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H.S. House of Representatives Subcommittee on Oversight and Investigations of the

Committee on Energy and Commerce

Washington, **BC** 20515-6116

MEMORANDUM

DATE: February 15, 1994

TO: The Honorable John D. Dingell, Chairman

FROM: Subcommittee Staff

RE: Recently Discovered Evidence Relating to Possible

Misappropriation of the Institut Pasteur AIDS

Virus -- LAV

In response to your request, the following is a synopsis of documents, plus additional information obtained through staff interviews, of new information relating to possible misappropriation of the Institut Pasteur HIV isolate, LAV. The key documents consist of correspondence between Dr. Gerald Myers and senior NIH officials, as well as Dr. Robert C. Gallo. (A list, and copies of the documents themselves, are attached to this memorandum.)

Dr. Myers is the principal investigator of the HIV Sequence Data Base, funded under a contract from the NIH National Institute of Allergy and Infectious Diseases (NIAID). The Data Base includes genetic sequences of a large number of the known HIV isolates. The first two isolates to be sequenced were the isolate that Dr. Gallo called HTLV-IIIb and the isolate the Institut Pasteur scientists called LAV. The Data Base shows that these two isolates are virtually identical, and Dr. Gallo's virus was derived from the IP virus. But for years, Dr. Gallo claimed that (1) his virus was genetically independent of LAV and (2) his virus was isolated from a "pool" of patient samples.

Dr. Myers' analyses and the resulting correspondence showed clearly that these claims by Dr. Gallo were not true. As early as April 1987, Dr. Myers wrote this to a number of HIV scientists, principally at the NIAID, including officials close to NIAID Director Anthony Fauci:

"Literally a 'double fraud' took place when the H9 cell-derived isolates -- HXB2, BH10, BH8, BH5, HXB3, PV22 (Muesing) ... -- were declared to be i) independent from LAV (BRU) and ii) derived from blood pooled from several patients. The probability of either account being true is very small by this analysis, and I predict that it will become smaller with each U.S. isolate sequenced in the future

"Ultimately, though, it is the astonishing and unforeseen variation of the virus which exposes the fraud.... I suggest that we have paid for this deception in more than the usual ways. Scientific fraudulence always costs humanity ... but here we have been additionally misdirected with regard to the extent of variation of the virus, which we can ill afford during the dog days of an epidemic let alone during halcyon times." (4/8/87 Myers-to-LaMontagner et al. letter; p. 4).

Dr. Myers' April 1987 letter was closely held in the succeeding years. The letter was written just after the signing of the French/American settlement agreement in the HIV blood test patent dispute; Dr. Myers later made clear the difficulties he encountered in trying to avoid the patent dispute.

Writing in April 1989 to Dr. Fauci, Dr. Myers said he had encountered two problems "unavoidably entangled with the dispute about the discovery of HIV." Dr. Myers said his analyses "immediately drew attention to the close similarity of the IIIb and LAV sequences" and that his "tree" analyses "were generated at precisely the time ... that the U.S. and French were settling the legal disputes that had arisen." Dr. Myers told Dr. Fauci that he and his Data Base colleagues "... agreed that the database would steer absolutely clear of the issue but that we would not suppress scientific data." (4/12/89 Myers-to-Fauci memorandum; p. 1). But, as described below, it is clear that forthright presentation and discussion of Dr. Myers' data were impeded and did not occur.

In September 1988, Dr. Myers, at the time "in residence" at the NIH National Library of Medicine, wrote to Dr. Gallo, summarizing for him the results of the most recent HIV Sequence Data Base analyses and telling him the following:

"From our earliest tree analyses, it was patently evident that the LAV and IIIb viruses had to have had a recent common ancestor . . . By including all of the

available gene sequences in a single analysis for the IIIBs, it is actually possible to define the branching order of the variants to a high degree of statistical precision. There is no doubt but that it shows the LAV source of the IIIB viruses: the NL43 clone of the BRU isolate is the oldest sequence; the published BRU follows it; the IIIBs follow thereafter.... (9/20/88 Myers-to-Gallo memorandum; p. 1).

In short, what Dr. Myers was telling Dr. Gallo was that (1) his virus (IIIb) was genetically identical to the IP virus (LAV) and (2) importantly, Dr. Gallo's virus was derived from the IP virus, not the other way around, as Dr. Gallo claimed to Dr. Luc Montagnier, to his (Gallo's) laboratory associates, and to top NCI officials in the summer of 1984.

