

## UNIVERSITY MANAGEMENT

## Debate Flares Over Tracking Foreigners

Thousands of foreign students flock to U.S. campuses each year, providing critical intellectual muscle as well as revenue for science and engineering departments. But Congress, the Administration, and members of a national commission are worried that some of those students may be using their education as a cover for terrorism, leading to a proposal to watch them more closely. Academics have responded with alarm. They say the terrorist threat is overstated and that the surveillance proposal could turn into an ad-

olina. But the increased monitoring, she adds, could force institutions like Duke into "a megareporting system ... that is invasive at a level we can't manage."

Some 900,000 foreign students and scholars are studying in the United States, spending about \$9 billion annually on tuition and other expenses. The CIPRIS program stems from a 1996 immigration law ordering the INS to set up an electronic tracking system to collect detailed information, such as current address and academic status. Under CIPRIS, universities would be required to let the INS know if a student dropped below a full course load, and why. INS began the pilot program with 21 colleges and universities, intending to expand it nationwide by the start of 2003.

The commission report warned that "a small minority may exploit student status" to conduct terrorist activities. To reduce that threat, it proposed that INS also gather data on when students change their majors—from, for example, English to nuclear physics. "We have to be careful not to lump all foreign students together," says Yonah Alexander, a terrorist specialist at the Potomac Institute for Policy Studies in Arlington, Virginia, who spoke last month at a meeting on science, human rights, and national security hosted by the American Association for the Advancement of Science (AAAS, which publishes *Science*). "But the risk is real." Commission member Richard Betts of Columbia University says that "it's not exactly paranoid" to suggest that modest efforts to gather more data would help authorities. "We're not talking about black FBI vans trailing students to their dorms," he adds.

But most university officials say that increased scrutiny is unnecessary and could be extremely burdensome. The terrorism commission "vastly overstates the case," says Victor Johnson, a policy expert at the Association of International Educators in Washington, D.C. "There is no evidence that foreign students pose a threat."

The commission's proposal to track a student's major has also come under withering fire. "At the undergraduate level, that information is relatively useless" given the frequent changes many students make to their majors, says Cotten. And changes at the graduate school level may be less helpful than first appearances might indicate. "We've got ourselves into a Cold War warp" by focusing on nuclear weapons development, says Mary Good, dean of engineering

at the University of Arkansas and AAAS president. A terrorist, she says, "can do just as much damage in computer science."

CIPRIS would allow the INS to invalidate the visas of students who do not show up on campus or drop a full course load for unauthorized reasons. The INS and universities that participate in CIPRIS are negotiating the details and when the data would be collected.

Johnson and others are worried that a more vigorous effort may "turn colleges and universities into the eyes and ears of the federal government." That change could make foreign students wary of choosing U.S. universities, he adds, at a time when "this is one of the few areas where we have a trade surplus." Betts doubts that any new system would affect enrollments, but adds that "if it deters a few, that may be the unfortunate price we pay." However, Good is less confident of a benign effect. "They've become a real part of the research establishment," she says about the foreign students. "We can't lose that in this shuffle."

—ANDREW LAWLER



**Thoughts and deeds.** Duke and other universities may be asked to monitor foreign students' coursework more closely to combat terrorism.

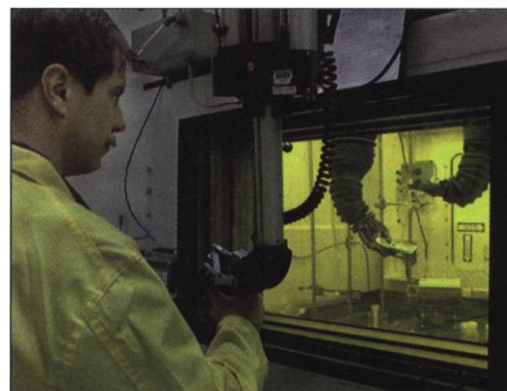
ministrative nightmare that could harm U.S. institutions.

At the root of the controversy is a pilot program designed by several southeastern colleges and universities and the U.S. Immigration and Naturalization Service (INS). The effort, called the Coordinated Interagency Partnership Regulating International Students (CIPRIS), is an electronic system intended to replace the current patchwork of record-keeping on foreign students. In June, a panel of 10 national security experts recommended using the program to track when foreign students alter their workload or change their major field of study, among other things. It's that proposal, from the National Commission on Terrorism chartered by Congress, that has elicited an outcry from university officials. "We absolutely support electronic reporting" of foreign students, says Catheryn Cotten, who directs the international office at Duke University in Durham, North Car-

## TOXICOLOGY

## Arsenic Researchers Face Isotope Shortage

Molecular biologist Barry Rosen has been making good headway studying the mechanism by which arsenic causes cancer. But he's hit a roadblock. Although he's got funding from the National Institutes of Health, he can't buy the reagent that he needs—arsenic-73. The Department of Energy's (DOE's) Los Alamos National Laboratory in New Mexico is the only place in the world that sells the radioactive isotope, and they've run out. And it could be the middle of 2001 before Rosen, at Wayne State University in Detroit, and some two dozen other labs around the world are back in business.



**Hot commodity.** A radioisotope is purified at Los Alamos, where a shortage of one isotope has sparked an outcry from scientists.

CREDITS: (TOP TO BOTTOM) DUKE UNIVERSITY PHOTOGRAPHY; LEROY SANCHEZ/LANL

## ELECTION 2000

## Uncertainty Wins By a Landslide

Scientists seeking order from the chaos of the U.S. election results may have a long wait. With the closest presidential election in a generation still undecided as *Science* went to press and the winners in several closely watched Senate and House races also unknown, it may be months before researchers and science lobbyists know who will fill influential posts in Congress and the new Administration for shaping science policies and budgets.

