be indicated in the treatment of the research section of the AID budget by Congress this year. Some \$15 million is being asked, a doubling of the estimated \$7.7 million spent in fiscal 1963. However, the chairman of the House foreign aid appropriations subcommittee, the puissant Otto Passman (D.-La.), has been promising major surgery on the AID budget this year, and it would not be surprising if the funds requested for research were whittled down.

Perhaps a more direct test will be whether or not funds are provided to enable Weyl to hire some first-class specialists to strengthen the AID research staff. In the reorganization act of 1961, some "supergrade," higher-level executive appointments for scientists and others with technical training were authorized, but appropriations for pay were never voted and the jobs were never filled.

Amidst these uncertainties, it is understandable that Weyl, an experienced and knowledgeable government official with a career in the balance, has not cut his moorings with the Navy.

-John Walsh

Scholarships: A New Study on Who Gets Them and Who Needs Them by American Council on Education

It is probably true that any poor but bright and sufficiently determined American boy or girl who wants a college education can get one, although it may take the exertions and the luck of a modern Horatio Alger hero. The studies, however, show that a great many young people capable of college work, especially those with the socioeconomic odds against them, don't win through. And, since trained brainpower is now a valued national resource, the question is being asked whether the nation can afford to waste the talents of so many of the able but needy who either don't try to overcome the odds or fall by the wayside.

These points are made in a study on aid to undergraduates, released last week by the American Council on Education (Financial Aid to the Undergraduate: Issues and Implications, available from the A.C.E., 1785 Massachusetts Avenue NW, Washington 36; \$2).

In the study, the director of the council's office of statistical information and research, Elmer D. West, provides what is essentially a review of current available data, along with a set of con-

clusions based on the data. The report marshals facts on scholarships, family income of college students, trends in tuition, fees, and other costs and in general provides pertinent information on financial aid, particularly on who needs it and who gets it.

The major conclusion of the study is that a great increase in financial aid to undergraduates—in scholarships, loans, jobs—is desirable, and that what is needed to reduce the loss of talent from a particular sector of society is a new federal program to identify students with high potential early, encourage them to prepare for college, and provide "small scholarships" for those from families in the low-income brackets.

Three reasons why self-reliance and self-help may not be enough to get the able but nonaffluent student through to the bachelor's degree these days, West suggests, are rising enrollments, rising costs, and rising standards.

Enrollment for degree credit in institutions of higher education in 1961 was 3,845,956, according to the report, and the estimate is that by 1970 the figure will have climbed to 6,936,000. Whether the scholarship, loan, and job opportunities can be increased proportionately is an open question. If not, an alternative, the report notes, is that "institutions accept in greater proportions those who can finance their education and pay less attention to those who cannot"; it adds, however, that "this last alternative probably will be unacceptable."

Tuition has been rising at a faster rate than the total costs of education, and this trend naturally affects students in public institutions less than those in private ones, where tuition represents a much larger portion of total costs. The report shows that in the 5 years between 1957 and 1962 the increases in average charges for tuition in the first two school years of the period were 8.4 percent for resident students at public institutions and 16.9 percent for students at private colleges and universities. Over the last three school years the increases were 10.1 percent and 18.9 percent, respectively.

The paradoxical fact that able but needy students get a rather modest share of scholarship funds is explained in the report as follows.

"Students coming from higher socioeconomic groups are more frequently awarded scholarships than are students from lower classes, whether or not financial need is a criterion. This may be because the former prefer to attend more expensive name colleges and the latter are content with colleges less well-known and less expensive." The report, for example, quotes an earlier study which showed that in 1957 "only 18 percent of the scholarship holders at Harvard come from families with incomes below \$4000."

The importance of such factors as ancestry, environment, and socioeconomic status are shown in data accumulated by the National Merit Scholarship program over a number of years, in which a good deal has been learned about the backgrounds of merit scholarship winners. Of 831 winners in a typical year the fathers of about 25 percent were manual workers. In other words, says the report, the larger number of lower-level workers produced a quarter of the winners, while the smaller number of higher-level workers produced three quarters. The report says that, in 1956, while it took 12,762 "professional, technical and kindred workers" to produce one National Merit Scholarship winner, it required 3,581,-370 "laborers, except farm and mine."

Generally, then, the predicament of the student working his way through college can be summarized this way. Tuition, fees, and living costs are going up steadily. Scholarship money is concentrated in private colleges and universities rather than the public institutions where students with meager resources tend to go. Rising academic standards put special pressure on those who must spend substantial time on jobs to pay their way.

A Task Undone

In its conclusions, the report says, "there are economic barriers, and particularly socioeconomic barriers, which deprive capable students of a higher education and deprive the nation of their services at the level at which they could perform. . . .

"The task is not yet being done satisfactorily by the states, by private individuals and organizations, or by colleges and universities. The data show conclusively that there is a segment of the population with insufficient funds to educate their children to the maximum level of capability. There is no reason to assume that national needs for educated manpower will diminish; in fact all the evidence is that needs will increase. All youth with talent are not being identified early enough—or

at all—to provide them with the incentive and the education they need.

