SCIENCESCOPE

edited by RICHARD STONE

AMES LABORATORY

True value. McDonnell Douglas uses Ames Lab's Magnescope to improve aircraft, not to create jobs.

Study Deflates High-Tech Jobs Hype

The idea that joint ventures between industry and federal labs result in new jobs is an article of faith in the Clinton Administration. Indeed, the president's 1996 budget request aims to increase the number of such collaborations because job creation, says Science Adviser John Gibbons, "is one of the things the public expects from research." But that expectation, a new study suggests, may be wishful thinking.

A survey by Georgia Tech researchers has found that more than 90% of 229 joint projects in the last 5 years, involving 219 companies and 29 federal labs, yielded no new jobs. The average for all projects was a paltry 1.5 positions, and some companies actually reduced their payrolls thanks to improved productivity.

Claims about new jobs are "usually a lot of hot air," says Barry Bozeman, lead author of the study, commissioned by the National Science Foundation.

But jobs are only one measure of commercial success. The study found that 22% of collaborations led to new products or processes, and that the average interaction yielded a net benefit to the company of $1.1 million. "That's not bad, but it's harder to sell politically," says Bozeman.

Biotech Unveils FDA Reform Plan

The Biotechnology Industry Organization (BIO) is the first organization to brave Washington, D.C.'s, new anti-regulatory climate with a specific proposal for overhauling the Food and Drug Administration (FDA).

BIO claims it takes 10 to 12 years to move a product from bench to bedside—twice as long as it did 20 years ago—and in that time the average cost of developing a drug has increased fivefold, to $360 million. BIO's remedy, concocted by a panel led by Amgen chief Gordon Binder, includes these ingredients: Shift review of early clinical trial data from FDA to outside entities, and focus agency research on regulatory needs such as developing surrogate endpoints.

FDA officials declined to comment on the proposal. But the reform drive is likely to get stronger: The Pharmaceutical Research and Manufacturers of America association expects to offer an FDA reform plan by the end of April, and House Speaker Newt Gingrich and many other Republicans are touting FDA reform as a top priority.

OSTP Loses Top Aide

M.R.C. Greenwood, associate director for science in the Office of Science and Technology Policy (OSTP), has resigned, effective 1 May. Greenwood, a nutrition scientist on leave from her position as dean of graduate studies at the University of California, Davis, will be returning to California for personal reasons. Greenwood joined OSTP in November 1993 and was the architect of the Administration's major research policy statement, *Science and the National Interest*, issued last August. She also serves as the chief liaison between the White House and the federal research agencies.

Fermilab Officially Discovers Top Quark

Hunters of the top quark appear to have bagged their subatomic quarry. Earlier this week, physicists at Fermi National Accelerator Laboratory in Illinois were expected to announce conclusive results that they had found the elusive particle.

Last April, a research team working at the Collider Detector Facility (CDF) detector array of Fermilab's Tevatron accelerator reported tentative sightings of the top quark (*Science*, 29 April 1994, p. 658). However, they judged their findings too uncertain to be called an official discovery, so the CDF team and a second group at the Tevatron's D0 array continued sifting through the debris of proton-antiproton collisions for the top quark's signature energy bursts.

In a joint seminar on 2 March, the D0 and CDF groups were expected to unveil independent findings allowing Fermilab to claim the mantle of discovery. Based on data collected over the last year and reanalyses of older proton-antiproton collisions, the teams now say that the odds their findings are due to chance—and not to the top quark—are less than 1 in 2,000,000, thereby reaching the threshold particle physicists set for a discovery. By comparison, the odds that last year's top quark sightings were due to chance were 1 in 400. At a collaboration meeting in late January, "people put all the discrete pieces of data together, and, lo and behold, it started to really hang together," says Harvard physicist and CDF collaborator John Huth. "It's pretty much conclusive," adds D0 physicist Drew Baden.

With the sixth and last quark in the bag, physicists now intend to characterize it more completely. Huth says his team wants to refine its estimate of the top's mass (about 174 billion electron volts). And that's a number critical to tracking down another particle on physicists' most-wanted list: the Higgs Boson.

Fisher: Target of "Electronic Graffiti"?

New evidence has come to light, says cancer researcher Bernard Fisher of the University of Pittsburgh, indicating that federal officials have been waging a vendetta against him. Fisher's proof: Feds slapped a "scientific misconduct" tag on his publications last spring—well before the Office of Research Integrity (ORI), an investigatory arm of the Department of Health and Human Services, even began a formal investigation of Fisher's co-authorship of papers containing data falsified by a collaborator. ORI has yet to complete its investigation.

Fisher and his lawyer Robert Charrow discovered the misconduct tags recently as they pored over an electronic index called *Cancerlit*, maintained by the National Cancer Institute, and *Medline*, maintained by the National Library of Medicine. *Cancerlit* had attached what Charrow calls "defamatory graffiti" to references to more than 80 articles co-authored by Fisher. The warning tag said: "Scientific Misconduct—Reanalysis of NSABP [National Surgical Adjuvant Breast and Bowel Cancer Project] Protocols."

Charrow concedes that the NSABP study on breast cancer surgery—which Fisher directed until last March—used tainted data from Montreal physician Roger Poisson (*Science*, 25 March 1994, p. 1679). But Charrow says many of the tagged articles did not rely on Poisson's data and that some articles by Poisson were not tagged. To Charrow, this suggests federal officials wanted to get Fisher.

According to ORI Director Lyle Bivens, the tagging error resulted from "a misunderstanding." Bivens says he wrote a memo to database managers advising them to add "some appropriate language" to their indexes to let users know that NSABP data were being revised. Because all such memos in the past had dealt with cases of proven misconduct, Bivens says, the managers must have concluded that Fisher's papers should carry the misconduct label. On this point, however, Bivens is at odds with National Library of Medicine official Lois Ann Colaianni, who told *The Cancer Letter* that ORI specifically ordered the use of the "scientific misconduct" tag. Regardless of how the errors crept in, Charrow says Fisher is entitled to seek compensation for damages under the Privacy Act and that he plans to do so. ORI, meanwhile, has asked that the tags be revised.