

- tion, Washington, D.C., 1963); D. T. Smith, Ed., *Abortion and the Law* (Western Reserve Univ. Press, Cleveland, Ohio, 1967).
3. For further discussion of the need to modify existing pronatalist influences in the United States, see J. Blake, *Science* 164, 522 (1969), pp. 528-529 in particular.
  4. Data on abortion from the National Fertility Study have appeared in a scalogram analysis; see C. F. Westoff, E. C. Moore, N. B. Ryder, *Milbank Mem. Fund Quart.* 47, 11 (1969).
  5. J. Blake, *Population Stud.* 21, 159, 185 (1967).
  6. H. E. Gaudet, *Public Opin. Quart.* 32, 517 (1968).
  7. ———, *ibid.*, p. 696.
  8. ———, *ibid.* 31, 658 (1967).
  9. ———, *ibid.* 27, 497 (1963).
  10. This finding accords with data from a National Opinion Research Center survey on attitudes toward abortion conducted in 1965 and analyzed by A. S. Rossi, in *The Case for Legalized Abortion Now*, A. F. Guttmacher, Ed. (Diablo Press, Berkeley, Calif., 1967), pp. 26-53. Rossi says, "Participants to abortion conferences, TV documentaries, and minutes of discussions by abortion reform committees often make the point that the only differences between the middle-class and working-class woman's abortion experience is the former's ability to buy the services of a skilled physician. This assumes that if the working-class woman could either afford to pay the price, or could obtain inexpensive abortions legally in an accredited hospital, that this class inequity would disappear. Our data on the strong association between educational attainment and liberal attitudes toward abortion suggest this may be an oversimplified view" (p. 48).
  11. The 1960 Growth of American Families Study found that, among Catholic husbands, 19 percent never received the sacraments, 15 percent received them once a year or less often, and 42 percent received them once a month or more. Among Catholic wives, only 13 percent never received them, 9 percent received them once a year or less, and 54 percent received them once a month or more [P. K. Whelpton, A. A. Campbell, J. E. Patterson, *Fertility and Family Planning* (Princeton Univ. Press, Princeton, N.J., 1961), p. 83]. A question on church attendance during the previous 7 days, asked on nine Gallup polls between 1947 and 1961, showed that about 43 percent of men but approximately 50 percent of women attended during the week prior to each survey. In 1963, Roper found that 43 percent of women but only 32 percent of men attended church once a week during the month prior to the survey, and 35 percent of men but only 26 percent of women did not attend at all [H. E. Gaudet, *Public Opin. Quart.* 28, 671 (1964)].
  12. For an initial development of this point, see K. Davis and J. Blake, *Commentary* 29, 115 (1960). More recent detailed evidence may be found in J. Blake, *Population Stud.* 20, 27 (1966).
  13. H. E. Gaudet, *Public Opin. Quart.* 29, 555 (1965).
  14. ———, *ibid.* 26, 140 (1962).
  15. See, for example, A. F. Guttmacher, in *The Case for Legalized Abortion Now*, A. F. Guttmacher, Ed. (Diablo Press, Berkeley, Calif., 1967), pp. 1-14; M. Mannes, *ibid.*, pp. 54-60; and G. Hardin, *ibid.*, 69-86. Other articles emphasizing the discriminatory treatment of women and the less advantaged in abortion statutes and practice are: E. M. Schur, *Ann. Amer. Acad. Polit. Soc. Sci.* 376, 136 (1968); H. Rosen, in *Abortion and the Law*, D. T. Smith, Ed. (Western Reserve Univ. Press, Cleveland, Ohio, 1967), pp. 72-106.
  16. I acknowledge support from the Ford Foundation and from a National Center for Health Services Research and Development training grant (8 T01 HS00059) to the Department of Demography, University of California, Berkeley. I also thank Irving Crespi of the Gallup Poll for assisting me in the collection of most of the data in this paper, and, as well, H. Nedel and W. Duncan, of the University of California's Survey Research Center in Berkeley, for their help in data processing. C. F. Westoff of Princeton University has my appreciation for making available the master tape of the National Fertility Study of which he and N. B. Ryder were codirectors. N. Tomasevich has made numerous editorial suggestions and K. Davis has given me the benefit of his critical acumen and unerring sense of relevance.

