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# **Resources for Research Medicine**

Research medicine has come far, and it has farther yet to go. The pace of biomedical discovery, of developments in technology and technique, has been explosive, and has been correlated with the explosion in NIH research funding since 1950—the latter distorted by inflation but impressive even in constant dollars.

Since 1979, however, annual NIH appropriations have not increased when measured in constant dollars. But the constant-dollar cost of biomedical research keeps on increasing. Will the resources be available to allow us to advance, and without breaking stride? If federal support declines, will industry and private investment pick up the slack? And if so, on what terms? These are our current problems, and we do not yet have solutions. Our hope must be that we can go forward. That hope, however, rests on a simple recognition: neither a miracle nor a happy accident produced our recent progress—billions of dollars of public investment made it possible. Our future has an obvious price tag attached to it.

A second hope I have is that we will be flexible enough to keep adjusting responsibly and effectively to changes of bewildering proportions. Medicine is rooted in the present but must well serve the future. No prophecy is needed to anticipate the shock of impact of trends already fully visible. Our increased ability to prevent disease will produce shifts in kinds of patients in hospitals. The aging of our population will produce a demand for greater and different resources for medical care. Changes in treatment may have consequences ranging from noninvasive diagnosis to the possibility that whole clinics may close as the tuberculosis hospitals closed in the 1950's. Our hope under these circumstances must be that we will neither resist the flow of change nor drown in it, but that we can and will succeed in managing and channeling change within our medical institutions.

Yet another hope is that we will make the best possible use of the larger number of physicians that are coming onto the scene. It is anticipated that their number will increase by a full one-third within this decade. Will we therefore be able to reduce the scale of some medical schools to more intimate and more personal dimensions, and to achieve more effective staffing in hospitals? Can we avoid the possible negative outcomes of so great an enlargement in the supply of physician talent?

Let me now shift from hope to purpose and touch upon two points. There is harmony rather than dissonance in the marriage of private enterprise with the public interest. When committed to public service, private enterprise surrenders profit. But it retains the virtues of autonomous and responsive private governance, the efficiency and flexibility of independence in management and operation, and the discipline of competing for resources. When committed to the public benefit of private enterprise, government as the representative of public authority surrenders control. But with respect to private not-for-profit institutions, it retains the incentive of providing support for public purposes with public funds, the responsibility for the public order in which the private corporation functions much as the private citizen does, and accountability for the legitimate use of public funds. In the American tradition, it is our genius that private enterprise and public policy are linked in partnership and therefore strengthen one another.

I am also convinced that the resources needed in the private sector will depend on our own resolve to secure them. If the quality of our work and strength of our purpose merit support, we shall not fail for lack of it. But as we achieve a richer and more diverse mixture of support, let us not trap ourselves into the false notion that support from government and industry is an either-or proposition. Only the trinity of university, industry, and government can effectively support the trinity of service, training, and research.—Steven Muller, President, Johns Hopkins University and Johns Hopkins Hospital, Baltimore, Maryland 21218

Excerpted from an address by Dr. Muller at the dedication of the North Division, Duke University Hospital, 25 April 1981.