

2024 Notice of Funding and Review Process for the United States Harmful Algal Bloom Control Technology Incubator External Grant Opportunity

I. Funding Opportunity

- a. **Dates:** An informational webinar will be held January 9, 2024 at 2pm Eastern time. The webinar will be recorded and posted to the US HAB-CTI website. Letters of Intent (LOI) will be required and due February 5, 2024 by 11:59 pm Eastern Time. Applicants will receive notification on whether a full proposal is “recommended”, “maybe”, or “not recommended” based on the LOI submitted within two weeks. Full applications will be due April 15, 2024 11:59 pm Eastern Time to smarterselect:
<https://app.smarterselect.com/programs/94009-University-Of-Maryland>. If use of smarterselect is not feasible, contact ushabcti@umces.edu as soon as possible and no later than two weeks before the due date to make alternative arrangements.

- b. **Funding Opportunity Description:** The United States Harmful Algal Bloom Control Technologies Incubator (US HAB-CTI) is a partnership between the National Oceanic and Atmospheric Administration, University of Maryland Center for Environmental Science's Institute of Marine and Environmental Technology, and Mote Marine Laboratory. The US HAB-CTI is soliciting proposals to research innovative Harmful Algal Bloom control tools and technologies to assess their real-world feasibility. Harmful Algal Bloom control includes biological, chemical, or physical approaches that eliminate or reduce the levels of harmful algae and their toxins. It is anticipated that the tools and technologies still be in the initial stages (Tier 1 or 2) of research and so the research project should largely be conducted in small scale lab testing, tanks, mesocosms, or raceways. The tools and/or technologies should demonstrate potential to be scalable, environmentally acceptable, and cost-effective. The 2024 call for proposals is open to projects focused on harmful algal bloom species occurring in and around the United States, but projects aimed to control *Alexandrium* and *Pseudo-nitzschia* are strongly encouraged. High scoring proposals on either, or both, of these HAB species may be prioritized in the final selection process.

II. Award Information

- a. **Funding Availability:** Applicants should submit proposals not to exceed 12 months in duration and a \$200,000 budget. We anticipate funding 5-7 projects with an expected start date of September 1, 2024.

- b. **Project/Award Period:** Awards will be funded incrementally, on a quarterly basis. Invoices will be submitted by Principal Investigators of funded research projects on a quarterly basis and submitted to the Director of US HAB-CTI to be reviewed and approved. Approved invoices will be submitted to and paid for by the University of Maryland Center for Environmental Science's Institute of Marine and Environmental Technology.
- c. **Reporting:** During the implementation phase of research projects funded under this announcement, US HAB-CTI Program Managers will analyze quarterly progress reports for each continuing award, and will have dialogue with the Principal Investigators and Authorized Representatives of the recipient institutions to discuss research progress and expected timelines for the remaining award period. Program Managers will consider the length of time remaining for each project, the amount of funds available, the tasks completed, the pace of research, and any delayed progress relative to that originally proposed.

III. Eligibility Information

Eligible applicants for this competition are institutions of higher education, other non-profits, state, local, Indian Tribal Governments, for-profit organizations, U.S. Territories and Federal agencies that possess the statutory authority to receive transfers of funds. The US HAB-CTI supports cultural and gender diversity and encourages applications involving women and minority individuals and groups. In addition, US HAB-CTI is strongly committed to broadening the participation of historically black colleges and universities, Hispanic serving institutions, tribal colleges and universities, and institutions that work in underserved areas. The US HAB-CTI encourages applications involving any of the above institutions to apply. No cost sharing or matching is required.

Please note that:

- (1) PIs should be employees of an eligible entity listed above and applications should be submitted through that entity. Non-Federal researchers should comply with their institutional requirements for application submission.
- (2) Non-NOAA Federal applicants will be required to submit certifications or documentation showing that they have specific legal authority to accept funds for this type of research.
- (3) Foreign researchers may apply but are subject to certain terms and conditions.

IV. Application and Submission Information

- a. **Letter of Intent (LOI) Requirements and Submission Information:** LOI's will be accepted through February 5, 2024 (11:59PM EDT). LOIs should be submitted via email to ushabcti@umces.edu.

