

WASHINGTON INS & OUTS

NEW JOBS AT WHITE HOUSE OSTP; SHAKEUPS AT NSF; CHANGE AT SURF

On 19 June, the Senate confirmed **Karl A. Erb** as the associate director for physical sciences and engineering of the White House Office of Science and Technology Policy. For nine months before his confirmation, Erb served as acting associate director. He was handpicked for the position by D. Allan Bromley, who became President Bush's science adviser and director of OSTP in 1989. Bromley shanghaied him from the National Science Foundation, where Erb had been deputy director of the physics division since 1986. At the confirmation hearing on 21 May before Al Gore Jr, chairman of the Senate subcommittee on science, technology and space, Bromley chronicled Erb's career, describing how he discovered him shortly after Erb had earned his PhD at the University of Michigan in 1970 and how he brought Erb to Yale the following year. Erb spent nearly a decade on Yale's faculty and at the Wright Nuclear Structure Laboratory, which Bromley headed. Erb continued his research at Oak Ridge National Laboratory from 1980 to 1986, when he joined NSF.

Actually, Gore took less than an hour to question Erb, having spoken with him the previous day, and he soon revealed his real interest was in grilling Bromley on the advice President Bush receives about environmental issues. For nearly two hours, Gore confronted Bromley in the manner of a grand inquisitor, with none of the courtesies that legislators normally bestow on senior scientists in the witness chair. The senator accused Bromley of misinforming the President on the positions the Administration would be taking to the United Nations Earth Summit at Rio de Janeiro the following month. "It often seems that the Administration is ignoring the scientific data when it comes to global climate change," Gore charged. "And if that is the case, part of the responsibility is yours," he told Bromley, "because it is your job to bring to the President's attention, in clear terms, the scientific advice which should inform his decisions."

When Gore ended his monologue, Bromley asserted that he has never had "any difficulty communicating with the President." Bromley had no inkling that Gore would use an uncontroversial hearing on a Presidential nomination to launch an attack on him and the Bush Administration. In

fact, before the hearing, Bromley had complimented Gore as the author of *Earth in the Balance: Ecology and the Human Spirit* (Houghton Mifflin, 1992) and had cajoled the senator to autograph Bromley's copy.

Erb's assistant director for physical sciences and engineering is **Lee S. Schroeder**, who was associated for nearly two decades with the Bevalac at Lawrence Berkeley Laboratory. Though he earned his PhD in high-energy physics from Indiana University in 1966 and then worked and taught in the field at Iowa State University, Schroeder switched to nuclear physics when he moved to Berkeley in 1971. Within the nuclear physics community he is known as a champion of a relativistic heavy-ion accelerator with a higher energy than the Relativistic Heavy Ion Collider, which is now under construction at Brookhaven. RHIC is designed to accelerate ions with collision energies of 100 GeV per atomic mass unit for the heaviest ions and even higher energies for lighter ions.

Another newcomer to Erb's staff is **J. Douglas Beason**, an Air Force lieutenant colonel who was deputy director for advanced weapons at the Phillips Laboratory of Kirtland Air Force Base in New Mexico. In that post he was in charge of a basic research group consisting of 300 people and an annual budget of \$80 million. He also was program manager of the Air Force's massively parallel computer initiative and headed a team of theoretical physicists and mathematicians attempting to study antiproton-induced fusion by performing two-dimensional magnetohydrodynamic calculations. He got his PhD in radiation hydrodynamic physics from the University of New Mexico in 1983. Then, for three years he taught at the US Air Force Academy and at the University of Colorado, both in Colorado Springs. Beason's title at OSTP is senior policy analyst.

