



## 2020 Competitive Research – Call for Proposals

Full Proposals due **November 15, 2019**, 5:00pm CHST

### I. Research Program

The University of Guam Sea Grant requests proposals to fund research in Guam, CNMI and the Freely Associated States for one-year projects. Projects should be directly relevant to the goals of the [UOGSG Strategic Plan \(2018-2021\)](#). Research projects within this region focused in one or both of two areas will be considered: 1) healthy coastal ecosystems; and 2) environmental literacy and workforce development. An estimated \$102,000 will be available to support 3-4 research projects over a one-year funding period. Researchers may request between \$10,000 to \$40,000 in federal Sea Grant funds. Successful proposals will have a start date of February 1, 2020 and an end date of no later than January 31, 2021. Researchers at institutions of higher education and organizations or agencies that conduct research in Guam, CNMI and the Freely Associated States are eligible to respond to this RFP. The research conducted must demonstrate the benefits it provides Guam.

#### Important notes for Principal Investigators (PIs)

- Funding of all proposals is contingent upon UOG Sea Grant's allocation from NOAA in the FY2020 federal budgets. Modification in the number of and funding for individual proposals may be made based upon the final program budget.
- PIs must provide a strong rationale for how their proposed research will affect policy and/or management decisions and how that information will be communicated outside of academia. UOGSG staff can assist with these efforts.
- A Data Management and Sharing Plan is required in the full proposal. PIs should consider data management funding needs as they develop their budgets.

UOG Sea Grant seeks research proposals that support the goals and objectives of the program, including the cross-cutting principles to cultivate partnerships and enhance diversity and inclusion while working within the framework of at least one of the two focus areas: 1) Healthy Coastal Ecosystems and 2) Environmental Literacy and Workforce Development. Research projects utilizing field and lab experiments, models, and socioeconomic studies should be designed to provide information to inform policy decisions and best management practices for UOG and its communities. Projects must include an outreach plan for which findings will be disseminated to a broad audience, outside of academia. UOG Sea Grant Extension faculty and staff will be available to assist PIs with such outreach. PIs are encouraged to contact UOGSG staff as proposals are being developed to collaboratively create an outreach plan to be included in the proposal.

Proposals should be relevant to at least one of the UOG Sea Grant focus areas and goals:

<p><b>Healthy Coastal Ecosystems</b></p> <p>Goal 1: Habitat, ecosystems, and the services they provide are protected, enhanced, and/or restored.</p> <p>Goal 2: Land, water, and living resources are managed by applying sound science, tools, and services to sustain ecosystems.</p>
<p><b>Environmental Literacy and Workforce Development</b></p> <p>Goal 3: An environmentally literate public that is informed by lifelong formal and informal opportunities that reflect the range of diversity of our communities.</p> <p>Goal 4: A diverse and skilled workforce is engaged and enabled to address critical local, regional, and national needs.</p>

The UOGSG will focus research priorities on areas that stakeholders are most interested in which are ecological resilience, land-based sources of pollution, and fisheries. These research priorities should be question-driven (**sample questions below**) in order to have a better understanding of issues affecting the region, and to inform science and management. Solution-based research outcomes is encouraged.

Priority 1: Ecological Resilience/Climate Change:

What are the tangible impacts of climate change on Guam/CNMI and FAS coral reefs to date? How do climate change impacts integrate with local stressors to determine resilience?

Priority 2: Land Based Sources of Pollution

a) What is the extent of watershed pollution on coral reefs in the region? What solutions are applicable for watershed restoration? Along the water quality gradient, what are the expected ecological responses? Focus on 1-3 priority watersheds in the region.

Priority 3: Fisheries

a) What local stressors are most influential to reef health around the region? Can we identify the spatial influence of fishing and pollution and quantify the proportional impact they are having for reefs?

b) Marine Protected Areas (MPAs) - Are MPAs currently functioning in terms of (i) biomass preservation of target species with key functional roles, (ii) providing larval output to surrounding areas, and (iii) connected spatially to each other?

Research priorities can be found in two documents: 1) [UOGSG Strategic Plan \(2018-2021\)](#); and 2) the [UOGSG Listening Session \(2016\)](#).

## II. PROPOSAL SUBMISSION PROCESS

### FULL PROPOSAL FORMAT

**PROJECT TITLE:** (Make this succinct while also reflecting the anticipated application, opportunity or need to be addressed, or problem to be solved. It should clearly relate to a University of Guam Sea Grant priority listed of the call for LOI.)