## NEWS AND COMMENT

# Nader and the Scientists: A Call for Responsibility

Consumer advocate Ralph Nader has launched a drive to encourage scientists, engineers, and other professionals to "blow the whistle" on destructive or unethical practices by the organizations that employ them. The campaign, which was introduced to the public at a "Conference on Professional Responsibility" held in Washington, D.C., on 30 January, embodies an important new tactic in Nader's continuing crusade to eliminate objectionable practices by corporations and government agencies. In the past Nader has relied primarily on outside pressure to club errant bureaucracies into line, but now he hopes to increase the effectiveness of his efforts by enlisting the support of public-minded professionals within the organization. Such professionals, he believes, can help check the excesses of "runaway or unjust bureaucracies" whose operations have become so extensive that it is difficult for outsiders to monitor them.

The Nader campaign consists of more than just a pep talk and exhortation. Nader has set up a clearinghouse to

offer advice to troubled professionals and to receive information from them in strict confidence. The administrative chores of the clearinghouse will be handled by Peter J. Petkas, a young lawyer with the Public Interest Research Group, a Nader-sponsored public interest law firm in Washington, D.C. Petkas says that only he and Nader will have access to the information sent to the clearinghouse, and that Nader himself will make the final decisions on what action to take as a result of the information received.

Thus far, the "public service" performance of most professionals has been rather poor, in Nader's opinion. Instead of speaking out against hazardous or unethical behavior by their employers, as most professional codes of ethics would require, all too many professionals, in Nader's view, tend to look the other way or slavishly follow company orders.

Nader told the conference that employed professionals are often among the very first to know about such corporate or bureaucratic depredations as

defectively designed automobiles, industrial dumping of mercury into waterways, suppressed data on occupational diseases, and undisclosed adverse effects of drugs and pesticides. "Hundreds and often thousands of people" are privy to such information, Nader complained, yet they "choose to remain silent within their organizations" or, worse yet, allow their services to be used in support of corporate or governmental abuses.

Nader noted that many professionals are "conscience-stricken" over their acquiescent role and "want guidance" on how to correct intolerable situations. What is needed, he said, is "an ethic of whistle blowing which can be practically applied in many contexts within corporate and other complex organizations or bureaucracies." In a prepared statement distributed before the conference, Nader suggested that the employed professional might find it easier to follow his conscience if "his duty to dissent is protected by an organization of his peers, by his professional society, and by law that requires due process and substantive justice." In his speech to the conference, he argued that "people must be permitted to cultivate their own form of allegiance to their fellow citizens and exercise it under conditions of due process and essentially constitutional right vis-à-vis the organization, private or public."

The day-long conference at Washington's Mayflower Hotel was devoted to speeches and panel discussions aimed at

illuminating the problems and potentials of wide-scale whistle blowing. Some 200 or more persons attended the conference, and a number of the nation's more publicized whistle blowers described their personal experiences. The lineup of speakers included Jacqueline Verrett, a biochemist with the Food and Drug Administration (FDA) who earned the wrath of her superiors by appearing on television to warn that cyclamates, an artificial sweetener, might cause birth defects; A. Dale Console, former medical director of E. R. Squibb & Sons, who told congressional committees about allegedly "corrupt" practices in the drug industry; John Gofman and Arthur Tamplin, two scientists employed at an Atomic Energy Commission (AEC) laboratory, who have charged that existing radiation standards will allow thousands of needless deaths; William I. Steiglitz, who resigned as engineering consultant to the National Traffic Safety Agency because he considered safety standards "totally inadequate"; A. Ernest Fitzgerald, who lost his job as an Air Force efficiency expert after he disclosed to a Senate committee cost overruns on the C-5A jet transport; Ralph Stein, a former Army intelligence specialist who revealed the extent of Army surveillance of civilians; and Edward A. Gregory, a General Motors inspector who complained about faulty exhaust systems in Chevrolets for more than 3 years before the company finally recalled some 2.4 million vehicles to fix the malady.

