Table 7. Degrees held by new principal investigators on NIH research projects, fiscal years 1966 to 1972.

Degree	1966		1967		1968		1969		1970		1971		1972	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Ph.D.	515	48.0	602	54.7	427	55.7	547	60.2	414	62.3	501	64.0	712	66.2
M.D.	441	41.1	384	34.9	251	32.7	279	30.7	199	30.0	221	28.2	274	25.5
Ph.D. and M.D.	30	2.8	39	3.5	39	5.1	46	5.1	26	3.9	31	4.0	46	4.3
Ph.D. and other health professional degree	9	0.8	17	1.5	10	1.3	14	1.5	9	1.4	8	1.0	19	1.8
D.D.S.	32	3.0	13	1.2	12	1.6	6	0.7	1	0.2	5	0.6	5	0.5
D.V.M.	13	1.2	6	0.5	9	1.2	4	0.4	5	0.8	6	0.8	4	0.4
NEC*	32	3.0	41	3.7	18	2.4	13	1.4	10	1.5	11	1.4	15	1.4
Total	1072	99.9	1102	100.0	766	100.0	909	100.0	664	100.1	783	100.0	1075	100.1

* Not elsewhere classified. Includes M.S., B.S., paramedical, engineering, other professional degrees, and principal investigators not identified by degree.

tween the rate of application of women for new research project grants and their rate of success in receiving awards. Kaufman's study (*3*) also shows that the approval rates of research project applications from male and female investigators do not differ significantly.

An analysis of the degrees held by new PI's (Table 7) shows a steady increase in the proportion of Ph.D.'s and a steady decline in the proportion of M.D.'s. Analyses of the degrees held by PI's of all research projects and of the degrees held by all applicants for research project grants have shown the same general trends. In 1966, Ph.D.'s accounted for 48 percent of all competing applications and 49 percent of the grants, while M.D.'s submitted 41 percent of the applications and received 39 percent of the grants. In 1972, by contrast, 60 percent of the competing applications were from Ph.D.'s and 59 percent of the grants went to them, while M.D.'s accounted for only 29 percent of the applications and 32 percent of the grants. The transition in both cases was gradual. The smaller proportion of M.D.'s applying for and initiating their own research projects is no doubt attributable to a number of factors, including national supply and demand. Physicians have more employment options than do most other biomedical scientists upon termination of their training, and other national demands for physicians place a strain upon the available manpower resources. However, another study in progress has shown that proportionately more M.D.'s are involved in research at large centers and in interdisciplinary projects, which have been funded at proportionately greater rates than traditional research projects within the last several years. These projects tend to be oriented toward categorical medical problems, which require the skills of M.D.'s more than those of Ph.D.'s.

Summary

In summary, our findings indicate that the research project grant programs of NIH have consistently provided opportunities for newly trained scientists to receive support for biomedical research projects that they have initiated themselves. The system encourages progress in the biomedical sciences through the continuous influx of creative individuals who can explore their own research ideas, ideas that also correspond to the health research needs of the nation as reflected by the categorical missions of the institutes. Despite the decline (approximately 20 percent) in the total number of active research projects over the past 7 years, the proportion of new PI's among all recipients of new awards remained fairly constant from year to year. From 1966 to 1972, an average of 57 percent of all new research project awards were received by PI's entering the system for the first time, while an average of approximately 10 percent of all the PI's on research projects each year were new PI's being supported by NIH for the first time.

References

1. T. J. Kennedy, J. F. Sherman, R. W. Lamont-Havers, *Science* **175**, 599 (1972).
2. W. G. Moss, *ibid.*, p. 10.
3. A. A. Kaufman, unpublished manuscript.

NEWS AND COMMENT

White House Foes: Wiesner Target of Proposal to Cut M.I.T. Funds

In the last 2 years, highly placed White House staffers and perhaps the President himself, apparently considered cutting off federal research funds to the Massachusetts Institute of Technology as a political reprisal against its president, Jerome B. Wiesner.

