# US Harmful Algal Bloom Control Technologies Incubator (US HAB-CTI)



# 2024 Funding Cycle

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#### **Partners**

- National Oceanic and Atmospheric Administration
- University of Maryland, Institute of Marine and Environmental Technology
- Mote Marine Laboratory











# **Objectives of US HAB-CTI**

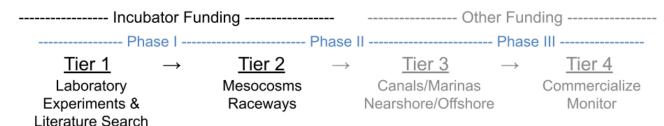
- **Funding source:** Funds small (<\$200,000), short term projects (~1 year) of <u>freshwater and marine</u> HAB control technologies still in the initial stages, Tier 1 (Laboratory Experiments) and Tier 2 (Mesocosms/Tanks/Raceways), of research.
  - This allows more control methods and ideas to be tested and only those HAB control strategies proven to 1.be effective in disrupting the life cycle of a HAB species, 2.scalable, 3.environmentally acceptable, and 4.cost-effective, to continue to be focused on by the research community and funding agencies.
- **Equipment assistance**: The Mote Red Tide Initiative facility and IMET laboratory facility can assist project investigators (especially industries and non-profits) to ramp up culturing and run laboratory and mesocosm studies, analyze toxins associated with HABs, and assess changes to phytoplankton community composition using a FlowCam.
  - This maximizes the potential of success of funded projects to produce conclusive answers on whether a technology works to reduce the growth of HAB species.
- **Clearinghouse website**: The US HAB-CTI clearinghouse website will provide guidance to end users and stakeholders on navigating the relevant licensing and permitting processes, and environmental compliance requirements that apply to both potential and existing technologies that can be used to control the spread of HABs.
  - Will include archived tool and technology project data for the use/dissemination to the broader HAB and resource management community.



# Requests For Proposals

- Annual RFP ~\$1 Million for lab/tank-based projects
- Each award less than \$200,000
- Contracts not to exceed 12 months
- Promising US HAB CTI projects will be encouraged to apply to NOAA Prevention, Control, and Mitigation of HAB funding or other opportunities

# US Harmful Algal Bloom Control Technologies Incubator Research Projects





-Effects on the Cells and Toxins in the Lab -Previous Uses Worldwide -Existing Regulatory Approvals



-Effective with Natural Communities -Ecological Impacts -Human Health Concerns -Logistical Issues -Economically Feasible



-Pilot Studies
-Field Demonstrations
-Federal/State/Local
Regulatory Approvals
-Engineering Needed
-Public Interactions



-Customers
-Intellectual Property
-Efficiency Scaling
-State/Local Budgets
-Deployment Contractors



# 2024 Requests For Proposals

- The US HAB-CTI 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.
  - \*\*Will still be funding both marine and freshwater control projects\*\*
  - 2023 Cycle, funded variety of projects from industries and universities covering physical, chemical and biological control methods



#### **Evaluation Criteria**

- Importance and relevance of the proposed project to the US HAB-CTI goals (30%)
  - Does the proposal focus on a HAB control 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)?
- Technical/Scientific merit (30%)
  - Is the approach technically sound and/or innovative?
  - Are the methods are appropriate?
  - Are there are clear project goals and objectives?
- Future applicability (20%)
  - If the lab-based research findings are successful, could the control/mitigation technology be permitted through federal and state agencies?
  - Could the control/mitigation technology be scaled up (engineering and deployment) for field application?
  - Could the control/mitigation technology be cost-effective for regular field control/mitigation use?
  - Will the outcome of the control/mitigation research benefit communities/economies through secondary ecosystem services?
- Overall qualifications of applicants (10%)
  - Does the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project?
- Project costs (10%)
  - Is the budget adequate/reflective of the proposed work?



