MBL Loeb Laboratory Facts - UPDATED

MBL Background

- Headquartered in Woods Hole, Massachusetts, the Marine Biological Laboratory (MBL) is a premier research center and training ground for tomorrow's leaders in the biological, biomedical, and environmental sciences.
- Each year the MBL trains more than 450 students, including 200 international students, as part of its education programs, which include more than 20 graduate and post-graduate laboratory courses.
- MBL alumni and faculty rank among the most innovative and successful scientists of our time. Discoveries by MBL researchers have furthered the world's understanding of biology and have been recognized with numerous awards, including the Nobel Prize.

Loeb Laboratory Background

- Loeb Laboratory is the MBL's principle facility for its unique and world-renowned discovery courses. Located in the center of the MBL's campus, Loeb has played a central role in research and research training programs since 1970.
- The renovation has created a state-of-the-art research training facility, greatly enhancing the MBL's capability to maintain its position as a unique and critical national resource for science training and discovery by offering an educational setting that matches the MBL's outstanding reputation.

Building Stats

- Built in 1970, Loeb is a 66,000 square-foot concrete structure.

Facility Improvement and Green Standards

- **Total project cost: $25 Million.**
- The building was completely gutted and renovated to thoroughly upgrade and modernize the internal infrastructure and design, bringing all of the MBL's research training programs into the Loeb Laboratory and creating spaces designed for each discipline.
- The Loeb renovation project recycled 98% (by weight) of the material removed from the demolition.
- The building is currently awaiting LEED certification, the nationally accepted benchmark for the design, construction, and operation of a high-performance green building.

Impact on Local Jobs & Economy

- This project created construction jobs throughout the renovation, estimated at 250 jobs at peak over the project period of 15 months. Shawmut Design & Construction (the construction firm) employed union workers for the job.
- The project promises long-term impact as well by increasing the influx of highly trained scientists into Massachusetts. Approximately 450 scientists are trained each year in Loeb. MBL education programs have been cited by leading scientists across the country as having a lasting and disproportionate impact on American science.

(more)

Significant Expansion of Research Capabilities

- Training programs were relocated to create Neuroscience and Cell Biology "Floors" to enhance research interactions, and promote collaboration and resource sharing.
- The laboratory is now fully equipped for advances in computational biology, imaging, and bioinformatics.
- A Microscopy Center and staging site have been created for the 135 commercial vendors that each year loan more than $20 million in high-end instrumentation to the MBL's research and training programs.
- The MBL has created space within Loeb Laboratory to house a national stock center for research on the frog, *Xenopus,* an organism that possesses unique regenerative abilities, including the ability to regenerate the lens of its eye.
- This facility, which will be supported by a grant from the National Institutes of Health, will meet an unmet need and bring together the nation's regenerative biology experts to promote collaboration and spark major scientific breakthroughs.

Eugene Bell Center for Regenerative Biology and Tissue Engineering

- As part of its commitment to the Massachusetts Life Sciences Center, the MBL has established the Eugene Bell Center for Regenerative Biology and Tissue Engineering. The new center will be a high-impact, multidisciplinary and unique research initiative that draws upon the special advantages of marine invertebrates and other cornerstone organisms to define and understand the natural processes by which damaged or aging tissues and organs can regenerate or be repaired, and to apply that knowledge to the development of medical therapies.

- Marine organisms, a focus of MBL studies, hold great promise as research models for this work and for advancing human health, particularly now that it is possible to decode their genomes.

# # #