**PRIORITY FOCUS AREA(S).** Identify the priority that your project addresses.

**PRINCIPAL INVESTIGATOR(S):** (Provide faculty name, academic department, and institution)

**CO-PRINCIPAL INVESTIGATOR(S):** (Provide faculty name, academic department, and institution)

**PROPOSED BUDGET:**        \$\_\_\_\_\_

### RATIONALE

Summarize the opportunity or problem addressed and its relation to Sea Grant's interest in supporting the improved understanding, management and use of marine and coastal resources of the Territory of Guam, CNMI, and the Micronesia region. Include an adequate, but brief literature review. Proposed research must be hypothesis driven. If the project is centered on a monitoring activity, it is essential to demonstrate how the project will lead to testable hypotheses or models. Explain how the data collected will be applicable to the problem or opportunity, and identify potential users of the results of your research.

### GOALS AND OBJECTIVES

Describe the overall goal of your project. State your hypotheses. Identify specific objectives that proceed from hypotheses. Objectives should lead to measurable outcomes at project completion. Narrative goals must match project summary goals. Do not include explanatory information here, such information should be included in either the Rationale or Research Methods/Approach section, as appropriate.

### RESEARCH METHODS AND APPROACH

Describe your experimental design(s) and/or research protocol fully and clearly, including special equipment, procedures or assays, etc. that may be used to accomplish your goals/objectives. Be concise, but specific enough to satisfy reviewers that your methods have been validated and will enable you to achieve your goals. Identify pitfalls and limitations in your approach and methodology and how you will address them. Where appropriate, speak to the statistical power relative to your proposed sample size. Include an explanation of how the data will be analyzed using appropriate statistical procedures. Describe the overall project design. How will the problem be tackled with rigorous research? How will the efficacy of new tools, technologies, policies or products be evaluated? Identify specific methodology and major aspects such as replication, sampling, surveys,

modeling approaches, statistical methods, etc.

### **DELIVERABLES**

PIs are required to track their progress and report semi-annually on information, products, and services rendered as a result of their work. Project deliverables include academic products (publications, presentations, graduate students supported, models), outreach products (public presentations, news stories related to the work, websites, fact sheets, maps), workshops, tools, etc. Some of these deliverables will be tracked as performance measures. Please see list of the [performance measures](#).

**OUTREACH PLAN:** An essential component of UOG Sea Grant's mission is to fund research that meets the needs of many audiences whom we serve. Our mission is to develop and share science-based knowledge to benefit the environment and economies of Guam and its region. Our audience is business, state, and local leaders and the communities they serve. To that end, we require investigators to develop an outreach plan as part of the proposal that describes how the project will engage with constituencies that may benefit from the research and describe the ways the proposed work will help solve problems and advance public understanding on Guam and its region. We strongly encourage proposals to include funding to support outreach efforts.

The outreach plan should include a clear communication strategy that supports the research effort. It should:

- Describe the outputs (i.e., products) and outcomes (e.g., resulting knowledge, skills, actions, consequences) of the proposed study that will be applicable to your outreach effort.
- Describe the target non-academic end users for the products/outcomes.
- Describe the outreach mechanisms to be used to reach both academic and non-academic end users.
- Present a timeframe for developing and implementing this outreach plan.
- Describe the intended impact of these outreach efforts with particular emphasis on how the impacts align with the UOG Sea Grant focus areas and goals.

**BUDGET:** A detailed budget is required using the [Sea Grant 90-4 budget form](#). A budget justification is also required. The budget justification is a detailed description of each item on the 90-4 budget form. Indirect costs for UOG projects are not allowed.

**END-USER PARTICIPATION AND DELIVERY OF RESULTS:** Identify the specific end-users that will participate in your project. Describe their specific confirmed role. Describe the specific approach that will be taken to transfer the new information, tools, technologies, policies or products to end-users. This may involve coordinating the project with a state or local resource management agency, a governmental organization or and private industry sector. The proposed project must develop linkages with the agency, industry or community for the dissemination and practical application of results. If there is a clear opportunity to involve a University of Guam Sea Grant Extension Associate in the project, this is encouraged but not required. If you take this opportunity, be sure to include funds in the budget for their time, travel and supplies that are directed towards the project.

**EXPECTED RESULTS, APPLICATIONS AND BENEFITS:** Describe the expected outcomes of the project, and who will benefit from the results of this study and how. If the objectives are attained, how would the problem to be solved create new commercial opportunities, improve technological and economic efficiency, improve management decisions, etc.? What Guam, regional or national impact is envisioned? We recognize that some research initiatives take considerably longer than two years to provide a solution to an identified problem. We want to know that your project is moving the level of understanding or utility of tools or models in a direction toward issue resolution.

