a temporary position at the Karolinska Institute in Sweden after being unable to find a job in the United States) nor Gallo were talking last week, but their lawyers were jubilant. Barbara Mishkin, an attorney with the Washington firm Hogan and Hartson, declared Popovic "completely exonerated." Gallo's attorney, Joe Onek of Crowell and Moring, noted that many of the ORI witnesses criticized by the board are scheduled to testify against his client as well.

ORI director Lyle Bivens says staff attorneys will review the Popovic decision for its impact on the Gallo case. He says every option, "from changing the order of the witness list to revising our strategy to abandoning the case," is on the table. A decision on whether to go ahead was expected on 12 November.

Mishkin, meanwhile, has submitted a brief to the Appeals Board on behalf of Popovic asking HHS to reimburse his legal fees, which exceed $250,000. But his ultimate aim, she says, is to get back into science. Popovic "really hopes that NIH will now let him come back," she says. "That's where he really wants to be." Although Gallo had offered him a job in his lab several years ago, she says, NIH officials at the time said he should not return until the allegations of misconduct were laid to rest. For Popovic, the board's decision, the final step in the process, appears to have done just that.

–Christopher Anderson

NATIONAL SCIENCE FOUNDATION

Lane's Strategy on Strategic Research

Within days of taking over the reins at the National Science Foundation (NSF) last month, Neal Lane received a welcoming present from Congress—an 11% increase in the agency's 1994 budget. But the present came with some strings: an explicit directive from the Senate to work more closely with industry. This presents Lane with a dilemma. If he responds by moving NSF more toward applied research, he will please Congress but incur the wrath of the basic research community—a fact learned the hard way by Lane's predecessor, Walter Massey, who provoked a backlash when he suggested that NSF should do more research relevant to industry. Last week, in an interview with *Science*—his first one-on-one encounter with the media since taking office on 15 October—Lane made it clear that he will not follow Massey's approach. He said he will argue that NSF can make its biggest contribution to the nation's long-term economic health by strengthening basic, academic research.

Indeed, Lane said the best use of additional federal funds would be to buy more of the same type of fundamental research that NSF now supports, and he argued that likely benefits from so-called strategic research have been overstated. "I don't know what you gain by calling [research] strategic," Lane said. "It would be much easier if one could just talk about research, and leave it to whomever one is speaking with to determine if the work is of near-term, medium-term, or long-term significance to the problems facing society."

That argument will undoubtedly be applauded by academic scientists worried that the $3 billion agency may be changing direction. But in making it, Lane is swimming against the political tide. Last year Massey responded to congressional pressures by declaring it was time for NSF to "accept a major role in fostering the links between research and technology" by embracing programs "closely aligned with industry and other government agencies." This spring President Clinton requested $204 million more for NSF as part of his unsuccessful economic stimulus package, and in September the Senate appropriations committee said that 60% of NSF's budget should be devoted to research that is "strategic and applied in nature," threatening to impose cuts if it did not comply (*Science*, 17 September, p. 1512).

But Lane, a theoretical physicist and former provost of Rice University, warns that a larger budget isn't likely to result in research that is any more "applied" than what NSF now funds. In particular, he says one should not overestimate the short-term impact of half a dozen interagency programs, including such initiatives as global climate change and high-performance computing.

CATHALEEN CURTISS

Back to basics. Neal Lane says NSF's forte is "foundational" research.

"I would challenge anyone to walk into a laboratory funded by a program that fits within [such an initiative] and one that isn't and find any difference in how the investigator approaches the problem, what the students do, what the apparatus looks like, and so on," Lane says. "The key question to me is, 'What are the people doing in the lab?'" Although Lane says the areas in which they are working may be more closely connected to a particular problem facing society, what they are doing is basic—or what he calls "foundational"—research, now as always NSF's most important product.

Why is that so important? Although Presidents Reagan and Bush promised to double NSF's budget over 5 years in exchange for its contribution to the nation's economic well-being, the precise nature of the contribution has remained unclear. Lane and many researchers are arguing that NSF's contribution is to continue funding basic research, to train the next generation of scientists and to help improve scientific literacy among the population. The Senate, on the other hand, appears to be arguing that NSF's research portfolio should generate knowledge that can be used immediately to improve the nation's technological base.

Asked for his interpretation of the Senate's directive, the soft-spoken and thoughtful Lane chooses his words carefully. "There are many examples of research that falls under the category strategic that ends up never having an impact on an application. That's the nature of research; you can't know for sure." A short time later, he notes that "technology transfer is a buzz word that's got a lot of meanings. Knowledge transfer is a better word for what we do."

Lane says he recognizes that NSF may not be able to repeat its double-digit funding increases, and that he must set priorities among disciplines. But he says he would not reduce support for a particular field to the point where it can no longer make an important contribution to science. "The more we just cut off certain areas of science and say that it's somebody else's responsibility, the less able we will be to take advantage of opportunities that cut across disciplines."

Similarly, Lane holds the middle ground in the ongoing debate about the proper balance of NSF's portfolio between small grants to individuals and larger projects, which range from new facilities to multimillion-dollar centers. "If NSF is going to be in astronomy or play a role in high-energy physics or oceanography, there are going to be some big things that it will need to support," he says. "Now you might say that there are other agencies that can do the big lumps, and NSF can use them. But that never works.... Many of these instruments are themselves cutting-edge science, so if NSF is supporting the scientists and someone else is building the instrument, it really doesn't work."

–Jeffrey Mervis