

Immunologists Cite Cell Clumping

Scientists Develop Accurate Test for MS

A team of Duke scientists reported in the June 24 issue of the *New England Journal of Medicine* that they have developed an accurate blood test for multiple sclerosis, a chronic crippling nervous system disease currently afflicting a half million young adults in the United States.

Authors of the report were Drs. Nelson L. Levy and Edward C. Hayes of the Department of Immunology

and Paul S. Auerbach, a fourth-year medical student.

The trio wrote that the test promises to detect the debilitating disorder in its earliest stages, even before it can be diagnosed from a physical examination.

Multiple sclerosis has always presented diagnostic problems to physicians early in its development because its symptoms often match

those of other illnesses, and there has been no accurate test for it.

By mixing white blood cells (lymphocytes) from patients with multiple sclerosis with human skin cells infected with measles virus in test tubes, the scientists were able to produce a rosette-shaped clumping of lymphocytes around the skin cells.

The rosette formation was significantly less pronounced when

white cells from healthy individuals or those suffering from other neurological disorders were combined with the measles-infected skin cells.

"Because of previously unpublished research and some of our own results, we expected that lymphocytes from patients with multiple sclerosis would be less, rather than more, adherent to the measles-infected cells," Levy said. "We got the exact reverse of the effect we expected to see."

The immunologist said the first experiments involved 27 MS patients, 26 MS-free neurology patients and 10 healthy Duke employees who served as controls.

"The Triangle Chapter of the Multiple Sclerosis Society and particularly its director Barbara Riddle were tremendously helpful in accumulating the patient population needed to do the study," Levy said.

Volunteers rose early in the morning to travel with Immunology technical staff as far as Henderson, Cary, Raleigh and Hillsborough to collect blood samples from persons with multiple sclerosis and to explain the need for the blood.

"Without their cooperation our work probably wouldn't have been possible," Levy said. "They convinced the MS patients to help us by giving blood samples."

The Duke research was funded by the National Multiple Sclerosis Society, a private organization and the National Cancer Institute.

Multiple sclerosis, currently incurable, is characterized by the partial destruction of the insulating myelin sheath around nerves. It causes a "short-circuiting" of nerve impulses often accompanied by stiffness, visual problems, difficulty with bladder control, weakness, tremors and other symptoms.

It is common for MS to follow alternate periods of activity and remission.



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DURHAM, NORTH CAROLINA

Elderly Mariners Find New Snug Harbor In Eastern Carolina Coastal Community

By David Williamson

The Sailors' Snug Harbor, a retirement home for elderly merchant seamen, weighed anchor at Staten Island, N.Y., on Saturday, June 26, for an air and land "voyage" to its new home in Sea Level, N.C.

Eighty-one of the institution's 116 residents, who range in age from 54 to 95 years, flew by commercial airliner from New York to Jacksonville, N.C., that morning and were met by Navy and Marine Corps units from Camp Lejeune and reservists from the 3247th U.S. Army Hospital Unit stationed in Durham.

The service personnel drove the main body of retired seamen from Jacksonville to Sea Level in eastern Carteret County by bus and ambulance. A group of 25 mariners arrived in the Core Sound community by charter bus last Tuesday evening, and 10 chose to remain in New York.

Reasons for Selection

"One of the main reasons the North Carolina coastal town was selected as the new site for The Sailors' Snug Harbor was that Duke University Medical Center owns and operates the 72-bed Sea Level Hospital," said Wilbur E. Dow Jr., former president of the institution's board of trustees and currently a consultant to that group.

"Through Sea Level Hospital, which is adjacent to the Snug Harbor grounds, Duke has pledged to provide the finest health care available to our residents," he said.

Dow said that growing air and water pollution around New York, the harsh winters and the fact that approximately 85 per cent of the mariners suffer from some sort of respiratory disease caused the trustees to seek approval for the move from the Supreme Court of New York in 1970.

In addition, he said, the federal government had proposed to shut down the U.S. Public Health Service hospital on Staten Island that provided medical care to the mariners, and the cost of renovating the existing buildings in New York, some of which date back to 1833, was prohibitive.

"Duke's Center for the Study of Aging and Human Development and the Duke School of Nursing were both instrumental in helping us plan the move," Dow said. "And their continuing interest in geriatrics and gerontology weighed heavily on the court's decision to permit the transfer to Sea Level."

Dean Ruby Wilson of the School of Nursing said a team of graduate students headed by Dr. Virginia Stone, professor of nursing, and a fellow in the Center for the Study of Aging and Human Development, travelled to New York in the autumn of 1975 to assess the residents of Snug Harbor from physiological and psycho-social standpoints. They also made recommendations about the safest ways of moving the mariners and locating them in their new home.

Dr. J. Ted Best, a physician on the Sea Level Hospital staff, accompanied the group to determine the medical needs of the elderly men on an individual basis.

