



SCIENTIFIC COMMUNITY

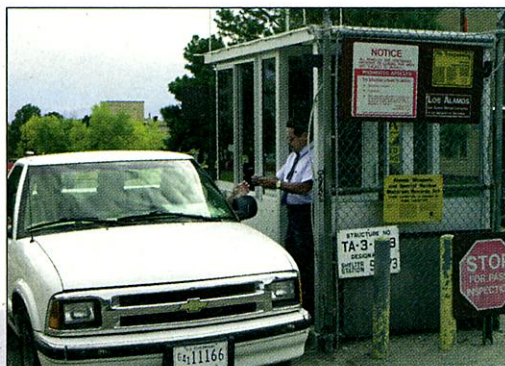
DOE Softens Bite of Tighter Security Rules at Labs

An increasingly public backlash by scientists angry about recent security crackdowns at Department of Energy (DOE) labs is having an effect. DOE is preparing to streamline some rules and is rolling out an array of initiatives it hopes will boost the spirits of government scientists oppressed by burdensome and confusing regulations.

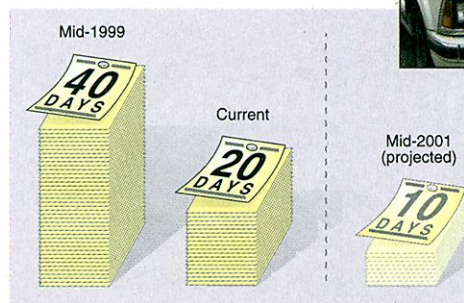
The pendulum swing toward scientific openness gained momentum on 13 September, when the government's case against former Los Alamos National Laboratory physicist Wen Ho Lee virtually collapsed; he was freed from jail, where he had spent 9 months, after pleading guilty to a single charge of mishandling government material (*Science*, 15 September, p. 1851). Then, last week, retired Senator Howard Baker and former Representative Lee Hamilton concluded after a review of a separate incident at Los Alamos that "the current negative climate is incompatible

research, and appointing a new blue-ribbon commission on science and security. These initiatives are seen as an olive branch from Energy Secretary Bill Richardson to a community under heavy fire from politicians since a 1998 congressional report on Chinese espionage argued that the labs had become easy pickings for spies.

The tension between science and security, never far from the surface, erupted in March 1999, when *The New York Times* publicized allegations that Lee had stolen weapons data



Time delay. A 1999 law tightened rules on background checks for lab visitors from sensitive nations, causing long delays that DOE has promised to shorten.



with the performance of good science." A few days later, presidential science adviser Neal Lane said that the Baker report suggests the government has "overshot the mark" on security. Lane was speaking at a workshop held by a National Academy of Sciences panel* convened to study the issue.

The new DOE initiatives include simplifying restrictions on foreign visitors to classified facilities and on travel abroad, holding "science days" at DOE's weapons laboratories to shine a positive spotlight on the labs'

for China. Amid the ensuing controversy, Congress created the semi-autonomous National Nuclear Security Administration (NNSA) within DOE to oversee security at the three weapons laboratories, ordered polygraph tests for thousands of scientists, and imposed a moratorium on foreign visitors to DOE's 15 national labs, of which just six are heavily involved in classified work. DOE also released an array of revised security measures, from new rules on when employees had to report overseas sexual liaisons to the restoration of a badging system that requires foreign nationals to wear bright red tags. In slightly more than 1 year, notes Jonathan Dorfman, director of the Stanford Linear Accelerator Center (SLAC), the number of DOE security directives grew from 11 to

more than 50 final and draft regulations.

"We spent a lot of time and money fighting off ill-conceived, one-size-fits-all security directives," says Dorfman, who leads one of DOE's Tier 3, or nonclassified, laboratories. Among the proposals were rules that imposed lengthy background checks on foreign visitors from 17 sensitive nations (including Russia, China, and India), required scientists to receive security briefings before and after trips abroad, and called for erecting thick digital walls around SLAC's computer system. Although such precautions may be appropriate at the top-secret weapons labs, says Dorfman, "they would shut down science at SLAC."

Other lab officials who attended the academy workshop reported similar problems. At DOE's Pacific Northwest National Laboratory in Richland, Washington, which conducts both unclassified and classified research, officials had to cancel meetings abroad and prevent foreign students in a visiting university group from touring the lab, said the lab's Gerald Stokes. The alternative—background checks—would have taken weeks, he noted, and lab officials were leery of issuing waivers that might attract criticism. At Lawrence Livermore National Laboratory in California, scientists are drowning in a sea of often vague rules regarding the handling of nearly a dozen kinds of unclassified but "sensitive" technical information, reported Eileen Vergino of Livermore's Center for Global Security Research, who has surveyed employee reaction to the clampdown.

Things went from bad to worse last summer at Los Alamos when two computer hard drives filled with weapons secrets went missing for several weeks (*Science*, 23 June, p. 2109). DOE's handling of the investigation has angered scientists. "It's devolving into a witch hunt, where people are afraid to admit mistakes because of the risk of criminal prosecution," says one DOE scientist, echoing a common view. An aide to NNSA head John Gordon says that "morale is much worse than we expected."