The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project and the likelihood of it being competitive in advance of preparing a full application. Full applications will be encouraged only for LOIs deemed relevant; however, the final decision to submit a full proposal is made by the applicant. The LOI should provide a concise description of the proposed work and its relevance to the US HAB-CTI program. The LOI document should be no more than two pages (front only) in length, single spaced in 12-point font with 1-inch margins and should include in order the components listed below:

- (1) Project Title
- (2) Principal Investigator(s): Name(s), Title(s), Affiliation(s), and contact information
- (3) Statement of Work Narrative
- (4) Estimated Budget

- b. **Application Submission Information:** Full applications will be accepted through smarterselect website:

<https://app.smarterselect.com/programs/94009-University-Of-Maryland>.

If use of smarterselect is not feasible, contact ushabcti@umces.edu as soon as possible and no later than two weeks before the due date to make alternative arrangements.

- c. **Application Proposal Information:** Each application must substantially comply with the following elements to be forwarded for merit review. The elements are as follows:

- i. Standard Form 424. The applicant must submit the Standard Form, [SF424A](#), "Application for Federal Assistance" to indicate the total amount of funding proposed for the project period. Budget cannot exceed a total of \$200,000 which include direct and indirect costs. Applicant institutions do not have to be members of an eligible NOAA approved CESU, but they must adhere to the relevant CESU guidelines and use the established CESU indirect cost rate: 17.5% applied to Modified Total Direct Costs. A 10% de minimis indirect cost rate may be used by any non-federal entity that has never received a negotiated indirect cost rate agreement. This rate would be charged against modified total direct costs. Cost share is not allowed under this program. Funding is not intended for large capital

infrastructure/lab items rather for salaries, travel, facility use, specific project related equipment, and supplies.

- ii. Budget Narrative (no page limitation). The application must include a detailed budget narrative and justification to support all proposed budget categories for the project period. The budget narrative should follow the guidance for [NOAA grants September 2023](#). Personnel costs should be broken out by named PI and number of months and percentage of time requested per PI. Any unnamed personnel (graduate students, post-doctoral researchers, technicians) should be identified by their job title, and their personnel costs explained similar to PI personnel costs above. The contribution of any personnel to the project goals should be explained. Travel costs should be broken out by number of people traveling, destination and purpose of travel, and projected costs per person. Cost-sharing and/or funding matching is not required. Funding is not intended for capital infrastructure/lab items rather for salaries/fringe/indirect, travel, facility use fees, specific project related equipment, and supplies.
- iii. Project Narrative (max 5 pages). Must Include:
 1. Brief Project Abstract
 2. Project Significance
 3. Objectives
 4. Scientific Testing/Methodologies
 5. Timeline
 6. Roles and qualification of all team members
 7. Facilities being used
 8. History of the mitigation tool/technology including previous/existing uses, research, and regulatory approvals, if any.
 9. References cited - will not count towards page limit
- iv. Resume/CVs (max 3 pages per principal investigator). Please use the NSF format found here: [Documents Required for Senior Personnel - Funding at NSF](#)

In addition to the required elements, applicants may provide the following:

- v. Letters of Support or Collaboration (no limitation)

Please use the following text guidelines for the project narrative:

- Arial6 (not Arial Narrow), Courier New, or Palatino Linotype at a font size of 10 points or larger, OR Times New Roman at a font size of 11 points or larger
- A font size of less than 10 points may be used for mathematical formulas or equations, figures, tables, or diagram captions and when using a Symbol font to insert Greek letters or special characters. Other fonts not specified above, such as Cambria Math, may be used for mathematical formulas, equations, or when

inserting Greek letters or special characters. PIs are cautioned, however, that the text must still be readable.

