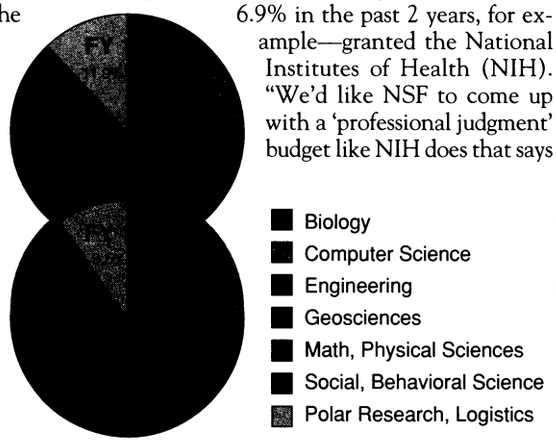
last summer to the Arlington Rotary Club that was covered by *The Washington Post*. The idea is for scientists to spend more time discussing their work with students, neighbors, local business leaders, and politicians. "Who better to do that—to explain the value of science and technology [S&T] to the public—than the professional scientists and engineers?" he asks. The campaign also has been noticed on Capitol Hill. "He's been a leader in speaking to scientists about the factors that impact support for science," says Tom Weimer, chief aide on Schiff's research subcommittee. "He's been a good spokesman for basic science."



Steady state. Disciplinary shares of the overall research budget have changed little during Lane's tenure.

To not so boldly go

Some researchers who depend on NSF for their grants wonder, however, whether the agency and its supporters should be more vocal in promoting basic science. They recall that, under Bloch, NSF enjoyed double-digit annual increases as part of a pledge by Presidents Reagan and Bush to double NSF's budget over 5 years. Now, the Clinton White House is telling Lane to be happy with a flat budget. Although the political environment has changed, some observers say that shouldn't be used as an excuse for timidity. "Erich went to the White House and fought for that increase on the grounds it was important for the country," says one former NSF official. "I don't see Neal making that kind of argument."

These critics also point to the large funding increases in recent years—5.7% and 6.9% in the past 2 years, for example—granted the National Institutes of Health (NIH). "We'd like NSF to come up with a 'professional judgment' budget like NIH does that says what it would do with more money," says Howard Silver, chair of the Coalition for NSF Funding and executive director of the Consortia of Social Science Associations. "But there's not much enthusiasm for that at NSF."

Unfortunately, NSF lacks one of NIH's biggest assets in dealing with Congress. As Donald Langenberg, chancellor of the University of Maryland, puts it: "No congressman ever had a relative who died of multidimensional algebra." And Lane admits that NIH tops NSF in cultivating ties to influential business executives and grassroots health organizations. "There is not a similar identifiable group within business that is articulating the need for more S&T funding broadly," he says.

Nevertheless, no less a figure than Representative Lewis, who played a major role last year in obtaining an additional $40 million in research funds for NSF, urges Lane "to be bold and strike while the iron is hot" on behalf of NSF. He suggests scientists build on last year's public expressions of support for basic research from House Speaker Newt Gingrich (R–GA) and President Clinton's recent comment in *The Atlantic* magazine that "we're way underinvesting in science and technology."

Lane backs away from leading such an effort. Putting on his jersey as a member of the president's team, he says: "I don't know exactly what bolder would mean. ... It wouldn't be prudent for me to talk about budgets while they are still under discussion." But Lane promises "to get out there and continue speaking about what a mistake it would be for this country to cut S&T funding." After all, he notes, there are lots of places where NSF funds research that might appeal to a curious legislator.

–Jeffrey Mervis

U.S.–RUSSIA COLLABORATION

Travel Grants to Boost Sagging Labs

A hundred U.S. scientists will travel next year to Russia's two main nuclear weapons institutes in an effort to spur collaborative research and bolster sagging morale among weapons researchers there. But while the work should augment efforts to turn Soviet swords into plowshares, it is unlikely to be more than a stopgap measure for scientists who once enjoyed a productive and comfortable way of life but are now facing severe hardships.

The $2500 travel grants will be provided by the U.S. Civilian Research and Development Foundation (CRDF), a nonprofit agency that funds collaborations between scientists in the United States and the former Soviet Union (FSU). The money will go to U.S. scientists working on joint projects funded by a second organization for defense conversion: the International Science and Technology Center (ISTC), which so far has sustained almost 14,000 FSU weapons scientists. The ISTC, a multilateral fund coordinated by the State Department, does not provide money for U.S. scientists to visit colleagues in Russia, and so the CRDF is stepping in. The travel grants are part of a $400,000 initiative approved last week.

The program comes at a time when conditions in the two formerly closed cities, to which access is still rigidly controlled, may be at their worst. In the wake of the severe economic crisis, observers say that a gloom deeper than winter darkness has settled on the Federal Nuclear Center for Experimental Physics in Arzamas-16, now called Sarov, and the Federal Nuclear Center for Technical Physics (VNIITF) in Chelyabinsk-70, now Snezhinsk. In Soviet days, many scientists were lured to these remote facilities with promises of decent pay, housing, and schools, says Evgeny Avrorin, a physicist who will serve 2 years as VNIITF director following the suicide in October of its previous director, Vladimir Nechai. Nowadays, however, Avrorin says, obtaining even the necessities of life is a scramble. Gas and water companies commandeer federal funds intended to go for salaries, so most scientists haven't been paid since April. They and their families, once able to afford a yearly vacation, are virtual prisoners in guarded compounds whose quality of life pales in comparison to neighboring towns, says Avrorin.

The CRDF and other organizations were created as a counterweight to fears that increasingly desperate financial conditions could drive nuclear physicists to countries that sponsor terrorism or induce them to smuggle fissile material out of Russia. Avrorin says that Russian safeguards are adequate and have improved, thanks to Western technology. But he acknowledges that the risk of smuggling remains real. "People are tempted to steal," he says.

Although Avrorin welcomes the travel grants, he says they will do little to meet a government mandate that VNIITF, by 2000, earn half its revenues from outside sources. Right now, he says, the institute gets 15% of its budget from nongovernmental sources. To boost their outside funding, says CRDF executive director Gerson Sher, the institutes must change how they do their work. The Russians are peddling what they have rather than what Western companies want "because they have jobs they want to save," Sher says. He cites the development by Avrorin's institute of a new sensor to detect impurities in milk—despite the fact that the U.S. dairy industry already has sensors. Getting the institutes to become market savvy, he says, "will take some discussion and some disappointment."

–Richard Stone