Amid the confusion, however, were a few results that election watchers could count on. They included the narrow defeat of Representative James Dickey (R-AR), a prominent opponent of government support for stem cell research, and the comfortable margin that returned Representative Vern Ehlers (R-MI), one of two physicists in the current Congress. Voters also approved several state ballot initiatives that will channel some funds from tobacco lawsuit settlements to research-related activities.

Those clear-cut decisions, however, were overshadowed by the chaos in the presidential race that has focused on Florida. That standoff was mirrored in New Jersey, where Democratic Representative Rush Holt—Congress's other physicist—was locked this week in legal wrangles with Republican Dick Zimmer over disputed ballots. On election night, Holt, a former official at the Princeton Plasma Physics Laboratory in New Jersey, appeared to have won by 56 votes, but later tallies prompted both candidates to claim a lead. "Rush likes to say that, as a scientist, he likes to get the facts," campaign spokesperson Peter Yeager said as the controversy swirled this week. "So that's what we are doing, counting votes and trying to get the facts."

If Holt loses, he would join stem cell opponent Dickey as one of the few incumbent House members to be defeated. Each year since 1995, Dickey has successfully pushed a controversial spending provision that prohibits federal funding for research that creates, harms, or destroys a human embryo. When the National Institutes of Health

(NIH) earlier this year announced guidelines for use of human embryonic stem cells, which are derived from human embryos, Dickey threatened to sue if NIH actually awarded any grants (*Science*, 1 September, p. 1442). Dickey's defeat won't end that threat, however, notes Richard Doerflinger of the National Conference of Catholic Bishops in Washington, D.C. Returning lawmakers, including House majority whip Tom DeLay (R-TX), are likely to pick up where Dickey left off.

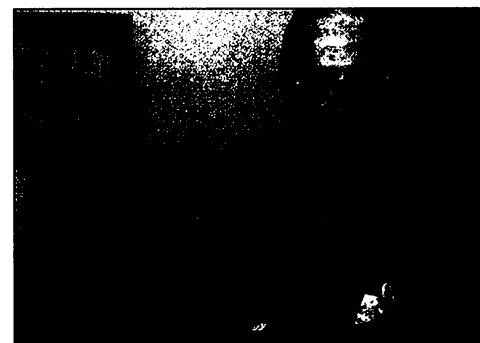
The election also heightened speculation about who will lead the committees involved in crafting science policy and budgets. In the House, James Sensenbrenner (R-WI) is attempting to jump from the chair of the Science Committee to the head of the higher profile Judiciary Committee. If Sensenbrenner is successful, Representative Sherwood Boehlert (R-NY), currently the science panel's second-ranking Republican, would likely inherit the top seat.

Boehlert, an avid environmentalist whose district includes the U.S. Air Force's Research Laboratory in Rome, New York, has said he would bring "a lot of ideas" to the post, without offering specifics.

Another vacant seat is the chair of the House appropriations subcommittee that oversees NIH's spending. The post was held by retiring Representative John Porter (R-IL), a major backer of efforts to double



**In or out?** Outcome of Holt's re-election bid is still unclear.



**Heir apparent?** Boehlert could lead the House Science Committee.

NIH's budget. Observers say there is no clear replacement.

In the Senate, Porter's counterpart, Senator Arlen Specter (R-PA), hinted before the election that he may also abandon his spending panel post. If he does, his replacement is uncertain. A victory by Democrat Marcia Cantwell over two-term Republican Slade Gorton in Washington state—a race still too close to call as this issue went to press—

To Rosen and others, the shortage comes at a particularly bad time. In May, the U.S. Environmental Protection Agency (EPA) proposed a costly clampdown on arsenic levels, a natural contaminant, in drinking water. EPA is also funding a burst of research on how arsenic causes cancer, because pinning down this elusive mechanism could reveal whether the limit needs to be so stringent. To understand the mechanism, researchers are using arsenic-73 to find genes that metabolize arsenic and to explore how these metabolites enter cells and damage DNA.

But Los Alamos, which makes the isotope by smashing protons from an accelerator into a rubidium bromide target, hasn't produced any arsenic-73 since the source of these protons—a tritium production program—ended in early 1999. A new isotope production facility was slated to open early next year, but the massive fires that swept through the region in the spring have pushed back the scheduled completion date to mid-2002. Los Alamos ran out of arsenic-73 inventory around July. "None of us knew about it until it was too late" to make other plans, says Marc Mass, an EPA toxicologist. There are alternative tracers, he says, but they're costly and too insensitive for some experiments.

Los Alamos officials say they can make arsenic-73 at another accelerator, then purify it at Los Alamos. But it took a flood of phone calls and letters from scientists to convince DOE officials to make it a priority, and it may be another 6 months before there's any arsenic-73 available, says Gene Peterson, manager of the lab's Isotope Production Program. The lab has to finagle beamtime on an accelerator—most likely one in Canada—prepare the target, he says, then cut through the red tape for transporting radioactive materials. Peterson says it's often not easy to predict shortages of radioisotopes used by only a handful of researchers, but that the new facility should make it easier to catch up because it won't depend directly on other experiments for protons.

That's little comfort to arsenic researchers, who are at their wits' end. Toxicologist Vas Aposhian of the University of Arizona, Tucson, who bought up the last few millicuries of arsenic-73 this summer, says, "We're going to scream bloody murder and call our congressman and senator" when the lab's supply runs out in a few weeks. Miroslav Styblo, a biochemist at the University of North Carolina, Chapel Hill, is trying to persuade colleagues at an accelerator in his native Prague to make a batch of arsenic-73. But "so far," he says, "we don't have realistic promises."

—JOCELYN KAISER

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