

REQUEST FOR APPLICATIONS

**UNDERSTANDING GULF OCEAN SYSTEMS:
CYCLE 3**

*The National
Academies of*

SCIENCES
ENGINEERING
MEDICINE

GULF RESEARCH PROGRAM



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1. AWARD INFORMATION AND KEY DATES

Award Duration: Funding will be awarded to support projects up to 60 months in length

Total Amount Available: up to \$25 million

Estimated Number of Awards: Funding for up to three (3) multi-investigator consortia is anticipated. The total available funding for the consortia is \$22 million. The remaining \$3 million might be used to address additional gaps in knowledge, modeling, or observations. The Request for Applications to address additional gaps would be opened after consortia are selected. There are no minimum budget requests per application, the maximum limit for a consortium is \$22 million; proposed budgets should be commensurate with the work described. Resources made available under this funding opportunity will depend on the quality of applications received and the budgets proposed by successful Applicants. The Gulf Research Program (GRP) may select for negotiation all, some, one, or none of the applications received in response to this solicitation. The right for negotiation will continue throughout the performance of consortia.

Letter of Intent (LOI): A LOI is required for this funding opportunity

February 17, 2021: Online LOI submission opens

March 30, 2021: LOI due by 5:00 pm Eastern Time

March 31, 2021: Online Full Proposal submission opens (Only open to Applicants who submitted a LOI)

August 3, 2021: Full Proposal due by 5:00 pm Eastern Time

Award Selection and Notification: November-December 2021

Anticipated Funding Start Date: First quarter, 2022

Submission site: <https://gulfresearchprogram.smapply.io/>

Important Version Information and Revision Notes:

- Version 1.1: Link to sample full proposal added on 3/19/2021.
- Version 1.2: Links to sample grant agreements added on 4/8/2021.

2. ELIGIBILITY

These terms are defined as follows when referenced:

- **Applicant:** The organization under which an application is being submitted (i.e., applying organization).
- **Project Director:** The individual who will lead the proposed project. The Project Director is responsible for the direction and intellectual design of the project and has primary responsibility for project execution and the submission of all required deliverables to the GRP. Project Directors usually initiate applications that are officially submitted by their employing organizations (the Applicant). When initiating an application, the Project Director is responsible for ensuring it meets all the requirements outlined by the GRP as well as any requirements set by the applying organization.
- **Key Personnel:** Individuals who share in the responsibility of the direction or intellectual design of the proposed project and/or contribute to the execution of the proposed project in a substantive, measurable way.
- **Consortium:** For the purpose of this Request for Applications (RFA), a consortium is defined as a project partnership consisting of at least one research organization and one entity that performs operational forecasting or uses forecasts of the Gulf of Mexico (GoM) dynamics for decision-making (end-user), and may also include other university, governmental, non-governmental, community-based, and private collaborators. Federal agencies may be included as non-funded collaborators. All partners within the consortium must provide substantial intellectual contributions towards the overall project goal and agree to work together seamlessly as one integrated team.
- **End-user:** For the purpose of this RFA, an end-user is defined as an entity that performs sustained, continuous, operational forecasting, integrates research into operational forecast systems, or uses operational forecasts for decision-making.

Applications must adhere to the following to be eligible:

- U.S. organizations (excluding federal agencies) that have a valid federal tax ID number are eligible to apply.
- This funding opportunity is for distinct activities only. Proposed activities that are part of a broader, existing effort, program, or project may only be eligible if the application clearly demonstrates that the funding request is for distinct activities that would not otherwise occur.
- Activities currently under consideration for funding from other sources are not eligible. The status of “currently under consideration for funding from other sources” is intended to mean that full or final application materials have been submitted to another entity to request funding. Submission of a Letter of Intent or Pre-Proposal to another funding source does not constitute an activity being “currently under consideration for funding from other sources” if that submission is a step that precedes submission of full or final application materials in an application process.
- U.S. organizations may partner with international organizations; a U.S. organization must be the Applicant, but Applicants may include Key Personnel from and sub-awards to non-U.S. organizations. Legal restrictions may prohibit transactions, including sub-awards, between U.S. entities and entities within certain foreign countries.
- U.S. federal agencies are not eligible to receive GRP funding as Applicants or sub-awardees, although their employees may be non-funded collaborators. Any proposed collaboration with employees of a U.S. federal agency should not involve any transfer of GRP funding to the agency and must be in compliance with all applicable federal statutes and regulations. This will be reviewed on a case-by-case basis to determine if this requirement is met.
- Federally Funded Research and Development Centers (FFRDCs) and University Affiliated Research Centers (UARCs) can be named as sub-awardees, however, these Centers must have the authority to obtain funding for work outside of the relevant federal sponsor contact and not be proposing to do work that is otherwise being done under the federal sponsor contract.
- BP Exploration and Production, Inc. (BP), Transocean Deepwater, Inc. (Transocean), their affiliates, and employees are not eligible to receive grant funding or to participate in any grant.
- Activities involving advocacy or lobbying are not eligible.