DOE security officials conceded at the academy meeting that they have won few friends in the past year. Lab researchers should "give us a chance to make things work," pleaded Marshall Cumbs, a DOE official who is shepherding new, streamlined rules for vetting foreign visitors through the bureaucracy. DOE officials are working to reduce the time needed for headquarters to complete background checks (see above), which were previously handled by each lab.

* Scientific Communication and National Security, Washington, D.C., 27–28 September.

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Also in the works are plans for Gordon and for Mildred Dresselhaus, a Massachusetts Institute of Technology engineer and the new head of the Office of Science, to host "science days" at the Sandia, Los Alamos, and Livermore weapons labs. The events, says an aide, would emphasize Gordon's belief that "security must not jeopardize DOE's science mission." That goal also underlies the new commission, to be stocked with high-profile independent scientists and security experts appointed by Richardson.

Such initiatives, however, may not be enough to win back researchers' confidence. Dorfman "is reserving judgment" but says he is "impressed with Gordon's commitment to science." A Los Alamos scientist quoted in the Baker report urged DOE officials to be guided by common sense rather than political expediency. "If you give nerds absurd guidance, it won't work," said the anonymous researcher. "Give them sensible and consistent guidance, and they'll do their best." Scientists are hoping that DOE will meet that standard.

—DAVID MALAKOFF

LABORATORY ANIMALS

Researchers Fight Plan To Regulate Mice, Birds

The U.S. government has decided that laboratory mice are animals. This week a federal judge is expected to accept an agreement between the U.S. Department of Agriculture (USDA) and animal-welfare advocates to regulate the use of mice, rats, and birds in scientific research. The pact, which would settle a pending lawsuit, would reverse a 30-year-old policy that exempts 95% of all experimental animals from the federal government's legal definition of "animal."

Biomedical research groups are furious. They predict that new rules will drive up animal-care costs, force small colleges to stop using live animals in classes, and spawn more lawsuits. "Settling this suit without taking into account the deep concerns of the research community is a serious mistake," says Jordan Cohen, president of the Association of American Medical Colleges (AAMC), one of several groups that fought unsuccessfully to sink the deal.

The controversy stems from a 1972 decision by the USDA's Animal and Plant Health Inspection Service to exempt mice, rats, and birds from Animal Welfare Act (AWA) regulations that spell out everything from annual

inspections to cage sizes. That decision came under legal attack in 1992 after a federal judge ruled that USDA's justification for the exemption—that Congress never intended the law to apply to the three animals—was "strained and unlikely." But an appeals court later threw out the case, ruling that the Humane Society of the United States and other plaintiffs lacked standing to sue since they had not been directly harmed by USDA's action.

In 1997 the Alternatives Research & Development Foundation (ARDF) of Eden Prairie, Minnesota, sought a way around that ruling by suing on behalf of an undergraduate student who claimed she suffered emotional and aesthetic harm from working with mistreated rats in a college psychology lab. This summer, after a judge ruled that the student had standing, USDA moved to negotiate an out-of-court settlement (*Science*, 21 July, p. 377).

The decision alarmed biomedical research advocates, including AAMC, the National Association for Biomedical Research (NABR), and the Federation of American Societies for Experimental Biology. In a blizzard of faxes, they asked Agriculture Secretary Dan Glickman to intercede, arguing that researchers should not be frozen out of negotiations. They also worried that USDA's refusal to challenge the decision could lead to dozens of new animal-rights cases.

Their pleas fell on deaf ears. On 29 September, USDA officials agreed to "initiate and complete a rulemaking on the regulation of birds, rats, and mice within a reasonable time." A jubilant John McArdle of the ARDF says that "we wanted to be certain that alternatives are considered for all laboratory animals," as required by the AWA. He also

notes that the process will allow "everyone to have their say."

Observers are divided over the practical impact of any new rules, which could take years to finalize. Animal-care experts say large breeders and research universities, which typically already meet widely used voluntary standards and other government requirements, should have little trouble complying with new regulations. But NABR has estimated that compliance could cost researchers \$280 million or more, in addition to requiring a bigger USDA budget for enforcement. Smaller teaching institutions won't be able to afford to keep rats in mazes in psychology classes or raise chicks in development courses, the

group predicts. Research funds, says Cohen, will be "frittered away on senseless and duplicative bureaucratic hoops that are driven by ideology and not reality."

Opponents have vowed to fight any changes. NABR and the Johns Hopkins University in Baltimore, Maryland, have asked to be included in the case so that their voices can be heard. If the judge signs off, however, the groups may seek a statement from

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Congress on whether it intended to regulate mice, rats, and birds when it passed the AWA. Any final rule could also be challenged in court. "The battle will now be joined in the regulatory and legislative arenas," says Cohen.

—DAVID MALAKOFF

NEUROSCIENCE

A Possible Target for Better Benzodiazepines

Valium and other benzodiazepines are among the world's most prescribed drugs. They ease anxiety, relax muscles, control epilepsy, and help people sleep—but so far it's impossible to enjoy just one of the drugs' benefits without the rest of the package. Benzodiazepine users also risk some