Bigelow | Laboratory for Ocean Sciences

## Committee on Housing and Economic Development Testimony of Valerie Young, Chief of Staff, Bigelow Laboratory for Ocean Sciences In Support of LD 1643, an Act to Establish the Maine Life Science Innovation Center

## April 24, 2025

Senator Curry, Representative Gere, and esteemed members of the Joint Committee on Housing and Economic Development,

I am here on behalf of Bigelow Laboratory for Ocean Sciences to express our strong support for LD 1643. This legislation represents a pivotal opportunity to enhance Maine's position as a leader in life sciences, fostering innovation, education, and economic growth.

For over 50 years, Bigelow Laboratory has been at the forefront of oceanographic research, pioneering advancements that have significantly contributed to our understanding of the foundation of ocean ecosystems. The tiny organisms we study regulate the Earth's climate, cycle nutrients, and even produce a significant portion of the oxygen we breathe. As one of the first labs to analyze the genetic code of individual marine microbial cells, we use cutting-edge molecular biology and bioinformatics tools used throughout the life sciences to help us understand biodiversity at the tiniest level. We research algae that produce toxins harmful to human and marine life and explore how marine organisms can be used to create new pharmaceuticals or sustainable materials.

Bigelow Laboratory is committed to turning our groundbreaking science into real-world solutions that benefit the environment and the economy. For example, our scientists are exploring the use of algae for animal feed, feed additives, pharmaceuticals, and other high-value biochemical products and processes. We are also driving innovation by enhancing algae-related research infrastructure, expanding STEM training and workforce development programs, and strengthening collaborative networks with business development partners to help transform innovative ideas into practical businesses. These efforts illustrate how a Life Sciences Innovation Center can serve as a catalyst for turning ideas into impact by supporting the infrastructure, partnerships, and commercialization pathways needed for success.

We have also played a role in convening the Maine Marine Research Consortium, a powerful example of collaboration among the state's marine institutions. This model of cooperative research and innovation is working—and with the support of the state through LD 1643, we can amplify these successes and ensure Maine remains a hub for life sciences excellence.

## Bigelow | Laboratory for Ocean Sciences

207 315-2567 | bigelow.org | 60 Bigelow Drive | East Boothbay, Maine 04544

Research institutions like ours play a vital role in Maine's innovation economy by creating high-skill jobs, attracting significant federal and private investment, and driving the development of commercial technologies through cutting-edge life science research. From supporting Maine's fisheries and aquaculture industries to advancing marine biotechnology and climate solutions, we directly benefit key sectors of the state's economy. Through our nationally recognized STEM education programs, research institutions help build and retain local talent, helping to grow Maine's life science workforce for the future.

Bigelow Laboratory's interdisciplinary research reflects the innovation that LD 1643 is meant to support. From microbial cells to entire ecosystems, our work advances foundational life sciences with global impact. Establishing the Maine Life Science Innovation Center aligns with our mission and will strengthen research, education, and economic growth in the state.

We urge the committee to support LD 1643 and help drive Maine's future in science and innovation.

Thank you for your consideration.

Sincerely, Valerie Young, Chief of Staff Bigelow Laboratory for Ocean Sciences