CAREER CHOICES

Minorities Move From Lab Rats To Policy Wonks

The phone call came to microbiologist Marian Johnson-Thompson of the University of the District of Columbia just after she'd been awarded a $338,000 grant to continue her research on multidrug resistance. The man on the other end of the line was Kenneth Olden, director of the National Institute for Environmental Health Sciences (NIEHS), and he was asking her to leave her grant, her research, and her students after 21 years as a university professor, and to come work for him. The job? Improving environmental health education for children, and recruiting minority scientists to NIEHS. In other words, science policy.

Johnson-Thompson didn't exactly leap at the offer. "I never wanted to be a paper pusher," she says. "I was concerned about trading off academic freedom for a position where ultimately you speak for the president. My students didn't want me to leave." She had, in fact, been approached about policy jobs before but had always said no. Yet this time, after a period of reflection—and persistent calls from Olden—Johnson-Thompson, who is black, decided to move to North Carolina to direct the NIEHS office of institutional development. "When you get to a certain age, you start thinking about where you can make the biggest impact," she says.

She became part of a small but highly visible group of minority scientists who design policies, not experiments, for a living. Like many, she feels she can best leave her mark in science by trading direct involvement in research for a wider sphere of influence. Indeed, a greater proportion of blacks end up in administrative positions than do their white colleagues, although that pattern does not hold for Hispanics or American Indians. According to the National Science Foundation (NSF), 21% of black Ph.D. scientists and engineers were working in administration in 1989, versus 17% of their white counterparts. Many of these black scientists run programs for minorities in science, but they also design research programs and help shape policy at the top, at agencies such as the National Institutes of Health (NIH) and the National Aeronautics and Space Administration (NASA). A handful of minority scientists now hold powerful—and very public—positions, such as endocrinologist Joycelyn Elders, now Surgeon General, and David Satcher, the new head of the Centers for Disease Control and Prevention in Atlanta.

Of course, there are downsides to policy jobs. Not every administrative position carries power, and scientists who have made the switch sometimes find that policies are stubbornly resistant to change. Others don't like stifling their personal opinions in the interests of diplomacy, and many regret losing their role as research mentors. And yet overall, many administrators say that the rewards of creating new policies, and translating policy statements into concrete programs, are well worth it.

The pull of policy. One reason for the presence of top minority scientists in policy positions is that they are sought out. Indeed, young minority scientists who make their mark as researchers often are "snapped up very early" by agencies eager for scientific talent to run minority programs, says Willie Pearson Jr., a sociologist of science at Wake Forest University. Meanwhile, those not on the fast track may seek security in lower-level administrative posts. Federal agencies like NSF and NIH say they actively recruit minority scientists for policy jobs—although they haven't succeeded in attracting large numbers. The NSF now employs 11 blacks and three Hispanics out of a total of 273 Ph.D. policy makers in science and engineering. At NIH, although former director Bernadine Healy couldn't forestall protests about the treatment of minorities on the NIH campus, she did boost the number of blacks in the senior executive service from 2.4% to 3.6%—by adding three individuals.

Many of the minority scientists now administering programs were the first to integrate their labs or graduate departments. The first Chicano to get a Ph.D. in the physical sciences, Joseph Martinez, is now a program manager in atomic physics at the Department of Energy. Wesley Harris, who was barred from becoming a physics major at the University of Virginia in the 1960s because he is black, became an aeronautical engineer instead and later returned to Virginia to become the first black tenure-track professor and the first black to teach engineering, before moving on to Massachusetts Institute of Technology (MIT). Harris is now a high-level administrator at NASA.

While many are called, a few minority scientists choose themselves, drawn to the policy arena almost from the start of their careers. Norman Fortenberry went to work for NSF only a year after receiving his Ph.D. in mechanical engineering from MIT in 1991. He felt "significant hesitation" about abandoning his students and leaving "that direct ego boost you get from teaching." However, says Fortenberry, "from my perspective, you can respond to someone else's agenda or you can help to set that agenda. Do you spend $10,000 or do you make it possible for 10 people to spend $10,000?"

Indeed, one of the chief satisfactions of a policy job is the ability to effect change. For example, John Diggs, former deputy director of extramural research at NIH, had oversight over 85% of NIH's budget. Along the way he helped craft the policy, which is just now going into effect, that requires any NIH grantee doing studies on human populations to include minorities or explain why not. Diggs also helped develop the grant system through which any NIH grantee can get a supplement for adding an underrepresented minority participant to their research.

For some researchers, including Diggs, it was limited opportunities in research that made administration more attractive. As a young physiologist at the Walter Reed Army Institute of Research, he felt he had little chance "to rise to the ranks of heading a laboratory where you could decide where resources go"—because he was a civilian and a minority to boot. Says Diggs, "Although I found the research fulfilling, fulfillment won't equip a lab, and it won't feed a family." In 1975, he left for a position reviewing grants at NIH. "Almost everyone argued against the move," he recalls. "There are certainly not enough minorities on the bench, and


DOE

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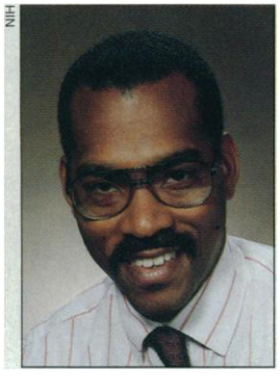

NIH

"You start thinking about where you can make the biggest impact."