Individuals named as Project Director or Key Personnel in an application must adhere to the following:

- An individual may be named as Project Director in only one application.
- An individual, including a Project Director, may be named as Key Personnel in any number of other applications.
- If an individual appears on multiple proposals, a clear description should be included to explain how the proposed work is complementary and not duplicative of other proposed efforts and how the participant will budget his or her time.
- Should an individual appear on two or more proposals as Project Director, **ALL** proposals listing that individual as Project Director will be disqualified and eliminated from the review process. It is the responsibility of the Project Directors to confirm that each member of the entire team is within the eligibility guidelines.

3. DIVERSITY, EQUITY, AND INCLUSION

The GRP takes issues of equity and justice very seriously. We are committed to promoting diversity, equity and inclusion in our work, and exercising these principles in our staffing, granting, board appointments, and fellowships. No person on grounds of race, color, age, gender, national origin, religion, marital status, pregnancy, parenthood, or disability shall be excluded from participation in, denied the benefits of, or be subjected to discrimination under this program.

4. BACKGROUND

4.1 ABOUT THE GULF RESEARCH PROGRAM

[The GRP](#) is an independent, science-based program founded in 2013, as part of agreements under plea orders with companies involved in the 2010 Deepwater Horizon disaster. The GRP seeks to enhance offshore energy safety and protect human health and the environment by catalyzing advances in science, practice, and capacity to generate long-term benefits for the GoM region and the Nation. The GRP is a division of [the National Academies of Sciences, Engineering, and Medicine](#)—a private, nonprofit organization that provide expert advice on some of the most pressing challenges facing the Nation and world on issues of science, engineering, and medicine.

4.2 ABOUT THE UNDERSTANDING GULF OCEAN SYSTEMS INITIATIVE

[The Understanding Gulf Ocean Systems \(UGOS\)](#) Initiative is part of the GRP focused on **improving the skill of sustained continuous operational forecasts, and associated physical understanding, of ocean dynamics for the reduction of risks in offshore energy exploration and production in regions of the Gulf of Mexico (GoM) where deep-water drilling and production occur and/or are anticipated.** For the purposes of this RFA, ocean dynamics refers to the motion of water throughout the full water column of the Gulf basin, including the general circulation, surface currents, Loop Current (LC) and LC eddies (LCE), and the seawater properties and forces that affect them. Presently, the safety of offshore operations, effectiveness of oil spill response, and management of GoM resources are hindered by limitations of existing forecasting, prediction data and tools, and understanding of the ocean dynamics, as well as, hurdles to collaboration among the many participants engaged in GoM research, management and operations. By deploying GRP’s four strategic approaches ([2020-2024 GRP Strategic Plan](#)), working in coordination across [the GRP program areas](#), supporting user-driven research activities, and using the convening power of the National Academies, the UGOS initiative will focus on reducing these barriers. To date, the UGOS Initiative has supported \$12.5 million in grants to improve understanding of the GoM LC and LCE that are particularly important in GoM dynamics. More information about UGOS, current activities, and supported projects is available at <https://www.nationalacademies.org/our-work/understanding-gulf-ocean-systems>.

5. FOCUS AREAS AND PROJECT GUIDELINES

5.1 FOCUS AREAS

This RFA is aimed at the following primary and secondary focus areas:

Primary:

- **Use existing and emerging understanding and data to improve skill of sustained continuous operational forecasts of ocean dynamics** for the reduction of risks in offshore energy exploration and production in the regions of the GoM where deep-water drilling and production occur and/ or are anticipated. Forecasts should be aimed at meeting the offshore operators and regulators lead-time requirements for near-surface and deep-water currents and transport ([link](#)).
- **Design and implement** cost effective ocean observations, data assimilation techniques, and improvements to forecast models that will contribute to improving the skill of sustained continuous operational forecasting of the LC and LCEs throughout the full water column with forecast times of benefit to the offshore energy exploration and production. The design could entail traditional and

innovative technologies and approaches, including adaptive sampling during LC expansion and eddy shedding or reattachment.

