NATIONAL INSTITUTES OF HEALTH

Glossy Strategic Plan Hits the Streets

After more than 2 years of executive retreats, road shows, and back-room negotiations, the National Institutes of Health (NIH) has released the final version of the strategic plan that is meant to guide the $10 billion agency into the 21st century. "For 100 years, NIH has needed to have some clear-cut statement of its mission and its goals and why it should continue to flourish, and the strategic plan does just that," says NIH Director Bernadine Healy proudly. It's not surprising that Healy is proud of the plan, since she shepherded it through every phase of its development. And it is Healy who is scheduled to present the plan to the House of Representatives on 13 May during her annual—and this time final—testimony to the appropriations committee.

How the document, called, in a Clintonian mode, "Investment for Humanity," will be received in the scientific community is anybody's guess, because it's still hot off the press. But if NIH's strategy works, the 2000 scientists who reviewed early drafts—and whose criticisms led to many changes—will quickly throw in their support.

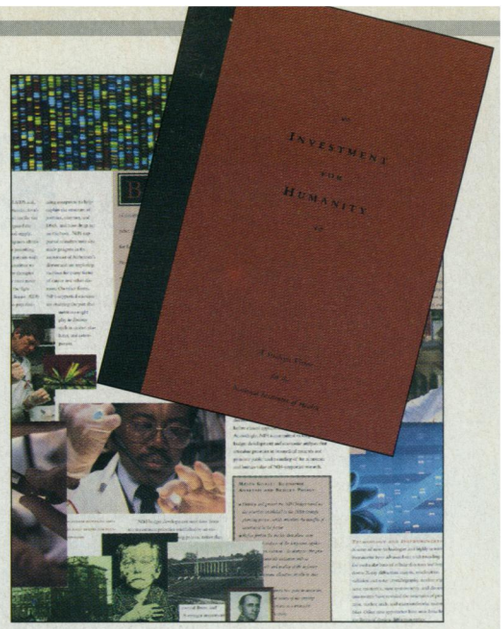
Though many details have changed, the overall structure of "Investment for Humanity" is identical to the draft revealed last July of what was then titled "Advantage America" (*Science*, 24 July 1992, p. 476). The plan begins by hammering home three promotional messages: NIH exists to improve human health; its 24 branches work together; and it spends money wisely.

Those general propositions are just the introduction to a more specific vision embodied in six objectives that cut across the traditional institute divisions: critical science and technology, critical health needs, intellectual capital, research capacity, stewardship of public resources, and public trust. Within those aims, the plan highlights such "major goals" as launching far-reaching research initiatives in vaccines, bionutrition, the human brain, human cells, and minority health. A new grant program (Junior R01s) will favor young postdocs in an attempt to broaden "the scientific talent base." And a "Trans-NIH Communication Strategy" will sell NIH more aggressively to the public.

Indeed, an unstated goal of the plan itself appears to be selling NIH to the public—and, more important, to Congress. At a time when most of the NIH budget is scheduled to remain static or even decline (*Science*, 16 April, p. 284), it's no accident that "Investment for Humanity" appears as a slick, handsome document bearing a strong resemblance to an annual report from a Fortune 500 company, the kind of lavish publication, replete with four-color photographs and elegant typography, that aims to convince people to invest. And some of the select few researchers who had seen copies of "Investment for Humanity" at the time *Science* went to press, view it as an ideal tool to lobby Congress. "It could be used like that and it should be used like that," says Nicholas La Russo, chair of gastroenterology at the Mayo Clinic. But La Russo sees the document as much more, since it "articulates some things that have never been articulated" and "identifies areas that require attention."

The plan emphasizes repeatedly that "science is inherently mutable and unpredictable"—a clear signal that the NIH values untargeted, basic research. But its strongest critics may well be those who do not hear—or do not believe—that message. "It's a very nice public-relations piece, but it's not a plan for research or for management of the future of NIH," charges Frank G. Standaert, who is director of research at Toledo Hospital and who sat on a task force that helped develop the plan. By not emphasizing basic research more strongly, "we're sacrificing the future for the present," warns Standaert, a board member at the Federation of American Societies for Experimental Biology. "It's the same mistake that automakers and IBM made."

