No clear recommendation was developed regarding funding for cardiovascular trainees. Major concerns were related to utilization of trainees for clinical work with a loss of academic and research pursuits. The technical or paramedic personnel would relieve the fellows of some burden, but would not necessarily relieve some of the financial burden.

Edward Murphy, M.D.

Reprint requests: Dr. Murphy, VA Medical Center, 3710 SW US Vets Road, Portland, Oregon 97201

The Uncontrolled Proliferation of Technology

Chairman: Michael D. Ezekowitz, M.D., Ph.D., Oklahoma City
Secretary: Frank C. P. Yin, M.D., Baltimore
Participants: James H. Caldwell, M.D., Seattle; David E. Hoekenga, M.D., Albuquerque; Richard M. Steinbert, M.D., New York, NY; Donald A. Weiner, M.D., F.C.C.P., Boston; James B. Young, M.D., F.C.C.P., Houston

The development of new technology in cardiology has generated the rapid and expansive proliferation of new diagnostic and therapeutic procedures that have not been fully tested. Physicians trained in a particular technique are often unwilling to address the potential of technologic obsolescence. The following problems currently exist in determining the effectiveness of new technology:

1) Initial reports suffer from the great pressure to produce and publish only positive results. Negative results often do not gain acceptance at national meetings and as publications.

2) Funding sources, particularly those from industry, may be end-serving, providing data which would only be beneficial to that particular industry.

3) Premature proliferation of poorly tested technology occurs when community hospitals, in an effort to be in the forefront of medical science, purchase equipment prematurely. The equipment then is unnecessarily utilized in order to justify its cost.

4) While it was agreed that controls on the proliferation of equipment should be instituted, it was equally important not to stifle initiative. It was thought that certain incentives should be provided to encourage researchers to pursue research ideas. These incentives might include tax incentives for private industry or federally funded non-goal directed research for academic institutions.

5) All assessments should be made by intellectually honest individuals who would gain sufficient rewards from presenting both positive and negative data.

6) It was generally felt that training facilities should be provided so that older practicing cardiologists could be updated on the new technology so that they would not be threatened by it and not be reluctant to give up using obsolete techniques.

Michael D. Ezekowitz, M.D.

Reprint requests: Dr. Ezekowitz, Cardiovascular Section/ Medicine, PO Box 26901 University of Oklahoma, Oklahoma City 73190

Interrelation of Federal Government and Research

Chairman: Paul S. Greenberg, M.D., Long Beach, CA
Secretary: C. Jeffrey Carlson, M.D., San Francisco
Participants: John S. Gottdiener, M.D., Washington, D.C.; Jeffrey M. Isner, M.D., Boston; John McAnulty, M.D., Portland, OR; J. Franklin Richeson, M.D., Rochester, NY; Bahram Zamanian, M.D., New Orleans

Quality of patient care is enhanced by basic and clinical research. Federal support of research is necessary, but is currently inadequate. The total federal funds allocated to cardiovascular research should be increased. Mechanisms for obtaining research funds are complex and unwieldy. The grant process should be simplified. Multiple application to different federal agencies should not be required. Inter-agency coordination of distribution of funds is desirable. There needs to be direct investigator representation on federal funding agencies. This can be achieved through institutional or existing professional societies. Consideration should be given to formation of a new organizational body whose sole function is to represent clinical and basic researchers for those funds available.

The decisions on the allocation of available funds must continue to be made by individuals with appropriate scientific credentials. In addition, alternative sources for research support should be explored. Since research contributes to patient care, it is appropriate to reinvest a portion of patient care funds into research. The federal government can facilitate this by avoiding overly restrictive regulations that limit the use of federal and state funds in activities of academic institutions which combine patient care and research. Private third party carriers should also be encouraged to recognize the beneficial effects of this approach. Consideration should be given to changing the federal tax structure to encourage the donation of time and money.

140 SPECIAL REPORTS

CHEST, 81: 2, FEBRUARY, 1982
by individuals and corporations to academic research.

Many important clinical advances have arisen from basic areas of investigation seemingly unrelated to their ultimate clinical application. Therefore, the federal government should continue to support a wide range of basic and clinical investigation. Attention to narrow, goal-directed research by the federal government should be limited.

We are concerned that allocation of federal health care funds to cardiovascular disease is not adequate. Since there are many organizations with an interest in cardiovascular disease, we may enhance our impact on Congress by developing a combined lobby.

Complex and costly technology should be largely concentrated in an academic or tertiary referral center.

The federal government must restrict its monitoring of new devices and therapies to ensure safety and reasonable intent rather than efficacy.

John McAnulty, M.D.

Reprint requests: Dr. Greenberg, 2840 Long Beach Blvd, Suite 120, Long Beach, California 90806