Secondary:

- **Develop robust linkages** with end-users and other stakeholders to address socio-environmental challenges and opportunities beyond safer offshore energy operations in the GoM region (for example, improved management of fisheries and ecosystems affected by hypoxia and harmful algal blooms)
- **Contribute to improving the accuracy of hurricane forecasts**, e.g., oceanic heat content and sea surface temperature estimates.
- **Contribute to understanding of the effects of present and future climate change and variation** on GoM ocean dynamics.

5.2 PROJECT GUIDELINES

To be considered responsive to this RFA, projects must involve the following:

Required:

- The proposed project must take a **multi-investigator consortium approach** to address **at least one primary AND at least one secondary focus** area described in Section 5.1.
- A consortium must involve at least one research organization and one entity that performs operational forecasting or uses forecasts of the GoM dynamics for decision-making (end-user), and may also include other university, governmental, non-governmental, community-based, and private collaborators. Federal agencies may be included as non-funded collaborators. All partners within the consortium must provide substantial intellectual contributions towards the overall project goal and agree to work together seamlessly as one integrated team.
- Projects must contribute to improving the skill of sustained continuous operational forecasts of GoM ocean dynamics that support end-users. The GRP will not fund data collection solely for observations and monitoring or projects that seek to prolong time series without a significant contribution to improving forecasting of the GoM dynamics.
- Projects must result in actionable outcomes and benefits to end-users:
 - Projects must strive for quality and specificity over quantity and breadth in selecting applications and end-users. One to two explicit primary applications and end-users are expected rather than an extensive list of hypothetical applications and end-users. End-users are expected to be partners in co-design and co-production of project and results.
 - Projects must demonstrate a plan for how their outputs could be incorporated into operational forecasting currently performed by the U.S. Naval Research Laboratory (NRL), National Oceanic and Atmospheric Administration (NOAA), and/or industry within the timeframe of their projects. For the final project year, proposals must include plans for transition of developed tools or products to the end-user organization(s) for deployment and long-term sustained use. As appropriate, projects should plan and budget for research transition activities.
- Projects must be collaborative and integrative:
 - Projects supported under this solicitation must collaborate, share data, software, code, and other information with the national and international scientific community, including other UGOS funded projects, UGOS partners, and end-users identified by the GRP. Project Directors should plan and budget to actively participate in cross-project collaboration among other UGOS funded projects with a common goal to improve skill of sustained continuous operational forecasts of GoM dynamics for the reduction of risks in offshore energy exploration and production.
 - Project Directors are expected to engage with the GRP to meet UGOS goals. This will minimally include working with the GRP Program Officer(s), participation in at least one meeting annually and quarterly teleconferences with all UGOS project teams. The travel expenses for the UGOS annual meeting will be reimbursed by the GRP.

- Projects with observational components must:
 - Demonstrate a plan for how they will collaborate with existing operational forecasting systems so that new observational data would be incorporated into forecasting systems within the timeframe of the projects;
 - Provide justification that the proposed observations are relevant to improving forecasting capabilities and are relevant to and can be incorporated into modeling efforts; and
 - Consider the advantages and disadvantages of their observational system, for example, breadth of coverage versus cost and utility, continuous versus targeted observations during times of ocean complexity, and observing system technologies.
- Projects with modeling components must:
 - Produce insights that help guide ongoing or future data collection, including temporal and spatial scales, location, frequency, and key variables; and
 - Demonstrate a plan for how the proposed work will incorporate new observations being collected within the timeframe of the projects.
- Proposals must include an explicit **data management component** that, at minimum, meets requirements of the GRP’s [data management policy](#). In addition to GRP’s standard data management requirements and reporting, proposals must show how data will be shared broadly and in a timely manner with the scientific community, federal agencies, and the interested public. It is expected that, wherever possible, there be rapid sharing of provisional, interim data in real (or near-real) time. Applicants must include a plan for data dissemination.