The evidence for this consists of the texts of two White House memoranda, one referring to a prior presidential "directive" to cut M.I.T.'s money "in view of Wiesner's antidefense bias." The second, which was addressed to the President himself, discussed how to do this. The first was addressed to presidential aides John Ehrlichman, Henry Kissinger, and George Shultz in 1971; the second was addressed to the President in 1972. However, the plan apparently came to nothing; M.I.T.'s federal research funds have increased steadily over the last 3 years.

Wiesner—who was President John F. Kennedy's Science Adviser and an ardent foe of the Nixon-backed antiballistic missile system—is also listed on the White House "enemies" list said to be drawn up by the office of Charles W. Colson. It is not known what, if any, connection there is between the enemies list and the Wiesner-M.I.T. memos. The memos' existence, at least,

indicates that specific reprisals were planned, that research funds were considered an added means of political reprisal, and that perhaps, the President may have been involved.

The first, labeled "Confidential/ Sensitive" and dated October 1971, is addressed to Shultz, Ehrlichman, and Kissinger. It states that it is from Jon Huntsman, who, as White House staff secretary, was a pivotal communications man among top-level aides. It states:

> Upon reading the attached article which appeared in the Wall Street Journal on October 12, 1971 [about the ABM debate and the scientific community] it was requested that you report on the progress that has been made on the President's directive of a year ago to cut back on M.I.T.'s subsidy in view of Weisner's [sic] antidefense bias.
>
> Please submit your report to the Office of the Staff Secretary.
>
> Thank you.

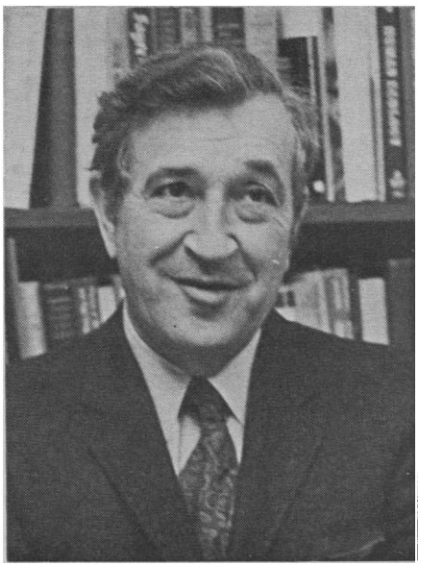
Carbons were addressed to H. R. Haldeman and Alexander Butterfield, a deputy assistant to the President.

The second text is dated April 1972 and addressed to the President from Ehrlichman, with an "E" over the latter's name. The presence of his initial would customarily indicate that he saw the memorandum.

> As you will recall, prior cuts have reduced grants to M.I.T. about 30 percent to $71 million.
>
> Of this some $40 million goes to Department of Defense laser development, which is deemed high priority.
>
> The remaining $31 million is fair game and will be identified by contract number immediately. The best method is to order no further funding, rather than cancellation, to avoid penalty claims and lawsuits. Such an order would actually stop funds as of June 30 (71 days from now).
>
> Either way it will take until Monday to know precisely which contracts make up the $31 million.
>
> You should give guidance on these specifics:
>
> —Cut out the DOD laser program (40 million dollars)
>
> —Order no further funding of non-defense programs as of June 30, 1972 (31 million dollars).
>
> —Cancel non-defense contracts *now* ($31 million less cancellation penalties)

A check appears next to the second option, and it could be the President's, since the memo was addressed to him. However, there is no way of confirming or denying this.

The memoranda were shown to this reporter who was permitted to copy down the texts. They were confirmed as authentic by a source considered to be reliable. Attempts to reach Ehrlichman through his lawyers were unsuccessful. Huntsman, who left the White House in early 1972 is now president of Huntsman Container Corp. Reached at his Maryland home, he said he couldn't remember writing the first memo, but that if his initials appeared on it—which they do—he probably did. "I put out 20 to 40 memos a day," Huntsman said. "I normally would be getting information and acting on requests made to me by the staff. I would not get involved with policy, or who wanted it, or why they wanted it." He admitted that some of these requests had come from the President. Huntsman asked what M.I.T. was, and indicated he was unfamiliar with Wiesner's activities.