- Paper size must be no larger than standard letter paper size (8 ½ by 11”) with 1-inch margins

V. Application Review Information

- a. **Evaluation Criteria:** Applications will be evaluated according to the following criteria:
 - i. Importance and relevance of the proposed project to the US HAB-CTI goals. This ascertains whether there is intrinsic value in the proposed work and the relevance to US HAB-CTI activities. Does the proposal focus on a HAB control/mitigation technology or approach? Is the research new or novel or provide a unique approach/significant improvement to an existing technology? Is the proposed work still in the initial stages of control research (Tier 1 and 2)? (30 percent)
 - ii. Technical/Scientific merit. This assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, whether there are clear project goals and objectives (30 percent)
 - iii. Future applicability. This includes questions such as: 1. If the lab-based research findings are successful, could the control/mitigation technology be permitted through federal and state agencies? 2. Could the control/mitigation technology be scaled up (engineering and deployment) for field application? 3. Could the control/mitigation technology be cost-effective for regular field control/mitigation use? 4. Will the outcome of the control/mitigation research benefit communities/economies through secondary ecosystem services? (20 percent)
 - iv. Overall qualifications of applicants: This ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. This includes the capability of the investigator and collaborators to complete the proposed work as evidenced by past research accomplishments, previous cooperative work, timely communication, and the sharing of findings, data, and other research products. (10 percent)
 - v. Project costs. The budget is evaluated to determine if it is realistic and commensurate with the project needs and timeframe. (10 percent)
- b. **Review and Selection Process:** Once an application has been received by US HAB-CTI, an initial administrative review is conducted to determine compliance with requirements and completeness of the application. Ineligible, incomplete, and/or non-responsive applications may be eliminated from further review. The

US HAB-CTI, in its sole discretion, may continue the review process for applications with non-substantive issues that can easily be rectified or cured. All applications that pass this initial review will be evaluated and scored individually by independent peer review.

Both Federal and non-Federal experts may be used in this process. The peer reviewers will be several individuals with expertise in the subjects addressed by particular applications. Each reviewer will see only certain individual applications within their area of expertise, and score them individually based on the review criteria listed above on a scale of one to five, where scores represent respectively: Excellent (5), Very Good (4), Good (3), Fair (2), Poor (1). Both whole and ½ scores will be acceptable. Reviewers will consider the relative weighting of the evaluation criteria in providing an overall proposal score. The individual peer panelists' scores shall be combined, using one or more methods, to obtain a numerical ranking of the proposals. Those applications receiving an average panel score of "Fair" or "Poor" will not be given further consideration, and applicants will be notified of non-selection.

For the applications scored by the reviewers as either "Excellent", "Very Good" or "Good", the Executive Board members will discuss each proposal and (a) create a ranking of the applications to be recommended for funding using the panel scores, selection criteria, and internal discussions and (b) recommend the amount of funds for each application. The list of final rankings with the recommended projects for funding will be sent to NOAA NCCOS program office for review. The final funding decision will be made by the Director of the US Harmful Algal Bloom Control Technologies Incubator.

US HAB-CTI reserves the right to negotiate the budget with the applicants that have been selected to receive awards, which may include requesting that the applicant remove certain costs, combine budgets into a single application, or change the lead institution. Additionally, the US HAB-CTI may request that the applicant modify objectives or work plans and provide supplemental information prior and during the award period.

- c. **Selection Factors:** Proposals may be selected out of rank order based upon one or more of the following factors:
 - i. Availability of funding.
 - ii. Balance/distribution of funds:
 1. Geographically.
 2. By type of institutions.

3. By type of partners.
 4. By research areas.
 5. By project types.
- iii. Whether this project duplicates other projects funded or considered for funding by NOAA or other agencies.
 - iv. Program priorities and policy factors
 - v. Applicant's prior award performance
 - vi. Partnerships and/or participation of targeted groups.

Awards may also be modified for selected projects depending on budget availability or according to the selection factors listed above.

VI. Award Information

- a. **Award Notices:** When a decision is made (whether an award or declination), summaries of reviews and panel deliberations will be made available to the applicant. The applicant will be notified by e-mail that their application was recommended for funding. In addition, US HAB-CTI reserves the right to reject an application in its entirety where information is uncovered that raises a significant risk with respect to the responsibility or suitability of an applicant.
- b. **Required reporting:** Awardees will be required to submit financial and performance (technical) progress reports electronically due on the 5th of every quarter of the one year award period. Final Technical and Financial Reports are due at the end of the project and no later than twelve months into the award period. Instructions for submitting financial and progress reports will be provided by UMCES-IMET as part of the award terms and conditions. The acceptability of the Reports will be at the sole discretion of US HAB-CTI program.

