

dissipate the energy as heat. In late 1983 they will step up to the more powerful method of neutral beam injection, wherein the plasma is simultaneously heated and refueled by beams of high-energy atoms. Meanwhile, for simplicity's sake they plan to work with hydrogen or deuterium plasmas until the end of 1985, since these isotopes do not undergo the fusion reaction. Only in early 1986 will they attempt a plasma of deuterium and tritium, which do fuse. If all goes well, TFTR should achieve energy break-even that year.

It may not be the first, however. JET, a similar device in the United Kingdom, is scheduled for completion this summer. The Soviet Union's T-15 is only somewhat further off, and Japan has already begun assembly of its JT-60. Japan's effort is particularly impressive, says Steven O. Dean, head of Fusion Power Associates and a recent visitor to that country. The Japanese are already spending twice what we do on fusion research, he points out, and their program seems to have considerably more momentum and direction. Next door to the JT-60 site, he notes, is a big vacant lot labeled "future power reactor."

—M. MITCHELL WALDROP

School Says Researcher Synthesized Results

Officials of Mount Sinai medical school in New York are seeking to set things straight after an investigation in which they say a researcher admitted he misrepresented work he did while at the school.

The research in question was done by Joseph H. Cort, who was at Mount Sinai as an adjunct professor between 1976 and 1980. Cort's work was funded primarily by the Vega Biotechnologies Company of Tucson, which had exclusive rights to drugs developed as a result of his research.

Dr. Cort told *Science* that the version of the Mount Sinai report he had seen contained "many mistakes" and on the advice of his attorney would not comment on the matter "until a later date."

Mount Sinai made public details of its own investigation of the matter in an official statement released in late

December. Included was the finding that "Dr. Cort reported certain data and conclusions not supported by adequate scientific research. It is important to note that none of Dr. Cort's research at Mount Sinai was performed on humans."

Mount Sinai launched a 10-month investigation last February when Vega informed school officials that Cort, who was then working for the company in Tucson, admitted that he had fabricated research data while at Mount Sinai. The medical school, which is affiliated with Mount Sinai Hospital and City University of New York, immediately established an internal fact-finding group. In May the group reported its preliminary findings to a review committee which included members from the Harvard and University of North Carolina medical schools. The fact-finding panel completed its work in early December. Mount Sinai president and dean Thomas C. Chalmers said that the results of the investigation were communicated to the National Institutes of Health (NIH) and that the school also is notifying the U.S. Patent Office and scientific journals with which Cort had dealings. A spokesman for the school says that NIH was informed immediately after formation of the fact-finding group that an investigation was in progress and the reasons for it. Cort had applied unsuccessfully for an NIH grant, but had received minor support from a general NIH grant to the department of physiology and biophysics to which he was attached.

Cort's career as a researcher took an unusual tangent after he became the center of a political controversy at the height of the Cold War. An American citizen with degrees from Harvard and Yale medical schools, he was on a fellowship in England in 1951 when he was ordered by the U.S. Embassy in London to return to the United States. According to a *New York Times* story, Cort, who had been a member of the Communist Party as a student, refused to return on grounds that the intention here was to prosecute him as a subversive. He was later indicted on charges of draft evasion and, when he was refused permission to stay in England, he took up residence in Czechoslovakia. In Czechoslovakia he became associated with a group of organic chemists working to alter the molecular struc-

ture of synthetic hormones to increase their effectiveness as drugs.

Despite a ruling favorable to him by the Supreme Court in the 1960's, the indictment against Cort was not dismissed until 1975. The next year he returned to the United States and took up the research post at Mount Sinai, which he obtained as a result of contacts made earlier at international scientific meetings. Cort's agreement with Vega dated from 1979.

At Mount Sinai he continued the line of research in which he had been engaged in Czechoslovakia. A focus of the medical school investigation was Cort's claim that he had synthesized five analogs of vasopressin, a substance which increases the level of a clotting factor which is missing or reduced in the blood of hemophiliacs. Cort had reported that he had developed five vasopressin analogs which did not cause the side effects that have prevented vasopressin's use in the treatment of hemophiliacs. The analogs had figured in an issued patent, several published and unpublished articles, and the NIH grant application. The Mount Sinai statement said that Cort had admitted to the panel reporting results on an analog that had not been synthesized and the panel found no evidence that another of the analogs had been synthesized. The panel also discovered inadequacies in documentation for biological testing in animals and discrepancies in the records on the synthesis of two hormone antagonists with a potential for use as a means of birth control.

Vega terminated Cort's contract when he admitted the falsification of data. The *Times* story quoted Cort as attributing his actions to pressures not to be beaten filing for patents and saying his main motive was to save the company and gain further support for his research.

Chalmers says that he is proposing new policies and procedures to "assure the integrity of scientific research at Mount Sinai." These include more regular review by faculty of their colleagues' work, increased responsibility of department chairman and division chiefs to assure that work meets the highest scientific standards, and a new permanent committee of trustees, administrators, and senior faculty to recommend new policies and generally oversee research practices.

—JOHN WALSH