Encouraged:

- Coordination with projects funded under [UGOS Grants 1 and 2](#) or other relevant ongoing or planned Gulf-focused activities is strongly encouraged.
- Projects with observational components should incorporate the results of the Observing System Simulation Experiments (OSSEs) in the design of their observational system. More details on the OSSEs can be found [here](#).
- Leveraging private and public resources in the form of direct or in-kind support is permitted. Though not required, applicants are encouraged to leverage available resources, such as talent, equipment, ship time, computational resources, data management, and/or funding from public or private partners where possible.

6. PROPOSAL APPLICATION MATERIALS AND PROCEDURES

Applications for this funding opportunity have two stages with different required components: 1) a Letter of Intent (LOI) and 2) a Full Proposal. Project Directors are advised to review the application preparation and submission instructions carefully and submit any questions to gulfgrants@nas.edu in advance of the submission deadlines. Although the GRP strives to respond to applicants’ questions within two business days, the response time depends on the volume of questions received and the complexity of the question asked. The GRP does not guarantee that applicants’ questions will be answered before submission deadlines. Applicants are advised to submit LOIs and Full Proposals well in advance of the submission deadlines as a precaution against unanticipated delays. The GRP expects applicants to review the Grant Agreement (see “Award Terms and Conditions”) prior to submitting an Application to ensure that the Applicant is aware of the applicable terms under which the grant is offered. It is the policy of the National Academies to entertain potential modifications to the Grant Agreement only under the most exceptional circumstances. Successful applicants are strongly encouraged to sign the Grant Agreement as presented.

6.1 LETTER OF INTENT

A Letter of Intent (LOI) is required for this funding opportunity and must be submitted via the [online application system](#) by **March 30, 2021**. LOIs submitted by other means (including mail, fax, or e-mail) will not be considered. The LOI application materials must be submitted in English, other languages will not be considered.

The LOI must include the following elements:

- Required [Eligibility Form](#)
- Required [Contact Information Form](#) that includes:
 - I. Required Information:
 1. Applicant
 2. Project Director ORCID—Open Researcher and Contributor ID
 3. Authorized Organizational Representative (AOR)
 4. Grant Administrator (if different from AOR)
 - II. Optional Information (responses in this section will not be shared with reviewers and will not affect the proposal evaluation):
 1. Suggestions for reviewers: The suggestions may be considered for the peer review of Full Proposals, but the selection of reviewers is the responsibility of the GRP.
 2. How did you hear about this funding opportunity?
 3. Demographic information
- Required [Letter of Intent Form](#) that includes:
 - I. Project Personnel:
 - Project Director
 - Key Personnel
 - Involvement of Project Director or Key Personnel in other applications
 - II. Project Details:
 - **Project Title** (maximum 15 words)
 - **Project Acronym** (if applicable)
 - **Project Key Words** (maximum 5 key words)
 - **The Problem:** The research question, issue, and/or gap being addressed (maximum 100 words)
 - **Goal and Objectives:** The overall project goal and its SMART (Specific, Measurable, Achievable, Relevant, Time-oriented) objectives (maximum 150 words)
 - **Approach:** How the goal and objectives will be achieved (maximum 500 words)
 - **Application:** How the results from this project will be used and by whom (maximum 200 words)
 - **Consortium:** How the project team is organized to ensure integration and the role and responsibilities of the different consortium members (maximum 500 words)
 - **Anticipated Budget:** The anticipated total funding request for the proposed consortium and by consortia members
 - **Resumes:** A resume is required for the Project Director and every individual identified as Key Personnel. 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. Resumes for individuals not named as a Project Director or Key Personnel in the “Project Personnel” section should not be included. It is the responsibility of the Project Director to ensure that the Key Personnel listed in the “Project Personnel” section are correct and match the resumes submitted.
 - III. Research Involving Human Subjects (if applicable)

6.2 LETTER OF INTENT MERIT REVIEW CRITERIA

All complete LOIs will be reviewed internally by the National Academies staff in consultation with UGOS Standing Committee members to evaluate the responsiveness of its goals and objectives to the RFA.

Relevance (60%)

- To what extent does the LOI appropriately and clearly address at least one primary focus area?
- To what extent does the LOI appropriately and clearly address at least one secondary focus area?
- How effectively might the proposed project contribute to the reduction of risks in offshore energy exploration and production in the regions of GoM where such activities occur and/or are anticipated?
- To what extent does the proposed consortium include an appropriate mix of partners from diverse institutions, disciplines, and sectors?
- To what extent is the proposed consortium collaborative and integrative?