Nursing School Involved

"The School of Nursing will continue to be involved in the nursing care at Sailors' Snug Harbor," Dean Wilson said. "The director of nurses there, Amie Modigh, has been appointed assistant clinical professor of nursing at Duke, and we plan to have certain students, particularly on the graduate level, participate in a gerontology program at Snug Harbor."

She added that Duke helped to recruit senior nursing staff for the home, and staff members and students will emphasize "wellness" and health maintenance along with traditional nursing care.

Amie Modigh is also a lieutenant colonel in the 3247th U.S. Army Hospital Unit. She helped to plan the move of the elderly men to Sea Level and secured the assistance of other branches of the service. About half of the 3247th's 260 members are M.D.'s, physicians' associates, nurses, psychologists and laboratory personnel from Duke and the Durham VA Hospital.

Modern Brick Building

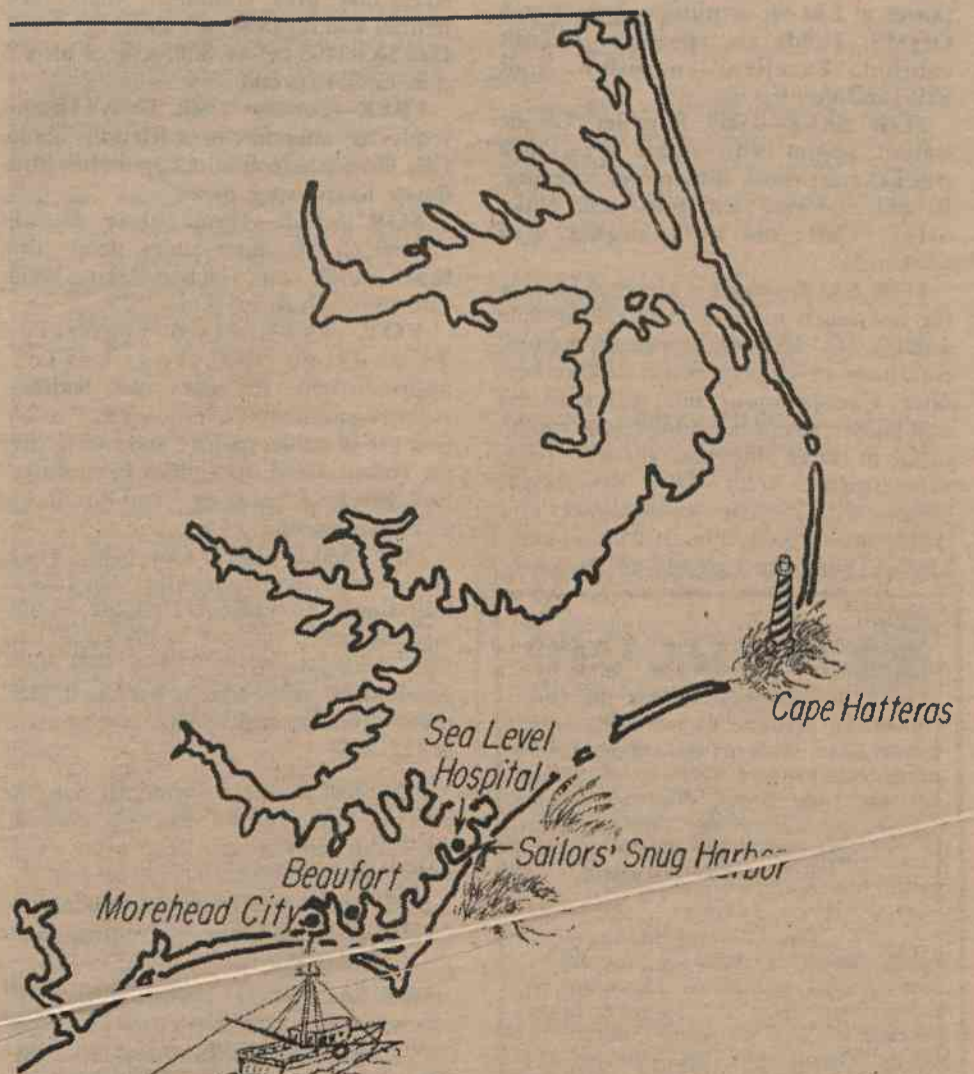
The mariners have moved into a new \$6.5 million, 122-bed brick structure located on a point of land

jutting out into tiny Nelson's Bay. The facility, which is shaped like a Maltese cross and includes a 40-bed infirmary, may be "the most modern nursing and retirement home in the country," according to Jack Johnson, administrator of Sea Level Hospital.

The residence quarters have been divided into three wings of 40 rooms. Each of the wings is subdivided into suites of 10 rooms, and each suite includes its own lounge area with televisions and snack facilities.

The new Snug Harbor, which has been built all on one level so that the mariners won't have to climb stairs, also features a large dining room, a chapel, a game room, a physical therapy area, a mail room, a barber

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LOCATION OF NEW SNUG HARBOR—This map of eastern North Carolina by medical artist Bob Blake pinpoints the area on the Outer Banks where 106 retired mariners have dropped anchor for the last time.