Jerome B. Wiesner

But the plan to cut off nondefense research funds to M.I.T. at the end of fiscal 1972, opted for either by the President, Ehrlichman, or someone else, turns out to have been inoperative. M.I.T. Vice-President Constantine B. Simonides states that the funding of M.I.T.'s campus research, the Draper Laboratory, and the Lincoln Laboratory, will rise for fiscal 1973 by the largest jump since 1968 to a $205 million total. Simonides said he could find no numbers among M.I.T.'s official charts corresponding to the "$31 million" of nondefense research monies that the Ehrlichman memo called "fair game." Nor could he find a total of $71 million, nor a drop of 30 percent—all cited in the Ehrlichman memo to the President. In fact, Simonides pointed out, each component of M.I.T.'s federal research funds has been rising steadily since 1971, when the two laboratories and the campus together netted $154 million from Uncle Sam. M.I.T.'s 1973 books do not reflect the loss of the Draper Laboratory, which, according to a previous 1970 decision, wouldn't spin off to become an independent, nonprofit corporation until the start of fiscal 1974, on 1 July. In short, M.I.T.'s business has been booming, despite Wiesner's "antidefense bias." Its federal funding has grown under Nixon (it stood at $168.8 million in 1968), as it did under Eisenhower, when the institute underwent a major expansion. As a director of another major science institution on the federal dole pointed out: "The Administration's science policy likes the kind of thing M.I.T. likes to do, like the RANN program. They all love that at M.I.T."

In the absence of any institutional reason then, why might the President and some of his aides have it in for M.I.T.? The obvious explanation is that Wiesner is a personal target. His name appears on the undated "enemies" list submitted to the Senate Watergate committee by John W. Dean III; he was a former Science Adviser to President John F. Kennedy; he is the only major university president closely identified with Nixon's antediluvian foe; and finally, at the height of the bitter 1969 debate over the antiballistic missile, Wiesner was a conspicuous opponent of it and one who, moreover, insulted military planners by arguing publicly that the system's hardware wouldn't even work. When he was sworn in as president of M.I.T., Wiesner swore off making public political statements; but there is no question that in his previous public life he has stepped on several toes. William O. Baker, who is as identified with the Republicans as Wiesner is with the Democrats, recalls an impromptu debate Wiesner got into early in the Kennedy Administration with rocket specialist Wernher von Braun in front of the President and some Huntsville, Alabama, television cameras. The dispute, Baker said, made the public think that these scientists who wanted to go to the moon didn't know what they were talking about, and afterward, he said, "Some of Kennedy's people were just as mad at Wiesner as the Nixon people evidently are." But Baker said that among other scientists, at least, Wiesner's style and ideas were regarded as "amusing," sometimes "ingenious," and generally "admirable," since this sort of controversy is the stuff of science. "It's true that Jerry has all sorts of strange attitudes about modern events, and people don't take some of them that seriously. They just say, 'Oh that's just Jerry sounding off.' But if you

were in the political arena, or in a religious one, and somebody started talking like that, Jerry would look like a heretic."

A former National Security Council staffer, on reading the texts of the Wiesner-M.I.T. memos, retorted, "That's par for the course. . . . There was talk in the administration at the time of the Cambodia invasion of reassessing federal grants." The memos are "entirely plausible and consistent" with Administration attitudes. "I'm sure there are companion memoranda to those in the files, about other institutions."

Wiesner had the two texts relayed to him by telephone and commented, "I think it's outrageous, of course, to attack an institution for things I did as a private citizen, in the public interest, before becoming president of it." He said that he thought the Administration might consider him part of the Edward Kennedy "team", but that their principal unhappiness with him was probably over his role in the ABM debate. He confirmed that he had, nonetheless, remained a consultant to the now-defunct President's Science Advisory Committee at the invitation of both of Nixon's science advisers.