Applications and End-Users (10%):

- To what extent does the proposed project appropriately identify explicit applications and end-users?
- To what extent does the proposed project clearly address the operational forecasting needs?

Approach (10%):

- To what extent does the LOI demonstrate an appropriate approach to accomplish the specific goals and objectives of the project?

Project Personnel and Organizational Support (20%):

- To what extent are the disciplines and perspectives represented by the personnel and institutions appropriate for the scope of the project?

Project Directors will be notified no later than **April 27, 2021** whether, based on the GRP's review of the LOI, a Full Proposal is encouraged or discouraged and suggestions for improvement given. All consortia submitting a LOI are eligible to submit a Full Proposal.

6.3 FULL PROPOSAL

Full Proposals must be submitted via the [online application system](#) by **August 3, 2021**. Proposals submitted by other means (including mail, fax, or e-mail) will not be considered. Full Proposal application materials submitted in any language other than English will not be considered. Conformance of proposals to instructions provided is required and will be strictly enforced. The GRP may reject, without review, any applications with required attachments that are missing requested information or that are not consistent with the instructions outlined. The GRP may reject inclusion of any optional attachments in the review process if the attachments are not consistent with the instructions outlined. Although the information provided in the LOI is considered to be non-binding, it is expected that Full Proposals will reflect the goals, objectives, and general approach laid out in the LOI, that the applying organization remains the same, and that the end-users include those initially proposed. The [Full Proposal](#) must include the following elements:

I. Project Personnel:

1. Project Director
2. ORCID (Open Research and Contributor ID)
3. Key Personnel
4. Involvement of Project Director or Key Personnel in other applications

II. Project Details:

1. **Project Title** (maximum 15 words). The title should clearly represent the project and help articulate

the importance and goals of the project to a non-technical reader. Titles are a primary referent for projects. The titles of awarded projects will be announced publicly and should not sacrifice clarity for novelty.

2. **Project Acronym** (if available).

3. **Project Key Words** (maximum 5 words).

4. **Project Summary** (maximum 300 words). The project summary should be an overview of the proposed project written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. The project abstract should clearly and succinctly address:

- What the project aims to achieve (i.e., the problem, proposed outcomes);
- The general approach to address the problem; and
- How the project results and/or outputs can be used to improve skill of sustained continuous operational forecasts of ocean dynamics for the reduction of risks in offshore energy exploration and production in the regions of the GoM where deep-water drilling and production occur and/or are anticipated (i.e., application of results).

5. **Project Description** (maximum 7,500 words). Provide a clear statement of the work to be undertaken and a plan for implementation. It should address the following:

- **The Problem:** The context for the research question, issue, and/or gap to be addressed and the current state of knowledge on the issue.
- **Goal and Objectives:** The overall goal of the project and its SMART (Specific, Measurable, Achievable, Relevant, Time-oriented) objectives.
- **Project approach, methodology, and implementation:** Details about the proposed activities to be undertaken and methods, tools, and analyses that will be employed to carry out the project, along with an explanation of how these are appropriate for accomplishing the specific aims of the project.
- **A clear description/plan for implementation** that demonstrates the feasibility of the activities to be undertaken, including explanations of the feasibility of access to specific data sets, people, or settings required to successfully implement the project and the mechanism to assess success.
- **A clear description/plan for transition** of developed tools or products to the end-user organization(s) for deployment and long-term sustained use.
- **A description of each Key Personnel role.**

6. **Application and Outputs Utilization** (maximum 1,000 words). Describe how the research addresses operational forecasting needs and how end-users will use the outputs of the project.

7. **Engagement, Communication, and Outreach Strategy** (maximum 500 words). Strong interaction and engagement with end-users and other stakeholders and audiences is expected of all proposals. Dissemination of results and their utility to stakeholders and educators must be clearly defined.

8. **Consortium Structure** (maximum 1,000 words). How the project team is organized to ensure integration, and the role of the different consortium members. Describe how the experience of the Project Director and other team members relates to the successful completion of the project. Explain the coordination and collaboration plan for multiple institutions, organizations or entities, and with other ongoing or submitted consortia or projects.

