Lisook is upset that patients' names were not deleted from the FDA documents.

At one point during the Straus discussion, Hatch and Metzenbaum assailed DeVita as "blasé" about his administrative leadership. Hatch said, "You're not running some kiddy game here. You don't seem to know how to manage." Kennedy later came to DeVita's defense. A Kennedy aide said that Kennedy believes DeVita is "first rate. The hearing was unfair and an inappropriate attack on DeVita based on a single example."

Hatch chaired only the first portion of the hearing and then departed, leaving the hearing in the hands of Senator Paula Hawkins, the chairman of the subcommittee on investigations and oversight which held a hearing on NCI 2 weeks ago. With Hawkins the only committee member present, and the television lights now gone, a significant part of the hearing received little attention. Auditors from the Department of Health and Human Services submitted a detailed report completed 9 months after DeVita took office, which specified serious weaknesses in NCI's monitoring of contracts and recommended a long list of ways to correct the deficiencies. Although only about half DeVita's reforms have been put into action, it appears that Hatch missed an opportunity to compare DeVita's changes to those recommended by HHS. During his opening statement DeVita tried to explain some of the reforms now in place. But what the committee seemed more interested in was a sense of commitment from DeVita, not the details. "I mean business," he told the committee, referring to a pledge for tougher management. Metzenbaum said, "That's the first time you haven't used buzz words."

Despite the hostile questioning by Hatch and others, it is clear that DeVita still has strong bipartisan backing including Kennedy and the new assistant secretary of health, Edward N. Brandt, Jr.

The cancer institute has undergone increasing scrutiny during the past 3 years. After the war on cancer was declared, the agency enjoyed an enviable relation with Congress which left it largely autonomous. But in 1978, when the GAO reports uncovered glaring examples of abuse, the relation was not so rosy. Congress continued to increase its oversight of the institute, and NCI apparently will have to continue living under its more watchful eye. Hawkins says she is giving the institute 90 days to implement changes in its management practices. If she's not satisfied, Hawkins says she may hold another hearing.

—MARJORIE SUN

. . . But Straus Defends Himself in Boston

After 3 years of silence, Straus came forward to proclaim himself victim of a conspiracy

Boston. After 3 years of silence, Marc J. Straus, a clinical cancer researcher who resigned in 1978 from the University Hospital of Boston University (BU) amid allegations of data falsification and patient abuse, has declared himself innocent of any wrongdoing and filed a $33-million conspiracy suit against five members of his former BU research team who originally brought allegations against him.

Appearing at a special hearing of the President's commission for the study of ethical problems in medicine and biomedical and behavioral research, Straus said the allegations were "absolutely false" and that for 3 years he had been denied a fair review by his scientific peers. "I have seen discriminatory and selective prosecution, threatened kangaroo proceedings, supposed investigations conducted by persons without specialized training in oncology, slanted Senate hearings, and more," he said. The Straus affair is the subject of ongoing investigations by the Food and Drug Administration and the National Institutes of Health.

Just before the opening of the 5 June hearing Straus had his lawyer file the suit in U.S. district court. The suit, which contains ten counts of individual malice and one of conspiracy, alleges that two doctors and three nurses on his staff falsified data, abused patients, and conspired to blame these acts on Straus, resulting in the loss of his job and research funding. Contacted by phone in Florida, one of the defendants in the suit, registered nurse Stephanie Richards, said: "I'm not worried. It's his prerogative to sue anybody he wants, but no court is going to find us guilty. There was no conspiracy, just a common concern about patient safety."

An uncontested fact amid the tangle of allegations is that some members of the Straus team did falsify data. The question is why.

As recounted in a series of articles in the Boston *Globe*, Straus at the time of the incident was a young, ambitious cancer specialist who in a few years at BU had built a million-dollar clinical research empire. That empire, however, was alleged to have been partly based on falsified data, which, according to several team members, had been doctored on the specific orders of Straus and also because of "general anxiety" that a shortage of statistically acceptable patients might threaten future funding for many of their clinical research programs. Because of the muddle of faked and real data, some team members feared that wrong treatments were being administered. On Friday 2 June 1978 Greg Medis, a physician on the Straus team who 5 months earlier had begun a 2-year fellowship, resigned in protest. This resignation sparked the decision by several other team members to make an issue of Straus's practices. At the beginning of the next week, Medis and four other team members went to officials at BU's

An uncontested fact is that data falsification did occur.

0036-8075/81/0619-1367$00.50/0

Gold Pipettes Make for Tight Lips

"We are already beginning to see serious threats against the usual modes of scientific communication," Donald Kennedy, president of Stanford University, warned a House committee looking into how the commercialization of biomedical research is affecting universities.