By the spring of 1989, Dr. Myers and his Data Base colleagues had accumulated important new data showing LAV and IIIb were situated squarely in the middle of the "sibling" cluster of sequences, all pairs of which, with the exception of LAV and IIIb, were known to be derived from the same person. According to Dr. Myers, Dr. Gallo at this time, at the urging of his closest colleagues, including Drs. Mikulas Popovic and Flossie Wong-Staal (herself an editor of the HIV Sequence Data Base), was prepared to "throw in the towel" and admit that IIIb originated with LAV. Dr. Gallo prepared an ambiguously worded, but still compelling, statement that was to be published in the April 1989 issue of the Data Base. The statement read, in pertinent part:

"Can we conclude ... that HTLV-IIIb and LAV BRU did indeed originate from the same individual? If that is indeed the case, it would only have resulted from a mix-up in my laboratory when the LAV from Luc Montagnier was temporarily growing along side the other isolates we had obtained. We certainly cannot rule this out, particularly since we and, I am told, many other investigators have often experienced the phenomenon of laboratory contamination of HIVs

"I do ... think that it is necessary as a result of the data compiled in this book to acknowledge the distinct possibility that HTLV-IIIb and LAV BRU are the same isolate." (4/17/89 Gallo draft statement).

Dr. Gallo's statement was never published in the HIV Sequence Data Base. According to Dr. Myers, on the eve of its publication, the statement was precipitously withdrawn by Dr.

Gallo who told Dr. Myers he had "discussed the matter with the lawyers" and they advised him not to publish the statement.

According to Dr. Myers, Dr. Samuel Broder also objected to the publication of the Gallo statement in the Data Base, on grounds that the Data Base "is not peer reviewed." In fact, the findings published in the Data Base are peer reviewed by an exceptional group of editors, including at the time Drs. Howard Temin, Walter Fitch, and James Mullins. In any event, according to Dr. Myers, a fall-back plan was then developed, according to which Dr. Gallo was to make the admission that IIIb is LAV "on a natural occasion," i.e., in the text of a scientific paper on a broader subject. Dr. Gallo failed to keep this commitment, and the promised paper containing Dr. Gallo's admission was not published.

Meanwhile, in April 1989, Dr. Myers sounded his concerns again, this time to Dr. Anthony Fauci. Besides mentioning his early concerns about the implications of his data for the patent dispute settlement, Dr. Myers said this:

"... I remained deeply disturbed about the claim made for the IIIb viruses -- that they derived from pooled blood of several patients. It was very difficult in 1987 to convince many researchers that the AIDS viruses mutated inordinately rapidly. The IIIb interpretation gave the false impression that the virus was more stable than other signs were indicating." (4/12/89 Myers to Fauci memorandum; p. 2).

Dr. Myers' findings and conclusions must be considered in context of Dr. Gallo's other actions as well as his failure to disclose Dr. Myers' findings to OSI. First, as early as the summer of 1984, Dr. Gallo decided, based on data from his own laboratory, that LAV and IIIb were genetically identical. Dr. Gallo telephoned Dr. Luc Montagnier, told him that the viruses were identical, and accused Montagnier of contaminating his LAV cell lines with IIIb. These events are confirmed by Dr. Montagnier's and other scientists' testimony to OSI, and by memoranda to the record, written in 1984 by Dr. Gallo and his superior at the NCI, Dr. Peter Fischinger. Meanwhile, Dr. Gallo refused to permit comparisons of his virus with the IP virus, and he insisted that genetic comparisons of these viruses would be done only by his laboratory.

Second, when Dr. Montagnier adamantly refuted Dr. Gallo's charge (since Dr. Gallo received LAV long before Dr. Montagnier received IIIb), Dr. Gallo reversed his strategy and began to

assert in the scientific literature that LAV and IIIb, while virtually identical, were genetically distinct. Dr. Gallo further maintained, adamantly, that LAV could not have "contaminated" his cell lines because "it was physically impossible to grow LAV." As revealed by the OSI investigation, Dr. Gallo's claim that LAV could/did not grow was not true. Dr. Gallo actually admitted to OSI that the growth of LAV in his laboratory was "significant and continuous." Dr. Gallo told OSI his earlier denials that he grew LAV were made during his "passionate period."

Another part of the story propounded by Dr. Gallo and his closest associate, Dr. Flossie Wong-Staal, was that the several clones of IIIb, obviously very similar in genetic make-up, were derived from multiple independent samples allegedly used for the "pool" experiment. By extrapolation, using this argument, Dr. Gallo et al. attempted, among other things, to make the case that the striking similarity of LAV and IIIb did not obviate the possibility that these actually were independent isolates.

The rapid mutation and resulting heterogeneity of the AIDS virus are now widely recognized as posing significant obstacles to the development of effective strategies for prevention and treatment of AIDS. Dr. Myers' concerns about the delay in scientists' recognition of HIV heterogeneity -- a delay caused in part by what Dr. Myers termed the "double fraud" associated with Dr. Gallo's account of the origins of "his" virus -- are a poignant reminder of the damage that resulted from the "fraud."

