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Additional Sources of Financial and Political Support for Science

The dismantling of the academic scientific research establishment continues. This is manifest at those universities that traditionally have been the leaders of American science, and particularly at the private institutions. In some places, and in some departments, the number of graduate students next year will be fewer than a third of that a few years ago. The state-supported schools have generally not been so hard-hit, but they must be apprehensive that their turn is coming.

Conversations with professors at various institutions give the impression that most have not yet adjusted their thinking to new realities. They ask about when funding will be restored and what scientists can do to bring about favorable action in Washington. They are thinking, of course, of such moves as writing to their congressmen or seeing somebody.

The reality is that the status of science and scientists has changed. Once scientists were regarded as supermen, and academic research was supported as the key to national security and commercial leadership. Scientists had an influence on national policies that far exceeded their numbers. Today scientists are regarded as mortals—fairly intelligent, fairly well-meaning, but still merely mortals. As pressure groups go, they are one of many, and their numbers are inconsiderable. When they make statements, however meritorious, their views are discounted just as those of any other group.

At one time, science needed no allies or advocates, and the federal government was a more than adequate source of funds. Today science must seek additional sources of political and financial support.

At one time, industry was a very effective ally of academic science. Both publicly and in private, spokesmen for industry emphasized the value and importance of healthy university science departments. Many cooperative arrangements existed between universities and industry, and these included various forms of financial support.

The relationship withered when massive government funds became available. Industry was not inclined to try to compete with the federal treasury. It withered for another reason. The universities de-emphasized training students for industry; they prepared their best students for university positions. This required that a student of any consequence must persist to the Ph.D. degree. Industry has found that the typical Ph.D. tends to be inflexible; he usually wishes to keep on redoing his thesis, and he expects to pursue a self-directed course. For many purposes, a B.S. or M.S. degree is adequate, and individuals with such degrees are more likely to adapt readily to a company's needs. The situation was especially evident at a recent visiting committee meeting at a leading university. The representatives of industry told of unfilled needs at the B.S. and M.S. levels, but the school was turning out only Ph.D.'s, for which industry had little enthusiasm. It is questionable whether academic science will acquire the political base it needs unless it responds more realistically to the needs of industry.

At one time, academic science enjoyed excellent financial support from private foundations. Last year they allocated \$784 million, but only a small fraction went to academic science or support of fellowships. If the plight of the universities were better comprehended, diversion of an additional 10 percent of foundation funds to the support of science might be feasible, and it would have very substantial beneficial consequences.—PHILIP H. ABELSON