On at least four occasions in the past years, speakers at scientific meetings have refused on questioning to divulge details of technique on the grounds that these were proprietary information. The problem here is that if people will not reveal how they do their experiments, no one else can repeat them, and an essential part of the scientific process is jeopardized. Witholding such information at scientific meetings is something which he hoped would somehow be declared "out-of-bounds" behavior, Kennedy told Representative Albert Gore's subcommittee at an 8 June hearing.

The subcommittee was seeking to understand such issues as whether Massachusetts General Hospital, in its recently announced decision to set up a $50-million joint venture with the German company Hoechst, was not allowing a foreign enterprise to come in and "skim off the cream", as Gore put it, from a body of research paid for by the American taxpayer.

This line of thought was emphasized by MIT biologist Jonathan King, who remarked that the public, when it comes to purchase the result of the new biotechnologies on the marketplace, "is having to buy back what it itself financed." "These strains and processes were publically developed; they should remain publicly owned," King declared.

MIT president Paul Gray disagreed, saying that the public's traditional reward for investing in research has been in the dissemination of the results. The tax revenues from the commercialization of new knowledge is the conventional way in which the taxpayer gets his return on basic research; why, the subcommittee wanted to know, should genetic engineering be considered in a different category?

According to Kennedy, the new biological knowledge is different because the basic knowledge itself has become valuable intellectual property, whereas in almost all other disciplines it is only in the form of applied research that the knowledge starts to gain a direct commercial value. What has happened in the commercialization of gene splicing is that the value added part of the process has somehow shifted from the applied phase, usually conducted in an industrial setting, into the university laboratory.

When most of the value is added in the applied stage, which requires considerable investment, no one thinks it unfair that the investor should reap the bulk of the rewards. With the new biology, where basic knowledge has an almost instant value, it is not yet clear how the rewards should be distributed between the researcher, his university, and the public who supported his research. Stanford's solution is to split royalties between the researcher and itself.

The new process may help reduce the habitual 10-year lagtime in the transfer of biomedical knowledge to the marketplace, and it may also provide a new source of funding for universities, Kennedy said. On the other hand, he added, "There is the prospect of significant contamination of the university's basic research enterprise by the introduction of strong commercial motivations and potential conflicts of interest on the part of faculty members with respect to their obligations to the corporations in which they have consultancies or equity and their obligations to the university. . . . Even more damage has been done to the informal roots of communication that characterize most vigorous fields of basic biological research."

Stanford's policy is to require faculty to account for the time they spend consulting but not for the form in which they are paid, whether by a fee or taking equity. Like Harvard, Stanford has decided against the possibility of having the university go into joint partnership with members of its faculty, on the grounds that the university would have a conflict of interest in distributing space and other resources among its faculty.

—NICHOLAS WADE

department of medicine with alleged evidence of Straus's complicity. After deliberating for a day, an ad hoc committee in the department concluded that some of the charges had merit. Straus was asked to resign. Two years later, starting on 29 June 1980, the *Globe* ran a five-part series on the Straus affair. Although Straus had been queried by the *Globe* reporters, he did not comment.

In testimony before the President's commission, Straus, who is now a clinical oncologist at New York Medical College in Valhalla, said that the whole premise of the *Globe* series was wrong. He testified that his team had "twice the number" of patients needed to keep a particular grant (administered by the Eastern Cooperative Oncology Group)—and he had been awarded a 3-year renewal for this grant months prior to the allegations. Straus further suggested that some of those who made the allegations had been trying to save their jobs. He said that in April 1978 he asked BU administrators to fire a nurse, Mary Jane Rimmer, and had earlier disciplined a physician, Robert J. Polachwich. Just what Polachwich stood to gain by accusing Straus was not immediately clear, since Polachwich's fellowship was scheduled to end on 1 June 1978. Further, Straus at the hearing presented no evidence that nurse Rimmer knew he had talked with BU administrators about firing her.

Straus went on to testify that evidence against him had been faked. Of 12 patient charts team members had presented to BU officials, one had a forged signature of his name. "In the other 11 cases," he continued, "there is substantial proof that the allegations were maliciously made. Members of the commission, when I present this to an impartial review this matter will be over and I will be vindicated."

No details concerning the alleged conspiracy were to be found in the court papers, as is always the case when a complaint is initially filed in a lawsuit. The 13-page filing in the $33 million suit does not say why the Straus team would have wanted to conspire against him, but merely outlines the charges and asks for a jury trial. The filing came just as the 3-year statute of limitations on the charges was about to expire.

Straus told the commission that he had "maintained public silence until today" because he had been waiting for peer review of the charges. Because of the complexity of the case, he said, the majority of these peers should be specialists and principal investigators in clinical oncology, like himself.

0036-8075/81/0619-1368$00.50/0

During the 1978 tempest itself there was no chance for a fair hearing, he told the commission, because his repeated efforts to ensure that cancer research was properly conducted at University Hospital had turned some physicians against him. In June 1978 Straus turned down a chance to appeal his case before a five-person committee of BU physicians.

