



March 24, 1983

NTH

The Honorable Thomas P. O'Neill, Jr.
Speaker of the House of Representatives
Washington, DC 20515

Dear Mr. Speaker:

I am pleased to provide the following information in response to your correspondence of February 10 asking about research efforts on acquired immune deficiency syndrome (AIDS). I hope it will be of assistance to you in replying to the letter from your constituent, Jonathan Handel, who states that the National Institutes of Health has lagged behind in its commitment to AIDS research. Perhaps he is not fully aware of the intense interest in and concern for this problem within federal agencies, particularly the Public Health Service (PHS) and in the medical research community.

AIDS was first reported to the Centers for Disease Control (CDC) in the spring of 1981. By early June of that year, a surveillance task force had been set up at CDC, and the first of many AIDS patients was admitted to the NIH Warren Grant Magnuson Clinical Center in July 1981. While a number of investigations into the cause of AIDS were initiated, the National Cancer Institute (NCI) developed a Request for Applications in the spring of 1982 to encourage additional research in AIDS. Furthermore, in the fall of 1982, the NCI awarded supplemental funds to investigators pursuing related studies so that they could direct more attention to AIDS. A more detailed chronology of events relating to AIDS is enclosed. I believe it highlights the effectiveness of the NIH in responding to this important public health concern.

The resources now committed to the campaign against AIDS by PHS are impressive. The Centers for Disease Control (CDC) is continuing surveillance and investigational activities to better characterize the syndrome and its risk factors, and to identify additional preventive measures. These CDC initiatives include epidemiologic studies attempting further to define the mode of transmission of the disease and to delineate the segments of the population that may be at risk, as well as immunologic, virologic, and toxicologic laboratory investigations to test hypotheses concerning the causative agent. CDC is spending approximately \$2 million on these projects in this fiscal year. The Food and Drug Administration (FDA) is spending approximately \$350,000 annually on preventive steps that might be taken regarding the collection of blood and blood products and their safe use.

The National Institutes of Health (NIH) is contributing to the investigation of AIDS through both intramural research and extramural awards. Intramural efforts consist of clinical and epidemiologic studies, and a number of ancillary and related studies. Collectively, these were at a level of more than \$3 million for FY 1982, with an estimate of nearly \$8 million for FY 1983.

Overall, the Public Health Service is spending more than \$10 million on AIDS in fiscal 1983, up from \$3.9 million in 1982. That figure will increase to more than \$11.5 million next year.

The NIH commitment involves effort on the part of the National Cancer Institute; the National Institute of Allergy and Infectious Diseases; the National Heart, Lung, and Blood Institute; the National Institute of Neurological and Communicative Disorders and Stroke; the Division of Research Resources; the National Institute of Dental Research; and the National Eye Institute. A budget table, by institute, is enclosed.

Patients in our intramural studies exhibit a variety of manifestations of AIDS including Kaposi's sarcoma and so-called opportunistic infections. Intramural research efforts are aimed at determining causative agents (possibly a virus); at evaluating the natural history of the disease; at characterizing the immunodeficiency in these patients; and at investigating a possible relationship between this disease and hepatitis. In addition, a variety of treatment regimens are being evaluated.

With regard to extramural research efforts, the National Cancer Institute (NCI) supports the largest program on AIDS. The Request for Applications issued by NCI in August 1982 has led to the funding of four grants (for a total of about \$341,000 for the first year), and other proposals are under review. A second request for applications, developed by the NCI specifically to search for an infectious agent in the syndrome, will be funded in fiscal year 1984.

Through its existing system of Clinical Cooperative Research Awards, a project entitled "Etiologic Studies of Acquired Immunodeficiency Syndrome" has been initiated by NCI. These awards will make it possible for investigators in a number of institutions to participate in major clinical research efforts on the causes and prevention of AIDS. NCI has given high priority to grant-supported studies on Kaposi's sarcoma and similar malignant tumors related to AIDS. In addition, NCI will use a series of already existing contracts to provide laboratory and technical support for NCI studies of patients who have, or are at risk of, AIDS. Studies carried out under this mechanism can be pinpointed at locations around the country which offer the greatest likelihood of producing new clues to the cause and spread of cancers.

