LA JOLLA, CALIF. Oct. 12, 1990 -- Scripps Clinic and Research Foundation has received a five-year $14 million grant from the National Institutes of Mental Health (NIMH) to establish an AIDS Dementia Complex Research Center.

In announcing the funding, Scripps Clinic president and chief executive officer Charles C. Edwards, M.D., said that it’s the largest single grant for biomedical research ever to be awarded to Scripps Clinic.

Floyd Bloom, M.D., head of Scripps Clinic’s Department of Neuropharmacology and director of the new center, noted that this will be the only NIMH center that focuses on the biological basis of central nervous system dementia in a comprehensive way.

"Although virtually everyone with AIDS will express some form of dementia," Bloom said, "researchers have been unable to determine how it is caused."

He added that patients with AIDS dementia have a variety of symptoms, but generally complain of lack of concentration and the inability to do simple mathematic functions, such as keeping their checkbooks.
"Since the central nervous system may be a repository for the HIV virus which causes AIDS," Bloom continued, "being able to attack the virus in those cells that are infecting the brain may be a way to prolong the course and improve, to some degree, the survival of the individual."

He added that research may eventually aid in the development of medications to prevent the spread of AIDS.

At the new center, research will focus on the way in which the HIV virus involves the central nervous system early in the disease, and the role to which the central nervous system infection may participate in the later immunodeficiency itself.

"A lot of people believe that a healthy nervous system is necessary for a well functioning immune system," Bloom said. "It may be that the central nervous system infection is actually causing, or in some fashion changing, the way in which the virus can depress the function of the immune system."

He added that recent studies have shown that brain abnormalities have been monitored in AIDS patients who themselves had not yet noticed any signs of dementia.

These studies included computer analysis of brain electrical activity tied to sensory events such as clicks and tones, and measurement of sleep stages that indicated abnormalities in sleep function.
"It may be that people with AIDS are tolerating some degree of decline in mental ability, attributing that to fatigue or in some way to general health decline, but without knowing that it may be indicative of AIDS dementia," Bloom said.

The AIDS Dementia Complex Research Center will be based primarily within the Department of Neuropharmacology at the Research Institute of Scripps Clinic, with additional collaborating investigators based within Scripps Clinic's Departments of Immunology and Molecular Biology, and the Department of Psychiatry at the University of California, San Diego.

The Center will investigate the molecular and cellular mechanisms underlying AIDS Dementia Complex. In addition to Bloom as center director, there will be 23 co-investigators whose studies will define the biological actions of persistent virus infections of the brain, the profiles of cell-cell signals activated by these infections, and the nature of the effects of these signals on neuronal function. Work at the center will include a number of scientific disciplines, including chemistry, physiology, anatomy and molecular genetics.

Bloom noted that "in addition to their relevance to the nature of AIDS Dementia Complex, studies at the new center may also shed light on the mental disfunctions that occur in people with diseases like schizophrenia."

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