in progress in both House and Senate. Representative Edith Green (D–Ore.), chairman of the House Education and Labor subcommittee which handles authorizations for higher education, has expressed strong reservations over the Administration's approach. She is particularly critical of the potential effects of student aid proposals on students from middle-income families and the effects of the proposed treatment of institutional aid on private colleges and universities. These views have been seconded by other Democrats on the subcommittee. Representative Green has also said emphatically that she does not propose to preside over the liquidation of the NDEA loan program. She is known to be drafting her own higher education bill, which, when introduced, could have an important bearing on the ultimate outcome.

Other options are already available, however. Representative Carl D. Perkins (D–Ky.), chairman of the House Education and Labor Committee, is sponsor of a bill which is essentially an extension of existing legislation and which represents a fallback position. And Representative George P. Miller (D–Calif.), chairman of the House Science and Astronautics Committee, has introduced his perennial institutional aid bill (*Science*, 20 November 1970) which is known familiarly in the higher education community as the "Miller Bill."

In the Senate, the new chairman of the education subcommittee, Senator Claiborne Pell (D–R.I.), has introduced a bill which extends existing programs in higher education but adds a new provision that combines student aid and institutional aid and is designed to put a "floor" under high education financing. Every student enrolled in higher education would be eligible for a grant of $1000 minus the federal tax paid by the student or the person on which he is dependent; the institution he attended would get a cost-of-education allowance of $1000 minus the tuition paid by the student.

At this point, the prospects are uncertain for these proposals and for the Quie bill. An immediate question is that of appropriations action in Congress. The House Appropriations Committee is moving along briskly and may report out the HEW funding bill containing the higher education funds by the middle of April. The extent to which the committee has followed the President's budget requests and has provided funds for existing higher education programs is likely to influence ensuing events.

One school of opinion holds that there is nothing wrong with higher education legislation which full financing wouldn't fix. And partisans keep green the memory of the revolt in the House which started with the adding of $1 billion to the HEW appropriations bill and went on to an override of a Presidential veto (*Science*, 23 January 1970). An Emergency Committee on Full Funding, with membership drawn from among interest groups representing elementary and secondary education and vocational education as well as higher education, has been reactivated. The committee played an effective role in the uprising, and it remains to be seen whether the main effort of the education lobby will be directed toward the appropriations or authorizations process.

Some of those who think that the chances for new initiatives in higher education authorization legislation are better this year cite improved communication between legislators and HEW officials. Secretary Richardson and Commissioner of Education Sidney Marland, who are in their first round of negotiations on behalf of HEW, had a series of meetings with Representative Green and other members of her subcommittee before hearings commenced. The idea of a National Foundation for Education may prove to be a mutually agreeable device for promoting innovation in higher education and resolving some differences over the fate of programs, but a fair amount of bargaining seems to lie ahead on the design of the foundation and on its relationship with the proposed National Institute of Education, which is supposed to provide a base for research relating to all levels of education.

The ultimate results for higher education this year may well depend on how well the cooperative atmosphere is preserved. A conservative odds maker would say that chances of a triumph for either the Nixon blueprint for student aid or a massive program of institutional aid is unlikely. What may well happen is that some additional student aid may be financed and a beachhead for institutional grants established but that higher education legislation will remain, essentially, as it is now—an untidy monument to Lyndon Johnson's Great Society.—JOHN WALSH

# Population Act: Proponents Dismayed at Funding Levels

It was, by coincidence, the day after Christmas last year when President Nixon signed into law the grandest gift the federal government had ever bestowed on population research and the once tabooed field of family planning. As the first major federal legislation dealing solely with population affairs, the Family Planning Services and Population Research Act of 1970 authorized the President to spend $225 million for family planning services and $145 million for research over a 3-year period. This would be additional to a total of some $75 million already being spent each year on services by the Health, Education, and Welfare Department (HEW) and the Office of Economic Opportunity. And it would supplement the $40 million spent annually on population research, mostly through HEW and the State Department. In brief, the Act was, as President Nixon said, "landmark legislation" that fulfilled his requests for greatly expanded birth control aid to the poor and for an "essential" increase in population research.

Thus it has come as something of a jolt to the Act's proponents that the Administration may end up spending none of the $73 million the Act authorizes in fiscal 1971, its first year. Until recently, HEW officials expected to receive at least $6 million of that for family planning projects around the nation this year. In the past 2 weeks, however, the Office of Management and Budget has denied even that small request. And to compound the post-Christmas letdown, the President's

1972 budget has called for spending only $57.3 million out of $75 million in the Act for services next year, and contemplates a research increment of only $10 million, though the Act authorizes $50 million.

This new stringency has particularly dismayed upper-echelon administrators in HEW, as well as private foundations which have long urged greater government involvement in population affairs. HEW officials insist they can use far more research money than they have coming this year or next. And the federal government is, after all, the world's primary supporter of contraceptive research. "To my mind, the research support is the most important part of this Act, because of its importance to the global population problem," notes Joseph D. Beasley, chairman of the Board of Planned Parenthood–World Population, an organization that helped draft the legislation in the first place.

