

from a set of "very tough" outside reviewers, Klausner says, it went to the NCI executive committee—which Klausner chairs—in October. There it received another favorable vote, and in November it went before the National Cancer Advisory Board (NCAB).

When Klausner presented the Seattle Project to the NCAB on 29 November, no one objected to its substance, but several questioned what Klausner called the "innovative use of intramural mechanisms" by which it was funded. Salmon said: "I do not see why this has to be done in the intramural program." And Philip Schein, chair and chief executive of U.S. Bioscience in West Conshohocken, Pennsylvania, questioned the decision to move it to Bethesda if it succeeds. "Rick," Schein said, "not everything exciting needs to expand the intramural program. Leave some of it out there" in the community. The lack of open competition led one adviser, requesting anonymity, to grumble to *Science* about NCI's "new old-boy network."

Asked to respond to concerns about the use of intramural funds to create a West Coast field station, Klausner told *Science*: "This is not something we're going to be doing" often. In this case, Klausner said, "we did it because of the unique intramural setup of the Developmental Therapeutics Program" at NCI, which can provide confidential feedback to companies that submit a compound for testing as a potential anti-cancer drug. This program uses cultured mammalian cells to test the effects of potential anti-cancer compounds—over 40,000 candidates have been submitted by a variety of researchers. It's much easier to handle intellectual property issues in an intramural program, Klausner claimed. Edward Sausville, who directs the Developmental Therapeutics Program, said it made sense to link this project to it because "it is a logical extension" of NCI's intramural research and should not be regarded as "a rabbit pulled out of a hat."

Whatever their qualms about using intramural funds to support extramural scientists, cancer experts agree about the merits of the project. John Mendelsohn, chair of medicine at the Memorial Sloan Kettering Cancer Center in New York, who is running a clinical trial of substances that block cell growth receptors, says the Seattle project has "a very cogent rationale" and appears to be "very creative ... innovative and important."

Whether the yeasts will actually serve as good models of human cancer cells and their susceptibility to toxic attack is unknown. The answers to those questions, as Friend says, "we can only get by doing the work, not by guessing." But preliminary results are promising, Friend said: After an initial screening run last year the Seattle group has already identified one promising candidate that deserves more investigation.

—Eliot Marshall

SCIENCE INTERVIEW

Donna Shalala: 'Leaving Footprints' at HHS

When Donna Shalala, secretary of Health and Human Services (HHS), visited *Science* 3 years ago in June 1993, she had been on the job only a few months, but she made a bold suggestion: "Forget what people are saying. Watch what we actually do and judge us by where we end up." At that time, the Administration was just starting to write its health insurance reform proposal, Bernadine Healy was still director of the National Institutes of Health (NIH), and Shalala was excited about the prospect for increased funding of preventive health care. Much has changed since then.

The Clintons' insurance package went down to an ignominious defeat in Congress in 1994, and with it, the preventive health plan. Healy was replaced by Harold Varmus, who has instituted critical administrative reforms at NIH. Congress has switched from Democratic to Republican leadership, and the entire government has gone through a series of wrenching battles over federal social spending and tax policy. Yet during this period, NIH's budget has grown at a rate higher than general inflation.

Against this background, *Science*'s editors and reporters earlier this month took Shalala up on her offer to review the Administration's record on biomedical research. In her feisty style, Shalala defended the Administration's policies and rattled off answers to questions about a wide variety of subjects—ranging from support for AIDS research, the congressional ban on human embryo research, and HHS's role in determining basic science budgets.

Shalala readily agreed that Republican congressional leaders like Representative John Porter (R-IL) and Senator Mark Hatfield (R-OR) deserve credit for their support of biomedical research—especially for securing a 5.7% increase in NIH's budget, a full 1.5% more than the Administration requested. But she argued that the Administration's appointments to NIH and other health agencies also helped by raising these agencies' visibility and status. She claimed that a reorganization of HHS carried out last year that eliminated the office of the assistant secretary for health has improved efficiency and elevated the status of NIH. Specifically, Shalala said that former assistant secretary

for health Philip Lee has been freed up "from the minutiae of budgeting and personnel to really be the public health leader." Doing away with an entire layer of bureaucracy and allowing the health agencies direct access to the HHS secretary, Shalala added, "frees topnotch senior" people to work on "big-time issues."

Organizational changes such as these, Shalala argued, had enabled HHS to "be a bigger player in science policy" at the White House. She noted that HHS controls two seats on the President's National Science and Technology Council—one held by HHS itself and the other by NIH. However, she rejected the suggestion that as head of the department with the biggest science budget, she should be an advocate for research funding in general. "I am not the president's science adviser," she said. "I am not required to balance off the interests between various agencies. My job is to be an advocate for the scientific enterprise which is within the department of HHS." However, she added that "I try to be helpful to science and technology, because I think it's clearly a national function, and that we ought to [be] steady in funding it, so that we can train the next generation of scientists."

On the always volatile topic of AIDS, Shalala said that the Administration had strongly opposed any reduction in budget authority of NIH's Office of AIDS Research (OAR). Legislation proposed by Representative Porter, chair of the subcommittee that writes NIH's budget, and passed by the House sought to weaken OAR's clout, but Shalala said that she, Varmus, and President Clinton "continue to believe that a single OAR appropriation is essential for better management and scientific oversight of the vast HIV/AIDS research effort at NIH," and she vowed to fight to include full budget authority for OAR in future appropriations bills.

