many researchers as cavalier in their handling of public funds. In the universities, especially among faculty, there is a tendency to deplore a "bean counter" mentality on the part of federal auditors. HHS auditors are charged with following standard accounting procedures suited to auditing the procurement of goods, but inappropriate when applied to R & D. The critics note that there has been little friction with auditors from the Defense Department's auditing agency or Office of Naval Research, who are regarded as knowledgeable about research.

There is agreement on both sides, however, that the root of the difficulty is that faculty duties include both teaching and research and it is, in practical terms, very difficult to allocate time for federal reimbursement only to research activities as the law requires.

The conflict over accountability for salary costs is relatively new since federal auditors only recently turned their attention to direct-cost charges—those for salaries, materials, and other specific costs of research. For years, arguments about accountability had been dominated by indirect costs—charges by universities for use of lab space and offices for research, library facilities, and various support services. The sharper focus on direct costs is due not only to auditors' keenness, but to critical comment from the General Accounting Office and from Congress.

One result of the new interest in direct-cost issues was an effort by the HHS inspector general's office to prod universities to adopt better "on line" auditing measures to keep tabs on spending in a more timely fashion, rather than certifying research activity retrospectively, for example, 6 months or a year after the fact.

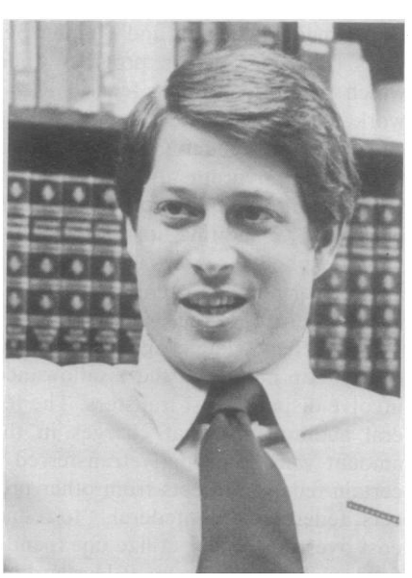
Another response is the HHS-funded experiment. The idea is that the individual institution will engage independent auditors—private accounting firms or state auditing agencies, for example—to carry out an audit of federally supported R & D activities which can be reviewed by federal auditors. The University of Pennsylvania apparently pioneered the scheme and Harvard has recently completed such an audit using the same firm, Coopers & Lybrand. A more broadly based pilot program initiated by HHS is now in progress. Some 22 major research institutions are participating and the program is being extended to 25 smaller colleges and universities.

The idea has definite attractions for the government. As the pressure for more frequent audits has increased so

Gore Proposes Oversight of Genetic Engineering

Legislation for a federally mandated committee to oversee genetic engineering is likely to be introduced when the new Congress convenes in January. On the basis of a recommendation from the President's Commission for the Study of Ethical Problems, Representative Albert Gore, Jr. (D–Tenn.) plans to introduce a bill to create some kind of oversight body, but its exact nature and the extent of its authority have yet to be determined.

The commission's recommendation of an oversight body was echoed again and again during three full days of hearings that Gore, chairman of the House subcommittee on investigations and oversight, held recently on all aspects of human genetic engineering. Some two dozen researchers, ethicists and legal scholars testified and reached what one House staffer called an "amazing consensus" in favor of a federal watchdog for the research and medical application. "Different people testified that the proposed body be essentially educational, others wanted it to have real regulatory authority, but no one was against the idea altogether," he said. "The congressman was surprised at that and very encouraged to go ahead."



Representative Albert Gore, Jr.

Testimony revealed a consensus for a watchdog committee

The hearings also reached near consensus on the idea that there are no fundamental ethical objections to gene therapy for debilitating diseases such as thalassemia and sickle cell anemia but there are serious issues to be resolved before using genetic engineering for "enhancement" of human characteristics including height or intelligence. In addition, the witnesses opposed far-out applications such as the hybridization of a human being and a chimpanzee. "The prospect of creating an actual being with partially human characteristics offends a deeply held taboo," said attorney Alex Capron of the President's commission. "There is, however, no legal or regulatory prohibition of such a step," he told Gore.—**BARBARA J. CULLITON**

Synfuels Program Runs Out of Projects

"The scope of this project is greater than the sum total of the interstate highway system, the Marshall Plan, and the space program all combined," President Carter said in 1980 as he installed the first chief of the Synthetic Fuels Corporation (SFC). Now, just 2 years after that grand christening, the SFC finds itself embarrassingly free of commitment, with a shrinking agenda. Five major synfuels sponsors have quit the market since 1980. Three of them gave up promised federal support.

The withdrawal of Ashland Oil on 22 November left the SFC with only one project in its portfolio, Union Oil's scheme to convert Rocky Mountain shale to crude oil. The plant, near Rifle, Colorado, is supposed to begin producing late next year at a rate of about 10,000 barrels a day. Even this was not an SFC original, but a hand-me-down commissioned by the Department of Energy (DOE) in July 1981 and passed along to the SFC for monitoring.

In the agreement with Union Oil, the government promised to support a price of over $40 a barrel for synthetic fuel produced in Colorado, with a maximum federal outlay of $400 million. That leaves the SFC today with $14.8 billion in uncommitted assets.

Ashland was the backer of one of two major synfuels projects that came

0036-8075/82/1210-1098$01.00/0