

Forecast on Plus Side for R & D Funding in 1983

A new forecast* by Battelle Memorial Institute analysts projects total U.S. expenditures on R & D for 1983 of \$83.6 billion, up some 8.2 percent from the estimated \$77.3 billion spent in 1982. Adjusted for inflation, the increase would amount to 3.5 percent.

Industry is expected to retain its narrow edge over the federal government as the leading source of R & D funds, although federal funding is seen increasing by a larger percentage. Industry funding is predicted to go up by 7.6 percent to \$41.4 billion (49.6 percent of the total); the projected rise in government funding is 8.8 percent to \$39.3 billion (47 percent of the total).

Funding for academic science is expected to rise to \$9.7 billion in 1983 from \$9.3 billion in 1982, giving colleges and universities a slightly smaller share of total R & D funding than they received last year. Industry is expected to provide some \$304 million in R & D funding for academic science. This is still a small fraction of the \$7.1 billion provided by the federal government, but industry support is seen increasing 10.5 percent compared to 2.7 percent for government. Costs of R & D are projected to rise by 4.5 percent this year, the lowest increase for years.

The forecasters warn that three factors could alter the picture. Inflation could heat up and make the "deflator" figure unrealistically small. Congress and the Administration have not yet thrashed out major appropriations measures for the 1983 fiscal year and the final figures, therefore, remain uncertain. A continuing economic slump could induce industry to cut planned R & D spending.

Battelle has been turning out R & D forecasts since 1960 at its Columbus division and has grown practiced in projecting trends. The analysts think that policies set by the Reagan Administration after it took office will continue to influence R & D spending. They see Administration emphasis on military and space programs likely to particularly benefit aerospace, elec-

tronics, and communications industries. Energy R & D, however, is expected to suffer from Administration priorities; the report says, "there is little evidence that energy is perceived as a national problem requiring Federal R & D support." Administration-sponsored tax credits should benefit industry R & D, but the forecasters attach the caveat that poor business and cash-flow conditions could counteract the effect of the credits.

—JOHN WALSH

Genentech Tries Novel Way to Fund Clinical Trials

It has long been conventional wisdom that biotechnology companies will eventually be forced into partnership with large corporations to bring their products to market. The reason is that their limited cash resources will not be able to support the necessary clinical testing and market development—according to one study, it costs \$70 million to get a new drug on the market. But Genentech may have found a novel answer to the problem.

The company has raised \$55.6 million from wealthy investors to finance clinical trials of human growth hormone and gamma interferon, both of which are being produced by gene-splicing. The novel feature is that the money has been raised by the formation of a partnership, Genentech Clinical Partners, Ltd., which will fund the clinical trials and get a share of the royalties when the drugs are finally marketed.

According to Fred Middleton, vice president for finance and corporate development at Genentech, it is the first time a partnership has been formed specifically to fund clinical trials. One attraction for investors is that it provides a healthy tax shelter—since no profits will be made for the first year or two, the entire investment can be deducted from income.

Investing in an oil and gas partnership would provide a bigger tax write-off, but an investment in a clinical trials partnership should be less risky. The R & D has already been completed, and there is a reasonable chance of generating some income when the drugs reach the market. Although human growth hormone is unlikely to be

a big money spinner, gamma interferon has the potential of being a broad antiviral and antitumor drug.

For those reasons, Genentech had little difficulty raising the cash, mostly from individual investors.

—COLIN NORMAN

Potential Conflicts of Interest Detailed at UC

Some 1709 researchers at the University of California received support for their work from nongovernmental sources in the past 6 months, and in 53 cases, the funding involved a potential conflict of interest, according to a report made public by the California Fair Political Practices Commission (CFPPC). None of the potential conflicts was deemed serious enough for the university to disapprove the deal, however.

According to CFPPC rules, a potential conflict of interest arises when a researcher derives support from a company in which he or his immediate family has a financial interest. When that situation occurs, a campus committee must review the arrangements and decide what conditions, if any, should be imposed on acceptance of the support.

The 53 cases reviewed in the CFPPC report involve several instances of researchers receiving support from companies in which they hold stock or from which they receive consulting fees. A few involve the receipt of funds from a nonprofit organization, such as the American Cancer Society, on whose board the researcher serves. The latter cases pose no problems, the report suggests.

The CFPPC, a state agency that oversees regulations governing state employees, adopted rules last spring requiring researchers at the university who receive research funds from nongovernmental sources to disclose their outside financial interests. The rules were vigorously opposed by the university. Pressure for adoption of the rules came chiefly from the California Rural Legal Assistance Council and the Natural Resources Defense Council (NRDC).

NRDC attorney Al Meyerhoff said last week the fact that the university

*Probable Levels of R & D Expenditures in 1983. Report from the Columbus Division of Battelle Memorial Institute.