Shalala said that one of her goals is to shield basic research in her department from undue political meddling and excessive bureaucratic burdens. Speaking of NIH staffers, she said "I've got to protect them" while ensuring that they get reviewed critically. For the long haul, she said, her goal is to see that administrative reforms are made permanent.



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The scientific community has asked for them "for a long time," Shalala said, and she would like to "leave footprints forever," so that "a whole generation of our brightest young scientists" will want to spend "at least part of their career at the NIH."

Following are Shalala's answers to questions, edited by *Science* for brevity.

—Eliot Marshall

Q: What role have you played in determining Administration support for science?

A: Well, NIH didn't start as one of the president's investment priorities. It is now. It took a little while. ... We made a hard case to the president. I think the appointment of Harold Varmus has helped, and him developing a relationship with the president helped. [So did] the visibility, getting the Clintons out [to NIH]. ... The economics people in the White House were prepared to argue the centrality of the investment in science technology. Al Gore was a leader in this area; the president's science adviser clearly had a role.

Q: Who deserves credit for the recent funding increase for biomedical research?

A: I think moving this country's investment in basic science to center stage has been a bipartisan effort; it has been helped by an absolutely first-class appointment to the head of NIH, by a settling down of some of the politics—and that includes the politics of AIDS—by first-class appointments, and by having a strategic plan and an investment strategy. I give credit where credit is due: the Republican chairs of the appropriations committees, who have been very pro-NIH right along. ... The president's own interests in this area [are strong], and he has paid attention. He knows Dr. Varmus. (I couldn't believe he took Harold's book on the trip to Wyoming—Harold took a lot of flak about that.)

Q: Is the scientific community getting a mixed message about how strongly they should campaign for a funding increase?

A: No, I think the professional organizations have shown some leadership, and I think that they have put some pressure on Congress and explained what the situation is, and I think that when they get the opportunity, they talk to the president about this, too. ... Whatever we get will not be enough, and should not be enough for the scientific community or the professional community. I would not—if I was still chancellor of the University of Wisconsin—I wouldn't sign off at whatever number HHS was able to get for the National Institutes of Health. I would still keep our feet to the fire.

Q: If a tax cut is enacted, is there any hope that NIH will get increases like this year's?

A: Only if we're willing to make tough decisions about everything else we do. ... We can't do everything, and we are going to have to slow down the growth, as we have in the department, of Medicare and Medicaid, of the big entitlements, as a way of doing this. ... If I want to make NIH a priority, then I've got to do my job on Medicare and Medicaid and welfare, and all the other programs. Or I'm not even in the discussion.

Q: Will you spend much time working on Clinton's re-election?

A: The president's re-election and my activities and relationship to that are not going to reduce the time I spend running the department. What I've said to everybody is, I'll be out on weekends. I told everybody in the department, don't you dare try to sneak something by because you don't think I'm here: I'm here.

Q: Were you involved in the president's decision to ban creation of human embryos for research, and will you try to reverse the congressional ban on human embryo research?

A: I was involved in the president's decision. I did look at the language, the budget language that the Republicans had submitted. I was reassured that we weren't currently doing research that would have to be stopped as a result of this. I didn't like it; the president didn't like it. ... I don't approve of restrictions on research, nor does the president. He got blackmailed like he did on [excluding HIV patients from the military]. It was clear blackmail. It was: Sign this, or you won't get your appropriations. And we needed the appropriations. That doesn't mean that we won't make efforts to try to get it repealed.

Q: Are you going to try to keep the language out of the HHS appropriation bill?

A: Oh, absolutely. We will try. We will try. Actually, we will try hard.

Q: When you met with us 3 years ago, you said scientific misconduct was high on your agenda. Have you seen a change in attitude about the handling of scientific misconduct?

A: I've seen changes. ... We need to get the bioethics issues and the waste and fraud issues out there in front, or science is going to be in great trouble. I think one of the things

I said when I was here the last time was, my great concern is that these cases cumulatively would change American attitudes about science, and we had to get on this immediately and take it responsibly. And my sense ... is that [academic leaders] are. ... The tightening up in this area is very important, and that reflects a change in culture and attitude.

Q: What can you do to help the academic health centers that are in financial trouble?

A: You mean other than send money? Well, first of all, they have to go through a transition themselves as they get more efficient. And some of that is being forced. Some of them need to get out from under the kind of bureaucracy—state bureaucracy—the way mine own did at Wisconsin in personnel and in budgeting. Some of them need to get those department chairs to pull together. ... We have to recognize as a country that if we're going to continue clinical research, scientific research, continue to be on the cutting edge, we have to figure out a way that they can survive, but within the context of a changing health care system. I believe that we shouldn't fool ourselves. It costs more money, but we can demand efficiency and some organizational changes at the same time.

Q: Has the position of HHS secretary been "marginalized" by the defeat of Clinton's social reform programs?

A: I reject that concept of marginalization. ... The president and the White House have always consulted and worked out a consensus with HHS on all of the major issues. I have had no problem of access to the president, the vice president, chief of staff, the budget director, or anyone else I needed to talk to at any point. ... We've been very successful; what we've done amid this kind of political and budgetary chaos is pretty impressive. ... Has there been another period in the history of the NIH or the CDC [Centers for Disease Control and Prevention] in which we had better quality appointments from the point of view of the scientific community, steadier budgets, more decentralization of authority in terms of budget and personnel, or more commitment to the kind of physical space kinds of issues?

Q: So does that mean you plan to retire on a high?

A: No. No. ... On the day after the election, I'll talk to the president about what's his pleasure, because I serve at his pleasure. I have no plans to leave.



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