–Marian Johnson-Thompson

my mentors all encouraged me to stay. But I thought I could have more impact at NIH, and in fact that is exactly what happened." A few months ago, he left NIH to become vice president at the Association of American Medical Colleges.

Chemist Joseph Reed Jr., a Black Seminole Indian, also found that government agencies offered opportunity at a moment when research opportunities were drying up. An industrial researcher at Exxon Inc. for many years, Reed recalls that in 1986, during dark days for the oil industry, Exxon management called together the 300 staff scientists and announced that half would lose their jobs. "I decided to jump ship before they put everyone out in a rowboat," says Reed. He wrote to every government agency involved in chemistry research, and eventually received an offer from Eric Bloch, then director of NSF, for a temporary job. He's been at NSF for 8 years now, overseeing education grants to university chemistry departments.

Although Fortenberry and his peers may look back with some nostalgia at their days of teaching and research, there are compensations. Many who walk the corridors of scientific power say they get a vicarious thrill from funding and interacting with top scientists. Says Martinez, "I live vicariously because I'm among the first to know about many discoveries." Agrees Pinn, director of NIH's Office of Women's Research, "Even if I'm not out there doing the research myself, my fingers are out there." Pinn was head of the department of pathology at Howard University when she was tapped by Healy in 1990. She was unsure at first whether she was making the right decision. "I had some apprehensions about working in government." But she quickly decided she had a "natural mandate" to promote the women's agenda in science.

Missing the labs. But despite the promised ability to affect a wider range of people, becoming a policy wonk can bring a whole new set of frustrations. A number of people who left teaching jobs regret losing opportunities to guide minority science students on an individual basis. Shirley McBay, a former mathematics professor and assistant dean at Spelman College, now runs a science education organization, the Washington-based Quality Education for Minorities Network (QEM). McBay meets aspiring minority scientists through the programs she directs, but this contact is "not the same as getting to know students up close on the campus."

That's why retired physicist Herman Branson argues that young scientists should not leave the bench too soon. "If you get a Ph.D. and you have some research interest you owe it to yourself and society to do a little bit of research," says Branson, who served as the head of the physics department at Howard and as president of two historically black universities, before retiring and working in a foundation-funded mentoring program. Some administrators, such as DOE's Martinez, have defied attempts to pigeonhole them as minority spokesmen by sticking to science, and doing the minority work on the side.

Despite the stellar academic and research credentials of such policy makers, there are always bench scientists who believe that only failed scientists take policy posts, or that minorities are tokens hired for the sake of appearance. So minority scientists, especially those in the bureaucratic rank and file, must prove themselves each time they walk into a conference room filled with new faces. "There's a lot of thought out there that because you're a person of color you're getting breaks," says Martinez. "I don't like to have that label pinned on me."

Even eminent policy makers such as George Campbell Jr., a former research physicist at AT&T Bell Laboratories who is now president of the National Action Council for Minorities in Engineering, Inc. (NACME), says, "Whenever you're new in an arena, you will have to prove yourself to people who are suspicious, people who will assume you're dumb and you're here because of some affirmative action program."

"You have to have reached a point in your career where you are comfortable with your own accomplishments to do this, because you're going to have less immediate gratification, and less glory," agrees George Peterson, an electrical engineer who was the only black department head at the U.S. Naval Academy before retiring and taking a policy position at the NSF. Most policy makers say that some days, they feel they have an effect on science; other days, they feel like a cog in the bureaucratic machine. "When you're caught in the middle of some grunt work, pushed and pulled by a budget squeeze, you don't think about how immediately rewarding it is to be a policy maker," says Shirley Malcom, one of the first black women to get a Ph.D. in animal behavior, who now directs the Education and Human Resources Programs at the American Association for the Advancement of Science (AAAS).

FLORIDA STATE UNIV.

"Do you spend 10,000 or make it possible for 10 people to spend $10,000?"

–Norman Fortenberry

Freedom of speech is another concern for many minority researchers who make the transition to administration. When you work for the executive branch of the federal government, you represent the president—whether or not you voted for him. Diggs, the former NIH deputy director, is well aware of the potential conflicts. "When you are working for the president, you have to defend the president's budget, and I feel the NIH budgets have been going in the wrong direction," says Diggs, who thinks NIH's budgets need to grow more dramatically.

Making a difference. Despite these frustrations, most of the scientists interviewed for this story reported overall satisfaction with their careers as policy makers. People like Diggs and Campbell, who have reached the pinnacle of science policy and are familiar faces at high-level gatherings, say that their power and influence serve as an antidote to discrimination. They no longer have to prove themselves repeatedly or counter the assumption that they owe their jobs to a quota system. Says NASA's Wesley Harris, "I'm not saying there is no discrimination. But the higher you go, the more control you have, the less impact discrimination has on you."

–Susan Katz Miller