"A Federal scholarship program designed to identify, in time, those students with great potential, to encourage able students to develop their talents and to help students regardless of the low socioeconomic conditions of their families by making available small scholarships and by providing hope would go a long way toward reducing the barriers of equal opportunity."

In a chapter titled "Effectiveness of financial aid in reducing talent loss," the author of the report frankly acknowledges that the major assumption underlying his recommendations is unproved when he says that there is "no direct and conclusive evidence" that providing help for the talented but needy would lessen the waste of human resources. Some evidence there is, but it is viewed as still inconclusive.

Scholarships Not Enough

Simply making scholarship money available will hardly do the job. For the task of locating and encouraging those with undeveloped potential among poorly motivated students, particularly in inferior urban and rural schools, would require a major program on a national scale employing techniques that are only now being developed. The report indicates but does not emphasize that the problem is particularly difficult as it applies to Negroes and other minority groups.

Federal scholarship programs, with the exception of the GI Bill, which was veterans' legislation rather than education legislation, have never fared well in Congress, although the Senate has been more kindly disposed than the House. Opposition has centered on the questions of the cost and propriety of a major, permanent federal scholarship scheme, and there is no sign of a change of heart in the House.

Colleges and universities, which might be expected to send forth strong advocates of a national scholarship program, have displayed an ambivalence in pressing the matter. The fact is that public institutions, which charge their students low tuition and fees, are primarily interested in federal programs for the expansion of facilities and faculty development, and the public and private sectors of the community have tended to make common cause in putting these needs first. As a result, there has not been and is not now an effective lobby for scholarships.—J.W.

Changes at NIH: More Studies Underway; New Institute Makes Researchers, Kennedys, Happy

If, tucked away in a locked closet somewhere on its vast campus in Bethesda, Maryland, the National Institutes of Health were harboring an important fugitive, the number of investigators knocking at its doors could hardly be much increased. NIH's research programs will get the exclusive attention of a panel currently being assembled by Jerome Wiesner, the President's science adviser, that is expected to report to the President next spring; the National Academy of Sciences' Committee on Science and Public Policy has begun a review of research-grant policies of federal agencies that will have strong implications for NIH; and if the House accepts a resolution just introduced by four members of its Rules Committee that a special committee be appointed to make a thorough study of the overall research programs of the federal government (budgeted at over \$14 billion for fiscal year 1964), NIH will find itself being inspected from that quarter, too. In addition, NIH is the object of continuous, affectionate attention from appropriations committees in both House and Senate, and of the equally continuous, though less affectionate, scrutiny of a House Government Operations subcommittee headed by Representative L. H. Fountain (D.-N.C.). And finally, through its jurisdiction over the Public Health Service, of which NIH is a division, and especially because of its current interest in a proposed reorganization of the PHS, still another House committee-Interstate and Foreign Commerce—has been keeping an eye on NIH as well.

The reason for all this interest is not hard to find-money. National expenditures for medical research have grown (maintaining, roughly, a proportion relative to all research and development funds of 5 to 7 percent) from \$148 million in 1950 to \$1.6 billion in 1963; the government, whose support for medical research outside its own laboratories was virtually nonexistent until 1947, has supplanted private and industrial sources as the principal angel of medical research; and a continually expanding share of the government's largesse has fallen to NIH to distribute. The government supports 62 percent of all medical research in this country, 40 percent of which comes through NIH, and NIH grants accounted for 40 percent, also, of the government's support of basic research in all fields in colleges and universities in 1962. This was an increase of 31 percent since 1952; during the same decade the proportion of research financed by the Defense Department decreased from 70 to 28 percent.

NIH has thus rather suddenly come to have a powerful influence not only on medical research but on all research. What NIH chooses to do, and how well it does it, are matters of great significance not only to the scientific community but to the politicians and government officials who feel a final responsibility for its use of public funds; hence the proliferating investigations.

When they arrive at the gates, investigators will find NIH growing and changing, as befits an institution on which Congress, despite recent irritation in some quarters with NIH grant policies, is about to bestow a record budget. For 1964, NIH will have at its disposal something between the \$930 million on which it operated last year and the \$980 million the President has asked. The House lopped off \$18 million, \$12 million of which was for construction of model treatment facilities for the mentally ill and mentally retarded, on the grounds that the plan lacked "definitive details"; the Senate has not yet completed its work on the appropriation.

Between an expanding budget, changing health patterns within the country, and developing needs in medical research, NIH has begun to outgrow its basic disease-oriented structure. The categorical institutes, established between 1937 and 1955, remain intact, but two new institutes have recently been created to support basic research that is not immediately directed toward the conquest of a specific disease. One of them, the National Institute of General Medical Sciences, has been in existence since 1958 as a division, and raising it to the level of an institute primarly means that it acquires more status. The second, the National Institute of Child Health and Human Development, is more of a departure.

The Institute of Child Health and Human Development became operational on 1 July; it is headed by Robert A. Aldrich, formerly chairman of the Department of Pediatrics at the University of Washington. For the first year of its life, the new institute will operate on \$34 million transferred to it from the programs and budgets of other in-