

away, they cannot afford to be portrayed as opposing the deficit reduction plan.

A number of prominent senators, however, including Mark Hatfield (R-Ore.) and Bill Bradley (D-N.J.), see the Gramm-Rudman-Hollings proposal as a crude tool that takes away some of Congress's budget responsibilities and vests unwarranted authority in the President. Should Congress and the President fail to agree on a budget, the President would be empowered to sequester one-half of the required reductions from department programs as he sees fit. The possibility for disproportionate cuts among programs within any given department could thwart the will of Congress, opponents argue.



**Erich Bloch**

*"I am not convinced that everything we are doing across the federal spectrum is worth keeping."*

"We are only fooling ourselves, and worse, fooling the people, if we believe this proposal will bring order out of chaos and put us on a sure path to deficit reduction," says Hatfield. No plan will work, he notes, unless there is a strong congressional will to tackle the problem—and there is no sign that that truly exists in Congress.

Under the Gramm-Rudman-Hollings plan, the annual deficit—projected at \$180 billion in FY 1986—would be stepped down in increments of \$36 billion a year. To achieve such large savings without increasing taxes, budget cuts far greater than those occurring in the first 2 years of the Reagan Administration might have to be imposed on federal agencies.

Concerns by House members that too much congressional authority was being abdicated under the plan is expected to be a source of conflict in the House-Senate conference. Indeed, opponents of the amendment in the House and Senate hope it will die in conference once mem-

bers understand the legislation's pitfalls. But, given the legislation's momentum, aides to House Majority Whip Thomas Foley (D-Ore.) predict that some form of deficit reduction plan will emerge.

What is unclear is just how much of the federal budget, which for 1986 is projected at \$965 billion, is available to absorb the scheduled reductions. The cut cannot be applied to the \$155 billion in interest payments on the national debt or the \$201-billion social security system. An estimated \$240 billion in other entitlement programs such as medicaid, medicare, and military retirement also are largely protected. But cost-of-living allowances for such entitlements can be cut or eliminated.

With over half the budget declared out of bounds, the budget reductions must be wrung from other federal programs, particularly the Department of Defense, which has projected outlays of \$302 billion this year. However, there also is uncertainty about what existing program contracts are exempt from reductions—and just how deeply the White House will let DOD be cut.

President Reagan gave the Gramm-Rudman-Hollings amendment a qualified endorsement in his Saturday morning radio speech 5 October, indicating deep cuts in defense are unacceptable. "When the spending cuts are made by this administration . . . the security of this country . . . will not be put at risk," said Reagan. "The Congress has agreed, and next year I will propose those amounts already accepted as necessary for keeping the peace."

The depth of budget reductions will be influenced greatly by economic growth levels, which affect federal tax receipts. Higher growth rates would ease pressure on federal programs targeted for reductions. Tax increases also could dampen the size of the required budget reductions. But so far, there is no sign that the Administration would support new revenue measures in exchange for deploying the deficit reduction plan.

As structured, the act requires the President to submit a budget that complies with declining deficit targets. If the Congress fails to enact such a budget by the start of the fiscal year, an automatic deficit reduction plan kicks in. It spreads half of the reductions proportionately over individual federal program accounts. The likelihood of the automatic mechanism being activated is high, congressional budget committee aides say, given Congress' reluctance to make tough choices on cutting back or scrapping many existing federal programs.

—MARK CRAWFORD

## Stanford President Calls for New Authorship Policy

The protocol for accepting or assigning authorship of scientific articles needs to be reassessed, according to Stanford University president Donald Kennedy, who has raised the issue with the Stanford faculty and the presidents of the 56 universities that belong to the American Association of Universities, which holds its semiannual meeting this month. AAU president Robert Rosenzweig believes the Stanford statement, which will become a topic for discussion by the faculty senate there, should be widely debated on campuses across the country.

In a statement circulated to both groups Kennedy says, "For some time, I have felt a need for systematic discussion within the faculty of two related issues: first, the allocation of responsibility and credit for scholarly work; and second, those forces that, in many disciplines, are pushing us toward a level of complexity in the conduct of research at which it becomes difficult to determine responsibility of authorship."

Noting that at Stanford there have been increasing numbers of disagreements between students and faculty members over credit for work to which each contributed, Kennedy says the subject needs frank discussion of ground rules for assigning authorship up front. It might, he suggests, ameliorate the "biterness of disappointed expectations."

It is easy, Kennedy told his colleagues, to condemn the practice of a scientist demanding authorship credit for work that he or she made no substantial contribution to. But the newer issue relates to more difficult cases that "generally involve the allocation of credit for work to which several individuals have contributed something."