To help develop the fiscal 1993 Presidential initiative for advanced materials and processing, which would appear to greater or lesser extents in the budgets of NSF, DOE, NASA and DOD, Bromley engaged a few key materials scientists and physicists, including David Huber of the University of Wisconsin and Henry Ehrenreich of Harvard. Though

these men have returned to their universities, one who stayed on for a longer period is **David C. Cranmer**. He took a year-long leave from his job as group leader at the Materials Science and Engineering Laboratory of the National Institute of Standards and Technology to work at OSTP. Cranmer got his PhD in ceramics from MIT in 1981, then joined Bendix Corporation's Advanced Technology Center. He later worked in materials sciences at The Aerospace Corporation in El Segundo, California.

Another addition to the OSTP staff is **Cynthia Ann Arnold-McKenna**, a research scientist at ICI Advanced Materials in Tempe, Arizona, and a visiting scientist at NIST this year. In 1989 she earned a PhD in materials science from Virginia Polytechnic Institute and State University as an Eastman Kodak research fellow. She has worked as a process engineer at Raychem Corporation in Menlo Park, California, and at Thoratec Laboratories in Berkeley, California. She came to OSTP this month as an executive office fellow sponsored by the American Association for the Advancement of Science. Her responsibilities include the advanced materials program and the industrial technology program.

Suddenly, shakeups are occurring at the National Science Foundation. Some of the most important changes involve physicists and the physical sciences programs. In the event, **Marcel Bardon** and **William C. Harris** have moved up smartly.

Bardon, who led the physics division for a total of nearly 15 years, was appointed last December as assistant director for international programs. As such he oversees the foundation's program agreements with about 50 countries and promotes research performed cooperatively by US academic scientists with scientists abroad. On a leave of absence from NSF in 1979–1981, Bardon was science advisor to the US ambassador to UNESCO in Paris. At the time the ambassador was Barbara Newell, former president of Wellesley College and later chancellor of the Florida State University system. Bardon left NSF again in 1986–1988 to serve as deputy assistant secretary general for scientific affairs at NATO in Brussels. Because of these activities and his knowledge of NSF's physical sciences programs, Bardon was selected by Walter Massey, the agency's director, to run the enlarged international cooperative programs—a \$13 million operation, whose budget is expected to rise in future years. Bardon received his

PhD in physics from Columbia University in 1961. He was at Columbia's Nevis Laboratory for almost a decade, as a research physicist, associate director and deputy director. He joined NSF as a program director in the physics division in 1970.

Harris is assistant director for the agency's Directorate for Mathematical and Physical Sciences, succeeding **David Sanchez**, who held the post for two years. Sanchez returned to Lehigh University as professor of mathematics for a term, and then in September, with the blessing of Energy Secretary James D. Watkins, Sanchez joined Los Alamos National Laboratory, where he is assistant director for research and education.

Harris has held a succession of increasingly complicated positions at the foundation since his arrival in 1977 as a visiting scientist in the physical chemistry program. He directed NSF's Science and Technology Centers Office, overseeing the creation of 25 new S&T centers, where multiuniversity consortiums, sometimes in conjunction with national labs, conduct innovative research programs. He has also served as director of the Office of Science and Technology Infrastructure, which provides grants for academic research instruments and runs the agency's controversial research facilities activities. His last job before taking over the Directorate for Mathematical and Physical Sciences was special assistant for science and technology to Massey. In that post, Harris set up linkages for Massey with key CEOs and corporate R&D leaders in an effort to develop partnerships with industry. Harris got his PhD in chemistry in 1970 from the University of South Carolina. He spent a year as a postdoc in the Laboratory of Chemical Physics at the National Institutes of Health on an NIH fellowship and later taught chemistry at Furman University and the University of North Carolina.

Succeeding Bardon as the head of NSF's physics division is **Robert A. Eisenstein**, professor of physics at the University of Illinois since 1985. After he collected his PhD in physics from Yale in 1968, Eisenstein became a postdoc at the Weizmann Institute of Science in Israel. For the next 14 years he taught physics at Carnegie-Mellon University, and then in 1985 he moved to the University of Illinois, where he also directed the nuclear physics lab. Eisenstein has served on program advisory committees and review committees at the Continuous Electron Beam Accelerator Facility in Newport News, Virginia; the Los

Alamos Meson Physics Facility; MIT's Bates Electron Accelerator Facility; and the Indiana University Cyclotron.

