

April 3, 2024

REQUEST FOR APPLICATIONS

Workforce Development for the Energy Transition



**NATIONAL
ACADEMIES**

*Sciences
Engineering
Medicine*

GULF RESEARCH PROGRAM

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SUMMARY OF FUNDING OPPORTUNITY

The National Academies of Sciences, Engineering, and Medicine's Gulf Research Program (GRP) aims to contribute to the development of a diverse workforce and to increase the scientific literacy of the Gulf citizens who will become the skilled leaders and professionals of tomorrow. This funding opportunity will enable project participants to acquire skills, knowledge, and credentials to enter careers as part of the future energy workforce. This workforce will support the industries and organizations leading the way in introducing net-zero technologies into the economy.

Specifically, the GRP is seeking proposals for sustainable, data-driven, industry-engaged projects that will provide education and training opportunities to students ages 16-25 and ready participants to become part of the future energy workforce. This funding opportunity is open to applicants from educational institutions, non-profit organizations, state and local governments, and tribal entities working in the U.S. Gulf of Mexico states (Texas, Louisiana, Mississippi, Alabama, and Florida). The applicants should demonstrate how they will partner with local employers and industry associations to use data and evidence to identify skill gaps and labor market needs, design relevant curricula and credentials, and provide education, training, job placement, and/or retention services to participants that will enable those participants to acquire the skills and credentials necessary to join the future energy workforce.

A total of \$3M 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. Applicants may request up to \$1,000,000, with a preference for projects that are less than \$500,000. 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. For more information, please [visit our website](#).

KEY DATES

- **April 3, 2024:** Online proposal submission opens
- **April 24, 2024:** Funding Opportunity Question and Answer Session
- **June 25, 2024:** Submission Help Office Hours
- **June 26, 2024:** Deadline for submissions of proposals due by 5:00 p.m. Eastern Time
- **September 2024:** Award selection and notification
- **November 1, 2024:** Anticipated funding start date

THE CHALLENGE

The Gulf Research Program (GRP) seeks to support U.S. Gulf of Mexico students, employers, and the economy by providing pathways for Gulf citizens aged 16-25 to enter high-quality jobs that can enable the energy transition. The GRP expects the main outcome of this opportunity to be an increase in the number of skilled workers capable of contributing to the energy transition. Specifically, the GRP expects this funding opportunity to lead to an increase in the number and/or quality of existing workforce development initiatives, an expansion of existing workforce development initiatives to a greater number of participants or a new location, and/or the establishment of new workforce development activities, all of which will ready participants for the future energy workforce.

Many nations, including the U.S., have set goals for net-zero carbon emissions.¹ This energy transition will have monumental impacts on the Gulf of Mexico states, which together are home to about half of the nation's oil and natural gas refining capacity and account for 15% of the total crude oil production in the U.S.² Achieving this energy transition will require sufficiently skilled workers at all stages of the production, storage, and distribution of clean energy, as well as the manufacturing of all the necessary components to do so. Skilled technical workers, those that utilize science, technology, engineering, and mathematics (STEM) knowledge in their jobs and careers, but do not have a bachelor's degree, are an often overlooked yet vital part of the science and engineering enterprise that enable the benefits of STEM to reach the American people. Careers for skilled technical workers typically provide good-paying jobs with fewer formal education requirements. Those careers facilitate workers more quickly entering a workforce in which they are more likely to have a higher paying job and lower unemployment relative to other jobs at a similar education level.³

WHAT WE ARE LOOKING FOR

This grant opportunity aims to deliver skills and credentials to project participants such that they can enter jobs and careers in the future energy workforce.

Projects should include partnerships that leverage data to identify labor market needs and associated skills gaps. Partnerships between sectors (such as between academia, industry, local governments, and nonprofits) are highly encouraged. Proposals should describe their inclusive approach to developing technical skills and conferring industry-recognized credentials

¹ National Academies of Sciences, Engineering, and Medicine. 2023. *Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25931>.

² United States Energy Information Administration. 2022. Gulf of Mexico Fact Sheet. https://www.eia.gov/special/gulf_of_mexico/

³ National Academies of Sciences, Engineering, and Medicine. 2017. *Building America's Skilled Technical Workforce*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/23472>.

on participants. Proposals should explain how they will put participants on a reasonable path to a skilled technical career as well as the approximate number of participants that the projects expect to engage. Preference will be given to applicants that have a history of working with underrepresented groups or that have an appropriate plan to do so. Projects should seek to “meet students where they are” and provide support services (such as transportation, tuition assistance, or personalized support and guidance) as needed.

All proposed activities should focus on workforce development initiatives for ages 16-25 that will prepare project participants to join the future energy workforce. Proposals that form partnerships across sectors (such as academia, industry, nonprofits, local governments) are highly encouraged. The focus of this funding opportunity is the acquisition of key skills and credentials by project participants for sustainable energy jobs and careers. Proposals should explain what data and evidence was used to forecast demand for careers as well as what data and evidence was used in the development of curriculum or projects that will prepare participants for the forecasted careers.

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

PROJECT GUIDELINES

PROJECT STRUCTURE

- Applicants may propose new projects or activities based in research or experience; or propose to extend existing projects across geographic, sectoral, socioeconomic, or cultural boundaries and/or topic/discipline areas to reach a broader range of participants and/or provide support services such as transportation, tuition assistance, or personalized support and guidance.
- Applicants may propose activities that pilot or test new approaches for developing and implementing educational or training programs critical to advancing students’ technical knowledge and skills as they relate to regionally identified jobs and careers in the future energy workforce.
- Applicants may seek funding to sustain and expand existing workforce development activities if the proposal demonstrates significant positive impact(s) and anticipated growth.

