

## Army Releases Report on Biowarfare Lab

A new facility that the U.S. Army plans to build in Utah to test defenses against biological warfare agents is unlikely to escape soon from a legal dispute that has held up construction for the past 2 years. Last week, the Army filed a court-ordered draft report on the proposed facility in which it concluded that the laboratory would pose virtually no environmental or health hazards. The document was, however, promptly labeled "grossly inadequate" by the facility's leading critic, activist Jeremy Rifkin, who threatened further legal action if the report is not "radically transformed."

The proposed facility, to be located at the Army's Dugway Proving Ground 70 miles southwest of Salt Lake City, would be one of only about half a dozen maximum containment laboratories in the United States. It would be designed to generate aerosols containing highly infectious organisms that might potentially be used as biological warfare agents. The prime purpose would be to test the degree to which the agents would penetrate protective devices.

The report concludes that the only foreseeable route by which a test organism could enter the environment would be through accidental infection of a laboratory worker. The probability of such an infection is less than 1 per 550 person-years, the Army says. Rifkin, who filed suit in 1985 to halt construction of the laboratory pending completion of an environmental assessment, charges that the report fails to consider other routes, such as sabotage, and did not adequately discuss the use of simulants instead of infectious organisms. ■ C.N.

## Investor Takes Major Position in BioTechnica

BioTechnica International, Inc., is turning to an undisclosed "institutional investor" to provide up to \$50 million over the next 4 years. The Cambridge, Massachusetts, company plans to use the cash to fund development and production of a range of genetically engineered crops, bacteria, and industrial proteins.

This is the fifth time since the company's initial capitalization in 1981 that BioTechnica has turned to outside investors for funds to keep its R&D programs moving forward. The first portion of this new financing is for a total of \$25 million. The institutional investor is picking up a 26% equity

position in the company for \$10 million.

Another \$15 million has been advanced in the form of 8.75% interest-bearing notes that may be converted into common stock at the option of the company. Joanne L. Yestramski, vice president for finance at BioTechnica, says the new investor could end up as the dominant stockholder, owning 46% of the company's voting stock.

An additional \$25 million may be provided to BioTechnica in exchange for non-voting common stock valued at \$8.10 a share. The new financing is drawing mixed reactions from analysts. While it may ensure that the company can get its products from the laboratory to the market, some control is being relinquished. ■ M.C.

## Bullish on Genentech

Genentech, the 12-year-old flagship of the biotechnology industry, could gross revenues of \$440 million to \$521 million in 1988, according to projections by two optimistic stock market analysts. Activase, the company's brand of tissue plasminogen activator (TPA) could produce upwards of \$350 million in sales alone, according to Kathleen Behrens of Montgomery Securities in San Francisco.

The clot-dissolving drug, which is being used to treat heart attack victims, produced \$56 million in sales for the company in the last 5 weeks of 1987. Linda I. Miller of PaineWebber, Inc., projects that the company's earnings per share will rise from 50 cents to \$1.50 in 1988. Behrens is more optimistic, projecting \$1.75.

The company's revenues were bolstered not only by TPA, but by a 95% increase in sales of its recombinant human growth hormone, Protropin. Sales hit \$85.5 million in 1987 and Behrens estimates they could rise to \$100 million in 1988. Some analysts had predicted that revenues from the drug would only climb to \$60 million. Even that projection was suspect for a time after the Food and Drug Administration approved a competing product, Humatrope, which is made by Eli Lilly, Inc. (*Science*, 20 March 1987, p. 1454).

With net, after-tax income for the company rising to \$42.2 million in 1987, Genentech is operating solidly in the black. PaineWebber's Miller predicts that it will reach \$128 million in 1988 and \$221 million in 1989.

Not all analysts, however, are as bullish as Miller and Behrens. Stuart Weisbrod of Prudential-Bache predicts that Genentech will gross \$360 million in 1988. Activase sales will account for \$181 million and Protropin \$88 million, he says. ■ M.C.

## Beagle Theft at Irvine

The University of California at Irvine suffered its first hit from animal activists the night of 29 January when members of the Animal Liberation Front broke into some outdoor dog runs and made off with 13 beagles from the Air Pollution Health Effects laboratory.

Laboratory director Robert F. Phalen says 11 of the stolen animals were from a group of 20 used in painless experiments to assess the effects of air pollution. They were trained to run on a treadmill wearing masks that feed in pollutants and monitor lung functions. Two of the beagles, from another lab, were wearing implants in their throats for research on sleep apnea.

"We thought we would be the last research lab ever to be hassled by this group," says Phalen. He says the lab got high marks in a recent inspection and that researchers were very attached to the dogs. "I am considered a highly ethical person," says Phalen, who has long been concerned with research ethics and gives speeches on proper use of animals. He also does not like to kill animals, and some years ago arranged for the university to give away as pets animals whose research career was over.

Phalen says the liberation front explained in a letter to the *Los Angeles Times* that the Irvine lab was targeted because of its easy accessibility and because the medical school, where the lab is located, is one of the country's fastest growing research institutions. ■ C.H.

## Researcher Held in Kenya

A representative of the AAAS was arrested and detained for 8 hours in Kenya on 11 January while attending the inquest of a suspected member of an antigovernment organization who died in police custody.

Robert H. Kirschner, deputy chief medical examiner from Chicago, was in Nairobi attending the inquest on behalf of the AAAS Committee on Freedom and Responsibility. He and retired New York judge Marvin Frankel, who was there representing the Lawyers' Committee for Human Rights, were taken from the courtroom and subjected to interrogation by Kenya's internal security police, who accused them of subversive activities. They were released following intervention by the American embassy.

According to human rights groups, illegal arrests and detentions have increased sharply in the past year in Kenya as president Daniel arap Moi has sought to crack down on Mwakenya, an antigovernment underground movement. ■ C.H.