

CONGRESS

SUBCOMMITTEE ON OVERSIGHT EXAMINES BIOTECH

WASHINGTON, D.C.—Amid the confusion of end-of-the-year business, a House of Representatives subcommittee held a disparate hearing here on the status of federal involvement in biotechnology. Witnesses addressed topics ranging from biological weaponry to orphan drugs in an attempt to update the oversight and investigations subcommittee of the Committee on Energy and Commerce. In the absence of subcommittee chairman John D. Dingell (D-MI), Ron Wyden (D-OH) presided over the session. Only a handful of representatives sat in on the meeting, which was interrupted frequently by voting calls on the House floor.

David Blumenthal (Center for Health Policy Management, Harvard University, Cambridge, MA) described the status of industrial support of university research in biotechnology. Forty percent of the biotechnology companies he surveyed report that at least one of their trade secrets has evolved from research they have sponsored at universities. And 17–23 percent of all patent applications that these firms have filed have resulted from such investments.

Blumenthal's study, which is still not complete, surveyed 106 biotechnology companies in the spring of 1984. He found that almost one-half of the companies fund some kind of biotech research at universities, and he estimates that in 1984 industry provided about \$120 million for biotech research. This made up about 20 percent of total research funding in biotech to universities—four times the level in other industries. Blumenthal added that a previous study of close to 100 universities found that more than 90 percent of them receive some industry funding for life sciences research.

Blumenthal suggested to the subcommittee that, through mechanisms like improved protection of intellectual property, the government tries to reduce the tendency of researchers to keep results secret. He also advised the government to continue to support research and training in biotechnology as a way of helping academic researchers negotiate workable agreements with companies, and to ensure continued U.S. competitiveness in biotech.

Also during the hearing, Alan

Goldhammer (Industrial Biotechnology Association, Rockville, MD) warned that government regulatory agencies could find themselves overwhelmed with product approval applications if they do not take on necessary personnel. He added that current strictures on the export from the U.S. of drugs not yet approved by the Food and Drug Administration discourage U.S. companies from developing important products—such as vaccines for tropical diseases—for which U.S. regulatory approval is irrelevant.

Marc Lappé (Hastings Center, Hastings on Hudson, NY) averred that, for a technology as important as biotech, the government must provide incentives to make financially unattractive but “socially relevant” projects (such as vaccines and biomass conversion) desirable to industry. Robert Nicholas (Blum, Nash and Railsback, Washington, D.C.) made a similar point for the issue he addressed—hazardous waste disposal—and he added that current regulatory uncertainties serve as additional disincentives to commercial development.

—Arthur Klausner

CORPORATE DEVELOPMENT

BIO LOGICALS REASSESSES ITS BIOLOGICAL R&D

TORONTO, Ont.—Is Bio Logicals getting out of the biotechnology business? No, reports chairman Alan Grieve, but the company isn't exactly forging ahead boldly either. In fact, the firm recently declined to exercise its option to buy 50 percent of International Genetic Sciences Partnership (IGSP, Research Triangle Park, NC).

Formed back in 1978 to commercialize DNA synthesizers and sequencers, Bio Logicals abandoned gene machines a few years ago and seemed content to sit on approximately \$10 million it had stockpiled from a 1981 public stock offering. Early last year, however, the company came out of its dormancy, emerging with somewhat of a split personality: Bio Logicals acquired a supplier of telecommunications equipment called Tele-Radio Systems Ltd., and it also signed an option to pay \$2 million for a half interest in IGSP, an equal partnership between International Genetic Sciences Inc. (Jamaica, NY) and First Mississippi Corp. (Jackson, MI). IGSP, which maintains laboratories in Jerusalem, has developed a technology that uses fusogenic vesicles as a

kind of “biological hypodermic” to transfer macromolecules such as DNA into plant or animal cells.

“To some extent,” said Grieve last summer, “the direction of Bio Logicals will be influenced by whether we take up the option on IGSP.” In dropping the option last fall, Grieve explained that IGSP's gene transfer technology could take eight or more years to commercialize, and Bio Logicals wants to start making profits soon. Bio Logicals' vice president of operations, Sam Asculai, remains president of IGSP, because Bio Logicals has agreed to run IGSP under contract to First Mississippi.

Although only seven people currently work full-time for Bio Logicals, Grieve reports that the firm supports some 25 additional researchers at various institutions in Canada. The company's main biotechnology project involves bacterial leaching of minerals, and Grieve says Bio Logicals may decide to build a large pilot/production plant to be ready in the spring of 1987. If the company goes ahead with this plan, total R&D expenditures for 1986 could top \$1 million. Otherwise,

he says, \$500,000 in R&D will be more likely.

Now divided into a Telecommunications Group and a Biotechnology Development Group, Bio Logicals maintains three additional biotech projects:

- a joint venture with the Alberta Research Council that focuses on process technology;
- an agreement with Bristol-Myers for the screening and synthesis of possible antiviral compounds developed at McGill University; and
- research at Laval University on the cultivation of edible mushrooms.

Grieve now looks at Bio Logicals' business as somewhat akin to venture capital: the company puts in money to sponsor speculative research and then decides whether it wants to commit to that research. In fact, the company plans to invest \$300,000 in SPURT I, a high technology venture capital pool set up by a subsidiary of Alberta Telephone. “What you're seeing,” concludes Grieve, “is an attempt to move the focus of what we're doing based on what we've already learned.”

—Arthur Klausner