#### **Risky and Lonely Work**

The burden of the message delivered by most speakers was that whistle blowing is a risky and lonely business—the whistle blower is never sure at what point he should speak out, he has no guarantee that his action will be effective, and he is subject to reprisals and scorn. Still, every whistle blower who spoke said he would do it all over again if he had the chance. Some said whistle blowing was fun, and all said it was good for the conscience.

Several speakers noted that the whistle blower is more apt to be considered a "traitor" or a "rat fink" than a savior of mankind. But Nader argued that a professional can be loyal to his organization and still blow the whistle at the same time. He noted that almost all organizations have lofty goals, and he suggested that often the leaders of an organization have subverted its goals while the whistle blower is trying to uphold them. "Repudiation of my-

opic or negligent leadership in an organization is not the same as repudiation of the organization," he said.

The stacked legal deck that confronts the whistle blower was described by Arthur S. Miller, professor at George Washington University law school. "The law at present provides very little protection to the person who would blow the whistle," Miller said. "More, it often assesses criminal or civil penalties when he does." Miller noted that government, in some instances, actively encourages whistle blowing to protect its own interests—thus tax informers are rewarded for their snitching by being given a portion of the money recovered, and stool pigeons are used by the police. What's more, the code of ethics for government employees seemingly encourages whistle blowing when it states that "any person in government service should put loyalty to the highest moral principles and to country above loyalty to person, party or government department." But when the chips are down, Miller said, "the employee of public government who snitches can expect to be fired, cast into some obscure limbo, or criminally punished. If he is wrapped in the security of Civil Service regulations, he might even have his job abolished." (Such retribution is obviously not a universal phenomenon. Verrett, the FDA biochemist, said she got her first promotion in 7 years not long after warning of the dangers of cyclamates. However, Fitzgerald had his job abolished after testifying about C-5A overruns, and Tamplin said he lost most of his staff and was denied a raise after campaigning for stricter radiation standards.)

Miller said that "those who toil in the private bureaucracies" face much the same risks as the government employees. He said whistle blowers in private enterprise, except for people employed in "the universities, where academic freedom prevails . . . and possibly in industries where strong collective bargaining agreements protect the employee," might be fired, held civilly liable, or even criminally liable. "An employee owes loyalty to his organization under the principles of law—contract or tort or agency law," Miller said. "The technical word is that he is in a fiduciary relationship. To breach it, he might be enjoined by a court or held liable in damages. Furthermore, if he discloses 'trade secrets,' he might, under the laws of some states, be punished criminally. Speaking generally, there is

an obligation to keep a confidence if the person knows it is a confidential matter. . . . Furthermore, it is a federal crime to peddle or sell information for profit."

"That's the picture," Miller concluded, "and it is a glum one. A secrecy syndrome affects our public and private bureaucracies, backed up by the law."

In an effort to provide more protection for whistle blowers, Senator William Proxmire (D-Wis.) told the conference he would introduce legislation in the current session of Congress aimed at safeguarding the rights of government employees who speak out against waste or corruption. Noting that there have been "innumerable" cases of bureaucratic retaliation against whistle blowers and that these have not been stopped by existing laws or by Civil Service regulations, Proxmire said his new legislation would enable any federal employee punished for whistle blowing to file a civil damage suit against the government and against his immediate superiors.

#### **Professionals Should Defend Selves**

Nader, in recent press interviews and statements, has suggested that Congress should go even further and pass legislation protecting individuals from arbitrary treatment by corporations. Nader has also suggested that professionals themselves should band together to gain strength in numbers. He believes that professionals should organize to force management to adopt due process procedures and that professional societies should defend their colleagues when they are punished for invoking professional ethics against the organization that employs them. "Most of the established professional societies or associations never challenge corporate or government treatment of lawyers, engineers, scientists, or physicians as the American Association of University Professors has done on occasion for university teachers denied academic freedom," Nader recently wrote. (A start toward providing the protection that Nader seeks has been made by the AAAS, which is in the process of setting up a committee to investigate cases in which scientific freedom is alleged to have been abridged. One of the first cases the committee is expected to investigate involves charges by Gofman and Tamplin that they have been harassed by the AEC because of their whistle blowing.)

