"It provides the structure you should have anyway," he said, and "modifies the impact of the vociferous person."

Academic institutions are interested too. Mike Beveridge, professor of education at Bristol University, would like to see it available throughout the university, wherever groups meet to decide between options. He arranged a demonstration at which "the response was favorable."

But the innovation hasn't yet taken the world by storm. Other research councils have been slow to follow the AFRC's lead. John Lake expresses himself "surprised and disappointed that other public sector bodies making assessments of science feel that they can do without this, or something like it."

Perhaps the problem lies precisely in the system's strength: that it formalizes and democratizes decision-making. There are always those who use the informal, imprecise atmosphere of a committee to get their own way. And, says Beveridge, the electronic system "works against those people who regard themselves as good in working committees to their own advantage."

■ JEREMY CHERFAS

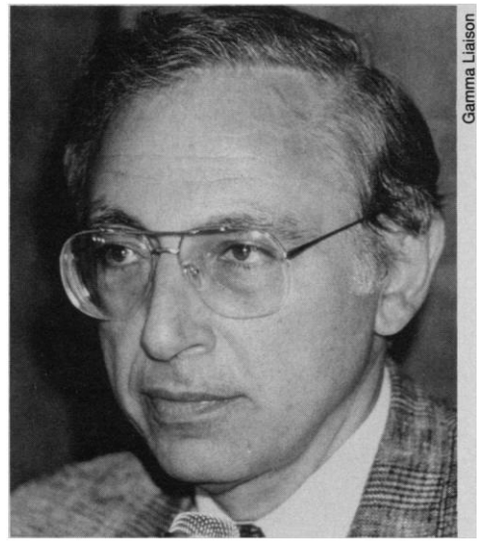
Which Patient Did Gallo's Virus Come From?

Having proclaimed that it has all but cleared National Cancer Institute virologist Robert C. Gallo of allegations that he stole the AIDS virus from a group of researchers at the Pasteur Institute (*Science*, 12 October, p. 202), the National Institutes of Health has decided to try to nail down once and for all which particular patient the virus came from.

This foray into viral archeology is the latest twist in a 6-year saga that began in early 1984 when Gallo announced that his lab had pinned down the viral cause of AIDS and developed a blood test for the virus. Almost immediately, questions were raised about the origin of Gallo's virus, which he called IIIB. It is remarkably similar in nucleotide sequence to an HIV isolate from the Institut Pasteur in Paris which was called LAV-BRU, BRU being the letters identifying the patient from whom the French virus came.

Allegations in the *Chicago Tribune* that Gallo stole the French virus prompted a 10-month inquiry, leading to what NIH acting director William Raub has called a verdict of not guilty "on the basis of the evidence." (NIH is, however, investigating alleged discrepancies in a key research paper Gallo published in 1984.)

Still, for historical and scientific reasons, NIH wants to track down IIIB. To this end, Raub has asked Gallo for original samples of cells from his lab in the months in 1983 and 1984 that the work was going on. "We have given him what we have and will cooperate however we can," Gallo told *Science*. In addition, he has asked the Institut Pasteur whether they would be willing to cooperate in this virologic dig by supplying an original sample of BRU. "As of now, they say they have not been able to locate one," Raub reports. Montagnier was not available when *Science* called him for comment.



Leftovers. *NIH probers will examine early viral samples from Robert Gallo's freezer.*

The Gallo lab's success in confirming that HIV causes AIDS depended on the fact that Mikulas Popovic, a Czech cell biologist on the Gallo team, was able to get an AIDS virus to grow in large quantities. He did it by pooling ten different candidate viruses in an admittedly unusual—one leading scientist sympathetic to the Gallo cause called it "crazy"—attempt to see if he could culture one virus from a viral soup. He succeeded.

Today, original frozen cells from nine of the pooled viruses are known to exist and the tenth is being sought. In addition, NIH has secured original samples of other isolates that were growing in Gallo's lab. According to Suzanne Hadley, deputy director of the NIH Office of Scientific Integrity, the plan is to send all this material to an independent laboratory where "blind" tests, including PCR (polymerase chain reaction) analysis of the viral DNA, will produce a profile of every virus.

If these studies show that IIIB was one of the patients in the ten-patient pool, researchers will then know not only the origin of IIIB, which is of historical interest, but also have new information about the genetic closeness of certain AIDS viral isolates.

Virologist and Nobel laureate Howard Temin of the University of Wisconsin says the archeology is of interest because "if we can verify the origins [of IIIB and BRU], we could perhaps learn whether they came from patients who had close contact, or were exposed to AIDS from the same source, or, maybe, whether they each came from the same person." Data show that even though IIIB and BRU are so much alike, the 1% difference between them seems to translate into clear biological differences. BRU is, for example, reported to be a more potent cell killer.

One possible route to unraveling the source of IIIB would be to find out whether Gallo and his French competitor, Luc Montagnier, happened to receive blood samples from the same physicians. Gallo's records show that in addition to numerous blood samples from U.S. patients, he got AIDS blood from physicians in France and Switzerland, but NIH officials do not yet know whether Montagnier received blood from the same people or whether his records still exist.

Scientists on Gallo's team have told *Science* that they have complete records of every AIDS blood sample that the lab received for testing. If IIIB is for some reason not among them, Hadley says, the NIH will go back to some of the physicians who sent early AIDS blood samples to see whether they might have kept the primary samples after all this time. "On the other hand, we may be lucky and find IIIB right off."

Although the outcome of all this investigating may tell us who IIIB came from, there is, Hadley says, another possibility. "It may be that we just won't be able to find the source." If so, what would it say about alleged misconduct in the Gallo lab? "Nothing," Hadley told *Science*. "You certainly couldn't conclude that there was misconduct."

Hadley speculates that the analysis of original samples will be complete within 6 to 8 months, "at the outside."

■ BARBARA J. CULLITON