elite universities than seems reasonable on the basis of other measures of where scientific talent is located—and notes that, between 1950 and 1973, 12 Americans who received the Nobel prize were not academy members at the time. The deficiencies of the Academy membership should not be exaggerated and members are, by and large, a distinguished lot; but, Boffey observes, "they are not necessarily the best of American science, nor are they drawn equitably from the full range of scientific disciplines and institutions, nor do they include the young, vigorous, active scientists working at the frontiers of knowledge. Thus . . . the Academy should cast its electoral net much wider than in the past."

The vantage point of his study, Boffey says, "is that of the citizen who would like the Academy to bring the nation's best scientific talents to bear on societal problems and then enunciate, unflinchingly and unequivocally, the nearest possible approximation to the truth." It is clear that the academy "all too often, turns in a flawed performance." What is to be done? The academy has recently introduced a number of reforms—particularly the establishment of a high-level report review committee—which, Boffey says, should help to alleviate some of the defects he found. The reforms are all admirable in intent, but many of them do not go far enough toward eliminating the specific problems they were designed to prevent. (For example, committee members now have to complete statements indicating possible sources of bias—but the academy does not publish the statements.) Nor do the reforms as a whole provide a fundamental solution to the academy's major weakness: its master-servant relationship with the government agencies and industrial interests which provide financial support. Boffey details his own prescription for reform, a carefully thought-out analysis that covers the full range of the academy's activity. His most radical recommendation is that, to reduce its dependence, the academy should cut back its burgeoning bureaucracy to a size it can support from its own funds. Instead of taking on every odd job the government tosses its way, the academy should accept only the projects which require a broader or more independent study than the interested agency is likely to make. If this were done, the academy might come to deserve the accolade bestowed by one of its former presidents, that it is a "supreme court of final advice" whose findings are "wholly in the public interest, uninfluenced by any elements of personal, economic or political force."

Boffey concedes in his preface that he has not found a perfect measure for the academy's performance. One of the achievements of his study is that it creates a yardstick. It will be hard for any reader of *The Brain Bank of America* to peruse an NAS report without asking if the academy has attained the elaborate standards of impartiality and independence that Boffey has held up for it, as well as avoiding the various defects he has described. Nor can Boffey's advice be ignored—that each academy report must be judged on its own merit, not accepted on faith just because it bears the academy's imprimatur.

In a broader context, *The Brain Bank of America* is an important contribution to the science policy literature. Its fundamental lesson is well stated in the preface:

> Ours is a society that believes in expertise, that constantly genuflects before the presumed wisdom of experts. . . . The public tends to assume that these expert advisers dispense some sort of objective truth, the "right" answer to the problem under consideration. But such implicit trust is misplaced. There are relatively few public policy questions whose answers are purely technical. In almost all cases, an element of informed judgment is required, and what comes strutting out as "objective" wisdom is actually the subjective opinion of those who prepared the advice. Unfortunately, those expert advisers can be just as biased and pigheaded as you and me, and they can be just as foolishly wrong as we often are.

The fallibility of experts is an old truth, but it bears repeating.—NICHOLAS WADE

APPOINTMENTS

Kenneth W. Ford, professor of physics, University of Massachusetts, to president, New Mexico Institute of Mining & Technology. . . . **John K. Hulm**, former research director, Westinghouse Electric Corporation, to science attache, American Embassy, London. . . . **Roland C. Rautenstraus**, executive vice president, University of Colorado, to president of the university. . . . **Clifford D. Clark**, academic vice president, State University of New York, Binghamton, to president of the university. . . . **A. Walter Olson**, dean, College of Arts and Sciences, Western Illinois University, to president, California State College, Stanislaus. . . . **Roger L. Mitchell**, dean of extension, University of Mississippi-Columbia, to vice president for agriculture, Kansas State University. . . . **Melvin D. George**, dean, College of Arts and Sciences, University of Nebraska-Lincoln, to vice president for academic affairs, University of Missouri. . . . **Samuel H. Rubin**, executive dean, New York Medical College, to dean and vice president for academic affairs at the college. . . . **Arnold B. Grobman**, special assistant to the president, University of Illinois, to chancellor, University of Missouri, St. Louis. . . . **Daniel C. Tosteson**, chairman, physiology and pharmacology department, Duke University School of Medicine, to dean, Biological Sciences Division and The Pritzker School of Medicine, University of Chicago. . . . At the Michigan Cancer Foundation: **Marvin A. Rich**, director of biological sciences, to director of research, and **Samuel B. Horowitz**, chief, Cell Biology Laboratory, to chairman, biology department. . . . **Robert B. Nordberg**, professor of education, Marquette University, to dean, School of Education at the university. . . . **William P. Ilgen**, associate professor of civil engineering, Gonzaga University, to dean, School of Engineering at the university. . . . **Cleo Abraham**, director, Center for Urban Education, University of Massachusetts, to dean, School of Education, Texas Southern University. . . . **David G. Barry**, professor of biology, Evergreen State College, to dean, Graduate School, University of Toledo. . . . **B. L. Atchley**, associate dean, School of Engineering, University of Missouri, Rolla, to dean, College of Engineering, West Virginia University. . . . **Tony Bonaparte**, acting dean, Graduate School, Pace University, to dean. . . . **Jack W. Bennett**, assistant director, optometry division, Indiana University, to dean, College of Optometry, Ferris State College. . . . **Donald W. Benson**, chairman, anesthesiology department, Johns Hopkins University, to chairman, anesthesiology department, University of Chicago. . . . **Donald Silver**, professor of medicine, Duke University, to chairman, surgery department, University of Missouri, Columbia. . . . **Louis H. Guernsey**, former chief, dentistry department, Walter Reed Army Medical Center, to chairman, oral surgery department, University of Pennsylvania. . . . **Vittorio Defendi**, professor of pathology, University of Pennsylvania, to chairman, pathology department, New York University School of Medicine. . . . **H. Hugh Fudenberg**, professor of medicine, University of California School of Medicine, San Francisco, to chairman, basic and clinical immunology and microbiology department, Medical University of South Carolina. . . . **Stanley Bruckenstein**, professor of chemistry, State University of New York, Buffalo, to chairman of the department. . . . **Theodore Tamir**, professor of electrophysics, Polytechnic Institute of New York, to chairman, electrical engineering and electrophysics department at the institute. . . . **Robert C. Neerhout**, professor of pediatrics, University of California School of Medicine, Los Angeles, to chairman, pediatrics department, University of Oregon Medical School.