### Diminishing Interest?

Inevitably, these unexpectedly small increments for research have been interpreted as a sign of waning Administration interest in population affairs. As Representative James H. Scheuer (D–N.Y.), a principal author of the Act, commented recently, the Administration's "strong public declarations have become feeble appropriation requests."

As a general rule, a President's budget may be assumed to speak more clearly of his intentions than his rhetoric. In this instance, however, the reasons underlying the discrepancy between rhetoric and budget would seem to be more complex and less dramatic than simple fickleness. The difficulty appears rooted in a policy that discourages huge surges of money for medical research through means outside the normal funding channels of the National Institutes of Health (NIH). The funding level for population research also seems to reflect a conservative estimate by OMB of the amount of money NIH can usefully spend on contraception and related matters.

Essentially all of the research money would go to the Center for Population Research (CPR), a unit of the National Institute of Child Health and Human Development (*Science*, 15 May 1970). The CPR was established in August 1968 and was designated by the President in his July 1969 population message as the agency that should "take the lead in developing, with other federal agencies, an expanded research effort" on methods of birth control and the sociology of population growth. CPR's budget has grown from $12 million in fiscal 1969 to $28.3 million in the current year, all of which has come through the normal NIH funding channel, the Public Health Service Act, and all of which is spent externally in grants and a large contract program.

A budget of $38 million is proposed for the CPR in 1972, but how much of that $10 million increase will come from the new Population Act is unclear. Although congressional intent was that the Act should provide additional money, superimposed on existing funds, the OMB apparently is treating the new authorization as just another pot from which to draw, without regard to dollar amounts specified in the law and without clarifying where the money is coming from. As a result, says Carl S. Shultz, the director of HEW's Office of Population Affairs, which encompasses the CPR, "I don't know whether all of the $38 million, some of it, or none of it is coming from the new Act." Such ambiguity seems to reflect the Administration's insistence, during the Act's formative months, against writing specific annual research increments into the law. "NIH has functioned well for two decades without authorization ceilings," Shultz told *Science*, "and all this further racket is just a further pain in the neck."

Depending on one's point of view, this attitude can be interpreted either as a desire to prevent research programs from becoming overly dependent on short-lived legislation or as an effort to preserve the integrity of NIH's research empire. Population lobbyists, as well as a segment of the research community, believe that population research would flourish better were it removed from NIH and made the province of a special agency or institution of greater stature than the CPR. The Administration has opposed a similar plan for cancer research. And as one of the sager of population affairs lobbyists in Washington expresses it, "The idea of setting up a population agency outside NIH probably greatly upset NIH, which had been hearing sounds about a similar coup in the works for cancer." On the chance that a new source of money for population was the initial ploy in such a move, the Administration appears to have prepared a research budget that simply ignores the Act's existence.

More to the point, however, is the fact that CPR's planned budget of $38 million not only falls $40 million short of what Congress authorized but also falls $12 million below what HEW wanted. Dismayed HEW officials attribute this to budget planners in OMB, who are apparently not satisfied with the progress the CPR has made toward "product-orienting" its contract research program. "This is a top priority," one high-level administrator promises. "If we were more product-oriented, I don't think we'd have these money problems."

The NIH has traditionally mirrored the scientific community's preference for basic biomedical studies and its disdain for mission-oriented science. Accordingly, the process of nudging CPR's emphasis away from more contemplative studies and toward directed R & D has been slow.

### Seeking New Contraceptives

In 1969, the CPR launched what has become the Center's largest contract program, the Contraceptive Development Branch. But until late last year, the contracts it doled out went almost exclusively for basic studies in four areas—the maturation and fertilizing capacity of spermatozoa, oviduct and gamete function, the corpus luteum, and the biology of the ovum and early zygote. More recently, however, the contraceptive branch has acquired a full-time director, Eugenia Rosemberg, the former chief of the Medical Research Institute at Worcester City Hospital, and the branch has also solicited contracts in several new areas bearing more directly on contraception. Currently under review are 15 contract proposals to screen and synthesize promising new antifertility drugs, and 14 proposals to develop and evaluate new methods of administering antifertility drugs continuously (in the form of an implant), to explore the use of microwaves and ultrasound in performing abortions, and to develop new and reversible means of male and female sterilization. Estimates are, however, that funds will be insufficient to pay for about 30 percent of contract proposals approved by the Contraceptive Development Branch.

Another, though lesser, factor said to have influenced budget planners is described by one HEW official as a "public relations coup" by the Agency for International Development (AID), which spends about $10 million a year on population research and which plunged nearly $3 million 2 years ago

into projects to examine the birth-control potential of prostaglandin compounds. HEW subsequently followed suit with its own program of prostaglandin research but found itself in a "me-too position with pie on its face" that did nothing to establish an image of imagination and aggressiveness.

