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## Funds for New Graduate Students

Academic scientists have not reacted sufficiently to drastic changes in the political climate. As a result, federal support for graduate education has been hard hit. Unless present political trends are reversed, federal funds for academic research may also be cut.

Graduate school enrollments have been increasing at the rate of about 10 percent per year and are expected to reach about 300,000 in 1968. However, the number of new fellowship and traineeship awards will drop from 15,000 in fiscal year 1966 to about 10,500 in fiscal 1968. The effects will be felt most painfully in the physical sciences. Among the programs supporting graduate study, new National Science Foundation graduate fellowships will fall from 3635 (in 1966) to about 2600 (in 1968); the National Defense Education Act Title IV fellowships, from 6000 to 3325; and the National Aeronautics and Space Administration traineeships, from 1335 to 75.

An alternative and important source of stipends for graduate students is research grants or contracts. If funds for research were expanding, some of the effects of the cuts in fellowship funds could be offset. However, overall federal support for the physical sciences has also diminished. Present indications are that federal funds for research and development in the physical sciences will drop at least 7 percent from fiscal 1967 to fiscal 1968. Because of inflation and other factors, the cost of conducting scientific activities increased by about 7 percent during the year.

Those responsible for the conduct of research will have to operate with the equivalent of 14 percent less money. In a retrenchment, purchases of equipment and supplies take precedence over provision of stipends for graduate assistants. Moreover, experienced graduate assistants of known competence are supported in preference to beginners. Thus, one consequence of recent congressional actions will be a stunted or a lost generation of young scientists. Prominent among the casualties will be those who need financial assistance in order to continue their education.

Congress does not seem to have comprehended the effects of its actions. In its present mood it does not want to listen. Observers have the impression that it is unusually peevish and anti-intellectual. Largely because of the war in Vietnam, a deficit of as much as \$29 billion is projected. With an election year approaching and the public overwhelmingly against a tax increase, Congress feels that its only course is to decrease spending.

However, it is unwilling to cut military expenditures, social security, or medicare. It cannot reduce the interest on the national debt. If cuts in the budget are to be made, they must come out of a few activities. Science and education now seem among the more vulnerable. The *Congressional Record* for 18 October shows the current attitudes of many members of the House of Representatives. In wide-ranging debate concerning budget cuts, many activities and agencies were defended—for example, the Post Office Department, the Internal Revenue Service, the Federal Bureau of Investigation, even the supersonic transport. No member rose to speak for education or the National Science Foundation.

Today Congress seems unable to select a wise course of action. In this pre-election year, congressmen listen willingly to their constituents but to few others. If a further decline in support of science and higher education is to be prevented, academic scientists across the country must make themselves heard both now and later. The universities and their alumni associations represent a potentially powerful political force. The time has come for bringing that force into constructive action.—PHILIP H. ABELSON

# Science

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Philip H. Abelson

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