred to as “project director” hereafter.

To be eligible to apply for this funding opportunity, applicants must have:

- 501(c)(3) status.
- An existing climate adaptation or disaster resilience program in the GRP's geographic region.
- A valid federal tax ID number.

REQUIREMENTS

Proposed activities must adhere to the following:

- This funding opportunity is for new, distinct activities only. Proposed activities that are part of a broader, existing effort or project may be eligible if the proposal clearly demonstrates that the funding request is for new or distinct activities that would not otherwise occur.
- Proposed activities that are currently under consideration for funding from other sources are not eligible.

Project directors and project team members in a proposal must adhere to the following:

- An individual may be proposed as project director in only one proposal associated with this funding opportunity. If an individual is proposed as project director in any proposal they may also be proposed as key personnel in up to two additional proposals.
- An individual not proposed as a project director in any proposal may be named as key personnel in up to three proposals associated with this funding opportunity.

APPLICATION SUBMISSION AND REVIEW

Applications for this funding opportunity will be reviewed through a full proposal process. Please review the application preparation and submission instructions and submit any questions to gulfgrants@nas.edu before the submission deadlines. The GRP cannot guarantee that questions will be answered before submission deadlines.

The GRP will only accept proposals submitted via the [online application system](#). Full proposal materials submitted in any language other than English will not be considered. The GRP may reject, without review, proposals that are not responsive to the Request for Proposal instructions.

FOR THE PROPOSAL

The proposal must include the following elements:

- I. **Project Team.** Applicants are encouraged to assemble diverse project teams. Partnerships with other organizations, institutions, academia, etc. are encouraged.
 - a. Project director
 - b. ORCID (Open Research and Contributor ID)
 - c. Project team members

- d. 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 program(s), including EJ programs for children and youth.
- e. Involvement of the project director and project team members in other proposals related to this funding opportunity.

II. Project Details

- a. Project title (up to 15 words)
- b. Project key words (up to 10 words)
- c. Project summary (up to 250 words)
- d. Provide a timeline of activities (up to 500 words)
- e. Project description
 - i. Describe the proposed EJ project or program. Other organizations should be able to adapt and implement your project or program (up to 500 words)
 - ii. Discuss how the proposed EJ project or program (up to 1000 words)
 - 1. provides children and youth (5 to 24 years old) 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; and/or
 - 2. raises awareness and builds the capacity among children and youth to pursue STEMM studies and/or careers in the field of EJ.
 - iii. Provide a general description of the children and youth who will participate in the EJ project or program. (up to 250 words)
 - iv. What do you expect to accomplish in each year of the proposed EJ project or program? (up to 500 words)
 - v. What are the anticipated deliverables and potential outcomes of the proposed EJ project or program? (up to 500 words)
- f. Project assessment (up to 500 words)
 - i. What does success look like for your proposed EJ project or program?
 - ii. How will you know if/when you achieve success?

III. Proposal Budget

- a. Anticipated total project or program budget
- b. Anticipated budget distribution among organizations you partner with, if applicable.

IV. Required Attachments

1. **Budget Form** ([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.
2. **Budget justification** (maximum 2,000 words). View a [sample budget justification](#).
3. **Resume(s)**: A resume is required for the project director and each individual identified as a project team member. Resumes are limited to two pages for each person. Please combine all resumes into a single PDF document before uploading as an attachment. If a resume is longer than two pages, only the first two pages will be considered in peer review.

4. **Current board members:** Upload a document with a list of names and their affiliation.
5. **Current and Pending Support from Other Sources Form:** [Download](#) the form and complete it to provide information on current and pending support from other sources for the project director and project team members, if applicable, and upload it to the online application system.

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](#).

FULL PROPOSAL MERIT REVIEW CRITERIA

Proposals will be evaluated on the basis of four review criteria. The bullets under each criterion should guide applicants in writing their proposals and guide reviewers in evaluating a proposal.

Relevance (35%)

- To what extent does the proposal address the challenge statement and provide a well justified approach to achieve intended outcomes?
- To what extent is the proposal feasible within the criteria of this funding opportunity?
- To what extent could the proposed project or program be used by other communities, organizations, or institutions?

Engagement and Impact (35%)

- To what extent does the proposal provide young people 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 and/or raise awareness and build the capacity among young people to pursue STEMM studies and/or careers in the field of EJ?
- To what extent does the proposal identify and engage young people (elementary to undergraduate)?
- To what extent is the proposed project or program innovative within the context of the applicant?
- To what extent is the project assessment appropriate to determine the success of the EJ-related project or program?

Project or Program 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 or program?

Budget (10%)

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

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. Awardees are free to accept or reject the grant agreement as offered.

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. 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. 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 within 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.

DATA MANAGEMENT POLICY FOR NON-ACADEMIC ENTITIES

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." If your proposal is selected for funding, the GRP will assess if your proposed project involves research that requires a data management plan. If research data is involved, then the GRP will work with you to submit the appropriate documentation, including a data management plan, before an award can be made.⁸ Visit our website for [more information about the GRP's data management policy](#).

POST-AWARD MANAGEMENT

COORDINATION WITH GRP

After the award is conferred, grantees shall coordinate with 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 a semi-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 sixty (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.

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 Program'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.

⁸ For more information about the GRP's data management policy visit <https://www.nationalacademies.org/gulf/data-management>.

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.](#)

BACKGROUND

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, 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”⁹:

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

THE GRP'S HEALTH AND RESILIENCE PROGRAM

The GRP's Health and Resilience Program works to put science into action in ways that enhance health, well-being, and resilience across communities in its geographic areas of focus (i.e., the coastal areas of the Gulf region and the Southcentral region of Alaska). Its overarching goals are to:

9 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.

- Reduce inequities in health and community resilience.
- Advance research and practice related to health and community resilience.
- Promote a culture of health and community resilience.

The Health and Resilience Program uses two complementary frameworks to approach its work:

1. the social determinants of health¹⁰
2. the six community capitals¹¹

Social determinants of health are the conditions in the environment where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Examples include, but are not limited to, education, employment, environment, health services and systems, housing, income and wealth, public safety, and transportation. The six community capitals—infrastructure, natural, financial, human and cultural, social, and political—represent a community’s assets.

Resilience is the “ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.”¹²

10 National Academies of Sciences, Engineering, and Medicine. 2017. *Communities in Action: Pathways to Health Equity*, pp. 116-9. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24624>.

11 National Academies of Sciences, Engineering, and Medicine. 2019. *Building and Measuring Community Resilience: Actions for Communities and the Gulf Research Program*, pp. 15-17. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25383>.

12 National Research Council. 2012. *Disaster Resilience: A National Imperative*, p. 1. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13457>.