CHRONICLE

The first recombinant Protein A is now being marketed by Repligen Corp. (Cambridge, MA). The company isolated the gene coding for Protein A in *Staphylococcus aureus* and transferred it to *Escherichia coli* for production. Protein A, which binds tightly to antibodies, is used in antibody purification and may have applications in treating autoimmune diseases and cancer.

A two-for-one stock dividend was announced by Ribi Immunochem Research (Fort Hamilton, MT), payable to shareholders of record as of April 15, 1985.

New agreements involving biotech companies:

- Porton International (London) has become the exclusive commercializing agent for the Centre for Applied Microbiological Research at Porton, under a 13 year agreement;
- Ciba-Geigy (Basel, Switzerland) increased its contract with Bio-Response (Hayward, CA) for the production of an unnamed cellular protein from \$275,000 to \$2,025,000. According to Montgomery Securities (San Francisco, CA), the substance may be in the plasminogen activator family;
- Biotechnica International (Cambridge, MA) and Uniroyal (Middlebury, CT) will work together for four years on applying genetic engineering and nitrogen fixation technology to increase yields in crop plants;
- Mitsubishi Corp. will be the exclusive marketer in Japan of technology developed at Nova Pharmaceutical Corp. (Baltimore, MD);
- Cooper Biomedical (Menlo Park, CA) and Chiron Corp. (Emeryville, CA) agreed to develop and market tests for hepatitis and acquired immune deficiency syndrome;
- DNA Plant Technology (Cinnaminson, NJ) and Arthur D. Little Inc. (Cambridge, MA) will jointly develop large-scale, automated plant cloning systems:
- Hygeia Sciences (Cambridge, MA) announced that Hoffmann-La Roche (Nutley, NJ) will market its urine test for luteinizing hormone, and Zer Science (Jerusalem) will distribute its pregnancy test in Israel and elsewhere;
- Genex Corp. (Rockville, MD) announced that it has obtained government support for projects on synthe-

sizing a portion of the gene for mussel adhesive protein, and on studying the crystal structure of a protein from a bacterium that uses camphor as its main carbon source. Also, Genex said it has conferred partial protection against coccidiosis in chickens using a genetically engineered antigen vaccine it is working on with the U.S. Department of Agriculture.

The U.K. biotechnology database, set up at the Laboratory of the Government Chemist, will hold information on approximately 50,000 microorganisms. Called the Microbial Culture Information Service, the online database should be operational by early next year.

New shipping fever drug tested. Amgen (Thousand Oaks, CA) is now testing its alpha consensus interferon on bovine shipping fever. The drug has a unique amino acid sequence that may give it high antiviral activity and decreased side effects compared to natural alpha interferon. Amgen is also continuing its preclinical tests with the substance as a human therapeutic.

A beta-interferon ointment developed by Inter-Yeda Ltd. (Rehovot, Israel) has been shown effective against the herpes virus causing cold sores. Trade-named "Feron," the preparation can speed cures by as much as 90 percent, according to a Weizmann Institute scientist.

In other interferon news, Schering-Plough Corp. (Madison, NJ) announced that its genetically engineered alpha-2 interferon called "Intron A" received registration approval in Italy for the treatment of multiple myeloma, Kaposi's sarcoma, and condyloma acuminatum (venereal warts). The product, which was originally developed by Biogen N.V. (Geneva), is already approved in Ireland and the Philippines.

The first aflatoxin detection kit using enzyme immunoassay technology has been developed by Biotech Research Laboratories (Rockville, MD). The kit uses a competitive inhibition enzyme immunoassay with an aflatoxin-specific monoclonal antibody as the key reagent, according to the company. Aflatoxins contaminate milk, peanuts, and grains; Biotech Research Labs estimates that the an-

nual worldwide market for tests is more than \$50 million.

The market for enzymes in the food industry will grow 5–7 percent annually for the next few years, according to Eldib Engineering & Research (Berkeley Heights, NJ). Eldib estimates that the U.S. makes up almost half of the world's enzyme market, with yearly sales of \$175–200 million.

A new company, American Biogenetics (Irvine, CA) has been formed by scientists at the University of California (Irvine) to work on increasing yields from microorganisms. The company will focus on developing strains that produce valuable substances, such as ethanol fuel, while subsisting on inexpensive feedstocks.

A monoclonal antibody against gram-negative sepsis is being tested by scientists at Stanford University School of Medicine (Stanford, CA) and the University of California (San Diego). This bacterial illness is the leading cause of death from infection in the hospital, killing about 75,000 Americans a year. The monoclonal antibody works by binding to and inactivating the bacterial endotoxin molecules.

Tumor necrosis factor (TNF) has been produced in large amounts by Cetus Corp. (Emeryville, CA). According to the company, TNF is active against some laboratory cultures of breast, cervix, colon, and lung cancer. Cetus does not expect to begin human clinical trials until the end of the year at the earliest.

Another AIDS blood test approved. The U.S. Food and Drug Administration will allow Litton Industries (Beverly Hills, CA) to distribute its test for acquired immune deficiency syndrome in blood. Similar tests made by Abbott Laboratories (North Chicago, IL) and Electro-Nucleonics (Fairfield, NJ) already have approval.

New test for Legionnaire's disease. Genetic Systems Corp. (Seattle, WA) has launched the first monoclonal antibody-based diagnostic test for Legionnaire's bacteria. The company says the kit has 100 percent sensitivity and 98 percent specificity in distinguishing Legionnaire's bacteria from other respiratory infections.