Extramurally, the National Institute of Allergy and Infectious Diseases (NIAID) is supporting research in three areas related to AIDS: cellular immunology and regulation of the immune system; deficiencies in the immune system; and cytomegalovirus--one of the viruses possibly related to the development of AIDS. Additional NIAID-supported studies are aimed at investigating the involvement of other infectious agents in AIDS. The Institute will hold a conference in early April at which scientists who have been successful in isolating causative agents in diseases with previously unknown cause will discuss their research methods and consult with AIDS investigators. Finally, the NIAID-supported Sexually Transmitted Disease Centers at the University of Washington and at the University of North Carolina have been engaged in studies of homosexual men since 1981, including an evaluation of the immune response of those exposed to cytomegalovirus.

The National Heart, Lung, and Blood Institute (NHLBI) is planning to expand a projected study in which blood plasma and other body fluids from AIDS patients will be applied to chimpanzees, after which the animals will be examined for development of immune dysfunction, AIDS or AIDS-like disease, and for the appearance of a causative agent. NHLBI also will expand a study already in progress in which groups of patients receiving large amounts of blood products by transfusion are being examined for dysfunction in a particular part of the immune system, which may predispose them to AIDS. This study is being carried out in cooperation with the Centers for Disease Control (CDC). The Institute also plans to initiate a study of "surrogate testing" for AIDS, which may lead to a method for screening blood prior to transfusion.

Other Institutes also are active in AIDS research. The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) is supporting research on the neurological aspects of AIDS, and the Division of Research Resources (DRR) is interested primarily in developing animal models for AIDS. Earlier this month, the DRR held a research symposium at which scientists explored the outbreaks of AIDS-like infections among rhesus monkeys at two primate research centers. It is possible that these naturally occurring epidemics among the research animals may provide clues to development of an animal model for AIDS.

I hope you will find this description of NIH studies helpful. I would be happy to discuss these items with you at any time.

Sincerely yours,

James B. Wyngaarden, M.D.
Director

Enclosures

<u>DATE</u>	<u>STATUS OF AIDS</u>	<u>NIH ACTIVITIES</u>
<u>Spring 1981</u> March - April 1981	CDC first learned about AIDS (homosexuals with <u>pneumocystis carinii</u> , N.Y. and L.A., 5 cases).	5 cases of <u>pneumocystis carinii</u> reported to the CDC by NIH grantee at UCLA.
<u>Summer 1981</u> June 5, 1981	Cases identified in San Diego; surveillance task force set up at CDC.	
June, July 1981	Epidemiologists sent to 16 cities to look for cases; interviewed victims.	First AIDS patient admitted to NIH Warren Magnuson Clinical Center.
<u>Fall 1981</u> October, November 1981	Task force administered questionnaires to homosexual community in hopes of finding link for disease. New phenomenon of lymphadenopathy identified. First cases of AIDS in Haitians (researchers identified Kaposi's sarcoma and pneumocystis from autopsy reports).	NCI investigators conduct pilot study to evaluate effect of amyl nitrate use in healthy homosexual men; results show lower T-cell ratios in inhalent users, which suggests an immunological deficiency. NEI intramural scientists identify the presence of cytomegalovirus in the retina of an AIDS patient; comprehensive eye examination and care provided to all AIDS patients admitted to the Clinical Center. NIAID supported Sexually Transmitted Disease (STD) Center at Univ. of Washington began prospective study of homosexual men; STD Center at Univ. of N.C. began study of immune response in gay men exposed to CMV infection.
December 1981		UCLA study (5 cases of pneumocystis carinii - noted above) published in the <u>New England Journal of Medicine</u> .
<u>Winter 1982</u> January 1982	216 AIDS cases, 88 deaths	
February 1982	Hemophilic first case (pneumocystis).	NCI contract to evaluate the effect of amyl nitrate exposure in mice; results suggest immunological effects.
<u>Spring 1982</u> April 1982	Investigators traced a case from one individual which was spread to nearly a dozen sexual contacts. Viral theory explored - CMV.	NCI researchers conduct field study to determine immunologic status of healthy homosexual men. NIH researchers participated in inter-agency meetings on AIDS. Intramural NIAID begin studies of immuno-regulatory defect in AIDS patients; studies of herpes virus isolates from AIDS patients; also studies of Epstein-Barr and CMV infections in AIDS patients. Development of NCI Request for Applications on AIDS - (RFA) (approximately \$1.25 million).