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 their impact.
- Enable organizational learning and increase capacity to provide quality 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.

AWARD INFORMATION

- **Total funding available:** \$3 million, with a minimum request of \$75,000
- **Specifications for award amount:** This funding opportunity is not intended for projects under \$75,000. Applicants may request up to \$1,000,000, with a preference for projects that are less than \$500,000.

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. 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. Applicants may request up to \$1,000,000, with a preference for projects that are less than \$500,000. The Gulf Research Program reserves the right to negotiate, some, one, or none of the proposals received in response to this solicitation.
- **Award notification:** September 2024

WHO SHOULD APPLY

For the purpose of this grant opportunity, applications will be accepted from all nonprofit, state, and local entities, excluding federal agencies, which support educational, service, and/or coordination activities for ages 16 - 25.

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 should occur in the United States Gulf of Mexico region.**

The Program will **not** consider funding:

- Proposals for political lobbying or advocacy activities.

ELIGIBILITY

The Gulf Research Program welcomes proposals from all types of U.S. organizations, excluding federal agencies, 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.

In order to best serve the citizens 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.

APPLICATION SUBMISSION

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.

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:

- 1) **Project Team:**
 - a) Project director
 - i) ORCID (Open Research and Contributor ID)
 - b) Key personnel
 - c) Involvement of project director or key personnel in other applications related to this funding opportunity
- 2) **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 age ranges targeted.
 - c) **Project Timeline** (excel upload)
 - d) **Project Summary** (maximum 250 words)
 - e) **Project Description** (maximum 4,000 words total)
 - i) Describe the proposed workforce development initiative; (1000 word limit)
 - ii) Discuss how the proposed workforce development initiative will (1) create partnerships across sectors (such as academia, industry, government, nonprofit) and/or institutions; (2) use data and evidence to forecast future energy workforce needs and explain the importance of these careers to the local community; (3) utilize data and industry input to provide effective, thoughtful educational experiences; (4) work with underrepresented groups to diversify the future energy workforce, if applicable; (5) provide participants with the necessary skills and credentials for the future energy workforce; and (6) provide support services (such as transportation, tuition assistance, or personalized support and guidance) and/or job placement and retention assistance. (2000 word limit)
 - iii) Discuss the pedagogical approach to the proposed project; (1000 word limit)
- 3) **Project Evaluation** (maximum 1250 words total).
 - a) Describe your goals and anticipated outputs and outcomes related to (1) providing participants with key technical knowledge, skills, and certifications; and (2) providing personalized career guidance and support. (500 word limit)
 - b) 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; (500 word limit)
 - c) Describe the qualifications of the evaluator(s). (250 word limit)
- 4) **Proposed Budget**
 - a) **Total Budget Requested**

- b) **Budget Justification:** Please submit a budget justification. A [sample document](#) is provided. (maximum 2000 words total).
- 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.

5) Other Attachments

- a) **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 the [Collaborators and Other Affiliations form](#) is to help the GRP eliminate potential conflicts of interest during reviewer recruitment. Download the 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.

MERIT REVIEW CRITERIA

All complete full proposals will be evaluated on the basis of these merit review criteria. 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.

Partnerships (30%)

- To what extent does the proposed project establish partnerships between sectors (e.g., academia, industry, local governments, non-profits) and institutions?
- To what extent does the proposed project engage industry to ensure that workforce development initiatives will lead participants to actual jobs?

Scientific and Technical Merit (30%)

- To what extent does the proposed project derive its strategy and pedagogy from quality data, methods, and resources?
- To what extent does the proposed project forecast future workforce needs and plan to respond appropriately?
- To what extent does the proposed project prepare participants with the skills to acquire an identified skilled technical career?
- To what extent are the anticipated outputs and outcomes clearly described and appropriately aligned to the goals of the proposed project?

Sustainability and Scalability (20%)

- To what extent does the proposed project have a reasonable path towards sustainability beyond the life of the grant?
- To what extent could the proposed project be effectively scaled if successful?
- To what extent could the proposed project be replicated by others wanting to follow this project's success?
- To what extent does the proposed project support students in achieving their educational goals by providing access or removing barriers (such as transportation to training facilities, tuition assistance, or personalized support and guidance)?

Project Team (10%)

- To what extent are project team members well-qualified in their experience, knowledge, and skills to ensure the completion of a successful project?
- To what extent do the proposed project applicants have a history of working 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, students with disabilities, first-generation immigrants, students from rural or remote areas, and/or students experiencing or at risk of homelessness?

Budget (10%)

- To what extent is the budget commensurate with the proposed activities?
- To what extent is the budget being directed towards ultimately supporting the educators and the students?

Larger Requests: \$500,000 - \$1,000,000 (unweighted)

- To what extent does the proposed project have the potential to be more transformative and impact a larger number of students, teachers, classes, school districts, and/or communities?

Project Evaluation (unweighted)

- 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?

RESEARCH INVOLVING HUMAN SUBJECTS

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](#).

DATA MANAGEMENT

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.

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 AGREEMENT 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”⁴:

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

⁴ 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_0f9e/content/4885770000227383.pdf. Retrieved April 24, 2021.