That's a charge disputed by rheumatologist William Kelley, a member of the plan's task force, who heads the University of Pennsylvania's Medical Center. "[The plan] reinforces time and time again the importance of basic research," Kelley says. "And it identifies the reality that NIH must do more than basic research."



Timely message? NIH says don't stop thinking about tomorrow.

Several large questions remain about the strategic plan's fate. Given the current budgetary climate, its price tag seems steep: Healy says implementing all of it would require adding $1.5 billion to the annual NIH budget. What is more, the entire plan remains at the mercy of the person selected to replace Healy, who plans to leave by 30 June. And if that person isn't sympathetic, the glossy report might meet the fate of many lavishly illustrated publications that wind upon coffee tables across America—unread.

–Jon Cohen

WOMEN AT NIH

Task Force: Level the Playing Field

Complaints about the treatment of women at the National Institutes of Health (NIH) have been echoing around Washington for a while. Now two recent reports commissioned by the institutes themselves are providing hard data to back up the claims. A report by the Task Force on the Status of NIH Intramural Women Scientists, released last week, concludes NIH female scientists earn much less than their male counterparts

PAY OF TENURED NIH SCIENTISTS BY GENDER

Position	Male (number)	Female (number)	Difference
Total MD	$89,219 (483)	$85,274 (71)	-$3,945
Total Ph.D.	$74,024 (473)	$64,903 (118)	-$9,121
Lab chief MD	$95,185 (138)	$105,696 (7)	+$10,509
Lab chief Ph.D.	$89,827 (78)	$89,484 (2)	-$197
Section chief MD	$89,653 (157)	$86,022 (21)	-$3,631
Section chief Ph.D.	$76,819 (140)	$73,570 (31)	-$3,247
Investigator MD	$83,249 (177)	$81,585 (43)	-$1,664
Investigator Ph.D.	$67,131 (251)	$61,164 (85)	-$5,972
Staff fellow Ph.D.	$34,642 (14)	$31,888 (9)	-$2,794

and occupy few of the high-level positions within the institutes. And a still-unreleased report by an outside consultant concludes that some male supervisors in a nonscientific office at NIH promised good job evaluations to female employees in return for sex.

The task force report contains no lurid accounts of back-room sex, but the inequalities it does reveal are disturbing, including a pay differential between male and female scientists ranging from 2% to nearly 9% (see chart). And it's not simply a case of men holding more senior positions than women. Hynda Kleinman, a cell biologist at the National Institute of Dental Research and the task force's chairwoman, cites a separate study of 77 "matched pairs" of NIH scientists—men and women who shared the same rank, institute, type of degree, and number of years since their degrees were granted—which revealed that, even with all of these factors equal, the man earned an average of $4,000 per year more than the woman. Kleinman says with wry humor, "I've been here about 18 years, so that's about 70,000 bucks I'm out."

But there wasn't much to laugh about in the statistics on the status of female scientists at NIH. Over the past decade, an average of 29.5% of NIH's postdoctoral trainees—the entry-level category that supplies most of NIH's tenured researchers—have been women. Yet women make up only 18% of the campus's tenured scientists. Task force members speculate the female postdocs aren't being clued in to the better job openings by their supervisors. "Anything you do at NIH is dependent on your lab chief, and 96% of the lab chiefs are men," Kleinman says. "We think [men] have a better communications system"—read old-boy network—for discussing career-related matters. Even women who manage to win tenure often remain in the lower echelons: Only 36% of tenured women, versus 56% of tenured men, occupy the top scientific positions.

