Science Adviser Gets First Formal Look

Yale physicist D. Allan Bromley, in line to head the White House science office, is expected to sail through his confirmation hearings in the Senate scheduled for this week

"Unlike other countries, we have not developed coherent national science policies. Indeed, the very idea is abhorrent to many. Our free enterprise laissez-faire system has served us well during periods of expansion and growth, but in retrenchment the development of more formal science and technology policies seems essential if we are to preserve the best aspects of our system."

—D. Allan Bromley, 1982.

WHEN ALLAN BROMLEY wrote those words, he was using the pulpit of the AAAS presidency to speak to the White House, albeit indirectly. Whether President Reagan heard him is hard to say. But now Bromley has a second chance to put his stamp on U.S. science policy, this time as director of the White House Office of Science and Technology Policy (OSTP) and science adviser to President George Bush. And early signs are that this time, Allan Bromley will be heard.

"George Bush has given me his personal assurance that I will have both direct access [to him] and the resources necessary to do the job," Bromley said in an interview with *Science* just prior to his Senate confirmation hearings, which are scheduled to take place as this issue of the magazine comes off the press.

One early indication of Bromley's status with Bush is that he has been named "assistant to the President for science and technology"—a title that puts him on a par with the national security adviser and one that his predecessor, William Graham, didn't enjoy. Bromley also has been made a full statutory member of the White House Space Council, and he has a mandate from the President to work with the Office of Management and Budget on budget issues. "It became evident a long time ago that if you control the budget you control public policy," Bromley has observed. "This is one of the facts of life that a science adviser must learn, that OMB is a tough player and not necessarily sympathetic."

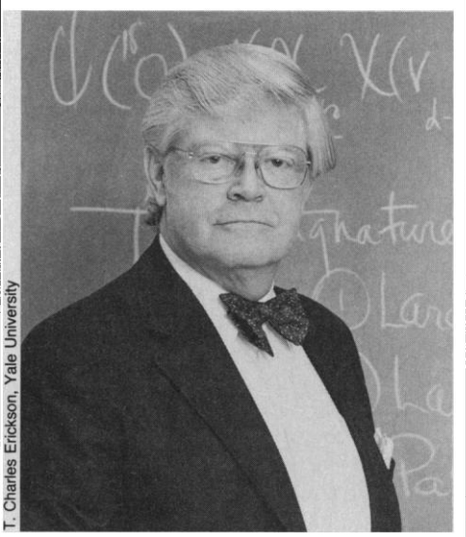
Even before his confirmation, Bromley appears to have done well at negotiating some status for OSTP. None of the new perks of his job pertained to William Graham, who kept such a low profile that he seemed virtually invisible.

Allan Bromley will not be invisible.

Long a backer of the idea that the White House should have broad and consistent science advice, Bromley has convinced the President to appoint a President's Council of Advisers on Science and Technology (PCAST). Bromley will be its chairman, with hopes of making PCAST far more effective than its predecessor was under Reagan. Bromley and Bush have already agreed on whom the President will name to PCAST once it is in place. One indication of PCAST's influence will be the President's response to it. Bromley said that the President has promised to sit in on PCAST meetings with some regularity.

Indeed, Bromley hopes to raise the budget of OSTP from a measly $1.5 million a year to more than $3 million. Both President Bush and the White House Office of Management and Budget are backing him on this. All that is required now is a check from Congress which is considering it as a budget amendment.

In addition, Bromley intends to rejuvenate OSTP by bringing in a staff of 33 this year, expanding to as many as 50 people by 1991. This contrasts dramatically with the skeletal crew of a dozen or so that staffed OSTP during the latter part of the Reagan years.



T. Charles Erickson, Yale University

Thinking big. *Putting the White House science office back on the map with an expanded staff and budget are high on Bromley's priority list.*

Bromley also has ambitions of attracting a few superstars to the top positions within OSTP. Although he declined to comment on any individuals, he has been talking to James B. Wyngaarden, outgoing director of the National Institutes of Health, about OSTP's biomedical slot. Orville Bentley, a former high level official in the Department of Agriculture, is also said to be in line for an OSTP slot.

Bromley appears to be a popular man with the Senate and his confirmation hearings before the Committee on Commerce, Science and Transportation, chaired by Ernest Hollings (D–SC), are expected to be a breeze. Not one soul has called to testify against Bromley's appointment, which has been well received by Washington's science policy gurus.

Bromley, 63, has been director of the Wright Nuclear Structure Laboratory at Yale since 1961, and over the years has had vast experience as an adviser or consultant to organizations ranging from the Oak Ridge and Brookhaven national labs, to GT&E and Bell Labs on the industrial side, to the White House itself as a member of the White House Science Council since its inception under Reagan in 1981.

He has spoken out against the decline in the U.S. investment in research and development as a percentage of GNP, thinks it shocking that a mere 105,000 high school students pass through algebra and move on to calculus in any given year, and expresses concern about the still low numbers of women and minorities getting advanced degrees in science.

Bromley believes that the United States will only lose in the long run if it adopts a policy of holding science close to the vest on the misguided theory that we can best international competitors that way. Furthermore, he thinks the country ought to formally weave science and technology issues into foreign policy. "The United States is the only developed nation in the world that does not consider international science and technology as an important part of our international relations," he notes.

In a speech a couple of years ago, Bromley went so far as to label the State Department a "disaster area" in this regard—strong words that will, no doubt, be phrased more diplomatically in his future dealings with Secretary of State James Baker.