He posed this example of the kind of case that resists easy solution. "Graduate student S is working in Professor P's laboratory on an experimental problem within P's general field of interest and competence." S, who has an assistantship funded by P's grant, does experiments that he writes up as part of a doctoral dissertation. P subsequently incorporates S's data in an article or, perhaps, in a grant application, with only cursory

credit to S. S thinks his work has been stolen by P, whereas P takes the view that it was work done in his lab, with his funding, and within the conceptual framework he devised. Is S right to feel aggrieved? Was P on solid ground in using the data?

"Each of us will think of factors not given in this bare sketch that would incline us toward one view or the other—but they will not always be the same factors," Kennedy notes.

Acknowledging that publication patterns (and pressures) vary from field to field, Kennedy argues that there is need for a broad reassessment of practices so that researchers at all stages of the academic ladder know what protocols are and how publication matters should be handled. "In some disciplines it is quite customary for graduate students to publish their own research results by themselves, even when their work involves fairly close supervision by a faculty member—and in others, the professor's name goes on virtually every paper produced in the laboratory."

"In the past," Kennedy says, "appropriate standards in these matters have been determined by the individuals involved, based upon traditions that have grown up in the profession as a whole and in the separate fields. But the steady stream of problems now coming before me suggests that isolated individual judgments by faculty may no longer be adequate. So I write this memorandum in the hope that it may initiate discussion among my colleagues."

—BARBARA J. CULLITON

## Episcopal Church Backs Genetic Engineering

At its 68th general convention recently, the House of Bishops of the Episcopal Church adopted an official position on genetic engineering that "encourages . . . research directed to an increase in human understanding of vital processes, recognizing that human DNA is a great gift of God. . . ."

The bishops backed human gene therapy in principle, saying in a resolution that "in order to provide effective therapy designed to reduce human suffering, encouragement should

be given to the multiplication of 'cloned' human genes in especially designed 'in vitro' conditions, a process providing the valuable source of human proteins which make this therapy possible. . . ." They also called on Congress to be sure that the Food and Drug Administration or some other appropriate agency seek advice from persons trained in ethics and representatives of the general public "to assure an ethically acceptable use of these human proteins."

In addition, the bishops offered their "commendation" to trained genetic counselors and the organizations that support them. And they resolved to ask the Council of Seminary Deans and the Board for Theological Education to "include basic training in human genetics in the curricula of our seminary continuing education programs."—BARBARA J. CULLITON

## USDA Fines Pennsylvania Animal Laboratory

The U.S. Department of Agriculture recently fined the University of Pennsylvania \$4000 for the abuse of primates at the school's head injury laboratory.

It was the second time in recent months that a federal agency has cited the head injury lab for improper treatment of primates. In July, the Department of Health and Human Services suspended funding at the laboratory because the school violated animal care standards set by the National Institutes of Health.

The lab is one of the few in the country to study head trauma, a leading cause of death among accident victims. For 15 years, researchers there have been using primates as the experimental model. Last year, the lab was broken into, and videotapes of primates undergoing experimentation were stolen and widely distributed. After the federal government began investigating, researchers suspended the primate work in June (*Science*, 2 August, p. 447).

Based on its own investigation, the Department of Agriculture charged the university with some of the same violations cited by NIH. The NIH report detailing its charges was formally

released on 4 October. Both federal agencies said animals were not given enough anesthesia and some surgical operations were conducted in unsanitary conditions. NIH also charged that the laboratory technicians were not properly trained to perform important procedures with the animals and that a veterinarian was not sufficiently involved in the choice of anesthesia and other drugs for the animals.

The university has decided it will pay the Department of Agriculture fine, according to a university spokesman. It disputes the finding that the animals were not properly anesthetized, but otherwise does not contest the agencies' charges.

Since most of the primate experimentation was complete at the time of the investigation, the bets are that the laboratory will not request more funding for the primate work. The budget for the primate research is roughly about 15 to 20 percent of a \$1-million grant renewal proposal to NIH for the head injury center, which also conducts clinical studies. The suspension of funds by NIH only pertained to the primate experiments.—MARJORIE SUN

## Comings and Goings

**Charles Buffalano**, a plasma physicist who served as the deputy director for research at the Defense Advanced Research Projects Agency (DARPA), has resigned to join the Pollard Road Corporation, a small new electronics research and development firm in Arlington, Virginia. The firm was organized in July by former DARPA director **Robert Cooper**, who serves as its president. A third DARPA alumnus, **Verne Lynn**, the former deputy director for technology, is also employed by the firm. Their first contract is from the Air Force, and involves research on advanced electronic counter-countermeasures (known in the trade as "adaptive nulling") for communications between satellites.

**James Tegnella**, a physicist who formerly served as an assistant under secretary of defense for conventional initiatives, has been selected as DARPA's new principal deputy. Cooper will remain as a consultant to the agency until a new director is named.