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LMAH Moves to New Quarters

In addition to Dr. Whitlock and Dr. Sweeney from Penn, Dr. Lawrence T. Hutchinson from Penn State, and Dr. Max Van Buskirk from the Bureau of Animal Industry were the primary developers of the paratuberculosis test-negative certification program.

While this program is under way, research is continuing to develop faster test methods and to refine the existing tests. The Penn team has been able to decrease the fecal test time from 16 weeks to 12 weeks by employing special centrifuging techniques that concentrate the sample. Dr. Sweeney is now looking to test milk for the presence of the antibody to the Johne's organism as an early indicator of infection. He is developing filtration techniques for large volumes of milk to concentrate the sample. Because *M. paratuberculosis* is such a slow growing organism, bacteria need to be present at a certain concentration before they will become evident in culture.

Johne's disease is not only a threat to agriculture, it also affects other



Herrold's egg yolk media with the typically appearing colonies for Mycobacterium paratuberculosis. The Johne's organism often requires 10-12 weeks to appear visible on the media surface.

ruminants such as endangered species in zoos. A National Task Force on Johne's Disease has been formed to combat the disease. Dr. Whitlock was appointed, along with Dr. Max Van Buskirk. On a historic note, the disease was first identified to be present in the USA by Dr. Leonard Pearson, in 1905. Dr. Pearson served as the third dean of the School, from 1897 to 1909.

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Steve Rosenthal

Dr. Donald Abt, Robert R. Marshak Term Professor of Aquatic Animal Medicine, is an old hand at moving laboratory facilities from one building to another. "I was at the School when we moved offices and laboratories into the Rosenthal Building. I moved again when VHUP opened," he said. "This current move was a joy. We now have ample excellent research and service space on the second floor of the brand new Marine Resources Center (MRC), the latest addition to the Marine Biological Laboratory (MBL) in Woods Hole."

The space has been designed specifically for the research, service and teaching programs of the Laboratory for Marine Animal Health (LMAH) and AQUAVET® in addition to providing the MBL with essential new space for their mariculture research efforts. The facilities include special holding tanks for maintaining and culturing healthy marine organisms and isolation tanks appropriate for research on diseased organisms. The one-of-a-kind seawater life support system in the MRC simultaneously can provide up to eight tailor made marine environments to the animal holding tanks.

The LMAH is staffed by four veterinary scientists with specialty training in microbiology, pathology and epidemiology and a part-time par-

asitologist, based at the main campus in Philadelphia. The professional staff are supported by three technicians and a secretary.

The LMAH provides diagnostic veterinary services for laboratory animal needs of the Marine Biological Laboratory, the Woods Hole Oceanographic Institution, and the Northeast Fisheries Research Center of the National Marine Fishery Service. The research effort of the LMAH is primarily focused on naturally occurring diseases of marine animals used as laboratory animals. In addition, numerous research projects arise from health problems encountered by investigators seeking to culture a given marine organism in the artificial environment of the research laboratory or within a commercial aquaculture facility.

Examples of current research projects include studies on: the life cycle of a shark cestode (tapeworm); ocular diseases in captive pinnipeds; mortalities in juvenile seed oysters; dinoflagellate infection of oysters; *Pseudomonas* infections in skates and a parasitic infection of annelid worms.

