

CHRONICLE

Dental applications of liposomes are being researched in a collaboration between Technology Unlimited (Wooster, OH) and the Ohio State University Research Foundation. The Edison Seed Development Fund recently awarded the team \$50,000 for the development of liposomes that stick to teeth and gradually release drugs to fight tooth decay and dental diseases.

Biotech products continue to march through regulatory pipelines:

- Novo Industri A/S (Copenhagen) received approval concerning environmental matters for its new fermentation plant in Kalundborg, Denmark. The plant is scheduled to begin producing human insulin via genetically engineered baker's yeast in 1987.

- Interferon Sciences (New Brunswick, NJ) filed with the FDA for approval to market Alferon™, its alpha interferon product for treating genital warts.

- Monoclonal Antibodies' (Mountain View, CA) ovulation test received marketing clearance from the FDA. The test, trade-named Ovutime®, will be sold by Ortho Pharmaceutical Corp. (Raritan, NJ).

- Genentech's Protropin® recombinant human growth hormone received orphan drug status for the treatment of growth hormone deficiency and Turner's Syndrome.

New financing was achieved by the following firms:

- Calgene (Davis, CA) raised \$5.6 million in equity financing.

- Two Berlin venture capital companies, VCG (VC Gesellschaft für Innovationen mbH) and WBB (Wirtschaftspartner Beteiligungsgesellschaft mbH) each purchased a 24.5 percent share of Biosyntech (Hamburg, F.R.G.).

- T Cell Sciences (Cambridge, MA) completed a \$2.6 million equity financing.

New agreements include:

- Nova Pharmaceutical Corp. (Baltimore, MD) and Eastman Kodak (Rochester, NY) will use Nova's screening system to analyze chemicals from Kodak's chemical library, which contains more than 500,000 compounds.

- American Scientific Products (McGaw Park, IL), a division of American Hospital Supply Corp., agreed to distribute the pregnancy

and ovulation test products made by Monoclonal Antibodies.

- PruTech Research and Development Partnership II invested \$7.2 million in Ecogen (Langhorne, PA) to fund development of biological insecticides against cotton pests.

- L'Oreal (Paris) signed an option agreement with University Genetics (UGEN, Westport, CT) to license UGEN's proprietary anti-aging compound called tissue control factor (TCF™).

Abstracts in BioCommerce (ABC) has gone independent. Published since 1983 by Celltech (Slough, U.K.) and IRL press, the biotechnology news abstracting service will now be made available through a new company, BioCommerce Data Ltd. (Berks, U.K.). ABC, which will still be edited by Anita Crafts-Lighty, is available as a twice monthly updating service for \$250 per year, and it can also be accessed on-line through Data-Star.

Biologically active human Protein C has been produced via recombinant DNA for the first time by scientists at Integrated Genetics (Framingham, MA). Protein C, which helps to regulate the coagulation cascade by which the body responds to injury, could have an annual worldwide market of over \$200 million, according to the company.

A gene transfer from *Escherichia coli* to blue-green algae was announced by Penn State University (University Park, PA). The team says this is the first genetic transfer from a heterotrophic organism into an autotroph, and that it could lead to the modification of blue-green algae for food.

A Chemical Systems Biotechnology

BIO/TECHNOLOGY STOCK INDEX

NEW YORK—The stock prices of biotech companies moved little in the four weeks between December 9, 1985, and January 8, 1986, as the *Bio/Technology* Index of Specialty Firms rose to 1596. Advances by Genentech, Hybritech, and Biogen sparked the month's modest 61-point gain. Hybritech's increase, from \$29½ per share to 31¼, followed the announcement that Eli Lilly raised its bid for the monoclonal antibody specialist from \$335 to \$374 million.

While Hybritech was taking advan-

Center will be established at the University of Pittsburgh Medical Center from a \$1.3 million contract from the U.S. Army's Chemical Research Development Center. The center will study the gamma-amino-butyric acid (GABA) neuroreceptor, which is responsible for muscular movements. Eventually, the Army hopes to use GABA neuroreceptors in the design of biosensors to detect GABA-binding chemical agents.

Interferon for the treatment of colds is back in the news following clinical trials with nasally administered alpha interferon from Schering-Plough Corp. (Madison, NJ). Although the product, trade-named Intron, reduced the occurrence of colds by about 40 percent (and decreased rhinovirus infection by almost 80 percent), side effects still occur. Some subjects developed irritated nasal linings, while others suffered from "cold-like" symptoms.

A survey of biotechnology companies is being done by The Association of Biotechnology Companies and the high-technology group of Arthur Young. The study focuses on financial and operating issues, including revenue sources, expenditures, financial trends, and personnel practices. Individual company data will be kept confidential, but the survey's results will be made freely available to the public around the middle of 1986. Any companies that have not received questionnaires and would like to participate are urged to phone the Association of Biotechnology Companies (202-842-2229) or Arthur Young's high-technology group in San Francisco (800-3HI-TECH). The cut-off for responses is March 1, 1986.

tage of soaring stock prices to extract a higher offer from Lilly, other public companies made secondary stock offerings. Centocor raised over \$20 million by selling 1 million shares, Intelli-Corp netted over \$15 million with 1.85 million new shares, and Damon hopes to garner \$20 million by offering an additional 2.5 million shares. Privately held biotech companies are also eyeing the lucrative public market, and a number of initial public offerings are in the planning stage.

— Arthur Klausner