John H. Hopps Jr., a principal member of the technical staff and chief of photonics technology at the Charles Stark Draper Laboratory in Cambridge, Massachusetts, has taken over the materials research division. He succeeds **Jagdish ("Jay") Narayan**, who returned to North Carolina State University, where he is a distinguished university professor. NSF's materials research division is responsible for materials research laboratories at universities, several science and technology centers and the National High-Field Magnet Laboratory at Florida State University.

The division provides research grants in ceramics, polymers, electronic materials, condensed matter physics, solid-state chemistry and materials theory. While earning a PhD from Brandeis University in physics during the early 1960s, Hopps was assistant football coach at Boston University, where he devised and patented a football training machine and trained five backfield players who later played professionally. In the 1960s he also worked on copy machine imaging and high-speed recording systems at Nashua Corporation and on plasma infrared devices and optical sensors for infrared military systems at Sanders Associates. From 1971 to 1977 Hopps taught physics and optics at Ohio State University. He then joined Draper Lab, just off MIT's campus. During most of his years at Draper, he was also a research scientist in MIT's nuclear engineering department.

NSF's astronomical sciences division is headed temporarily by a veteran of the foundation, **M. Kent Wilson**. In his 26 years at the agency, Wilson has held many posts, including director of the chemistry division and head of the Office of Planning and Resource Management. A physical chemist with a PhD attained in 1948 from Caltech, Wilson has held faculty positions at Harvard and Tufts. An all-rounder at NSF, he serves as acting director of the division of mathematical sciences as well as acting director of astronomy and astrophysics programs. At the astronomy division he succeeded **Julie Lutz**, who returned to Washington State University to head the department of pure and applied mathematics and to direct the astronomy program. She received a PhD in astronomy in 1972 from the University of Illinois. NSF is completing its search for a permanent division director.

Southeastern Universities Research Association has chosen **Dennis W. Barnes**, former associate vice president for governmental relations at the University of Virginia, to succeed **William A. Wallenmeyer** as its president. Wallenmeyer, a former director of the Energy Department's high-energy and nuclear physics research programs, had led SURA for nearly five years. SURA is a consortium of 41 universities that manages DOE's \$515-million Continuous Electron Beam Accelerator Facility, which is under construction outside Newport News, Virginia. SURA also manages SURAnet, the nation's largest regional computer network for the academic research community.

Barnes has served on SURA's board of directors since 1985. He was assistant director for science, energy and space on the White House Domestic Council during the Ford Administration, and between 1981 and 1983 he was chief scientist for the Senate Committee on Commerce, Science and Transportation. Wallenmeyer, who received a PhD in physics from Purdue University in 1957, was a leading member of the Midwest Universities Research Association, formed in 1954 to champion the interests of particle physicists in the region. Determined to develop a unique concept, MURA physicists and engineers designed a particularly ambitious accelerator, the Fixed Field Alternating Gradient Synchrotron, a 12.5-GeV machine capable of producing proton beams at least 100 times more intense than those in Berkeley's Bevatron or Brookhaven's Cosmotron. The 13 MURA states competed for a site, and the winner was the University of Wisconsin. At the same time Argonne had proposed a 12-GeV Zero Gradient Synchrotron, which, after a stormy history, was turned on in 1963. President Kennedy had agreed in principle in 1962 to support the MURA machine. But after Kennedy's assassination, Lyndon Johnson, ready perplexed by the budget pressures of the rapidly escalating Vietnam War, thought differently. In 1964 Johnson canceled the FFAG proposal, which had the effect of destroying MURA.

Wallenmeyer left MURA to join the Atomic Energy Commission in 1962 as director of high-energy physics. He held the same position when the AEC was transformed into the Energy Research and Development Administration in 1975 and when ERDA was reconstructed into DOE in 1977. On his retirement from DOE in 1987 he assumed the presidency of SURA.

—IRWIN GOODWIN ■