

Request for Proposals: Supporting the Blue Economy through Technology & Capital Equipment

UMass Dartmouth faculty are invited to submit internal proposals for technology and capital funding priorities to bolster our leadership and increase our positive impact in the broadly defined "blue" economy¹. Given the central importance of advancing environmental justice and protecting marine and coastal resources and ecosystems, proposals that address these issues – specifically as they relate to the actual or expected impact of "blue economy" industrial activities -- are welcome.

Project Overview:

The objective of this Request for Proposal (RFP) is to inform institutional priority setting for the allocation of several million dollars in state resources the campus has received to support the acquisition, deployment, and maintenance of capital equipment that will contribute to the growth of the university's relevant research capacity and economic impact, and support efforts to prepare students for successful careers in "blue economy" industries.

The blue economy encompasses a wide range of industries, including marine renewable energy, marine technology, aquaculture, coastal tourism, and the fishing and seafood processing sectors of the regional economy, among others². This program aims to increase the university's role and positive impact in these sectors by enabling the acquisition of modern technology and equipment that supports efforts to improve the stewardship of coastal and ocean resources, increase the resilience and competitiveness of regional blue economy industries, and enhance regional economic outcomes and opportunity.

Future RFPs will seek relevant programmatic proposals and support non-capital expenses targeted toward less capital-intensive activities and fields of study (including the Arts, Humanities, Business, Law, and Social Sciences).

Eligible Projects for this RFP:

This request for proposals is designed broadly, and eligible proposals will inform campus funding priorities for the blue economy, related research, and related activities. Examples of eligible projects include by broad area of activity include but are not necessarily limited to:

¹ For more details on the regional "blue economy", see Borges, D. & Goodman, M. et.al. (2017). <u>Navigating the</u> <u>Global Economy: A comprehensive analysis of the Massachusetts maritime economy</u>. and Goodman, M., Borges, D., & et. al. (2019). <u>Charting the Course: A Regional Assessment of the Marine Science and Technology Sector in</u> <u>Southeastern New England</u>.

- Coastal and Ocean Science: Requests for the acquisition of technologies and/or equipment that enhance our capacity to understand the marine ecosystem, environmental impacts of blue economy activities, marine environmental justice, and coastal resilience to climate change.
- Marine Renewable Energy Technology: Requests for the acquisition of equipment and technology that supports the development of innovative systems capable of harnessing renewable energy from the ocean, including requests for capital resources designed to support, evaluate, monitor, or mitigate the coastal and ocean impacts of the deployment of marine renewable technologies in consideration of environmental justice.
- Sustainable Aquaculture: Requests for equipment and technology that supports and promotes environmentally friendly and efficient fish farming practices, including technologies that may be compatible with windfarm development.
- Coastal Tourism: Proposals for capital equipment and technology to support efforts to improve the competitiveness and sustainability of the regional tourism sector, including but not necessarily limited to relevant economic and market research activities.
- Sustainable Fisheries: Proposals for equipment and technology that helps promote efficient and sustainable fishing operations, such as selective fishing gear, real-time fish tracking systems, low-impact fishing methods, improved assessment of stocks, and harvesting technology compatible with windfarm development, among others.
- Marine Internet of Things (IoT): Proposals for equipment and IoT technology that support and promote an intelligent, connected, and open ecosystem for exploration and sustainable utilization of ocean and coastal resources, also enabling smart and safe operating environments both offshore and onshore.
- Marine Materials for the Blue Economy: Proposals for equipment to support the discovery and development of innovative materials to improve the structural reliability and life cycle performance of ships and maritime structures, lower their environmental footprint, and make the industry more viable and sustainable at a global scale.

Submission Details:

Faculty are requested to submit a proposal of no greater than five (5) pages in length. This proposal should include:

- 1. a detailed description of the technology or equipment requested, along with a clear rationale for why the broadly defined goals of campus "blue economy" initiatives as described above would be advanced by the proposed acquisition.
- 2. A discussion of any associated space, safety, or regulatory requirements,

3. A detailed estimate of the cost for acquisition, installation, and expected annual maintenance expenses³.

The Provost will make funding decisions in consultation with the Chancellor's Office and other relevant offices as appropriate (e.g., Facilities, Environmental Health & Safety, etc.). Multidisciplinary projects with broad faculty participation and those that enhance the university's ability to recruit students and faculty and reputation will get the highest consideration. A Q&A session will be held in early April; details will follow. Questions should be sent to provost@umassd.edu.

Available Funding:

Up to \$5 million in funding will be available to support capital expenses associated with campus Blue Economy Initiatives through calendar year 2026. Proposal budgets must be no greater than \$2 million unless a compelling case can be made.

Deadlines:

Proposals should be submitted by midnight (EST) on May 15, 2024.

We anticipate an award announcement no later than July 1, 2024. Proposals will be evaluated based on their relevance, research (and/or educational) merit, prospects for faculty and student engagement, timeline, and potential for positive impact on the regional blue economy and the protection and stewardship of coastal and ocean resources.

³ For example, if a dedicated technician will be required, that cost should be included in the cost estimate. If regular maintenance or replacement components are required, those expenses should also be estimated and included.