VII. Administrative and National Policy Requirements

The US HAB-CTI is funded by NOAA through its Prevention, Control and Mitigation of Harmful Algal Blooms Program. As such, awards made by the US HAB-CTI under this competition are also subject to NOAA Administrative and National Policy Requirements.

- a. **Uniform Administrative Requirements, Cost Principles, and Audit Requirements** Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards in this program. Refer to <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBg4>.
- b. **Department of Commerce Financial Assistance Standard Terms and Conditions.** Successful applicants who accept a USHAB-CTI subaward, under this solicitation will be bound by Department of Commerce Financial Assistance

Standard Terms and Conditions. A current version of this document is available at <https://go.usa.gov/xVmMZ>. NOAA will also add administrative terms for which a current version is found at <https://go.usa.gov/xVmMP>. In addition, award documents provided by the NOAA Grants Management Division in the Grants Online award package may contain special award conditions unique to a project, including conditions that may limit the use of funds for activities that have outstanding environmental compliance requirements and/or stating other compliance requirements for the award as applicable.

- c. **Limitation of Liability** Funding for programs listed in this notice is contingent upon the availability of appropriations. Applicants are hereby given notice that funds may not have been appropriated yet for the programs listed in this notice. NOAA or the Department of Commerce are not responsible for direct costs of proposal preparation. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

- d. **Unpaid Tax Liability and Recent Felony Conviction Certification** When applicable under appropriations law, NOAA will provide certain applicant organizations a form to be completed by the applicant's authorized representative making a certification regarding federally-assessed unpaid or delinquent tax liability or recent felony criminal convictions under any federal law by the organization. A copy of this form may be viewed at https://www.ago.noaa.gov/grants/docs/unpaid_tax_liability_form.pdf.

- e. **National Environmental Policy Act (NEPA)** The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., as Notice of Federal Funding Page 39 of 48 implemented by the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500 through 1508), requires that Federal agencies include in their decision-making processes appropriate and careful consideration of all environmental effects of proposed actions, analyze potential environmental effects of proposed actions and their alternatives, avoid or minimize adverse effects of proposed actions, and restore and enhance environmental quality to the extent practicable. Therefore, NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities to ensure applicant projects or proposals are in compliance with NEPA and all policies and procedures in NOAA Administrative Order (NAO) 216-6A and the NAO 216-6A Companion Manual and all applicable federal, state, and local environmental laws, regulations, and Executive Orders (EOs) aimed at protecting human health, the environment, natural resources, and

cultural resources. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: <http://www.nepa.noaa.gov/>, and in the NAO 216-6A;

http://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_216/216-6A.html and the associated companion manual;

<http://www.nepa.noaa.gov/docs/NOAA-HQ-2016-0145%20NAO%20216-6A%20Companion%20Manual.pdf>.

Examples of existing Environmental Assessments include the Programmatic Environmental Assessment (PEA) for the PCMHAB program and the Supplemental Environmental Assessment (SEA) to the PCMHAB program for the Nano-bubble Ozone Technology that can be found on this website:

<https://coastalscience.noaa.gov/research/stressor-impactsmitigation/pcmhab/>

Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). Applicants to be recommended for funding will may also be required to answer relevant questions from the "Environmental Compliance Questionnaire for NOAA Federal Financial Assistance Applicants" (OMB Control No. 0648-0538) or other questionnaires to fulfill compliance with NEPA and all other environmental laws, regulations, and Executive Orders (EOs) aimed at protecting human health, the environment, natural resources, and cultural resources. The Program Manager will determine which questions are relevant to each specific proposal. Answers must be provided before the application can be submitted for final funding

In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. Failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on

any impacts that a project may have on the environment. See also Section IV.B. of this announcement.

