

Industry Readies for Interferon Market

Spurred by signs of clinical success, a number of groups are pumping additional millions into the manufacture and clinical testing of interferon, the protein produced by virus-infected cells that fends off viruses and apparently some types of cancer. G. D. Searle & Co. of Chicago announced on 4 March that it will soon begin the largest clinical trial yet of fibroblast interferon, a type not yet extensively studied. Searle and Abbott Laboratories of Chicago have separately announced plans to boost production of the drug.

The American Cancer Society (ACS), meanwhile, announced on 25 February that it will add \$3.4 million to a study of leukocyte interferon, in which it has already invested \$2.4 million. The additional dollars will enable the society to more than double the number of patients, now 150, being treated. Saul B. Gusberg of Mount Sinai School of Medicine, the national president of ACS, said [in a statement] that results of the clinical trial so far were "promising." He added that "the unprecedented size of the society's appropriations for interferon is due to the very high cost of the material. There is little expectation that much less expensive material will become available for research purposes in less than 2 to 3 years."

Lured by the potential market, more than a dozen firms are now planning to make one or more of the several kinds of interferon, according to Nelson Schneider, a drug industry analyst for the investment firm E. F. Hutton. Initial investments already may have reached \$100 million, he said. "If the drug works the way some people think it does, you could be talking about the forerunner of a line of products with an impact like antibiotics, which has a \$15 billion market worldwide with a lot more than a dozen companies involved." Leukocyte interferon, made from white blood cells from blood donors, costs about \$50 per million units. A daily dose costs about \$150 and a course of treatment can run to \$30,000. Although much of the \$3.4 million will go for purchase of additional interferon, ACS expects that "substantial amounts" will go into

projects aimed at purifying the material and increasing its production.

Daniel Azarnoff, senior vice president of Searle's research and development division, said the company hopes to make fibroblast interferon at a cost of only \$25 per million units. Beginning in about a month, Searle will test the drug on 30 cancer patients at M. D. Anderson Hospital and Tumor Institute in Houston, Texas.

A Cramp in Fermilab Style

Robert Wilson, who designed and built the Fermi National Accelerator Laboratory at Batavia, Illinois, always prided himself on the aesthetics of the place. The main body of the accelerator, which runs through a 4-mile tunnel, is painted bright red, blue, and yellow. Over the main entrance to Fermilab is a 30-foot-high sculpture that Wilson made out of scrap iron from the deck of a decommissioned battleship. Now, under pressure from the Department of Energy (DOE), the Wilson tradition is suffering something of a setback.

J. K. Mansfield, DOE's Inspector General, in a 14 January report to DOE Secretary Charles Duncan, said a 1976-1977 audit indicates the lab spent at least \$47,000 in federal funds on such "aesthetics and amenities" as stained-glass elevator ceilings and jewelry for retiring employees. "It is fundamentally wrong for DOE to fund amenity-type projects of the kind discussed in our report," Mansfield said in an accompanying letter. The letter contrasted the situation at Fermilab with conditions at the nearby Argonne National Laboratory at which, he reported, "There are extensive leaks in many of the roofs of the prefabricated buildings that dot the Argonne site."

The DOE report listed the following expenditures by Fermilab officials: \$11,965 for stained-glass elevator ceilings, \$9,819 for a conference table, \$7,310 for a dining table, \$4,340 for jewelry, and "various plaques and personal gifts totaling about \$3,700."

Leon Lederman, who now directs Fermilab, says he has now clamped a \$15,000 ceiling on "aesthetics and amenities" and has cut back on the

staff of the Fermilab model shop, where many of the amenities were produced. But he made it clear that the Wilson tradition is not dead.

"The lab must be a place of beauty," he said, "both to attract scientists and to relate to people who come for sightseeing. They're the taxpayers."



Leon
Lederman

It's their money. It's not easy to explain what we're doing. It's an abstract program so it is important to know that science and aesthetics are related."

In any case, he added, "I think the bookkeeping made it look much worse than it was and that's why the Department of Energy didn't really come down on me hard, because they understood it. And then I promised I would monitor the thing more closely and try to err on the side of austerity."

A Bank for Nobel Sperm

"I'm very excited about this," wrote one of the women. "I'm tentatively going to select Number 13 because he is the youngest of the donors and has the highest IQ."

Number 13 is one of five Nobel prize winners who have contributed to a sperm bank founded by California business tycoon Robert K. Graham. Three women, according to a front-page story in the 29 February Los Angeles *Times*, are now pregnant after being artificially inseminated with Nobel sperm.

Graham, 74, a developer of plastic lenses for eyeglasses, was a friend of the late Hermann J. Muller, who won the Nobel prize in 1946 for his work in genetics and who advocated sperm banks for famous, exceptional people—not just Nobel prize winners. After Muller died in 1967, Graham began to write Nobel laureates, asking