All participants in the conference agreed that whistle blowing is no pana-

cea for the nation's ills. Some speakers noted that whistle blowers are not always motivated by noble purposes—they may simply be trying to work out a grudge against their employer or else may be seeking the notoriety that whistle blowing often brings. Others noted that the late Senator Joseph McCarthy, no hero to most Nader fans, used whistle blowers to assist his hunt for “subversives” in government. “One should be very careful about extending the principle of whistle blowing unduly,” law professor Miller cautioned. “Surely it can be carried too far. Surely, too, an employee owes an institutional loyalty to try to work, first of all, within the organization to effect change. Only when his way is blocked there and only when the matter involves something more than mere trivia should he put the whistle to his lips and blast away.”

Once the whistle is blown, there is the further problem of getting the message heard and acted upon. Miller suggested that some means of access to the media should be established for whistle blowers, perhaps as a constitu-

tional right. Tamplin suggested that Centers for Adversary Assessment of Technology should be established to give whistle blowers enough muscle and organization to contend with existing bureaucracies. And Gofman suggested that whistle blowers might be more effective in bringing about change if a system could be developed whereby investors and technologists would be indemnified against the losses that would occur to them through the abandonment of a major technology that was found to be too destructive, a step that he felt would lessen resistance to abandoning such technologies.

The determination of when to blow the whistle is a tricky question that involves issues of individual conscience and allegiance to society. Any potential whistle blower, Nader says, should ask and try to answer the following questions:

► Is my knowledge of the matter accurate?

► What are the objectionable organizational practices and what public interest do they harm?

► How far should I go inside the organization with my concern or objection?

► Are any rules being violated by contacting external parties?

► Are any rules or ethics being violated by *not* contacting external parties?

► What is the best way to blow the whistle—anonously, overtly, by resignation prior to speaking out, or by some other alternative?

► What is expected to be achieved by whistle blowing the particular issue?

► What will be the likely response from various sources—inside and outside the organization—to the whistle blowing action?

For those who have asked themselves the above questions and determined that they must, in good conscience, blow the whistle, Nader has set up a clearinghouse to provide help to inquiring professionals and to receive information from them on a confidential basis. The address is: Clearinghouse for Professional Responsibility, P.O. Box 486, Washington, D.C. 20044.

—PHILIP M. BOFFEY

## Stanford School of Medicine (1): Problems over More than Money

*Since World War II the American medical school has become a highly complex institution and, like other American institutions today, the medical school is being challenged to respond to diverse and often conflicting demands. In part the pressure comes from activists who insist that the medical school more fully meet the needs of the community by reforming both training and the delivery of medical care. But another sort of pressure is exerted as a result of changes in internal relationships that have occurred in the last two decades in large measure because of the federal support of biomedical research. As in most institutional conflicts the dispute is expressed in contests over power and money, but, at a more fundamental level, what is involved is the value and reward system of academic medicine and the question of how the medical school is to be governed.*

*This is the first of three articles which will attempt to discuss these issues in the context of the development of one medical school—Stanford's. The first article will describe the pattern and policies of expansion since World War II, and the other two will examine the effects of internal and external pressures for change.*

In less than a decade Stanford University School of Medicine made a national reputation as a model of the research-oriented medical school. The names the public identify most readily

with Stanford are those of cardiac surgeon Norman Shumway and of Nobel laureates Arthur Kornberg and Joshua Lederberg. But in its medical-school peer group Stanford has a

broad-spectrum reputation for research and advanced techniques in other forms of surgery, radiology, psychiatry, and some types of medicine, and also for curriculum innovation. Stanford's dean during the late 1960's, Robert S. Glaser, and some other members of the faculty belonged to that group of medical school representatives, foundation officers, and government officials who dominate the *haute politique* of academic medicine. And all in all, Stanford became one of the half-dozen schools generally regarded as setting the pace in American medical education.

Like other medical schools in the 1960's, Stanford depended heavily on federal funds to finance expansion. And at Stanford, the rapidity of the buildup and the reliance on federal funds almost inevitably caused an unevenness in development. Then in the later years of the decade, Stanford was hit by the squeeze on federal funds and by demands on the school to exercise a greater measure of social responsibility by providing new forms of training and community service. As a consequence Glaser, who resigned last year after 5 years as the university's chief administrator for health affairs, says that “Stanford has an acute form