

## DES Surprises Medical Researchers Again

In 1971, the medical community was rocked by the news that diethylstilbestrol (DES), long used as an aid to pregnancy, was linked to a rare vaginal tumor in daughters of women who took it. Now, another DES surprise may be in the offing: This synthetic estrogen apparently does not cause cancer by the mechanism researchers had tagged as the relevant one.

The story began a few months ago when a group at the National Institute of Environmental Health Sciences (NIEHS) led by molecular biologist Jeffrey Boyd began taking another look at DES. Boyd's team employed the polymerase chain reaction (PCR)—a technique for extracting genetic information from small bits of DNA—to study how DES might have induced mutations in cancer genes two decades ago. First, they obtained archived samples of vaginal tissue from women who suffered from DES-linked cancer in the early 1970s. Then Boyd's group and collaborators at the M.D. Anderson Cancer Research Center in Houston began searching for DNA mutations in genes such as the *ras* oncogene and the *p53* tumor suppressor gene.

After studying more than a dozen tissue samples, Boyd told *Science* that so far they have found "absolutely nothing." That deflates the theory that DES acts similarly to many other chemical carcinogens, says Boyd, who adds that the next step will be to search for other mechanisms. The results should prevent wasted effort at the National Institutes of Health, which has just launched a congressionally requested program to investigate, among other things, how DES causes cancer.



**DES legacy.** Twenty-year-old tissue with cancerous lesion.



**Magnet for trouble.** SSC components may lose funding from Taiwan.

## SSC Fans Launch Direct-Mail Campaign

You might think a \$50 million contribution from Taiwan would not be a big deal to the \$10 billion Superconducting Super Collider (SSC), but with Congress sharpening its budget ax, the project needs all the help it can get. So when the outgoing head

of Taiwan's National Science Council announced last month that the nation would withdraw its pledge, Department of Energy (DOE) officials pulled out some big guns to try to woo them back. But now at least one physicist seems to feel that DOE went too far.

Earlier this month, DOE asked several eminent U.S. scientists of Chinese descent, including Nobel laureate physicists T.D. Lee and Samuel Ting, to write letters supporting the SSC to the Taiwanese science council. In a letter dated 18 March, Ting assures the council that a SSC collaboration "will be beneficial to both Taiwan and the U.S." However, *Science* has learned that Ting

told colleagues that he was pressured to write the letter by Wilmot Hess, director of DOE's high-energy and nuclear physics program.

Ting was traveling and unavailable for comment. But a letter obtained by *Science* seems to indicate Ting's displeasure. In a curt note dated 18 March, Ting told Hess that "many outstanding members of the Academy of Sciences in Taiwan strongly object [to] Taiwan's involvement" in the SSC. Ting concludes: "It is my understanding that after my letter today I will not be asked to participate in other efforts about Taiwan..." When *Science* called Hess and asked if he had pressured Ting to write the letter to the council, he answered no and hung up. Meanwhile, the collaboration remains up in the air, pending an ongoing review by the new Taiwanese science council head.

## Scientist's Salary Remark Raises Hackles

Federal scientists have griped long and noisily about the low pay they get compared to their peers in academia and industry. Now, National Institutes of Mental Health (NIMH) researchers are grumbling louder, after an editorial in *The Wall Street Journal* on 9 March implied that the claim of a salary gap might be much ado about nothing.

The article by NIMH scientific director Steven M. Paul criticized Bill Clinton for attacking drug company profits. Paul, who is leaving the government this month to join the drug giant Eli Lilly & Co., argued that Clinton's criticism of drug companies might indirectly curtail drug research. But he also wrote, "The attraction of my new job is not primarily financial; my salary here at NIMH is more than comfortable."

That claim was quickly disputed. Several NIMH researchers contacted by *Science* agreed that government attacks on the drug industry might affect research but insisted they don't share Paul's sentiments on NIMH salaries. Paul is comfortable, they say, be-

cause he has other sources of income, including a psychiatric practice.

Contacted by *Science*, Paul said that he had made a "misstatement" about the adequacy of NIMH pay. Although happy himself, Paul says that in general "government salaries are a real disincentive to recruitment and retention."

So what exactly lured Paul to industry? His answer to that was also inflammatory to some NIMH researchers. In the editorial, Paul explained that Lilly provides a better atmosphere for drug discovery. Paul's views about "what we in the public sector can and can't do," complains one NIMH researcher, "left a bad taste here."

## Shared Sacrifice on Tox Testing?

When environmentalists and representatives from industry, labor, and the public gather at a federal building, it's usually a courthouse and it's not to trade war stories. Earlier this month, however, these groups met at the National Institutes of Health to give advice on the future of the National Toxicology Program (NTP), the main government lab for testing the health effects of chemicals. Indeed, the disparate groups did find a common ground: None wants to pay for more testing.

The NTP has come under fire recently because it tests fewer chemicals each year. That in part has prompted Ken Olden, director of the National Institute of Environmental Health Sciences (NIEHS) and head of NTP, to say he'd like to see the NTP test more chemicals and do more work on the mechanisms of toxicity (*Science*, 5 March, p. 1398).

Most participants endorsed these goals. But when NIEHS officials asked who'd foot the bill for more tests, the buck they tried to pass hit them like a boomerang. Environmentalists and labor reps wanted industry to pay, perhaps through fines for breaking pollution laws. But industry reps said they were paying plenty already; the money just needs to be spent more wisely.

In the end, everyone agreed that the "partnerships" that Olden was calling for between NTP and the outside community would be more intellectual than financial. If Olden wants the NTP to test more chemicals, one participant suggested he ask Congress for a larger budget—a tough task considering that last year Olden failed to win just that.