Third, Dr. Gallo's testimony to OSI on this matter was substantially less than forthcoming. Despite having agreed, just one year earlier, on the need for a public acknowledgement that IIIb and LAV were genetically identical, and an acknowledgement that IIIb was derived from LAV and not the reverse, Dr. Gallo in 1990 made numerous misleading statements to OSI such as the following:

"With time and more sequences available the relative similarities of this pair (LAV and IIIb) remains unusual but not unique." (4/8/90 "Opening Scientific Statement" to OSI; p. 5).

"... I would conclude that there can't be a conclusion today ... I don't think we can make any conclusive statement Also, please keep in mind that though I said if this possibility or probability exists ... I didn't tell you where it [contamination] happened with

certainty also. I believe that question is open, no matter what information you may have, and I believe that question [where the contamination took place] could be solved in the immediate future." (4/11/90 Gallo OSI interview; transcript p. 72).

Elaborating on the "Paris contamination" theory Dr. Gallo had tried to convince Dr. Montagnier of six years earlier -- subsequently thoroughly discredited by Dr. Myers' data -- Dr. Gallo's attorney asserted this to OSI:

"... IIIb was sent to Paris in May of 1984. It could be that what they then tested ... was a contaminant. It's at least possible."

Dr. Gallo then added:

"The other direction." (4/11/90 interview; transcript p. 75).

To be certain OSI comprehended his disdain for the issue of the origins of "his" prototype virus, Dr. Gallo added this:

"I have felt it's an irrelevant question, for the most part ... scientifically, ethically, medically and historically, because there are so many other isolates and if anybody had half as many in tissue culture within the next year I would be surprised, so I've never felt it to be an important question. It's only in this context of the questioning that I'm getting here that it becomes important or for politics that have been played in newspapers ... " (4/11/90 interview; transcript p. 71).

Yet, just a few days before he made these statements to OSI, Dr. Callo wrote a letter to Dr. Myers, in which Dr. Gallo said:

"I have wanted to tell you for some time -- that you were certainly right, and I should have listened to you ... as early as 1984 I told her [a reporter for the journal <u>Science</u>] IIIB could be a contaminant of LAV. Because of everything else we did and because of other isolates and because of the help I gave Montagnier early on, I just could not believe anyone would really care." (4/5/90 Gallo-to-Myers letter).

Notably, Dr. Gallo failed to disclose to OSI anything about his discussions with Dr. Myers and his associates in which he

(Gallo) acknowledged that LAV and IIIb were genetically identical. Dr. Gallo did not tell OSI about his intention, a year earlier, to acknowledge that the isolates were identical, neither did Dr. Gallo provide any of the pertinent documents to OSI. And, as you know, it was not until May of 1991 that Dr. Gallo finally admitted what for years was clear to most of the HIV scientific community: that IIIb originated with LAV and the Gallo HIV antibody test was developed with the virus isolated at the Institut Pasteur.

One other circumstance needs to be mentioned: the Myers documents (as well as other key documents) were withheld from the public by NIH FOIA officials (at the behest of the NCI). The information in the documents itself was delayed and soft-pedalled by Dr. Myers, who at the time was operating under the unfortunately misguided belief that Dr. Gallo would deal forthrightly with the reality that his virus was derived from LAV. As Dr. Myers put it in a July 1989 memorandum to Gallo:

"I don't like being the person to have to tell you this, but I'm happier that the information is in my hands than in the hands of someone else. Up ahead, you'll have reason to think that I have worked against you (I don't think that, but I could understand how you would reasonably think so) ..."

Speaking of his "fine structure" data, Dr. Myers then said to Dr. Gallo:

"... this is the strongest argument against your position and the <u>Tribune</u> has not learned of it or anything of that sort. I have held it for nearly a year now, hoping some resolution within the tradition rather than within the press It has been my hope that you would not be placed into a 'reactive' position but rather a position of taking the initiative Let me know your thoughts and how I can help. I do feel some obligation to the French and to the database along these lines, but those considerations do not impose a time constraint." (7/3/89 Myers-to-Gallo memorandum; pp. 1-2).

By September 1989, when he finally realized that the promised paper from Dr. Gallo acknowledging the truth about IIIb and LAV was never going to materialize, Dr. Myers proceeded with publication in the HIV Data Base of the raw data showing that LAV and IIIb came from the same person, and that IIIb was derived from LAV, and not the other way around. Important though the raw

data were, they were not accompanied by the commentaries Dr. Myers had provided in his correspondence to, among others, Dr. Gallo and Dr. Fauci. The absence of Dr. Myers' candid commentaries, plus the fact that the Data Base has a much smaller circulation than many scientific journals, meant that for most scientists and certainly for the public, the impact of the Myers' data was all but lost.

Referring to Dr. Gallo's failure to honor his commitment to publicly acknowledge the truth about his virus, and to his (Myers) delayed publication of his data, based on Dr. Gallo's professed commitment, Dr. Myers now says of Dr. Gallo, "I just do not trust the man."

Attachments