The next 5 years (1956–60) were years of maximum growth rate. The guiding principle of this period was the concept that the expansion of medical research in the national interest should not be restricted by lack of funds and that the necessary resources for this expansion should either be made available or created for this purpose. This principle was initiated by Secretary Folsom in fiscal year 1956, ratified by the Bayne-Jones Report in 1958, and acted upon with vigor and swiftness by the Congress throughout this period. Between 1955 and 1960, NIH programs expanded over fivefold, reaching a level of \$430 million in the latter year, including construction grants. The NIH investment in the development of resources was substantially enlarged. New fields of scientific endeavor were cultivated, including biophysics, mathematics, and behavioral sciences. Engagement with science on an international basis became an essential component of NIH programs. The problem of stable support for the institutional base of research and training was diminished by the enactment of general research support grant program in 1961.

In most recent years—with growth rate slowed to a more mature stage of development—the long-term principles, terms, and conditions guiding the conduct of the extramural program were subjected to searching examination and reassessment, stimulated largely by congressional inquiry. From this inquiry has emerged a more structured, articulated, and formal framework for grant administration.

- 4. Level of operations. (See tables 1 and 2 at the end of NIH section.)
- 5. Estimated magnitude of program in 1970 Not answered.
- 6. Prospective changes in program orientation Not answered.
- 7. Coordination and cooperation
 - (a) Within NIH:

i. The need for coordination and cooperation: The health research objectives of NIH are sought through the interrelated efforts of nine Institutes and three program divisions—each with separate areas of responsibility as defined by distinctive missions. Two factors explain the need for this somewhat complex structuring of NIH program: (1) The number and variety of health research goals pertinent to NIH mission; and (2) recognition that progress toward these goals depends to a considerable degree on the sensitivity with which program interest can be focused on research needs and opportunities in each goal area. Clearly, with such structuring, there is potential for program overlap or gaps, and for cross-purpose or competing activities. Consequently, increased effectiveness is sought through a variety of coordinating mechanisms.

ii. Existing arrangements: The Director, NIH, is responsible for coordinating the total NIH program. In this, his principal concerns are for best distribution of total resources available for health research; also for integration of current and longer range plans, particularly in their impact on resources. The identification and elimination of gap areas and unnecessary overlap on cross-purpose activities are other

concerns.