NATIONAL INSTITUTES OF HEALTH

Dental Institute Report Has NIH Down in the Mouth

People at the National Institutes of Health (NIH) don't worry much about earthquakes, yet the institutes were rocked by a temblor on Friday, 29 January, that might foreshadow a full-blown quake. The tremor stemmed from a region of the NIH campus that isn't usually associated with upheavals: the National Institute of Dental Research (NIDR). The trigger for the shock was the release that day of a blue-ribbon panel report proposing sharp changes in NIDR's intramural research program—shifting it in the direction of applied research, a move that has many in the basic research community shaken up, not least because critics charge that appointment of the blue-ribbon panel bypasses the institute's own procedures for setting its research agenda.

Teeth and advanced research aren't usually considered together in these days when molecular biology holds the limelight. But in fact NIDR houses a highly regarded basic research program with both dental and nondental components, including research on transgenic mice expressing HIV genes and an anticancer adhesion molecule. And in today's climate, when pressure to move away from basic research and toward applied studies is a worry that spreads far and wide over the NIH campus, the report's conclusions came as something of a shock.

Indeed, the report alarmed the scientific directors of the other NIH institutes enough for them to call their own emergency meeting in late February. Item One on the meeting's agenda: how NIDR's top brass set what directors consider a dangerous precedent by convening the blue-ribbon panel and bypassing the institute's own board of scientific counselors, the group officially charged with guiding the institute's research priorities. Although the report's recommendations don't have binding power—the panel is merely advisory—what bothers people is the idea that any institute director could use this approach to reshape an institute's research program without regard for what the scientific counselors think. Lance Liotta, deputy director for intramural research at NIH, thinks the panel approach is a mistake and says he would advise other institutes against convening one. "I'm strongly of the opinion that the board of scientific counselors can serve that function," he says.

But at NIDR, Harald Löe, the director since 1982 and chairman of the advisory council that created the blue-ribbon panel, didn't agree. Loe wants to focus NIDR's intramural research program (IRP) more sharply on dental concerns, and that has caused him to butt heads with viral immunologist Abner Notkins, a 30-year NIDR veteran who until recently was the institute's scientific director. Notkins is a strong advocate of unfettered basic research, and the NIDR research program had always been highly rated by the scientific board—a group appointed by Notkins. In a review of the program in 1990, biochemist Margo Cohen, director of the Institute of Metabolic Research at Philadelphia's University City Science Center and at the time chair of the board of scientific counselors, said the program "is of fine quality" and a "well-respected, diverse, and mission-oriented program."

RICK KOZAK

Out of place? Dental institute immunologist Abner Notkins with a nondental project: mice that express HIV genes.

But Löe was concerned that the program had moved too far from the institute's dental roots. Last July, he asked Notkins to resign as scientific director; Notkins resigned on 15 September. In addition, Löe set up the blue-ribbon panel, which recommended that the NIDR program focus on "evolving questions of dental, oral, and craniofacial health, and the spin-offs to general health." Those recommendations don't sit well with former scientific director Notkins. "I don't know any scientist worth his or her salt who would go to a long-range report to come up with ideas or experiments that should be done," he says.

Another perturbed staffer is Jerry Keith, head of NIDR's microbial ecology laboratory, one of three NIDR labs targeted by the panel for an "in-depth review...with respect to relevance to both the NIDR and IRP mission and vision." One of Keith's projects is to develop a new vaccine against whooping cough to replace current side effect-laden vaccines. An additional nondental program Keith is pursuing is research on an anticancer protein called osteotoxin that his group recently isolated. Keith says his belief is that he has "an obligation to follow a potential lead for a cancer therapy." But he adds that the panel's report has forced him to question whether he can meet that obligation at NIDR. He adds that some of the younger staff in his lab and others at NIDR are doing more than questioning. "They're looking for jobs, they're scared to death," Keith says.

Many other NIDR researchers, however, contend that their colleagues are overreacting. "No one is telling people to drop basic science," says Bruce Baum, the intramural program's clinical director. He does say, though, that basic research should be "mission appreciating." "This is the National Institutes of Health, not the National Institutes of biochemistry and molecular biology," he says. Other NIDR staffers, who insisted on anonymity, say they feel Notkins is using the basic-research issue to divert attention from charges in the panel's report that he was inaccessible and unresponsive as a manager.

Löe also insists he's not moving the program toward applied work and that people can still do basic research. That research, he says, simply should have more to do with the charter of the institute. He also defends his use of a blue ribbon panel, saying the scientific board primarily reviews individual labs, and is not set up for "development of a vision for an intramural program." In contrast, he says, the panel "has given us substantial assistance in shaping a vision for the future."

In spite of those justifications, some officials at other institutes are concerned—especially when the newly released NIH Strategic Plan emphasizes research with a direct public health payoff. "The purpose of NIH is to do more high-risk and less-obvious types of research," says Irwin Kopin, scientific director at the National Institute of Neurological Disorders and Stroke. Yet, he asserts, "the report is very targeted toward 'what can you give me now.'"

While staff at other institutes grapple with those unsettling implications, NIDR's administrators are trying to rebuild a sense of stability. Löe is wrapping up a search for a new scientific director and expects to announce his appointment next month. Everyone is hoping the new scientific director can assuage a frazzled staff. "Fences have to be mended," says Kenneth Yamada, head of NIDR's developmental biology laboratory, "and this will take time."

–Richard Stone