Given such influences on the budget, it would seem that a clearer measure of White House attitudes toward population problems could be gleaned from the President's response a year from now to the findings and recommendations of his own Commission on Population Growth and the American Future. Chaired by John D. Rockefeller, III, the 24-member commission is seeking to determine the probable course of the nation's population growth and distribution between now and the year 2000; to assess the problems that growth and distribution will pose for government services, the economy, and the environment; and to determine the means by which the nation might ethically control its growth.

Last week the commission marked the halfway point in its 2 years of deliberations by issuing a 31-page interim report. Noting that it hoped at this time only to "encourage a rational discourse on population matters," the report chiefly outlined the questions and issues with which the commission will deal. It asserted, as the President had in his population message, that the nation's growth had aggravated many social and environmental problems, but it judiciously cautioned that domestic population growth does not appear to foreshadow "an immediate crisis for the country."

The commission refrained from policy recommendations, with one exception. In what might be taken as a muted protest of population research funding, the commission said it "endorses" the new Act, urged that it be "implemented promptly," and observed that the future freedom to choose "if and when to have children depends largely on the priority which we as a society are willing to devote to policies, and research and educational programs to reduce unwanted pregnancy."

—ROBERT GILLETTE

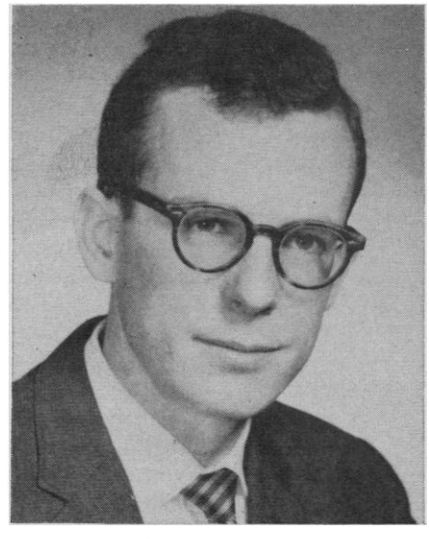
# FAS: Reviving Lobby Battles ABM, Scientists' Apathy

After 20 years of limited activity, a once-outspoken science lobby group, the Federation of American Scientists, is making an effort to live up to its own slogan as "the voice of science on Capitol Hill."

In 1945, within months of Hiroshima and Nagasaki, 3000 scientists across the country, who were connected with building the atomic bomb, banded together to prevent the military from gaining exclusive control of atomic energy. The issue at the FAS today is—in two words—arms control, with emphasis chiefly on the Antiballistic Missile System (ABM) and on the Strategic Arms Limitation Talks (SALT) in Vienna, which reopened this month.

The men who founded both FAS and its parent organization, the Federation of Atomic Scientists, in 1945, were mostly physical scientists. Among the principals were Leo Szilard, Lyle Borst, Harold C. Urey, and William Higinbotham. Many original members still sit on the FAS Board of Sponsors or on the governing group, the FAS National Council. Those original members still dominate FAS membership today. But it is now a quarter of a century later; that base-line 3000, which joined in 1945, has dwindled to approximately one-half, and FAS is seeking new and younger members among biologists, chemists, social scientists, and engineers.

The latest chapter in FAS history is a revival attempt, which began in 1968 and now, in terms of active organizing and lobbying, is almost 1 year old. During meetings in 1968 and 1969, the Council decided to expand itself, the issues it studied, and the FAS overall membership. Most important was the decision to hire a full-time lobbyist-director.



Jeremy J. Stone

These decisions were part of a spirit of activism felt by many scientists over the then-hot issues of Vietnam, military funding of research, and the ABM. But the social responsibility bonfires of 1968 have become somewhat dampened and smoky in the comparatively uneventful months of 1971. Thus, although FAS's lobbyist-director, Jeremy J. Stone, enters his second round of congressional lobbying this month on ABM and SALT with a warm welcome from his fellow opponents of ABM in Congress, FAS's drive to gain an active rank-and-file membership is meeting a somewhat cooler response.

### The Scientists in 1945

From 1945 to 1947, the Federation of Atomic Scientists and its successor, the FAS, conducted a bustling lobby supported by 11 enthusiastic site groups at atomic laboratories and universities. These two groups are given a solid share of the credit for the defeat of the May-Johnson Bill, which would have left the door open to military control of the atom, and for the creation of the Atomic Energy Commission (AEC).

The style of science lobbying was much the same then as now. The pyramidal structure of the science profession enables a few, well-known scientists to speak publicly with a weight disproportionate to their number. Thus, the postwar FAS lobbies consisted mainly of private meetings between congressmen and the most prestigious scientists who could be drawn to Washington to talk on a given question.

These years also saw the development, with FAS assistance, of one of