

## NEW REPORT STRESSES BENEFITS

**SCHOOLS NOT THREATENED BY CORPORATE FUNDING**

NEW YORK—Agreements between biotechnology companies and universities have some unique characteristics when compared to other disciplines, but do not represent a grave threat to academic integrity. This is the conclusion of a report titled *The Science Business*, published this summer by the Twentieth Century Fund.

The report, prepared by a task force on conflicts in the commercialization of scientific research, states, "With common sense and the adaptation of principles formulated in the course of these relationships, we believe that universities can deal with the problems posed by the commercialization of biotechnology." Biotech has brought the issue of academic-corporate relations to the fore because many university molecular biologists now maintain corporate connections. The blurry distinction between basic and applied research in this field and the large number of small, venture capital-stage companies making agreements with university researchers have raised new concerns about such liaisons.

The Twentieth Century Fund's panel of 14 scientists, university administrators, corporate executives, and venture capitalists suggests the university take steps to ensure its own interests because corporations surely will do the same for themselves. It recommends that the university

- Insist that faculty members give priority to university research and teaching. This should be determined not on a strict time basis, but by the quality of academic performance.
- Require that faculty members disclose their commercial connections within their field. Neither the exact financial arrangements nor the ownership of stock in companies outside the person's field need to be made public.
- Divvy up corporate monies between departments to prevent jealousy from disciplines, such as philosophy, that receive little industrial support.
- Refuse to own stock in companies in which faculty members have a pivotal role. Additionally, the university should not grant exclusive licenses to such companies.
- Gain title to any patents that result from projects funded by companies.
- Insist that publication of research not be postponed for more than two or three months because of patent precautions.
- Determine and publicize its policy on distributing royalty income be-

tween itself and the scientist.

- Not give up an entire field or department to a company.

Despite a background paper by Nicholas Wade of the *New York Times* stressing the importance of not contaminating the university system with ill-advised commercial interests, the task force concludes that the benefits of cooperation outweigh the risks. Industry gains prestige, access to new technologies, and contact with personnel for eventual recruitment. Uni-

versities benefit both monetarily—an aspect that could actually *increase* their independence—and via exposure to the practical applications of their research.

"We're not Pollyannas about the subject at all," says Robert L. Sproull, president of the University of Rochester and chairman of the task force. "There are a lot of elephant traps out there and I hope this report will help people to avoid them."

—Arthur Klausner

## ISRAELI PHARMACEUTICALS

**FIRST COMMERCIAL INTERFERON**

REHOVOT, Israel—Inter-Yeda, an Israeli pharmaceutical company that has strong research links with the Weizmann Institute of Science, has just launched the first interferon-containing medication approved for commercial distribution outside the socialist bloc. The new preparation, PRONE, contains beta interferon produced by tissue culture of fibroblasts from human foreskins.

The source of the tissue, not surprisingly, has evoked a number of more-or-less ribald remarks in Israel, all the more so since the official launching of PRONE virtually coincided with the publication of a report to the government, drawn up under the chairmanship of Dr. Ephraim Katchalski-Katzir, on Israel's prospects and potentialities for biotechnology. (The report, like such government documents everywhere, comes somewhat after the event. Israel already has some 20 private companies with a major commitment to, or specially established for, biotechnology, working on products as diverse as citric acid production by fermentation and the development of vaccines against poultry diseases.)

Inter-Yeda itself is one such com-

pany. It is partly owned by the Yeda Research and Development Co., the firm set up to handle the commercial exploitation of research results from the Weizmann Institute. (The word "Yeda," which also occurs in "Bio-Yeda," another biotechnology company using Weizmann know-how, appropriately means "knowledge.") The research team that developed PRONE was headed by Professor Michel Revel, Professor of Virology at the Weizmann Institute, who is now working on alternative methods of large-scale production of human interferon by genetic engineering—alpha and beta interferon from genetically engineered bacteria and beta and gamma interferon from DNA-altered hamster cells.

PRONE was initially approved in Israel in the form of a cream for topical use, to treat genital and facial herpes and also varicella zoster (shingles). Eye-drops and intramuscular injections containing PRONE have already been approved for general distribution on prescription in Italy and Argentina, and are available for experimental use in Israel, where approval for general distribution is expected shortly.

—Vera Rich

**BIOTECH BRIGHT SPOT IN SOVIET INDUSTRY**

MOSCOW—The Soviet media coverage of this year's "Chemical Workers' Day" (one of the many such annual festivals established to replace the old Saints' Days) this year paid special attention to the All-Union Institute of Genetics and Industrial Microorganism Selection. Achievements singled out by Moscow Radio and TASS included a process for the production of lysine (now being implemented on a large scale), experimental work on

the production of insulin by modified *Escherichia coli*, and a recently completed project to produce a microorganism that can produce riboflavin more efficiently than the strain now in use. The glowing reports of the Institute's work were in sharp contrast with the majority of speeches and reports marking the day, which gave a gloomy overall picture of unfulfilled targets and failure to meet contract deadlines.

—Vera Rich