BIOMEDICAL POLICY

Satcher Tapped for Top Health Posts

The White House last week nominated David Satcher, head of the Centers for Disease Control and Prevention (CDC) in Atlanta, for two top health policy posts: Surgeon General of the U.S. Public Health Service and Assistant Secretary for Health (ASH) in the Department of Health and Human Services (HHS). As Surgeon General he will have a bully pulpit for highlighting public health issues, while as ASH, he will be in a position to help shape biomedical research policy.

Satcher, 56, who holds a Ph.D. in cytogenetics and a medical degree from Case Western Reserve University in Cleveland, has spent most of his career in community health and as an administrator (*Science*, 29 March 1996, p. 1910). He was dean of historically black Meharry Medical College in Nashville, Tennessee, before he took the helm of CDC in 1993. There he has emphasized such areas as preventive medicine and the need to stem violence in inner cities and has dealt with such controversies as drug trials involving pregnant women in developing countries.

The White House is apparently treading cautiously with the nomination. Satcher's name was first floated for the combined position of Surgeon General and Assistant Secretary for Health 7 months ago (*Science*, 28 February, p. 1251). No objections have yet been raised, and the Senate committee that must approve Satcher's nomination says it expects to move quickly. This is in sharp contrast to President Bill Clinton's previous nominee, W. Henry Foster Jr., whose appointment as surgeon general was shot down by Congress in 1995 because he had performed abortions. The surgeon general spot has been vacant since Joycelyn Elders resigned in 1994 after making controversial comments about masturbation and legalizing drugs.

RICK KOZAK

Two hats. Surgeon General nominee David Satcher.

By combining the post with that of ASH, the Administration is hoping to give Satcher more direct influence over biomedical policy. ASH's status was downgraded about 18 months ago, when oversight of CDC, the National Institutes of Health (NIH), the Food and Drug Administration, and other HHS agencies was shifted from ASH to the HHS secretary. But the assistant secretary still heads HHS's Office of Public Health and Science and oversees HIV/AIDs policy and the offices of women's and minority health. Moreover, Jo Ivey Boufford, acting ASH from 31 January—when then–Assistant Secretary Phil Lee retired—until she left in June to become dean of the New York University School of Public Service, says the assistant secretary is "sort of the secretary's senior adviser" on such matters as the NIH budget and coordinates cross-agency projects like the recent food safety initiative. Among the tasks awaiting Satcher, Boufford says, may be implementing the changes to the Office of Research Integrity recommended by an internal working group and a project examining the future of academic health centers.

Public health researchers have endorsed Satcher's nomination, and Boufford agrees that he's "very well suited for the position. ... He's a thoughtful person, he's very good at bringing disparate groups together, and he's well regarded in the department."

–Jocelyn Kaiser

SCIENCE BUREAUCRACY

USGS Chief Resigns After Tough Tenure

After more than 3 years as head of the nation's biggest natural resources research and geologic mapping agency, U.S. Geological Survey (USGS) director Gordon Eaton last week announced he will retire on 1 October. Eaton's decision came just after he told staff that Department of Interior Secretary Bruce Babbitt had instructed the agency to move its western headquarters away from Menlo Park, in the high-rent San Francisco Bay area. Eaton's announcement triggered a firestorm of criticism from members of California's congressional delegation.

USGS

No connection. Gordon Eaton *(inset)* says departure isn't linked to relocation of Menlo Park offices.

Some observers have speculated that Eaton's departure is tied to the uproar over Menlo Park and earlier, controversial management decisions. But in an interview with *Science*, Eaton insisted there is no connection. In a lengthy memo announcing his departure to employees, he noted that he was 65 when he became director and explained that "from the beginning it was understood that my tenure would be relatively short."

It may have been short, but Eaton's tenure was also tumultuous. He had the misfortune to come on board in March 1994, shortly before the midterm elections ushered in a new Republican Congress that initially pledged to do away with the $746 million agency. In the end, Congress preserved USGS and even gave it more authority: Last year, it abolished the National Biological Service as a separate agency and moved it under USGS's wing, making USGS the sole science agency in Interior.

Several steps Eaton took to protect the agency have been controversial, however. His emphasis on "mission-oriented" research in the Geologic Division eroded basic research in areas such as earthquakes and geochronology, some researchers complained (*Science*, 30 June 1995, p. 1840). Some USGS scientists have also charged that a massive layoff in that division in 1995, in which 525 staff jobs were cut, was aimed at ousting whistle blowers (17 November 1995, p. 1107). Last year, an investigation of the layoff by a House Government Reform subcommittee found the extent to which job descriptions were rewritten was "unusual," but legal, according to a staffer. Still, several dozen scientists are appealing the job cuts, and 11 of the 36 Menlo Park scientists have gotten their jobs back.

More turmoil ensued late last month, when Eaton issued a memo instructing staff to "cancel immediately" all lease renewals at Menlo Park in anticipation of moving to cheaper locations within 5 years (*Science*, 5 September, p. 1425). Most stunning to researchers, the memo said the 260-member earthquake hazards group, which is linked to hundreds of seismology stations and has strong ties to local universities, had to relocate in just 1 year.

California's two senators and 10 of the Bay Area's congressional representatives fired off letters of protest to Babbitt. The House members said in a 5 September letter that they were "alarmed and deeply concerned" at the "narrow scope of options allowed" and the "exceedingly short time frame" outlined in the memo. Babbitt's response, in letters sent on 11 September, seems to step back. He said USGS officials "will evaluate the full range of

options, including retaining some or all of the programs at Menlo Park" and promised to assemble a committee to "review the options."

