Biomedical science has played a pivotal role in the development of national health and health science policy. Biomedical research is the only major health activity which has not been challenged as an appropriate federal role in health during the past 30 years. During this period of our history, the magnitude of this federal investment has changed our academic medical centers and research institutions by providing unprecedented opportunities for the growth of research programs, the training of researchers, and the expansion and upgrading of medical school faculties as well as of the scientific quality of medical education. In the process, the pattern and scope of federal research policy and funding created a high level of expectations and an interdependence between the federal government and these institutions which recent policy and funding changes have threatened.

The past 10-12 years have brought major changes in the nature of the federal role in health. The generation of new knowledge about health is now only one federal health activity competing for increasingly scarce health resources. The past decade has seen the demand for and development of major federally supported health financing programs, direct support of health manpower development, programs of health services demonstration and delivery, expanded product safety and environmental health programs, as well as regulatory quality assurance and health planning programs. These 10 years have also seen strong challenges to biomedical research to justify its relevance to our overall health objectives as well as its share of federal health resources.

The overall federal objective in health is improving the health status of the American people. Both the health of the American people and the health care system of the nation are good and getting better. Life expectancy is increasing; the mortality rate is declining; and more people—notably the poor—are receiving more and better health care than ever.
before. In contributing to this progress, the federal government has played three important roles: paying for care, regulating what is paid for, and developing the knowledge and technology of health science to permit greater effectiveness and efficiency in health care itself and the way it is organized and delivered. These three roles are intrinsically interrelated. In particular, everything we do in the name of better health is inherently knowledge-dependent. Thus knowledge development has become one of the major cross-cutting themes of our Forward Plan for Health in recent years.

The federal government supports over 65% of the health-related research in this country—over $2.5 billion—nearly 80% of which is allocated for research on the cause, prevention, diagnosis, and treatment of illness. The National Institutes of Health alone administer nearly 65% of these federal funds, and supported nearly 40% of all the nation's medical research and development in fiscal year 1975. The federal government is also a major supporter of health services research, with an annual investment nearing $50 million. While overall funds for health research are growing, health research investment is declining as a percentage of total health costs, now down to 3-4%.

The evident magnitude of the federal role in biomedical, behavioral, and health services research—with the consequent impact of federal policy and policy changes, as well as the impact of levels and consistency of funding for such research and related programs—explains the origin of widely expressed concern and controversy about health research. Even small changes in Federal research policy can have major, and unpredictable, effects on a "system" which is so dependent on federal resources. Major policy shifts, such as those of the Administration and the Congress on research training and general support for higher education, when combined with intense competition for scarce health resources increasingly funneled to Medicare and Medicaid benefit entitlements, and general trends in the economy such as 350% increases in fuel costs, have created a climate of uncertainty and a sense of instability among the institutions which are the nation's major performers of health research. Much of the discussion of the need for stability derives from this aura of uncertain expectancy which now pervades the world of research. Knowledge development is a creative enterprise, in which subtle changes in the milieu can have profound (if not easily documented) effects. Clearly we have left behind the halcyon days of unquestioning support and security for research support. Nevertheless, the federal government is as depen-