ence into its budget plan. Staffers talk with lab chiefs; lab chiefs negotiate with division chiefs; and division chiefs huddle with administrative officers in retreats to discuss a document called the bypass budget. This annual statement of NCI's scientific goals, and the funds it needs to meet them, is drawn up by the NCI director and his executive committee. As stipulated by the 1971 Cancer Act, it goes directly to the White House, offering the executive branch scientists' judgment on what must be done to fight cancer. Later, the Health and Human Services Department and NIH submit a "real" budget request to the White House, which is revised and sent to Congress.

The bypass budget—some refer to it as NCI's "wish list"—bears little relation to the budget that is finally submitted to Congress. The 1996 bypass budget, for example, called for a total of $3.6 billion for NCI—a whopping $1.4 billion more than the Clinton Administration requested. Clearly, NCI has to do a lot of squeezing to shape its wish list to fiscal realities, but how that shaping is achieved isn't clear even to many on the inside. The Bishop-Calabresi panel seems ready to recommend that the next NCI director create a more comprehensive and transparent system for setting priorities.

Issue IV: Loss of flexibility

NCI's priorities are not all set from within. Patient advocacy groups, professional societies, and disease lobbies all have a hand in shaping the agenda, mainly by asking Congress to earmark certain tasks for funding. One example: research on cancer prevention and control. The 1993 bill authorizing NIH specified that NCI must devote a fixed percentage of funds to this area, reaching 10% this year. NCI is having trouble hitting that target, however, and is asking Congress to drop the requirement.

Perhaps the most striking earmark is for breast cancer research, for which funding at NCI has increased 236% since 1991, when cancer patients began lobbying hard. Broder says he agrees that breast cancer and prostate cancer research were due for an increase. But he warns that "we have to be cautious that we don't overcompartmentalize the process" by creating "scientific entitlements."

Broder doesn't think earmarking has unbalanced cancer research—at least not yet. But he worries that the process could become unbalanced if a set-aside for AIDS research (also part of the 1993 NIH authorization bill) isn't handled carefully. AIDS-related research already consumes 26% of the NCI intramural budget, and Chabner told the Bishop-Calabresi panel that all intramural growth in his division since 1992 has gone into AIDS, while funding for cancer "headed south." The result: "We shift research," and people change what they do.

But when it comes to predicting what the NCI itself will look like a year from now, nobody is ready to make a guess. Varmus is waiting for the Bishop-Calabresi report, and he says he wants to hear the views of the new NCI director—whoever that may be. "I would be surprised if there weren't some changes," says Varmus, but beyond that, "I don't know enough to say what they should be." But Varmus is certain of one thing: The Bishop-Calabresi review won't be the last of its kind. He says he will soon order up a similar review of the National Institute of Mental Health, which is also looking for a new director, and other institutes will get their turn.

–Eliot Marshall

With reporting by Antonio Regalado.

BIOMEDICAL FUNDING

Nobelists Make a Plea for NIH Budget

Six Nobel Prize winners who went to Capitol Hill last week to make a pitch for biomedical research themselves came away with an unsettling message: Prospects for funding this year are more uncertain than at any time in recent memory.

The Nobelists had been invited to testify before a key panel—the House appropriations subcommittee for Labor and Health and Human Services, author of the appropriation bill for the National Institutes of Health (NIH). But before they even began, the panel's most senior Democrat, David Obey of Wisconsin, rattled them with a warning that a fiscal "train wreck" lies ahead for basic research if a federal tax cut—promised by the Republican leadership in Congress and by the White House—is enacted. He predicted such a tax cut would lead to a 30% reduction in all domestic spending, including funds for NIH. Another panel member, Louis Stokes (D–OH), agreed that a tax cut would be devastating, but doubted it would be approved.

It fell to the subcommittee's Republican chair, John Porter (R–IL), to provide some reassurance. Torn between his party's plan to cut spending and his own support for NIH, he reiterated his own opposition to the tax cut: "I believe in the end we will not cut taxes," Porter said, suggesting that his colleagues are "wise enough" to avoid the governmental crisis it would create. And Porter said he would do his best to support biomedical research in what will be a tough budget year, with or without a tax cut. Another Republican member, Dan Miller (FL), also noted that House Speaker Newt Gingrich (R–GA) is "a very strong supporter of basic research" and not one to abandon biomedicine. However, the most junior Republicans on the subcommittee—members who favor stringent spending cuts—didn't show up for the hearing and have not yet indicated how they will vote on research funding.


SAM KITTNER

Show and tell. Phillip Sharp demonstrates for House appropriations committee members how cancer genes are spliced and expressed.

Only then did the scientists get to talk about their own experiences and the importance of federal support for research. Michael Bishop, friend of NIH Director Harold Varmus and co-winner with Varmus of a Nobel in 1989, orchestrated this part of the hearing. Bishop described his own work on retroviruses and the progress since 1970 in understanding the causes of cancer, declaring that a strategy for conquering the disease is now in hand. Other speakers included Michael Brown of the Southwestern Medical Center at the University of Texas, Dallas, on heart disease; David Hubel and Joseph Murray of the Harvard Medical School, on brain research and organ transplantation, respectively; Phillip Sharp of the Massachusetts Institute of Technology on oncogenes and biotechnology; and James Watson of the Cold Spring Harbor Laboratory on the Genome Project.

Murray's presentation, illustrated with a photo of the "oldest living organ transplant recipient"—one of his patients, now living in Oklahoma, not far from the home town of one of the House panel members—was especially powerful, in the opinion of one longtime observer of these hearings. But some of the other discussions, he said, verged on "whining" about the hardships associated with applying for federal grants, which is unlikely to evoke sympathy from the subcommittee. The "real question" facing biomedical funding, this observer says, is: What if funding decisions get entirely "out of Porter's control?" In this topsy-turvy year, it could happen.

–Eliot Marshall