Eaton says "there is no connection whatsoever" between the Menlo Park memo and his retirement, which he began discussing with Babbitt early summer. Indeed, he says, because of the "flap over Menlo Park" he agreed to stay 2 1/2 weeks longer than he had originally planned. Eaton also defends his reshaping of the agency: "There are still people who are clinging to the past, but others have moved on and seen that the future in all of science is that we need to demonstrate our value to the American people." Basic research, he adds, isn't "lost" but "rolled up inside."

"There is validity in [Eaton's] claims that they have at least survived the threat of annihilation," agrees David Simpson, president of the Incorporated Research Institutions for Seismology in Washington, D.C., who notes that geological surveys around the world are fighting the same battle. "I hope he's been able to set the stage for a stronger USGS." Bill Ellsworth, a seismologist in Menlo Park, agrees. "There have been some pretty difficult times," but "we're finally beginning to come out of that." The moving memo, he says, "has thrown things here into a bit of turmoil, but most understand it's reasonable to study ways to be more cost effective. I think all of us now just have to wait and see."

–Jocelyn Kaiser

PLANETARY SCIENCE

Company Targets Asteroid—and Profits

Geologists routinely work with oil and gas companies, and biologists form the backbone of the biotechnology industry. But space scientists typically have little contact with the rough-and-tumble world of profit and loss. That could change, however, if a group of entrepreneurs pulls off the first privately financed mission beyond Earth's orbit. The company hopes to make money by selling data gathered from a nearby asteroid. And it is counting on a steep discount in the cost of such data, compared with what NASA would have to spend to collect it, to attract customers. It also hopes to offer a platform for government-built instruments.

"We are bringing a commonsense business approach to a science mission," says Jim Benson, who chairs SpaceDev, the Steamboat Springs, Colorado–based company that is pursuing the venture. "This could trigger an explosion of planetary science data." The company says it can build, launch, and operate the probe, called Near Earth Asteroid Prospector (NEAP), for less than $50 million, a fraction of what it would cost NASA.

The plan, unveiled last week at a press conference in Washington, is to use a small spacecraft with well-tested instruments that would send back encrypted data on the asteroid's composition. The data then could be sold to customers, including NASA. NASA officials say they welcome the mission but would purchase data only if and when researchers show an interest.

Scientists working with the company say that shouldn't be a problem. SpaceDev plans to send its craft, which will weigh about 300 kilograms, to one of the thousands of small asteroids and comets that pass close to Earth's orbit. Such objects are cheaper to reach than the moon or Mars, because their weak gravitational fields require less fuel for a rendezvous. They also provide inviting targets for researchers interested in the formation of the solar system, because they are among its oldest inhabitants. "They offer an extremely diverse collection of materials," says James Arnold, a University of California, San Diego (UCSD), chemist specializing in asteroids who is a consultant on the venture. "The whole periodic table is up there." The fact that NASA has already planned flights to asteroids and comets is proof of the market for such data, he adds.

Arnold and Benson say that SpaceDev can do the job for far less than what it would cost NASA by using off-the-shelf technology and avoiding the complex procurement and management rules that government agencies must follow. The company also is drawing on graduate students at UCSD and other universities to help design the probe before choosing an aerospace company to build it. For example, each data set from NASA's Near Earth Asteroid Rendezvous, now en route to an asteroid, will cost $50 million to $60 million per instrument, Benson says. "NEAP will be about one-fourth that cost, so we're betting the demand will be there."

SPACEDEV

Private bodies. Colorado company plans to sell data from proposed mission to near-Earth asteroid.

NEAP would carry a multiband camera, a neutron spectrometer to detect the presence of water, and a small alpha proton x-ray spectrometer that would fall to the object's surface to catalog the surface composition. All of these instruments have been used successfully aboard NASA spacecraft, and they would be built by the same companies, says Arnold, who adds that there is room for three additional small instruments. Benson hopes to interest NASA, for example, in buying a ride for a tiny 1-kilogram rover that would crawl across the asteroid's surface.

SpaceDev's data would be sent back via NASA's Deep Space Network, perhaps in exchange for other science that the probe would conduct. Benson says he expects NASA to be the primary customer for the data, and that SpaceDev will want "cash on delivery."

The notion of buying data is not new. The agency has paid Orbital Sciences Corp. to provide remote-sensing results, but the mission was dogged with delays and problems that have made NASA leery of the arrangement. So while NASA space science chief Wes Huntress praises the new venture, he says the agency is making no promises. "It's exciting—it's the first truly commercial proposal for planetary exploration," he says. "When they have their data and a science proposal, we'd be delighted to put it through our competitive review process."

Planetary scientists not associated with SpaceDev say that new data could be a boon for the field, but they have adopted a wait-and-see attitude. "I'd be glad to look at whatever they get," says Clark Chapman, an asteroid expert at the Southwest Research Institute in Boulder, Colorado. While he's skeptical that sales could recoup SpaceDev's costs, he hopes NASA will consider the relative cost of obtaining the data itself.

Benson declines to reveal the names of his investors or how much money SpaceDev has raised. But he says the company is only $6 million or $7 million shy of the total needed to build the spacecraft, with anywhere from $8 million to $26 million more needed to cover launch costs. The precise cost of the mission will depend on which launcher—most likely U.S. or Russian—is chosen, he says, but the total will be under $50 million. The spacecraft is expected to be built next year and launched in mid-1999, arriving at a not-yet-chosen target 9 to 16 months later.

Once the data have been collected, SpaceDev managers want to land the probe and stake a claim. Ultimately, company officials envision extracting minerals from asteroids and water from extinguished comets to fuel planetary missions or build space stations.

–Andrew Lawler