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Clinton Changes His Science Policy Team, Replacing Gibbons with Lane as Science Adviser

Five years into his presidency, Bill Clinton has chosen a new science policy team for the remaining three years of his term. With the imminent departure of John H. Gibbons as his science adviser and director of the White House Office of Science and Technology Policy (OSTP), the President reached out to one of the main research agencies to select Neal Lane, director of the National Science Foundation (NSF) for nearly five years, to become his science adviser and lead OSTP. Clinton chose Rita R. Colwell, a University of Maryland microbiologist and president of its biotechnology institute, to succeed Lane as the foundation's director. Only a month before, Clinton had named Colwell to be Lane's deputy at NSF.

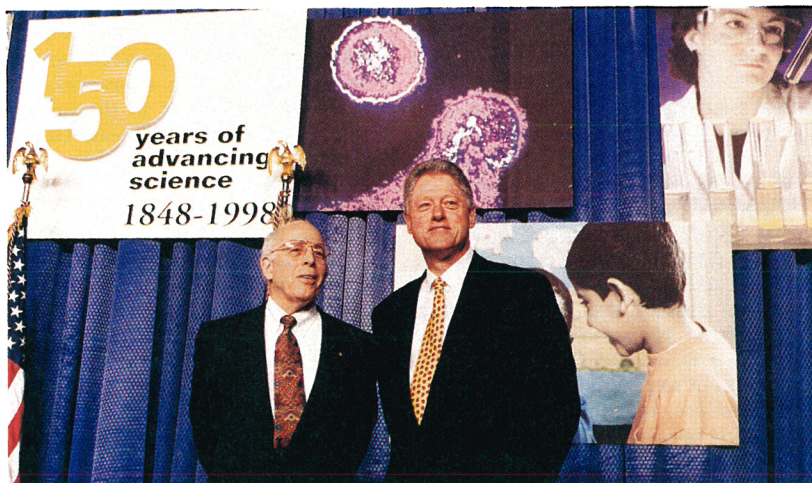
The nominations suggest that the President is looking not so much for policy reforms as for a steady course and for strong advocates of his programs at government agencies, in the science community and in Congress. Both Lane and Colwell will be part of the strategy the Clinton Administration has adopted for R&D activities. The strategy includes a dynamic emphasis on basic and applied research, as marked by the fiscal 1999 budget proposal that would provide most of the R&D agencies with hefty increases (see news story starting on page 49) and would recognize the large amount of interdependence among seemingly disparate scientific disciplines.

In Lane, Clinton will have a modest, urbane former physics professor and provost at Rice University who has effectively bridged the narrow confines of academic disciplines with new programs at NSF and championed several costly and controversial projects in Washington's often bruising political arena. At the helm of NSF, Lane has steered the agency into supporting the interfaces of fields (sometimes fending off turf battles with other agencies), taken part in the funding of particle detectors for CERN's Large Hadron Collider (a responsibility that has usually been considered the business of the Department of Energy) and led three Congressional delegations to Antarctica, where the agency operates an important research station. His most recent Antarctic trip was in Janu-

ary with Republican members of the Senate Appropriations Committee—notably, chairman Ted Stevens of Alaska, Thad Cochran of Mississippi, Slade Gorton of Washington, Conrad Burns of Montana and Larry Craig of Idaho. Colwell was also on an Antarctic trek over last New Year's Day with a group that included Norman Augustine, chairman of Lockheed Martin, Ed Stone, director of NASA's Jet Propulsion Laboratory, and Gibbons.

An Oklahoman with an unpretentious manner, Lane has made fast friendships in Congress, especially with F. James Sensenbrenner Jr, the

Food and Drug Administration and a Hall of Exploration, intended to increase public understanding of science through interactive exhibits. A bacteriologist who specializes in studying microorganisms in marine environments, Colwell has actively promoted recent efforts to preserve biodiversity. In scientific circles, she is celebrated for discovering the link between cholera outbreaks in several countries of South America and, more recently, for her leading role in understanding the *pfisteria* outbreak that infected the fish population of the Chesapeake Bay watershed.



WHITE HOUSE

PRESIDENT CLINTON ON GIBBONS (LEFT): An 'ability to build bipartisan coalitions.'

Wisconsin Republican who chairs the House Science Committee, Vernon Ehlers, a Republican of Michigan who serves as the committee's vice chair, Sherwood Boehlert, a Republican of New York, and George E. Brown Jr of California, the committee's senior Democrat.