**COMPLIANCE WITH NOAA DATA SHARING GUIDELINES:** The America COMPETES Act requires the federal government to ensure that data from federally supported research is accessible to the public in a timely manner. NOAA requires Sea Grant programs to have mechanisms in place to meet these data access requirements. As a condition of all research grants, projects funded by UOG Sea Grant must have a data management plan in place that will allow for the information collected to be freely available for public use. Specifically, NOAA requires that:  
*Data and information collected and/or created under NOAA grants and cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two years after the data are collected or created), except where limited by law, regulation, policy or by security requirements. The requirement has two basic parts: (1) environmental data generated by a grant project must be made available after a reasonable period of exclusive use, and (2) the grant application must describe the plan to make the data available (Principal Investigators are expected to execute the plan).*

Timely means no later than publication of a peer-reviewed article based on the data, or two years after the data are collected and verified, or two years after the original end data of the grant (not including any extension or follow-on funding), whichever is soonest.

Final pre-publication manuscripts of scholarly articles produced entirely or primarily with NOAA funding will be required to be submitted to NOAA Institutional Repository after acceptance and no later than upon publication. Such manuscripts shall be made publicly available by NOAA one year after publication by the journal.

To comply with these requirements, proposers must complete a Data Management Plan for making environmental data and results accessible and interpretable within two years of collection. Storing data on local servers or external drives without public access or noting that data will be available “upon request to the PI” are no longer sufficient options. Note you will be required to list data sets created and how to access them when reporting on your project. If funding is required for archiving data, please include this in the project budget. See [data management forms](#).

### **NEPA QUESTIONNAIRE**

An [abbreviated environmental compliance questionnaire](#) must be submitted.

**LITERATURE CITATIONS:** Limit this section to no more than 10 highly relevant references. Provide complete bibliographic information for all references. (not counted toward page limit)

**REVIEWERS / CONFLICTS:** Please provide the names, addresses, telephone, and email of three potential reviewers outside Guam, CNMI and FAS that are knowledgeable and competent in your field of inquiry. Please also tell us if particular persons may have a conflict of interest in reviewing your proposal and in those cases, provide an explanation. This is to ensure investigators do not have a conflict of interest with potential reviewers.

**CURRICULUM VITAE (CV):** The principal investigator, co-principal investigators and other collaborators to the project must each provide a two-page max CV. Include professional positions from current to past, education from most recent to past, and other information you consider relevant to defining a level of expertise that is aligned with the project being proposed.

**LETTERS OF SUPPORT:** A minimum of two (2) letters of support from potential collaborators or partnering organizations is required.

**SUBMISSION:** To submit, email proposal and all required documents in .pdf format to [seagrant@uog.edu](mailto:seagrant@uog.edu), indicate on the subject line: **UOGSG Research RFP 2020** on or before **Friday, November 15, 2019** by **5:00 pm CHST**. Late submissions will not be accepted.

### III. PROPOSAL REVIEW PROCESS

#### **TECHNICAL PEER REVIEW**

All proposals will be reviewed for technical merit by external peer reviewers. PIs must provide the names of at least four possible reviewers who are located outside of Guam.

#### **PANEL REVIEW**

A panel composed of researchers and outreach professionals from the region will convene to discuss the merits of all of the proposals and make final recommendation for funding. The panel will use the technical peer reviews in their decisions, along with an understanding of the research and outreach needs in the region. Depending on funding constraints and reviewers' comments, UOG Sea Grant may ask PIs to revise their proposed budgets and scope of work

### IV. REVIEW CRITERIA

Proposals will be reviewed by both peer reviewers and a review panel using the following criteria:

**Technical Merit (30%):** Includes novelty/originality; conceptual adequacy of hypotheses or research questions; clarity of objectives; adequacy/feasibility of methodologies; probability of success. Adequacy of the proposed budget to accomplish objectives and of the budget justification in explaining the need for resources.

**Project Relevance (30%):** Relevance includes improved understanding, assessment, use, management, conservation, or restoration of marine and coastal resources. When assessing relevance, please also consider the primary focus areas detailed in this RFP and relevance to the current UOG Sea Grant strategic plan.

**Outreach (20%):** Appropriateness and impact of the outreach component outlined. Consider the methods by which the investigators propose to disseminate results to both academic and non-academic end user groups and encourage knowledge, skills, actions and/or consequence scale impacts through extension, education, or communication activities.

