

In 1962 Sternglass became even more troubled. He was then chairman of the Pittsburgh FAS and another great national debate was shaping up—this one over the need for a nuclear test ban treaty. Sternglass came across two articles in 1962 that influenced him greatly. One article noted that there had occasionally been unusually heavy fallout in certain localities, such as the Albany-Troy area in New York in 1953. The other confirmed that diagnostic x-rays given to pregnant women seemed to be associated with increased cancer in the children. Sternglass put the two ideas together and concluded that fallout—like the x-rays—might also damage unborn children. “I said to myself: ‘By God, this really means we must worry about fallout,’” Sternglass recalls. “‘By God, we had better get a test ban.’” Sternglass put his ideas down on paper and ultimately, after an initial rejection, got the paper published in the 7 June 1963 issue of *Science*.

The paper in *Science* was controversial at the time, and it remains controversial, but Sternglass believes it played a role in the government deliberations that led to the atmospheric test ban treaty that was signed in 1963. Early that year, even before the paper was accepted by *Science*, Sternglass sent a draft copy of it to Arthur M. Schlesinger, Jr., then a special assistant to the late President Kennedy. Sternglass is under the impression that Schlesinger passed the paper on to Jerome B. Wiesner, Kennedy’s science adviser, and that Wiesner, after checking it out with a prominent Nobel laureate, then showed it to the President and used it as another argument demonstrating the need for a test ban. The only evidence Sternglass can produce to document his impression of events is an inconclusive, but nevertheless intriguing, letter from the assistant librarian at the British Ministry of Health, dated September 1963. The letter asks for a copy of Sternglass’ paper and says: “Our attention has been drawn to your report on the effects of the last round of Russian and American nuclear tests, which I understand was presented to the President of the United States on 10th June.”

Schlesinger told *Science* he doesn’t recall anything about the Sternglass paper. Wiesner told *Science* he “vaguely” remembers getting the paper but he doesn’t recall showing it to the President. Wiesner says the fact that he remembers the paper indicates it was a “non-trivial input” into the test ban

deliberations, but he says it was certainly “not a major factor at that time.”

After Sternglass’ report appeared in *Science*, numerous arguments were raised to dispute its conclusions, including one argument which Sternglass found “devastating.” The New York State Department of Health published a table of leukemia cases in children in the Albany-Troy-Schenectady area along with a statistician’s note saying the 1953 fallout did not seem to be connected with the leukemia incidence in children born in 1953. Sternglass, who had been assuming that the fallout radiation would do its damage to children while they were *in utero*, was temporarily stumped. But several years later he noticed a paper suggesting that x-rays cause genetic damage and he “suddenly realized that my suspicions were right about Albany-Troy.” He concluded that fallout—like the x-rays—might cause genetic damage and that this would affect children who had not even been conceived at the time of the fallout. Sternglass wrote to the New York State Health Department asking for more data on Albany-Troy and got back what he regards as a “vicious letter” refusing to supply him with any

more data. But he says the problem “kept nagging me—I felt there was some fantastic thing that needed to be brought out.” At the June 1968 meeting of the Health Physics Society in Denver, Sternglass presented a new paper arguing that fallout radiation had caused a doubling of leukemia in Albany-Troy over an 8-year period, partly as a result of genetic damage. He submitted his paper to *Science* but it was criticized sharply by the reviewers and ultimately rejected.

Since the middle of last year, Sternglass has been trying to buttress his theory with new evidence. His motivation, at least in part, is frankly political. Last October, Sternglass began to get “worried about the election.” He noted that Richard Nixon’s scientific advisers included Edward Teller, Willard Libby, and others whom he regards as advocates of nuclear testing. He also noted that General Curtis Lemay, vice presidential candidate on the American Independent Party ticket, made a speech in Pittsburgh asserting—as Sternglass recalls it—that the only ill effects of nuclear testing were “a few hot crabs at Bikini.” Says Sternglass: “I realized the battle was only beginning. I had to find

House Threatens Unrestful Colleges

The House of Representatives has aimed an angry jab at colleges and universities in which there have been student disturbances about military presence on the campus.

A section of the House military procurement authorization bill, which passed the House by an overwhelming vote on 3 October, would hold up all Department of Defense research contracts or grants to a university or a university employee until 60 days after the filing of a report with Congress. The report, which presumably would be filed by the Defense Department, would state, among other things, “the record of the school, college, or university with regard to cooperation on military matters such as the Reserve Officer Training Corps and military recruiting on campus.”

There is nothing in the bill indicating what Congress might do if it were dissatisfied with one of these reports, and it is not clear what Congress *could* do. The Senate version of the military authorization bill did not include this provision, and a House-Senate conference committee was to decide whether the provision would become law.

Both the Defense Department and the White House Office of Science and Technology opposed the reporting provision. One OST official, Hubert Heffner, suggested that the provision, ironically, might encourage the kind of protest Congress seeks to punish. If a student wishes to get the university out of military research, Heffner said, “all he has to do is be nasty to ROTC and the implication is that defense funds to the university will be cut off.”—JOEL R. KRAMER

Joel R. Kramer, a recent Harvard graduate, has joined Science as a news intern.