9. **Success Metrics** (use this [template](#)). This template should be used to concisely outline major goals, objectives, approach, success metrics, anticipated deliverables, outcomes, and project risks. It should be limited to five-pages and uploaded as a PDF as a separate document.

10. **Timeline** (use this [template](#)). A timeline, as a Gantt chart, showing key project activities or events, including tasks, milestones, outputs, or deliverables is required. The timeline will be used by reviewers to assess project feasibility. For funded projects, the timeline allows Project Directors to track progress and allows GRP staff to monitor the project schedule. Project activities or events listed in the timeline should serve as unambiguous indicators and measures of progress. The timeline should include sufficient key

activities or events so that the portrayed, overall progress of the project can be reasonably tracked over distinct time periods. The timeline Gantt charts should be uploaded as a PDF as a separate document.

11. Facilities, Equipment, and Other Resources (maximum 500 words). This section of the proposal will be used to assess the adequacy of the resources available to perform the proposed project. Include an aggregated description of the internal and external resources (both physical and personnel) that all the partners of the consortium will provide to the project, should it be funded. The description should be narrative in nature and must not include any quantifiable financial information. Although these resources are not considered cost sharing, the GRP expects that the resources identified in the Facilities, Equipment, and Other Resources section will be provided, or made available, should the proposal be funded.

12. Data Management Plan (maximum 1,500 words). Applications should include an explicit data management component that meets the requirements of the [GRP's data management policy](#). All observational and modeled data shall be made available with minimal delay to be negotiated with the GRP for each dataset, through submission at least to the Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC, [link](#)) and national archives for use by intermediate and end-users.

13. References Cited

14. Research Involving Human Subjects (if applicable)

III. Project Budget:

1. Total Budget Requested

2. Budget Justification (maximum 2,000 words). View a [sample budget justification](#).

3. Budget Form (use this [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.

4. Sub-award to FFRDCs or UARCs (if applicable). The FFRDC(s) and/or UARC(s) named as sub-awardees in the Full Proposal must have the authority to obtain funding for work outside of the relevant federal sponsor contract and not be proposing to do work that is otherwise being done under the federal sponsor contact.

IV. **Resumes:** A resume is required for the Project Director and every individual identified as Key Personnel. 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. Resumes for Individuals not named as a Project Director or Key Personnel in the "Project Personnel" section should not be included. It is the responsibility of the Project Director to ensure that the Key Personnel listed in the "Project Personnel" section are correct and match the resumes submitted.

V. **Letters of Commitment:** Applicants are required to upload a PDF with letters of commitment from collaborators or organizations/individuals anticipated to inform or participate in the project in a substantial way. Each letter of commitment should be brief and no longer than one page. Letters of commitment must not include itemized budgets or other information that is required in other sections of the application. All letters of support should be combined into a single PDF before uploading as an attachment.

VI. **Current and Pending Support Form** (use this [template](#)): Complete this form to provide information on support from projects or activities currently underway and pending support for future projects or activities of the Project Director and all Key Personnel named in the "Project Personnel" section. All current or pending 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 for every member of the project team. The project proposed in this application and all other projects or activities requiring a portion of time of the Project Director or Key Personnel must be included, even if an individual receives no salary support from the projects or activities. If an individual does not have any other current or pending support or is unable to document that information for whatever reason, that must be indicated within the section of the form for that individual. 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. It is the responsibility of the Project Director to ensure that the Key Personnel listed in the “Project Personnel” section are correct and match those listed in the Current and Pending Support Form.

VII. **Collaborators and Other Affiliations Form** (use this [template](#)): The purpose of this form is to help us eliminate potential conflicts of interest during our reviewer recruitment. Complete this form to provide information on the following for the Project Director and all Key Personnel named in the “Project Personnel” section:

- 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.
- The individual’s own graduate and postdoctoral advisor(s) and their current organizational affiliations.
- All persons (including their current organizational affiliations) with whom the individual has had an association as a graduate or postdoctoral advisor.

If an individual does not have any collaborators or other affiliations pertaining to the above situations, that must be indicated within the section of the form for that individual. It is the responsibility of the Project Director to ensure that the Key Personnel listed in the “Project Personnel” section are correct and match those listed in the Collaborators and Other Affiliations Form.