**Project Costs (10%):** Realistic and appropriate budget for the project needs and timeframe. Likelihood the project will result in appropriate outcomes for the proposed cost. Project costs well justified.

**Overall Qualifications of Investigator(s) (10%):** Applicant(s) possess the necessary education, experience, training, facilities, and administrative resources to accomplish the project.

## V. AWARD INFORMATION

### A. Project Award Period

The project budget award period is twelve (12) months, from February 1, 2020 through January 31, 2021. No-cost extensions may be allowed on a case-by-case basis, contingent on awardee performance and compliance with grant guidelines.

### B. Funding Instrument

Successful applications are anticipated by January, 2020. Awardees will enter into a Memorandum of Agreement (MOA) with UOGSG and execute funding through respective academic units/institutions or as a subcontractor for UOGSG.

### C. Reporting Requirements

PIs are expected to submit progress reports which include information about publications, presentations, graduate students supported, news stories related to the work, and accomplishments made throughout the year. Progress reporting occurs in May 31 and November 30 of each year. Reports include progress on tasks as per the proposed work plan and a minimum of 5 photos or supplementary documentation per reporting period. Failure to comply with reporting requirements and meeting deadlines will result in termination of grant support.

### D. Acknowledgment of Sea Grant Funding

Any materials or activities funded in part or whole by this grant must acknowledge University of Guam Sea Grant. Selected recipients will receive official language on their MOAs.

## VI. ELIGIBILITY

### A. Eligible Applicants

Current faculty from the University of Guam, Guam Community College, Northern Marianas College, College of Micronesia, Palau Community College, College of Marshall Islands, and nonprofit organizations.

### B. Cost Sharing or Match Requirements

There are no cost sharing or match requirements, but the application and budget form requests if you have any leveraged funding, show it. Leveraging is *not* factored into the scoring process.

### C. Proposal Package Format Requirements

The entire proposal package must be no more than 20 pages, *inclusive* of the title, proposal text (**10 pages max**), budget narrative and budget form 90-4. Two (2) page CV, references cited, applicable permits or permissions, and letters of support will not be part of the page limit.

Complete the application using 1-inch margins, 11 or 12-point Arial, Times or Times New Roman font, and page numbers on the bottom right corner.

### D. Submission Date and Time

All proposals are due on **Friday, November 15, 2019** by **5:00 pm**. Chamorro Standard Time (CHST).

### D. Restrictions – Allowable Costs and Non-Allowable

Typical allowable costs include travel expenses related to technical training or data collection and expendable supplies. Note that conference attendance or presenting does *not* count as an outreach activity unless it explicitly targets a lay audience of coastal users.

Expenses that are not allowable include promotional items, entertainment costs or food.

## **VII. REVIEW INFORMATION**

### **A. Program Officer**

For questions about this RFP, please contact UOGSG Program Leader, Ms. Fran Castro, email: [francastro@uog.edu](mailto:francastro@uog.edu). *Email inquiries only.*

### **B. Proposal Review Process**

All proposal packages will first be assessed for completeness and adherence to submission guidelines. UOGSG reserves the right to reject application packages for missing, incomplete, or improperly formatted documents. After the initial assessment, proposal packages will move to the Merit Review Committee.

The Merit Review Committee will score and rank proposals according to the criteria below. The Committee may have further questions about the proposals, after which time the applicant should respond by the deadline given in the request. The Committee will then forward responses and recommendations to the Director of UOGSG for final selection.

Reviewers may not necessarily be familiar with the applicant's specific academic discipline and/or reside in Guam or the immediate region. As such, applicants should provide enough background information for an educated layperson to understand the proposal and its relevance to Guam and/or Micronesia.

## **VIII. DIVERSITY, EQUITY, AND INCLUSION**

The National Sea Grant College Program champions diversity, equity, and inclusion (DEI) by recruiting, retaining and preparing a diverse workforce, and proactively engaging and serving the diverse populations of coastal communities. Sea Grant is committed to building inclusive research, extension, communication, and education programs that serve people with unique backgrounds, circumstances, needs, perspectives and ways of thinking. We encourage applicants of all ages, races, ethnicities, national origins, gender identities, sexual orientations, disabilities, cultures, religions, citizenship types, marital statuses, educational levels, job classifications, veteran status types, and income, and socioeconomic status types to apply for this competitive research opportunity.

The UOG Sea Grant program encourages applicants to clearly identify how this research will have broader societal impacts on the Guam community including stakeholders from underrepresented or underserved communities.