# Mote/IMET Facilities: Available for US HAB-CTI Use

\*Details and Costs on US HAB-CTI Website













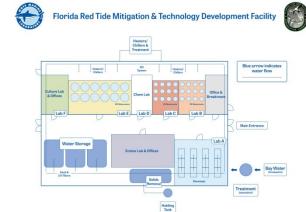






Institute of Marine and Environmental Technology (Baltimore, MD)





Mote Red Tide Initiative Facility (Sarasota, FL)



#### **Executive Board**

- Dr. Allen R. Place, Professor & Director- University of Maryland Institute of Marine and Environmental Technology
- Dr. Michael P. Crosby, President & CEO- Mote Marine Laboratory
- Dr. Taylor Armstrong, Program Manager- University of Maryland Institute of Marine and Environmental Technology
- Kevin Claridge, Vice President of Sponsored Research & Coastal Policy Programs- Mote Marine Laboratory
- Felix Martinez, Program Manager of NOS/NCCOS/Competitive Research Program- National Oceanic and Atmospheric Administration

# Advisory and Review Board

Role: advise and make recommendations on the overall US HAB CTI processes and progress as well as serving as liaisons to the segments they represent, membership includes representatives from:

- National Oceanic and Atmospheric Administration
- Environmental Protection Agency
- Army Corps of Engineers
- United States Geological Survey
- State Agency
- Industry
- Academic Institution
- Non-Governmental Institution

# General Timeline

February 5 (11:59pm EST): Letter of Intent Deadline - REQUIRED

April 15 (11:59pm EST): Request For Proposals Deadline

June: Award notification

September 1, 2024 - August 31, 2025: Subaward Project Period



# Letter of Intent (LOI)

- LOIs <u>are</u> required
- 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
- Deadline February 5 (11:59 EST), 2024

#### Submit via email to ushabcti@umces.edu

- 2 page max, single spaced in 12-point font with 1-inch margins and should include:
  - Project Title
  - Principal Investigator(s) Name(s), Title(s), Affiliation(s), and Contact Information
  - Statement of Work Narrative
  - Estimated Budget
- Review by US HAB CTI Executive Board
- Response by approximately February 19, 2024 (Recommended, Maybe, Not Recommended for full proposal)



### **Request For Proposals**

- Following LOI process, final decision to submit a Proposal is made by applicant
- Submit via smarterselect on US HAB CTI Website (on IMET Website)
   https://imet.usmd.edu/application-resources
- Deadline April 15, 2024
- Document Checklist
  - Project Narrative/Scope of Work (max 5 pages)
  - Resume/CVs
  - SF424A Budget and Budget Narrative
  - Letters of Support or Collaboration (optional)
- \*No Cost Sharing or Matching are Required under the US HAB CTI\*
- Review by Members of HAB CTI Executive Board and External Proposal Review Board with HAB/Related Expertise
- Award Notification ~June 2024 with start date September 1, 2024

### **Sub-award Details**

- Open to any/all applicants businesses, academic institutions, government entities, NGO's, etc.
- Funding is being provided by NOAA under Cooperative Ecosystem Studies Unit (CESU) requirements.
  - Sub-award 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. This rate would be charged against modified total direct costs.
  - Indirect costs include things like facilities operations and maintenance, equipment use, clerical staff salaries, supplies, and student administrative services.
- All sub-awards will have cost reimbursable agreements which can be billed quarterly with supporting financial documentation.
- Quarterly Technical Reports and Final Technical Reports will be due for the projects
- Quarterly Calls between USHAB-CTI Program Managers/Directors and sub-awardees
- Funding is not intended for large capital infrastructure/lab items rather for salaries, travel, facility use, specific project related equipment, and supplies.



### **Anticipated Questions**

- Can more than one LOI and/or RFP be submitted? Yes
- How many sub-awards will be given? Estimated at 5-7, depends on award amounts.
- May I include using the IMET or Mote facilities in the LOI/RFP application? Yes, please contact IMET or Mote PI's or scientists for detailed questions on facility capabilities and HAB culturing.
- Does the US HAB CTI include projects for HABs in the Great Lakes? Yes
- How is Intellectual Property handled for US HAB CTI projects and findings?
  - The rights to any invention made by a University employee or other nonprofit research organization at an Institute under the cooperative agreement with NOAA are determined by the Bayh-Dole Act, Pub. L. 96-517, as amended, and codified in 35 U.S.C. 200 et seq. The specific rights and responsibilities are described in more detail in 37 CFR Part 401 and in particular, in the standard patent rights clause in 37 CFR 401.14.
  - Reference the NOAA Cooperative Institute Handbook and there will be Special Award Conditions in the Sub-award for Data and Information
- Will there be another LOI/RFP application opportunity occur in 2025? Yes



## **Questions? Please Type Into Chat.**

Send additional questions to <u>USHABCTI@umces.edu</u>

