Shellfish Culture Internship

Background Information and Project Justification

New England’s shellfish production has been in decline since the early 1900’s and has reached a critical low with current production at less than 10% of recorded historic highs. To revitalize this struggling industry, the MBL (along with commercial and academic partners) have devised the New England Shellfish Recovery Initiative, a program aimed at developing selectively-bred oysters and clams with improved growth and disease resistance. Disease-resistant, fast-growing oyster lines promise to meet the growing demand for cultured oysters while preserving New England’s coastal waters. Development of these new shellfish lines further promises to safeguard employment for thousands of New England shellfish farmers as well as increase the number of jobs on expanded shellfish farms.

Primary Objectives:
The primary objective of this internship is to develop skills appropriate for all stages of shellfish cultivation, and a basic understanding of shellfish biology. You will be trained in efficient means of growing micro-algae cultures, feeding and assessing health and growth of juvenile shellfish, and culture techniques indoors and outdoors through the hatchery, nursery and field-grow-out stages. Travel and work at field research sites will be involved occasionally. We are pursuing several research projects that can use assistance:

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. We manage a shellfish nursery upwelling system under our dock to promote maximum growth of our juvenile shellfish seed.
• Availability of general use equipment; water quality test kits, microscope, autoclave etc.
• Access to computer and use of world renowned MBL/WHOI Library for literature searches.
• Mentors with over 50 combined years of experience in hatchery technology and aquaculture experience.
• Project field sites in MA, CT and RI with commercial partners who have extensive practical experience.

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

Project Supervisor: Scott Lindell
for additional details of on-going projects, visit the following: