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PRESIDENTIAL ADDRESS

Academic Medicine and the Public

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Each year at this time the President is privileged to address the Society on a subject that he hopes will be of interest to members and guests. After giving much thought to the matter, I have decided that the most important problem facing academic medicine today is the question of our relationship to government and to the public that it represents. Stated in the briefest of terms, the issue is how we ought to respond to the pressures being generated by a changing social climate, in which federal support for research seems to be threatened, and demands for more services and community involvement are coming from all sides.

This I believe is the problem that is causing us the greatest anguish these days, and this is the problem that I want to discuss with you this morning.

Let me confess at the outset that I have no claim to any special wisdom in this area, no solutions to propound, and, in fact, no confidence that there *are* satisfactory answers to the problems we face. Nevertheless I believe we must examine the current situation as closely as we can. Unless we do we may lose by default any opportunities to influence the future direction of affairs.

This Society was born 61 yr ago at another time of great ferment in American medicine. Its early members spearheaded the transformation of the medical educational system that followed the Flexner report, and they contributed in large measure to the revolution that joined together the natural sciences and medicine in the new discipline of clinical investigation. The thesis I would like to put before you is that we have now entered a new era which is going to produce changes in medical education, research, and practice at least as profound as those witnessed by the original Young Turks.

Two major developments have contributed to the present state of affairs. There is, first of all, the extraordinary recent history of federal support for medical research, mainly through the National Institutes of Health. Beginning in 1947, with a congressional appropriation of 4 *million* dollars, the total of funds expended by NIH for extramural support of research rose rapidly until 1966, when it reached approximately 1.2 *billion* dollars annually. As James Shannon has said, "Never in the nation's history had public funds in such amounts been placed at the disposal of individuals working outside the framework of federal institutions" (1). Most of this money went to the medical schools and their teaching hospitals, where it was largely responsible for the spectacular growth of clinical investigation during the past two decades, and for the equally impressive increase in the number of clinical investigators.

There is no need to extol the widespread benefits of the NIH program, which have been recognized by all observers. As we all know, these benefits have extended *beyond* research and have contributed in many indirect ways to the strengthening of medical education and patient care. However, it is important to note that the primary thrust of the NIH bonanza was toward the development of research programs. It was not until 3 yr ago that there was any federal assistance for medical education as such. This support, welcome as it is, has so far been only a trickle compared with the current estimates of need by the Association of American Medical Colleges. 20 yr of inflation in our research economy, with inadequate support for the educational enterprise that nourishes it, has produced serious imbalances in our medical schools and teaching hospitals that now cry out for redress. What is needed, of course, is not *less* research but *more* education and more support for the whole structure of academic medicine upon which everything depends.

This problem has now been compounded by the recent tightening of NIH funds. Everyone knew that the logarithmic rate of growth in appropriations, which occurred during the decade 1955–1965, could not be sustained, but 3 yr ago when increasing military expenditures forced Congress suddenly to apply the brakes, a shock wave was generated which has continued to shake the foundations of the academic medical establishment ever since. On paper the situation doesn't look too bad because there has simply been a leveling off of *total* expenditures. However in the face of escalating costs

and increasing requests for the support of young investigators and new projects, a sudden leveling off of total available funds means in fact that research grants are harder to get, and that the funding of approved grants must be curtailed or delayed. There are some optimists who profess to see a salutary aspect to all of this. They describe it as a "trimming of excess fat," a necessary and healthy process of tightening up on a program that had become too big for its own good. But most of those who have *personally* felt the pinch would not agree with this interpretation, nor would most deans and department chairmen, who face the prospect of supporting a growing full-time faculty with less help from the NIH. When research funds are tight, there is less opportunity to make them serve multiple academic purposes. Thus, the strain on medical school budgets originally generated by the rapid growth of sponsored research is made even worse when this growth is abruptly halted.

I want to comment briefly on one other aspect of the NIH research program and its relation to academic medicine. Now that the total NIH appropriation is well over the billion dollar threshold, it must be considered a significant item in the federal budget. With enhanced visibility comes greater sensitivity to political and public pressures of all sorts. The NIH program is now in the realm of public policy and, as such, must compete for priority with all the *other* governmental programs. This means that the research activities of academic medicine, which are now largely dependent upon NIH funds, have moved into the public domain, where they will be subject to legislative control. Shannon has observed that universities demonstrate "a persistent ambivalence concerning the extent to which research is an academic function supported by public funds or a public function housed in universities" (1). I think the answer is that medical research is now *both* an academic and a public function. This is an important new fact of life for us clinical investigators, and it has wide-ranging implications to which I will return in a moment.

A second major source of social pressure on academic medicine is the growing national concern for the improvement of our health care system. The President's National Advisory Commission on Health Facilities in its report a few months ago (2) drew one major conclusion: "The Nation must now concentrate upon organizing health facilities and other health resources into effective, efficient, and economical community systems of comprehensive health care available to all." This recommendation reflects a widely held view that health care for many people in this country is seriously deficient, and that new federally aided programs will be required if we are to create an acceptable system of care.

Many planners, both in and out of government, believe that medical schools and teaching hospitals must play an important role in developing these programs. We are being asked not only to advise and consult but also in many cases to organize and staff new community-oriented facilities. This kind of pressure is being felt most keenly by the schools that are located in urban areas with large medically indigent populations, but there is hardly a major medical center in the country that has not been affected. The impetus for this movement comes from all sectors of our society, but most notably of late from the urban communities themselves and from our medical students and house staff. As America's urban and racial problems have become more acute there has been a remarkable awakening of social activism among the young people coming into medicine, a phenomenon made all the more impressive by contrast to the relatively passive attitudes of earlier generations of medical students.