VIII. Optional Attachment:

1. **Equations and Visual Elements:** The text box for the “Project Description” does not support equations or visual elements (e.g., figures, tables, images, maps). Applicants may upload a single PDF document with 1) a one-page list of equations and 2) up to eight visual elements, each on one page, to support the information included in the project description. Visual elements must be labeled sequentially (e.g., Figure 1, Table 1). The total number of pages of visual elements in the PDF may not exceed eight pages. Only equations and visual elements can be included in this attachment and only information that is directly relevant to the equations or visual elements included (e.g., figure legends) is acceptable. Attempts to use this attachment to provide any information beyond this stated purpose may result in removal of the attachment from the review process.

6.4 FULL PROPOSAL PEER REVIEW PROCESS

All complete applications will be provided to external reviewers who will constitute a review panel for evaluation that is based on the Merit Review Criteria. The review panel will discuss the merit of each application and score the applications. The GRP will make reasonable efforts to develop a review panel in which external reviewers are not affiliated with institutions that submitted applications. Any external reviewer with conflict(s) of interest will be recused from reviewing or participating in all discussion of any application(s) with which they have a conflict of interest. Program staff will examine the applications and prepare a grant-funding plan taking into consideration the review panel’s ranking of the applications, summaries from the panel discussion, and the program’s funding availability, current portfolio, objectives, and goals. A subset of current and former GRP Division Committee and UGOS Standing Committee members will oversee the grant-funding plan and recommend a list of projects for funding. Current and former GRP Division Committee and UGOS Standing Committee members are recused from individual applications involving a conflict of interest, such as affiliation with a submitting institution. The final decision for funding will be made by the National Academies.

All review processes will be governed by the GRP’s [Conflict of Interest and Confidentiality Policies](#).

6.5 FULL PROPOSAL MERIT REVIEW CRITERIA

Applications will be evaluated using three broad review criteria. Reviewers may raise additional issues that are not covered by the bullets under each criterion.

Relevance (50%):

- To what extent does the project appropriately and clearly address at least one primary focus area?
- To what extent does the project appropriately and clearly address at least one secondary focus area?
- How effectively might the proposed project contribute to the reduction of risks in offshore energy exploration and production in the regions of GoM where such activities occur and/or are anticipated?
- To what extent does the project lead to explicit applications and end-user engagement?
- To what extent does the proposed project clearly address the operational forecasting needs?
- To what extent does the proposed consortium include an appropriate mix of partners from diverse institutions, disciplines, and sectors?
- To what extent is the proposed consortium collaborative and integrative?

Technical and Scientific Merit (30%):

- To what extent does the proposed project demonstrate a scientifically and/or technically valid and appropriate approach, strategy, methodology, and analyses to accomplish the specific goals and objectives of the project?
- To what extent is the implementation plan of proposed activities well-reasoned, well-organized, and based on a sound rationale?
- To what extent does the implementation plan incorporate a well-designed mechanism to assess success?
- To what extent is the timeline of the proposed work reasonable and feasible?
- To what extent is the budget commensurate with the proposed work?
- To what extent does the proposal include a data management plan that is appropriate for the scope of work?

Project Personnel and Organizational Support (20%):

- How well qualified are the Project Director and Key Personnel to conduct the proposed activities?
- To what extent are the disciplines and perspectives represented by the personnel and institutions appropriate for the scope of the project?
- To what extent does the application demonstrate that the project personnel would have adequate resources (for example, institutional support, equipment, and/or other physical resources) to conduct the proposed project?

Leveraging and Coordination (non-weighted category):

- As applicable, to what extent does the project team plan and budget to actively participate in cross-project collaboration among other UGOS funded projects with a common goal?
- As applicable, to what extent does the project propose to leverage available public or private resources (e.g., operational forecasts, user interfaces, instrumentation, computational capacity, ship time, platform accessibility, and national data archiving centers)?
- As applicable, to what extent does the proposal include coordination or collaboration with Gulf-focused activities?
- As applicable, how adequately are the roles of each collaborator described?

6.6 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](#)"). 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

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 application with their local IRB at the same time the application is submitted to the GRP so that any approval procedure determined as necessary will not delay the award process. An application may be submitted to the GRP prior to receiving IRB approval or being granted exemption; however, if the application 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.