The Senate confirmation hearings will cover a wide range of issues as Bromley reveals where he stands and the Senate indicates its priorities through the questions

it asks. Among those that have been prepared for Bromley are these:

- International competitiveness. Is it a serious problem? How should the United States respond.
- The environment. What are the true dimensions to the problem of global warming? What are the realistic options we have for fighting back?
- East-West military tensions have been reduced recently. What does this mean for military R&D in this country? Will we need less? Or, will we need more research to remain technologically on top even if we have fewer weapons?
- Conflict of interest. The times they are a-changing and there is increasing concern about the independence of scientific research and advice. What should today's standards be?
- High technology. What does the future hold in superconductivity? In high definition television?
- The infamous infrastructure. There are signs that America's laboratories are physically wearing out and that equipment is becoming obsolete. Will there be money to reverse the decay?

When rumors of Bromley's appointment first circulated in Washington months ago, there was some grousing that he lacked the experience and political connections to have much power in the inner circles of the White House. His very formal manner was called arrogance by some, while others said he is too conservative for the liberal majority in science. However, now that he is on the verge of confirmation, the private grumbling appears to have ceased.

■ BARBARA J. CULLITON

Benveniste Criticism Is Diluted

Jacques Benveniste, the French biologist who last year rocked the scientific community when *Nature* published his paper concluding that water could "remember" the shape of molecules in high dilutions, has come close to having his research on the topic shut down. The Scientific Council of the National Institute for Health and Medical Research (INSERM), where Benveniste works, recommended earlier this month that he be told to cease and desist. But last week, INSERM director Philippe Lazar offered Benveniste a reprieve.

Lazar gave Benveniste 6 months to look into possible bias and other errors in his dilution studies, after which Lazar will decide whether to reappoint him to another 4-year term as head of his research group. In rejecting the scientific council's recommendation, Lazar said he did not want to stifle research on new ideas and he implied that Benveniste had been badly treated by *Nature*.

The way INSERM's scientific council saw it, Benveniste's group should drop the dilution studies immediately and concentrate on its widely respected research on the immunological aspects of allergies and inflammation. It also recommended that Benveniste be told to stop talking to the mass media on what has become popularly known as "the memory of water." The council, whose evaluation team included two foreign scientists, Henry Metzger of the National Institutes of Health and A. B. Kay of the National Heart and Lung Institute in London, said that the worldwide controversy raised by the *Nature* article not only appears to have dented the research group's own scientific reputation but has also harmed "the image of INSERM and more generally the impact of the French scientific community."

But Lazar appears to criticize *Nature* for the way it handled the controversy. In a letter to Benveniste, Lazar cites *Nature*'s behavior toward Benveniste as "attenuating circumstances" in deciding whether any sanctions should be taken. *Nature* submitted Benveniste and his research team to a highly public grilling after publishing his paper. And, in the first public comment by any French official on the whole affair, Lazar refers to what he describes as the "strange" composition of the team that the journal sent to investigate Benveniste—it included professional magician James Randi and NIH fraud-buster Walter Stewart, along with *Nature* Editor John Maddox—and "the questionable ulterior justifications of the journal concerning its real motives" in pursuing Benveniste.

In his letter, Lazar says: "Your priority must be a systematic search for the experimental bias which may up to the present have escaped you, and which can apparently explain your unusual claim." Lazar says that such a course of action "would not be criticized by your scientific peers because it corresponds to the very essence of scientific thought."

Although told by Lazar not to speak to journalists about the affair, Benveniste wrote in the newspaper *Le Monde* last week that the phenomena he reported in the *Nature* paper have been confirmed by two other teams in France, two in the United States, and one in the Soviet Union. "Some of these foreign groups are planning to carry out tests on man in collaboration with pharmaceutical companies," he claimed.

■ DAVID DICKSON

Microfilm Thieves Hit University Libraries

Microfilm records of U.S. patents are mysteriously disappearing from university libraries around the country. The University of Massachusetts was the first victim to detect a theft at the end of June, and 11 other libraries have since discovered they've been hit. The thieves, who have so far walked off with hundreds of reels of microfilm—as many as 237 from just one library—appear bent on obtaining a complete record of U.S. patents for the past 20 years.

A 6 July memo from the Patent and Trademark Office (PTO) describes the thefts as "a most serious situation," and says "the extent of the problem is growing daily and has now reached alarming proportions." There is little or no overlap in the reels stolen, suggesting a planned operation.

The targeted libraries are part of the Patent Office's Patent Depository Library program, which has 65 libraries in 41 states. Jaia Barrett, assistant executive director of the Association of Research Libraries, says the thefts have baffled everyone.

"There's no logical explanation that I've been able to come up with," she says. "We've been hearing a lot of speculation." One possibility is that the film could be used in conjunction with an index of patents on CD ROMs that will soon be available from the patent office. Coupled with the index, the microfilm would make a powerful tool for patent searches.

The FBI has begun an investigation, but a spokesman for the agency says it is not clear what federal laws have been broken.

None of the material is classified. Anyone interested can obtain the microfilm from Research Publications, Inc., of Woodbridge, Connecticut. But cost—a complete set of microfilm for the past 20 years would fill up about 3000 reels and would cost approximately $100,000—may have prompted what department store detectives like to call five-finger discounts.

Rice University has identified two men who were seen in the library together one afternoon as possible suspects. They are described as being in their late 20s or early 30s, casually dressed, and carrying large, brown attaché cases.

The libraries hit so far are: University of Massachusetts, Virginia Commonwealth University, University of Maryland, Rice University, University of New Mexico, University of Utah, Georgia Tech, Texas A&M, University of Texas, University of Idaho, Ohio State University, and the University of Michigan.

■ JOSEPH PALCA