

# Micro-Algae and Shellfish Culture Internship (MASCI)

## ***Background Information and Project Justification***

There are several research projects underway that rely on marine micro-algae and production of shellfish seed.

A major new initiative will be launched in early 2008 to expand our hatchery and spawn oysters, scallops and clams for scientific research.

The research includes restoration ecology, shellfish genetics and breeding, and development of disease-resistant strains of shellfish.



*Micro-Algae Production Facility at the Marine Resources Center, MBL*

## ***Primary Objectives:***

The primary objective of this project is to develop efficient means to grow micro-algae cultures to feed and grow juvenile shellfish for research projects. This involves growing algae under optimal conditions, shellfish spawning and culture indoors and outdoors through the hatchery and nursery stages. Field work at research sites will be involved occasionally.

## ***Resources Available for this Project:***

- State of the art wet-lab space with temperature controlled water, filtration system, etc for shellfish hatchery and micro-algae culture. Under-dock shellfish upwelling system.
- Availability of general use equipment; water quality test kits, microscope, autoclave etc.
- Mentors with over 50 combined years of experience in hatchery technology and aquaculture experience.
- Research project field sites in MA, CT and RI.

## ***Skills Required:***

- Aptitude for understanding aquatic animal husbandry and plankton culture.
- Problem solving skills and ability to correct minor problems (i.e. simple plumbing).
- Accurate record keeping skills.
- Ability to work and make decisions independently with minimal supervision.

## ***Estimated Time Commitment:***

For a full-time intern, 20 to 40 hrs/week; 10 hours/week for a part-time intern.

## ***Project Supervisor:***

Scott Lindell