Though Colwell has a more forceful and feisty approach than does Lane, she too has a reputation for being effective and productive. In the 1980s, she worked closely with Senator Barbara Mikulski, a Democrat of Maryland, to get Federal and state funds to build Baltimore's \$160 million Columbus Center, which houses part of the biotechnology institute, as well as a food safety research unit of the US

Clinton announced his nominations of Colwell and Lane on 13 February in Philadelphia, at the annual meeting of the American Association for the Advancement of Science (AAAS), which is observing its 150th anniversary. He had accepted the offer to address the AAAS when he was told that 50 years earlier President Truman had spoken before the organization and promised to establish NSF, after first opposing a bill to initiate the agency (see PHYSICS TODAY, February, page 34). The occasion gave Clinton the opportunity to discuss his belated discovery of a new priority of his Administration—namely, scientific research. Having said almost nothing about science in his first term, he has recently



LANE: An 'unflappable' voice of reason.

redeemed himself in a series of events and talks. One of his early efforts was his remarks before he awarded the Medals of Science and Technology last December (see *PHYSICS TODAY*, February, page 55). So far this year, he has spoken about the promise of science in his State of the Union message, in speeches in San Francisco and at Los Alamos National Laboratory, and at the White House on 6 March, when he brought Cambridge University physicist Stephen Hawking to regale some 150 invited guests in one of a series of Millennium Lectures.

At the AAAS conference in Philadelphia, Clinton displayed some unalloyed eloquence: "Today, at the edge of a new century, the dawn of a new millennium, at a sunlit moment of prosperity for our people, we see before us an era of unparalleled possibilities. Our restless quest for knowledge, which has been one of America's defining traits since we got started right here in Philadelphia, will quicken. . . . We must seize this moment to strengthen our nation for the new century by expanding our commitment to discovery—increasing our support of science, pressing our progress in the war against cancer, protecting our children from public health dangers." He reminded his listeners that in the same year that Truman addressed the AAAS, the transistor was invented at Bell Labs and the ENIAC computer had just been operated in Philadelphia.

Clinton evoked the loudest applause, however, when he thanked Gibbons for his work as science adviser and head of OSTP and then named his new science team. Gibbons's "ability to build bipartisan coalitions on contentious issues from nuclear testing to cloning to climate change has strengthened our nation immeasurably," said Clinton. As for Lane, Clinton en-

thused, "Neal has placed the National Science Foundation at the center of our science and technology policy in many ways." And Colwell, said the President, "will maintain that momentum."

Gibbons, for his part, had let the White House know soon after Clinton's second inauguration that he wanted to retire. In fact, he had told a group of science writers back in January 1997 that he had sent a list of his possible successors to the White House. He waited for a response, but nothing happened. Meanwhile, Gibbons traveled to Russia, China, Japan and other lands on scientific missions for the Clinton Administration, visited the national laboratories and conducted meetings of the President's Committee of Advisers on Science and Technology (PCAST).

Even when rumors of Gibbons's replacement began circulating last spring, the White House paid no heed. Then, early this year, after Gibbons submitted a letter of resignation and stated he would depart on 15 March, Clinton and Vice President Al Gore began casting about for candidates. Some on Gibbons's list, including two PCAST members, Augustine and John Holdren, a Harvard physicist and environmentalist, were approached, but expressed no interest in the position. Over lunch early this year, Gibbons exhorted Lane to take the job. "I was surprised when Jack first raised it with me," Lane told friends. "I was more surprised when Al Gore offered it to me."

Lane is considered by his many admirers "a voice of reason and integrity," as D. Allan Bromley, dean of engineering at Yale and President Bush's science adviser put it. "Neal is unflappable. He's sure of himself and can't be pushed around." Richard Zare, chairman of the National Science Board and a Stanford University physical chemist, adds that Lane "knows the significance of explaining science and technology to the public." In addition, said Zare, "he set a remarkable standard at the foundation for integrating research and education and for promoting partnerships, especially between industry and institutions of higher learning. I've seen up close his skills of persuasion and consensus building."

Lane himself is uncomfortable discussing his personal style, but according to Holdren, "In his quiet way, Neal pushes people in directions they might not think about and inspires people to do things that might not otherwise be possible. He's a problem solver. Neal has great instincts and is willing to act on them."

With the Administration's proposed R&D budget the highest it's ever been, Gibbons observes, "I'm leaving at a high water mark for science" and with



COLWELL: To 'maintain the momentum.'

the country's science and technology "setting the stage for a new century of progress."

Gibbons also has set the stage for Lane's actions as the President's top scientist and director of OSTP. It isn't likely to be an easy role for Lane. Besides lobbying Congress to enact the Clinton Administration's record research budget for 1999, he will need to grapple with several politically charged and divisive issues. Bills to restrict human cloning have been subject to bitter debate in both chambers. Senate Republicans are refusing to consider the Comprehensive Test Ban Treaty, which Clinton and Gore want ratified. And many lawmakers from both parties sharply oppose ratification of the Kyoto Protocol that the Administration orchestrated last December to limit the production and release of greenhouse gases into the atmosphere.

As the President's assistant for science and technology, Lane can step into Gibbons's job as soon as Gibbons leaves, which is not likely to be before mid-April. The position of science adviser is a gift of the President and does not require Senate confirmation. But as the head of OSTP, an agency that is funded separately from the executive offices of the President, Lane will need to be confirmed. That is not apt to happen until Congress returns from its Easter holiday in April. Meanwhile, Lane will go through the clearance procedure required of all political appointees—namely, scrutiny by the FBI, the Internal Revenue Service, the White House Legal Counsel and the White House Office of Presidential Personnel. Colwell will need to undergo similar vetting and Senate ratification for her position at NSF.

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