After finishing his testimony, Straus was asked by commission chairman Morris B. Abram why he had declined since August 1980 to appear at a full inquiry into the matter by the Food and Drug Administration. Answering for Straus was his attorney, Andrew Good of Boston, who said that they never declined but that "we are narrowing the issues [with FDA] by mail, so as to save time when we get together."

Chairman Abram at several points during the day rapped his gavel and asserted that the hearing (with 15 witnesses) was a forum not for resolution of the allegations in the Straus case but for discussion of general policy questions raised by reports of misconduct in research. However, Straus and three scheduled witnesses for him used their testimony to try to correct the record and to attack his accusers. Moreover, in the time allotted for public comments at the end of the hearing, three more Straus testifiers spoke up: a man whose wife was a former cancer patient of Straus, a brother of Straus, and a man in a wheelchair. He said he had never been treated by Straus but had been treated at University Hospital for a spinal cord injury. He said that unfair treatment of Straus in the press, in Congress, and in the federal bureaucracy raised fundamental questions about constitutional rights.

Some resolution of the myriad allegations in the Straus case may not be too far off, at least for a segment of the federal bureaucracy. An investigative team from the National Institutes of Health will reportedly finish their work by the early fall.—WILLIAM J. BROAD

A Manhattan Project Postscript

Traces of wartime uranium metal production in New Jersey plant take time to track down

A few months ago, the Department of Energy (DOE) released a report* on a radiological survey of sites used in the World War II atom bomb project. With its list of sites in half the states, the report is a reminder that the work was done not only in the great, secret, backwoods enclaves like Los Alamos and Oak Ridge, but also in scores of small programs scattered around the country.

I worked briefly in a menial job in one such program and was, therefore, among the thousands who helped to make the bomb and didn't know it.

In my case, it was at a Westinghouse lamp plant in Bloomfield, New Jersey. Years later, it became known that the place had turned out much of the uranium metal used in the famous first atomic pile in Chicago that served as a kind of feasibility study for the bomb project. It was hard to believe that the work going on in the dank basement of that light bulb factory was significant to the war effort.

To be sure, the department ran three shifts and was obviously under pressure to keep up production of whatever it was. But considering the makeshift equipment, the occasional floods in the basement, and the fires that kept breaking out unaccountably in barrels of sludge in the alley, I had concluded that the department must have been engaged in some bush-league experiment that never really worked out.

It took me a long time to satisfy my curiosity about what was going on in that odd corner of Building No. 7. I was spurred on last fall when I learned that Westinghouse was also digging up the past in the form of lingering radioactivity in the drains below that basement.

The revelations began for me on the day in 1945 that I first heard about the bomb along with a couple of hundred other 18-year-olds standing in a company street in an infantry replacement training center in northern Florida. The shock of recognition came later that day when I spotted the word "uranium" in a newspaper story. Two years before, between my junior and senior years in high school, I had had a summer job in an "experimental" department in the local Westinghouse plant. I was unable to figure out what the department was doing, and the bosses made it very clear that you weren't supposed to try. The allusion to uranium in the paper, however, triggered a flashback—I remembered talking one time to an engineer in charge of a bank of electric furnaces and glancing at an engineering handbook opened to the dog-eared, heavily underlined pages on uranium. Of course, I didn't make the connection then; there were many things undreamed of in high school physics in those days.

At Westinghouse, my job as a messenger was necessary because the department was scattered in bits and pieces over several buildings of the massive, multistory plant. My main task was to make the rounds with mail and messages and, sometimes, with heavy, gritty metal "buttons" the size and shape of small hockey pucks.

However minor, my job was a link to the larger scheme of things. I worked 6 days a week and about noon every Saturday reported to the boss's office to pick up a thick manila envelope full of production reports. I would catch a Lackawanna train to Hoboken and then the 23rd Street ferry across the Hudson. In Manhattan, I would take a crosstown bus to Madison Square, enter a building there, identify myself to one of the guards, and hand over the envelope. The sign on the entrance said Manhattan Engineer District, which seemed logical enough at the time. Two years later, of course, Bingo.

How did a 16-year-old high school kid wind up carrying atomic secrets around? Easily enough. The coach of my church basketball team, a chemical salesman in secular life, knew one of the engineers at Westinghouse and passed on word of a job.

Despite the wartime labor shortage, teenagers, as they were about to be called, did not have the pick of jobs in post-Depression New Jersey. I had an interview that spring and filled out the usual forms; what happened next was anything but routine. One day, the barber who cut my hair said that a "G-man" had been asking questions about me

* "A Background Report for the Formerly Utilized Manhattan Engineer District/Atomic Energy Commission Sites Program," available from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22161.

0036-8075/81/0619-1369$00.50/0