DATE

STATUS OF AIDS

NIH ACTIVITIES

Summer 1982

MLM began compilation of an exhaustive bibliography on AIDS.

Intramural NIAID researchers investigating possibility of parvo-like virus in AIDS patients.

Committee to Coordinate Environmental and Related Programs convened meeting on AIDS (NIEHS participant) because of possible involvement of environmental agent.

NIH working group on AIDS established with representatives from each institute and liaisons from CDC and FDA.

NCI RFA issued (August).

Fall 1982

September 1982

NHLBI convened working group with CDC regarding transmission of AIDS through blood products; agreed to contribute \$150,000 to CDC efforts to expand program on investigation of blood products.

NCI supplemental funding of current grants to encourage AIDS research (approximately \$165,000).

Receipt of responses to NCI RFA (October).

Intramural NIAID begins investigation of role of hepatitis in AIDS using chimpanzees already used in hepatitis studies - (virtually all AIDS patients have had hepatitis).

NIAID decision to contribute funds to NCI RFA (approximately \$750,000).

Special Review Committee convened by NCI to review response to RFA.

NCI begins development of second RFA on AIDS for anticipated funding in FY 1984 (RFA requests research on possible infectious agents).

NCI study of stored plasma samples from hemophiliacs thought to have had AIDS - discovery of elevated interferon levels; 45 healthy hemophiliacs evaluated in field studies - no significant increase found in interferon levels.

December 1982

<u>DATE</u>	<u>STATUS OF AIDS</u>	<u>NIH ACTIVITIES</u>
<p><u>Winter 1983</u></p> <p>January 1983</p>	<p>Representatives from blood banks meet with Federal officials on AIDS.</p>	<p>NIH scientists attend blood bank meeting.</p> <p>NHLBI reconvened working group with CDC to plan conference and to explore result of CDC blood research.</p> <p>Intramural NHLBI extended use of its chimpanzees for the study of AIDS-like disease.</p> <p>National Cancer Advisory Board action on responses to first RFA (4 proposals approved for funding; (\$341,000); 8 deferred for site visits).</p>
<p>March 1983</p>	<p>1112 AIDS victims (418 deaths); children identified with AIDS for first time.</p>	<p>DRR sponsored one-day conference on comparative medical aspects of AIDS in primates and humans.</p> <p>NCI researchers to present data on the immunology of healthy homosexual men at AIDS symposium at New York University.</p> <p>NHLBI-CDC conference on blood products to be held.</p> <p>Nearly 50 AIDS patients enrolled in Clinical Center research studies as either in-house or ambulatory patients.</p>
<p>April 1983</p>		<p>NIAID to sponsor symposium at which investigators who have been successful in isolating a causative agent in diseases with previously unknown etiology will discuss their methodological approaches and consult AIDS investigators.</p>

NIH ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS) EXPENDITURES

	<u>FY 1982 Actuals</u>	<u>FY 1983 Estimates</u>	<u>FY 1984 Projections, Based on President's Budget Request</u>
NCI	\$2,400,000	\$3,800,000	\$4,100,000
NHLBI	5,000	250,000	250,000
NINCDS	31,000	72,000	76,000
NIAID	297,000	3,150,000	4,150,000
DRR	564,000	644,000	701,000
NEI	33,000	45,000	58,000
NIDR	<u>25,000</u>	<u>25,000</u>	<u>30,000</u>
TOTALS -	\$3,355,000	\$7,986,000	\$9,365,000