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The University and R & D

The article by John D. McCrone and Margery E. Hoppin discussing research contract solicitation by the federal government (9 Mar., p. 975) suggests, although it does not mention, a question that is of profound importance in these times of research-support evaluation: What is the proper role of the university in publicly supported research?

The traditional role of the university as source of fundamental new knowledge, growing from its responsibility for storing and diffusing existing knowledge, seems unassailable. I question, however, the unlimited extrapolation of this role to the application of existing knowledge through applied research and development (R & D).

McCrone and Hoppin competently discuss the fact that present practice in applied research support displays a continuing trend toward more dependence on contracts (which by definition require explicitly stated performance) and less dependence on grants (which make performance requirements implicit). I cannot quarrel with this trend; it increases both the objectivity with which researchers and institutions are chosen by funding organizations and the probability that useful results will be produced.

My quarrel is with the changing nature of the institutions themselves, with the growing emphasis upon the acquisition of services "business" rather than upon the acquisition of knowledge, upon services to "customers" rather than to humanity.

This change apparently assumed serious proportions during and after World War II, when the federal government determined that new information, methods, and devices were needed and correctly concluded that (with few exceptions) only institutions of higher learning had the intellectual resources to provide applied research and develop-

ment services that were organized and disciplined.

During the last three decades, competent R & D organizations have developed in the private enterprise sector. Thus one basic and valid motivation for seeking R & D services from universities has vanished. During the same period, however, many universities have spawned "office of research" (O/R) subsidiaries which compete with R & D vendors and which do not resemble at all the popular image of the university research team as a group of scholars earnestly probing at the boundaries of human knowledge.

A typical O/R group consists mainly of ad hoc employees hired for, and only for, the purpose of working on contract R & D activities, usually under the titular supervision (rather than, alas, under the intellectual leadership) of a member of the faculty. Some faculty members may work on the "project," usually on a part-time basis, and seldom with any real intellectual involvement in terms of their academic department responsibilities.

Should the universities be in the marketing business, retailing services in competition with privately financed vendors of comparable services? As an officer of such a vendor, I have found universities to be among the most aggressive competitors for the acquisition of R & D contracts. As a consultant to government agencies taking part in the evaluation of R & D organizations and their work, I have found that an ad hoc university O/R group is sometimes inferior in performance, and not necessarily lower in cost, in comparison with its commercial competitors.

The well-known financial squeeze of a few years ago placed many educational institutions in serious straits. In some cases the financial pressure was generated by the need to support academic overhead organizations which were overexpanded during the frenetic 1960's.

It is not evident that a proper answer is to support universities from the sale of applied R & D services performed by either faculty members or nonfaculty. In particular, the notion that universities must find ways to support ad hoc extra-academic business organizations, some of which may well have completed their proper missions, seems not worthy of public support.

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