7. MAKING THE AWARD

Selection Notice:

Following completion of evaluation of all applications received, the Project Director identified on an application will be notified via email that (1) the application has been selected for funding pending contract negotiations, or (2) the application has not been selected. For selected applications, 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 is not obligated to provide any funding until a signed copy of the grant agreement has been received by the Academies.

Award 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 strictly prohibited. Expiration date is the date

specified in the award notice after which expenditures may not be charged against the award 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 via approval of a request for a no-cost extension. If approved, the GRP will issue an amendment to the award.

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 award. 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. For more information please visit [grantee FAQ](#).

8. POST-AWARD MANAGEMENT

Reporting Requirements:

After an award is conferred, the awardee shall provide a semi-annual financial report to the GRP to report on expenditures to date under the award. The awardee shall provide an annual written report to the GRP to report on activities being carried out under the award, including but not limited to project accomplishments to date and expenditures. No later than sixty (60) days after the expiration of the award, the awardee shall provide in writing a final report that addresses the original objectives of the project as identified in the application, describe any changes in objectives that were approved by the GRP, describe the final project accomplishments, and include a final project accounting of all award funds.

Mid-point and Final Evaluation:

Annual and final reports are one mechanism the GRP will use to understand, manage, and learn from the work of its grantees. The GRP may also make site visits to review project accomplishments. At the mid-point and at the end of the project, Project Directors will be required to submit an extended narrative report that addresses the technical and programmatic achievements of their projects. These reports may be reviewed by peers or other technical experts and evaluated by the GRP. After the mid-point evaluation, Project Directors may be requested to update their project plans for the remaining project duration. Failure to submit timely reports, to respond to peer review comments, or to meet project objectives due to problems in program management, may result in withheld payments.

Collaboration:

Applicants are expected to engage with the GRP to meet UGOS goals. This will minimally include working with the GRP Program Officer(s), participation in at least one meeting annually and quarterly teleconferences with all UGOS project teams. The travel expenses for the UGOS annual meeting will be reimbursed by the GRP. Project Directors must actively participate in cross-project collaboration among other UGOS funded projects. The GRP will be substantially involved by coordinating partners and teams to accomplish the work. Failure to participate in collaborative activities may result in withheld payments.

Data Management:

Implementation of the data management plan must follow FAIR guiding principles and will be monitored through the annual and final report process. Annual project reports required for all multi-year awards must include an account of ongoing data management and the accessibility (e.g., sharing) of research information products (e.g., digital object identifiers [DOIs] or accession numbers for digital information;

citations of relevant publications, conference proceedings, and conference presentations; and other types of dissemination). In addition, the report must articulate any current or foreseeable changes to the original plan. Continued funding for subsequent years of multi-year projects will be contingent upon acceptable performance, which includes adherence to the data management plan. All observational and modeled data shall be made available with minimal time delay to be negotiated with the GRP for each dataset, through submission at least to GRIIDC ([link](#)) and national archives for use by intermediate and end-users.

Final project reports, which are required for all awards, must describe the implementation of the data management plan. They must clearly describe any changes from the original plan. At a minimum, the final report should include descriptions of the following:

- Data, datasets, and information products produced during the award period.
- Metadata (that describe the project and that describe the data and other information products) produced during the award period.
- Data, other information products, and associated metadata that will be maintained or curated after the award expires.
- Dissemination activities (e.g., publication of results and data, presentation of results and data).
- The curation facility or facilities (e.g., digital repository) where project data and other information products have been deposited or are being curated for long-term management and accessibility.
- Verification that the data and other information products are, or at least will be, widely discoverable and accessible (e.g., DOIs for data and other information products).
- In addition to evaluating the final report descriptions, the GRP may review any digital products curated in digital repositories or otherwise curated to ensure that they are properly preserved, documented, and accessible.

Scientific Integrity:

A fundamental purpose of the GRP is to facilitate the advancement of knowledge and the application of the 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 as specified in the application to advance the project goals and objectives. To continue the emphasis on scientific integrity throughout the award period, the GRP will ask all researchers, trainees, and fellows to comply with professional standards as defined by the National Academies report “[On Being a Scientist: A Guide to Responsible Conduct in Research.](#)”

Grant Terms and Conditions:

The GRP expects Applicants to review the Grant Agreement prior to submitting an application to ensure that the Applicant is aware of the applicable terms under which the award is offered. 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.

Sample Grant Agreements for:

- [Public Institutions](#)
- [Private Institutions](#)