

Berkeley, 4.2; Wisconsin at Madison, 4.1; UC Los Angeles, 4.0.

History: UC Berkeley, 4.8; Harvard, 4.8; Yale, 4.8; Princeton, 4.7; Chicago, 4.5; Columbia, 4.5; Michigan, 4.5; Stanford, 4.4; Johns Hopkins, 4.3; Wisconsin at Madison, 4.2; UC Los Angeles, 4.1; City University of New York, 4.0; Pennsylvania, 4.0.

Political Science: Yale, 4.8; UC Berkeley, 4.7; Harvard, 4.7; Michigan, 4.6; Chicago, 4.5; MIT, 4.3; Stanford, 4.2; Wisconsin at Madison, 4.1.

Psychology: Stanford, 4.8; Harvard, 4.6; Michigan, 4.5; Yale, 4.5; UC Berkeley, 4.4; Pennsylvania, 4.4; UC Los Angeles, 4.3; Minnesota, 4.3; UC San Diego, 4.2; Chicago, 4.2; Illinois, 4.2; Carnegie-Mellon, 4.0; Columbia, 4.0.

Sociology: Chicago, 4.7; Wisconsin at Madison, 4.6; UC Berkeley, 4.5; Michigan, 4.5; Harvard, 4.3; North Carolina, 4.3; Columbia, 4.2; Stanford, 4.2; Arizona, 4.1; UC Los Angeles, 4.1; Washington at Seattle, 4.0.

Reagan Orders Review of Controls on Research

The Reagan Administration has launched a high-level review of ways to control the publication of scientific papers that contain unclassified, but militarily sensitive information. The review, which is being coordinated by the Office of Science and Technology Policy (OSTP), was initiated by a presidential directive issued without public announcement on 23 December. The study is to be completed by 1 March.

The directive and a covering letter signed by National Security Adviser William P. Clark indicate that the review will be more concerned with how, rather than whether, publication of such information should be controlled.

The review is a belated response to the National Academy of Sciences' report on scientific communication and national security, which was published last September (*Science*, 15 October 1982, p. 271). Known as the Corson report, the Academy's study was conducted amid growing apprehension in the scientific community over the Reagan Administration's an-

nounced intent to curb leakage of sensitive scientific information to the Soviet Union and its allies.

The Corson report in essence concluded that basic research was not the source of much technology leakage and that it should remain as unfettered as possible. It acknowledged, however, that there is a legitimate need to classify work in a few fields, and said there are some very limited "gray areas" that may require controls short of classification. The latter suggestion is the starting point for the new review.

According to President Reagan's directive, the review is supposed to come up with recommendations for pinpointing research that poses a potential security problem "So as to focus . . . efforts efficiently and to avoid raising fears of intrusion within the scientific community."

The Corson report suggested that federally funded research in the gray areas be controlled through restrictions written into grants and contracts, perhaps requiring prepublication review of potentially sensitive papers. The Department of Defense already requires this in many areas. Reagan's directive requires OSTP to determine whether such a mechanism is feasible for all federally funded research, and whether an appeals mechanism should be set up to ensure that restrictions are appropriate and workable.

The review will also look into the controversial question of whether export and visa controls should be used to restrict the access of non-U.S. citizens to sensitive research. The Corson report concluded that export controls are inappropriate in this area, in part because their use can pose severe problems in university departments containing foreign graduate students. Export controls essentially prohibit the transfer of scientific information to a foreign national.

Reagan's directive also requires the review to come up with proposals for improving the dialogue between the federal government and the scientific community over the imposition of controls on publication. And it states that special care should be taken "to weigh the anticipated benefits of any restrictions against the costs of slowing scientific and technical progress."

The review is being carried out by an interagency committee under the chairmanship of OSTP Deputy Direc-

tor Ronald B. Frankum. The committee contains representatives from the agencies that have been pushing most strongly for increased controls on the dissemination of sensitive scientific and technological information—the Departments of Defense, Commerce, and State, and the Central Intelligence Agency. It also includes representatives from the National Science Foundation, the Department of Health and Human Services, and seven other agencies.

Meanwhile, the Department of Defense has established a group under the chairmanship of Richard Perle, assistant secretary for international security policy, to review the department's procedures for controlling export of technology to the Soviet Union. Perle is said to be a hard-liner on these matters.

Top Health Policy Official Leaving OSTP

Denis J. Prager, one of the longest-serving staff members in the Office of Science and Technology Policy (OSTP), is leaving the White House. He has offered his resignation and is expected to leave in the next few weeks.

Prager, who joined OSTP in 1978, is one of only two Carter appointees to stay on into the Reagan Administration. He says his departure is not prompted by disagreements over policy. "It just seems like the right time to think about doing something else," he told *Science*, though he does not have another job lined up.

As assistant director for life sciences and institutional relations, Prager has been concerned with policies affecting biomedical research. He earned the enmity of part of the agricultural research establishment by spearheading an OSTP study that called for a shake-up of the agricultural research system (*Science*, 24 September 1982, p. 1227). More recently, he has headed a review of federal policy for the regulation of carcinogens (*Science*, 3 December 1982, p. 975). With Prager's impending departure, OSTP's continued interest in both these controversial areas is now in doubt.

Colin Norman