(continued from page 3)

AIDS virus with colleagues once he and Popovic had successfully grown it in permanent cell lines, Gallo actually slowed the pace of AIDS research. Further, the committee faulted the OSI for its focus on the one *Science* paper in its final analysis of the case, arguing that by so doing it missed the forest for the trees in terms of assessing Gallo's professional behaviour.

The two reports put Healy in a quandary. If the Richards committee's view was fair, then the OSI's exoneration on strict definitional grounds might be misplaced, she reasoned, before doing what people in Washington do. Healy created a committee to advise her on the reports of the OSI and Richards committees: she convened the scientific directors of the 13 NIH institutes and gave them both reports.

Then, going one step further, Healy called Gallo before her own committee of advisers for three hours on the night of 23 March and challenged him, in effect, to rebut the allegations of the Richards committee. According to Healy and others who participated in the interrogation, Gallo did just that. In the words of one participant, "He blew the directors away, including those prejudiced against him."

Whether that is an exaggeration or not, participants agree that Gallo presented compelling evidence in his defence. For instance, on the serious charge of failure to share HIV with other laboratories, he presented files showing that the virus was sent to some 45 laboratories around the world in the months following the May 1984 paper in *Science*. (However, it is true that, because of a petty argument, Gallo was slow to give samples of HIV to his NIH colleague, Malcolm Martin, who subsequently suggested that the structural similarity between the Montagnier and Gallo isolates argued that Gallo's isolate HTLV-III was really the French virus in disguise.)

The Richards committee did not examine (nor, apparently, ask for) evidence to support its conclusions, relying instead on the OSI. Thus, it did not know the extent to which HIV had been distributed. At Healy's request, four members of the committee did meet with Gallo recently for 30 minutes but it was not a fact-finding occasion.

Taking the evidence altogether, Healy came down on Gallo's side in her letter of transmittal of the report to HHS authorities. Gallo, she says, has been absolved and, unless those higher up in HHS who have final responsibility for approving the report fail to approve it, the department should do everything it can to "restore Dr. Gallo's reputation." This is not to say that Gallo deserves any prizes for collegiality in science. But "if collegiality is the measure by which we evaluate good scientists", she says, "we might as well shut down right now".

One particularly thorny issue of collegiality centres on Gallo's role in editing a paper by Montagnier that was pub-

The OSI on Crewdson on Gallo

The OSI is frank in admitting that much of its investigation was driven by an article published in the *Chicago Tribune* by John Crewdson in November 1989. Although Crewdson's article presented no new facts, the way he wove together known information implied a pattern of behaviour that could add up to misconduct. The two examples given here are illustrative of the OSI's analysis of the Crewdson opus.

■ Throughout the AIDS dispute, the extent of Gallo's study of LAV, and his acknowledgment of that extent, has been an issue. In 1986, through a Freedom of Information Act filing, US attorneys for the French received a copy of a letter written in 1983 about electron microscopy of several HIV samples from Gallo's lab. The original letter included EM positive data suggesting that LAV was growing in two cell lines.

In the copy of that letter, as received by the French lawyers and subsequently read by Crewdson, all reference to LAV was deleted. According to the OSI report, "The 1989 *Chicago Tribune* article did not assert Dr. Gallo or one of his colleagues was responsible for the deletion, but there was an implication that this might be the case."

In fact, an investigation revealed that Gallo's copy of the letter did contain a reference to LAV and that the altered version had come from somewhere else. (Gallo has always seen this as evidence someone conspired against him.) Although the source has never been found, OSI concluded that Crewdson's "implication" could not be sustained by the evidence.

■ Crewdson hinted at misconduct on Gallo's part because data in conference proceedings from a presentation at a 1983 meeting in Cold Spring Harbor included information that had not actually been presented. "The implication of the *Chicago Tribune* article was that the Gallo et al. chapter [published in 1984 with updated information] ...overstated the [Gallo lab's] progress toward discovering the cause of AIDS. The inquiry team did not find convincing evidence for this assertion." In fact, most of the chapters were updated, including one by "Luc Montagnier et al." **B.J.C.**

lished along with papers by Gallo in the 20 May 1983 issue of *Science*. The manuscript, which Montagnier sent to the magazine via Gallo, lacked an abstract which Gallo offered to write. In addition, he suggested two editorial changes in the paper that have generated endless dispute.

The OSI's analysis of this episode is illustrative of the tone of the report. A sentence added to the paper said, "The DNA sequence of these and other members of the HTLV (human T-cell leukemia virus) family being compared." OSI concludes that the added sentence is "in line with the substance" of the initial version of the paper, but it goes on to say that "The mere fact of the addition...without the explicit, unequivocal agreement of the coauthors...[constitutes] a gratuitous, self-serving, and improper act on the part of Dr. Gallo."

The OSI report, however, does not stop there. In reaching its final analysis, it notes that because Montagnier received galleys of his manuscript, and could have objected to the added sentence if he wished, the editing by Gallo does not amount to scientific misconduct.

In an angry rebuttal to this (and other points), Gallo's attorney, Joseph Onek, argues that because it was Gallo who reviewed the manuscript favourably for *Science* and agreed to hold publication of his own paper until Montagnier's was ready, it is unfair to attack him. "Is this uncollegial?" he asks.

And so it goes.

The "final" OSI report is, sad to say, not the end of this tiresome story. Once the

report is cleared by her political bosses at HHS, Healy will argue for its open publication. Gallo's attorney, who along with Popovic's lawyer has written a rebuttal challenging points in the OSI report that impugn Gallo's behaviour, has said that if the report is made public, his rebuttal should accompany it. There will be plenty for Gallo supporters to like, in particular, the conclusion of "not guilty", and plenty for Gallo's critics to cite against him.

Meanwhile, Healy, angered by the unceasing accusations against Gallo, is arguing for an open administrative hearing to review the case yet again. She suggests bringing in an independent administrative law judge to run it. Referring to a recent nationally televised broadcast in which anti-Gallo parties to the dispute accused him of stealing or otherwise "misappropriating" the French virus, Healy says that "these people should come forward at an administrative hearing and present their evidence. On television they can say what they like. If they have evidence, I want to hear it."

Meanwhile, a dispute over distribution of royalties from the US AIDS blood test remains to be resolved. The French are asking for a greater share of the money in light of data uncovered this year that the virus both Montagnier and Gallo thought had come from a French patient known as BRU actually was contaminated, first in France and then in the United States, by a virus from another French patient known as LAI. But that's another story.

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