

# Maine Technology Asset Fund Project Summary

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**AWARDEE:** BIGELOW LABORATORY FOR OCEAN SCIENCES, WEST BOOTHBAY

**MTAF PROJECT TITLE:** Bigelow Center for Blue Biotechnology

**AWARD AMOUNT:** \$4,453,971      **MATCH:** \$4,453,971

**PROJECT DIRECTOR:** Graham Shimmield, PhD

**COLLABORATORS:** Micro Technologies, Richmond



Bigelow Center for Blue Biotechnology, May 2011

*"The MTAf award has allowed us to leverage over \$14M of additional federal funds and start construction on our \$30M campus, bringing over 300 direct and indirect jobs to the southern Lincoln County area over the next two years."*

*Dr Graham Shimmield, Executive Director*

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## PROJECT SUMMARY:

Bigelow Laboratory for Ocean Sciences is a globally recognized leader in basic ocean research. The Laboratory is primarily funded by competitive federal research grants, attracting \$100 million during its history. Through the MTAf award of \$4.45M, the Laboratory is developing a new Ocean Science Campus at East Boothbay. The award has provided the leverage for two major federal grants totaling \$14.12M. Once construction is completed, the Lab will double its employment to over 150. The Campus will be made up of three centers:

**Bigelow Center for Blue Biotechnology** Research in the BCBB applies molecular biology and microbial ecology to the viruses, bacteria, and algae living throughout the world's oceans in order to understand their evolution, genetic and chemical make-up, and their culture and industrial application. The BCBB will house the world's first microbial single cell genomics facility, a state-of-the-art flow cytometry laboratory, a bioreactor facility, and the national Center for Culture of Marine Phytoplankton and will increase the Lab's capacity to partner with industry.

Bigelow Blue is projected to generate revenue of \$33,832,310 of new money to Maine over five years. 85% of these funds will be spent in Maine, primarily in rural Lincoln County. In addition to staff scientists, a portfolio of medium and high wage jobs will be brought to this rural region of the state.

**Center for Ocean Biogeochemistry and Climate Change** The research conducted here will address questions of ocean biogeochemistry and climate change at many scales, from local to global, and from individual cells to entire ocean basins.

**Center for Ocean Health** This center will study a critical component of ocean ecosystems, namely the contribution of microbial communities and marine viruses to ecology and food supply for fisheries, as well as their role in the harmful algal blooms and marine pathogens that impact ocean health and productivity.