Although no one disputes the need for broad social action to improve our health services, many thoughtful and responsible people in academic medicine feel that it would be unwise for medical schools to assume a primary role in such an effort. In his Presidential Address before this Society 3 yr ago (3), Dr. Donald Seldin argued cogently that medical schools and their universities jeopardize their essential scholarly functions if they take on major service responsibilities of this sort. A similar note of warning was sounded by Dr. A. McGehee Harvey before the Association of American Physicians last year (4). Dr. Harvey went on to make the interesting suggestion that medical schools might be able to make a significant contribution without compromising their academic responsibilities if research and development in medical care were assigned to an administratively and financially separate division of the university.

My own view of this issue is that we must begin by recognizing that medical schools differ from many other elements of the university in that they do have direct social responsibility. Inherent in the concept of medicine as a profession is the idea of an obligation to serve the health needs of society. This obligation is clearly laid upon medical practitioners. Does it also apply to our schools, or is their social obligation limited to the education of physicians and the generation of new biomedical knowledge? I do not believe there is any clear answer to this question that can be deduced from first principles. However, I suspect that it will be resolved by historical events rather than by debate.

This consideration now leads us back to our discussion of the new position of medical research in this country. I said a few moments ago that medical research has become both an academic and a public function. As clinical investigators in university departments of medicine, *we* see our research as a free expression of independent scholarship. We are driven by the same need to find order in nature that motivates our colleagues in other sciences. Most of us are also strongly committed to the idea of serving society by contributing knowledge that will directly or indirectly improve man's health.

The public, on the other hand, sees our research as an essential resource which it needs in order to achieve its own ends. The public has therefore undertaken to support and expand this resource; it has in effect made a social contract with us. By our acceptance of this con-

tract, we recognize the public nature of our research. We must then be prepared to accept the consequences.

It seems to me that what has happened in *one* area of academic medicine is very likely to happen in the others, and for the same reasons. Society is turning to us for help with the task of rebuilding an archaic and inadequate health care system, for the simple reason that there are few places outside the medical schools where the necessary talent and expertise can be found.

I do not believe that our medical schools will refuse to help, for they really have no choice. Whatever the enabling administrative and financial mechanisms may be, and regardless of our understandable anxieties, I think the obvious need for such community programs, and the insistent pressure from all sides, will make the outcome inevitable. Indeed, many schools have already committed themselves and are well launched upon this course.

A similar degree of public involvement will doubtless extend to the areas of undergraduate and postgraduate medical education when a major program of direct federal grants to medical schools is finally instituted. Such a policy has been advocated by the Association of American Medical Colleges and has recently been strongly endorsed by a Special Report by the Carnegie Commission on Higher Education (5).

I hope it has been clear up to this point that I have tried simply to analyze recent trends as I see them, and that I have avoided advocacy of any specific position. Now, to conclude my remarks, I should like to offer briefly some personal views.

First, I see nothing in recent events to give us reason to abandon the basic philosophy of clinical investigation, as embodied in the tradition of this Society. As clinical investigators, we are committed to the study of human biology and disease by the methods of the natural sciences, in the firm conviction that this is the way medicine advances.

Those who seriously question the practical value of basic medical research are ignoring the lessons of the history of medical progress, and those who advocate that we concentrate on applied research at the expense of more fundamental and unrestricted investigation simply misread the American character. We have never been a people to overlook practical applications. What limits our knowledge in practical medicine is much more our lack of biological infomation than it is any failure to apply what we already know.

Second, I believe that since our new and expanding relationship to the public is historically inevitable, we should not waste our time in hand wringing but should get on with the task of assuring that the terms of this relationship will permit us to do our job well. We must see to it that our scholarly and service functions, both essential elements in the life of a clinical department, remain in balance and that they support each other. Our service responsibilities must be appropriate to our capacities, and they should serve an important research or educational function.

It would be ironic if we in clinical investigation, who have so often in the past criticized the inflexibility of organized medicine, should now permit ourselves to be frozen into a similar posture of fruitless protest. We must not wait until we are forced by events, or by inept or punitive legislation, into arrangements that are neither in the public interest nor our own.

If we wish to encourage public policy in the medical sphere that is enlightened and consistent, we must try to establish effective mechanisms of communication and interaction between policy-making levels of government and a broadly representative spectrum of leadership in medicine. It will be essential that there be a continuing dialogue between medicine and government, carried out in a nonpartisan atmosphere of mutual respect and confidence and illuminated, at least on the medical side, by the highest attainable degree of objectivity and professional competence.

Many attempts have already been made by various groups and individuals in the academic medical establishment to develop a liason with the NIH or other governmental agencies. By and large, these attempts have not been effective because efforts have been fragmented, and because there has been no formal or legal recognition of such a function. It is encouraging, therefore, to learn that the Board on Medicine of the National Academy of Sciences has recently recommended the formation of a National Academy of Medicine. Like the parent NAS, and the recently organized National Academy of Engineering, such a National Academy of Medicine could assume a legally sanctioned advisory role to government and, if suitably constituted, could speak authoritatively for the many diverse elements in this country which are involved in medical research, education, and practice.

Final action has not yet been taken, but it is my personal conviction that this is the kind of role academic medicine must claim if we are to be in a position to shape our own future. I have argued that we have become a public institution. If that is true, then we must henceforth have a voice in the formulation of public policy.

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