- f. Review of Risk** After applications are proposed for funding by the Selecting Official, the Grants Office will perform administrative reviews, including an assessment of risk posed by the applicant under 2 C.F.R. 200.205. These may include assessments of the financial stability of an applicant and the quality of the applicant's management systems, history of performance, and the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. Special conditions that address any risks determined to exist may be applied. Applicants may submit comments to the Federal Awardee Performance and Integrity Information System (FAPIIS) about any information included in the system about their organization for consideration by the awarding agency.
- g. Permits** It is the applicant's responsibility to obtain all permits and approvals from federal, state, and local governments and private landowners where necessary for the proposed work to be conducted. If applicable, documentation of requests or approvals of environmental permits must be received by the federal program office prior to release of funding. Failure to apply for and obtain federal, state, and local permits, approvals, or letters of agreement may delay the award of funds if a project is otherwise selected for funding. In some cases if additional permits and approvals are required after an application is selected, funds may be withheld by the Grants Officer under a Special Award Condition requiring the recipient to submit required permits and approvals.
- h. Access to Information** Patentable ideas, trade secrets, privileged or confidential commercial or financial information, disclosure of which may harm the proposer, should be included in proposals only when such information is necessary to convey an understanding of the proposed project. Such information should be clearly marked in the proposal or included as a separate statement accompanying the proposal and should be appropriately labeled with a legend such as, "The following is [proprietary or confidential] information that [name of proposing organization] requests not be released to persons outside the Government and US HAB-CTI, except for purposes of review and evaluation." As an alternative example in the event that an application contains information or data that you do not want disclosed prior to award for purposes other than the evaluation of the application, mark each page containing such information or data with the words "Privileged, Confidential, Commercial, or Financial Information - Limited Use" at the top of the page to assist US HAB-CTI in making disclosure

determinations. While US HAB-CTI will make every effort to prevent unauthorized access to such material, it is not responsible or in any way liable for the release of such material.

Department of Commerce regulations implementing the Freedom of Information Act (FOIA), 5 U.S.C 552, are found at 15 C.F.R. Part 4, which sets forth rules for DOC to make requested materials, information, and records publicly available under FOIA. The contents of funded applications may be subject to requests for release under the FOIA. Based on the information provided by the applicant, the confidentiality of the content of funded applications will be maintained to the maximum extent permitted by law. A proposal that results in an award will be available to the public on request, except for privileged information or material that is personal, proprietary or otherwise exempt from disclosure under law. Appropriate labeling in the proposal aids identification of what may be specifically exempt. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act, referenced in the paragraph above. Without assuming any liability for inadvertent disclosure, NOAA will seek to limit disclosure of such information to its employees and to outside reviewers when necessary for merit review of the proposal or as otherwise authorized by law. Portions of proposals resulting in grants that contain descriptions of inventions in which either the Government or the grantee owns a right, title, or interest (including a nonexclusive license) will not normally be made available to the public until a reasonable time has been allowed for filing patent applications. NOAA will notify the grantee of receipt of requests for copies of funded proposals so the grantee may advise NOAA of such inventions described, or other confidential, commercial or proprietary information contained in the proposal.

In addition, applicants are also reminded that under 2 C.F.R. § 200.303(e) they must take reasonable measures to safeguard protected personally identifiable information and other confidential or sensitive personal or business information created or obtained in connection with a Department of Commerce financial assistance award. By submitting an application, an applicant (1) agrees to cooperate with Department of Commerce and external project and program evaluators and submit required financial and performance information and data in an accurate and timely manner, and (2) acknowledges and understands that information and data contained in applications for financial assistance, as well as information and data contained in recipient financial, performance and other reports, may be used by the Department of Commerce in conducting reviews and evaluations of its financial assistance projects and programs.

Applicants are notified that Department of Commerce and other Federal employees, Federal agents and contractors, and/or non-Federal personnel who enter into appropriate confidentiality and nondisclosure agreements may access, review, and evaluate applicant and recipient information and data.

- i. **Scientific Integrity** The Science Program adheres to the principles of scientific integrity. This policy can be found at:
https://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_202/202-735-D.html.