The report, commissioned by outgoing NIH Director Bernadine Healy, makes several recommendations. Some, such as clarification of the institutes' tenure policy, are already being acted upon by NIH officials, who last week published a new policy that establishes an official tenure track (*Science*, 16 April, p. 283). Officials are also preparing to implement the formal family leave policy the task force recommended; currently, the length of a woman's family leave depends on her lab chief's discretion. And Lance Liotta, NIH's deputy director for intramural research, has vowed to bring women's salaries into line with those of men at NIH.

Though task force members are encouraged by such developments, some express skepticism that, in a time when funding is particularly scarce, Liotta will have the money to equalize pay. Others predict opening up the tenure track will prove quite difficult. "It's good to have a tenure policy in place," says task force member B.J. Fowlkes, an immunologist at the National Institute of Allergy and Infectious Diseases. "But the way people get into tenure track is still not really well defined. I don't think anyone knows how to make the process more open to women."

Female scientists aren't the only NIH employees complaining about a male-dominated workplace. According to a report on NIH's acquisitions management division, which oversees supplies at NIH, several male supervisors promised promotions or good performance reviews to women employees in exchange for sex. The report said this "ole boy-younger women network" has operated for years in the division. Copies of the report were given to the press at the end of April by a local chapter of the National Association for the Advancement of Colored People, which was concerned because of allegations of discrimination against African Americans within the division. In response to the report, Healy has formed yet another task force, this time to recommend how to discipline employees guilty of discrimination, sexual or otherwise.

–Traci Watson

SCIENCE IN EUROPE

Yet Another Science Minister for Germany

The year is less than half over, yet for German scientists 1993 has been unsettling already. In January, they watched with trepidation as the man who had served as Germany's research minister for more than a decade, industrial chemist Heinz Riesenhuber, gave way to Matthias Wissmann, a lawyer known for his expertise in economics rather than for any interest in scientific research (*Science*, 29 January, p. 598). Now after barely settling in, Wissmann, too, is on the way out. In his place, Germany is getting its first science minister from the former East Germany: Paul Krüger, a 43-year-old former software engineer.

Krüger takes office at a time when many eastern German researchers are embittered by the experience of uniting the two Germanys, which has left thousands of them out of work and allowed most of the top research jobs in the east to be filled by western Germans. Easterners hope Krüger, as an easterner himself, will understand and introduce measures to ease the painful transition to the competitive western research system.

Detlev Ganten, who moved from the University of Heidelberg to head the Max Delbrück Center for Molecular Medicine (MDC) in east Berlin in 1991, says Krüger could help by educating researchers in the east about the unfamiliar western research system. Scientists used to lifetime tenure with continuous research funding, he says, need to be convinced that a grant rejection isn't a humiliating final rebuff, and they need help in preparing a better proposal the next time around. "What people really need is psychological support," says Ganten.

"I really have never heard of him in any scientific context."

—Herbert Walther

A top priority for Krüger, most eastern researchers say, should be to overhaul an integration program designed to provide temporary funding for some 2000 promising scientists from the former East Germany's state-run research institutes. This program, intended to tide these researchers over until they find university positions, has been condemned as a failure. Most people in the program have not been able to find jobs, largely because eastern Germany's slowly restructuring universities have been unable to provide them, say senior researchers.

There are questions, however, about Krüger's ability to solve these problems. Many western German scientists—and some from the east—take a cynical view of his appointment. The posting came as his predecessor, Wissmann, moved on to replace Günther Krause, the transport minister who was forced to resign last week after a series of minor scandals. Krause was also from the east, and many see Krüger as a mere token intended to retain balance between east and west in the cabinet.

Krüger's low political profile supports this view. Although he has been a member of the unified German parliament's science and technology committee for more than 2 years, researchers say he hasn't taken an active part in the science policy debate. "I really have never heard of him in any scientific context," says laser physicist Herbert Walther of the Max Planck Institute for Quantum Optics in Garching. And Krüger's lack of political muscle, far from correcting worrisome problems, could lead to obscurity for science in German politics.

–Peter Aldhous

With additional reporting by Patricia Kahn.