As to whether he had any evidence that the plan to cut off nondefense funds to M.I.T. was carried out, Wiesner said he had heard of an occasional research administrator saying that he could have considered a given proposal, "if only it didn't come from M.I.T.," but that he knew of "no overt action taken to punish M.I.T."

That the Nixon White House, apparently unhappy with one of the nation's most prominent scientific figures, should have tried to cut off funds to his institution as a reprisal, is not unprecedented. President Lyndon Johnson, riled by some scientists' opposition to his Vietnam policies, was said to have gone over the budget figures to pencil out items he thought should not be funded (see *Science*, 5 March 1971). But both Wiesner and Eisenhower's Science Adviser George B. Kistiakowsky stated last week that, to their knowledge, nothing of the sort transpired when they served in the White House.—DEBORAH SHAPLEY

APA: Psychiatrists Reluctant to Analyze Themselves

"Know thyself" is a primary aim of modern psychiatry, but an attempt to apply this ancient imperative to the principal organization of American psychiatrists—the 22,000-member American Psychiatric Association (APA)—has been the casualty of a Byzantine closed-door struggle involving some of the most influential members of that increasingly troubled and questioned profession.

More than a year ago, the APA's board of trustees enthusiastically approved a study of conflicts of interest in the practice of psychiatry. The purpose of the study was to examine allegations that psychiatrists employed by community, military, and penal institutions often serve the interests of the institution, not the patient; treatment, it was argued, is designed to maintain the status quo and suppress behavior disapproved of by the institution, such as refusal to accept authority. A staff was selected, a grant obtained, and work was slated to begin in January 1973. Six months later, the staff had been "dehired," and the study, though officially alive, was put on a slow course to an uncertain future.

The about-face was caused by a combination of political, professional, and psychological factors, but it primarily underscores the profession's heightened sensitivity to recent charges that, in addition to its therapeutic role, psychiatry is sometimes used as an instrument of social control.

The group which suggested the project was originally appointed by the APA trustees not to examine American psychiatry, but to study the Bukovsky papers—diagnostic reports which purportedly documented the use of psychiatric facilities to suppress political dissent in the Soviet Union. In 1971, the International Psychiatric Congress had failed to take any position on the charges, claiming that they had no procedural basis on which to act. In response to pressure from critics, such as journalist I. F. Stone, the APA trustees appointed last spring a special committee, the Ad Hoc Committee on the Use of Psychiatric Institutions for the Commitment of Political Dissenters. The committee was chaired by Raymond Waggoner of the University of Michigan Medical Center and included the Honorable David Bazelon, Chief Judge of the U.S. Court of Appeals for the District of Columbia—an esteemed jurist with expertise in the fields both of psychology and the law. After examining the documents, the committee issued a rather innocuous statement together with a minority report written by Bazelon and signed by two other committee members. The Bazelon statement argued that the ad hoc committee was mistaken in confining its observations to the Soviet Union. He suggested that American psychiatry should "stop sweeping its own problems under the rug and conduct an in-depth inquiry into the use of psychiatric discipline in the institutions of our own society." The statement was endorsed overwhelmingly by the board, and the ad hoc committee's life was extended for another year to carry out such an investigation. Thus the APA walked blithely into the snare of turning back on itself a weapon originally launched against a quite different target.

"We became very excited about the study," remarked Bazelon during a recent interview. "We thought our investigation would illuminate many of the problems and help American psychiatrists faced with conflicts of interest within institutions." Work on the project began almost immediately after the trustees' endorsement. Although Waggoner chaired the ad hoc committee, Bazelon was its prime mover. Funding was arranged (from the W. T. Grant Foundation), advice was sought from prominent sociologists throughout the nation, and a research team was selected. The team consisted of Donald Light, an assistant professor of sociology at Princeton; Joseph Perpich, a young psychiatrist then working for Senator Edward Kennedy's health subcommittee; and Franklin Chu and