

"clearly wrong" that Fermi would leave documents lying around for the moles to see. "Security at Los Alamos was far from perfect," writes Teller in *The Wall Street Journal*, noting that Richard Feynman joked about opening other people's safes at the lab. "I am sure that Soviet moles are as good at cracking safes as a Nobel Prize winning theoretical physicist," says Teller. "They may well have boasted about getting information on the work of the great Fermi." Teller believes Sudoplatov's motivation is easy to understand: He seeks "to justify himself as an outstanding intelligence officer who could extract information . . . of the greatest scientists."

Beria's fall within months of Stalin's death in 1953 brought an end to Sudoplatov's career. Sudoplatov was accused of mass murders by Khrushchev and imprisoned for 15 years. He was eventually released in 1982 after addressing a plea to Yuri Andropov, then premier and a former KGB chief. In the plea, Sudoplatov asked to be freed because of his exploits in obtaining information from Oppenheimer, Fermi, Bohr and others for the Soviet nuclear program. The Schecters say Andropov and the Communist Party Central Committee could easily have checked Sudoplatov's story and not rehabilitated him had they found it false.

Still, Sudoplatov's memory at the

age of 85, when the interviews were conducted, is very likely to be muddled. Both physicists and historians have identified serious errors and distortions. One of Sudoplatov's anecdotes had Yakov Terletsky, a Soviet physicist and intelligence agent, visiting Copenhagen in 1945 to get Bohr's advice on a nuclear reactor that would not operate. According to Sudoplatov, Bohr pointed to the problem spot on the diagram and told Terletsky how to fix it. The meeting took place, but Bohr's son, Aage, who was present, insists his father was not shown any reactor diagram and gave no technical data to Terletsky. In fact, Bohr had informed security officials of both Denmark and Britain that Terletsky had asked to visit him. Aage Bohr recalled that his father handed Terletsky a copy of the Smyth report, and Sagdeev, who read an account of the meeting that Terletsky wrote before he died, says Terletsky characterized the meeting a failure.

In Moscow the Russian Foreign Intelligence Service—the pale successor to the agency Beria once led and Sudoplatov served—issued a rare disclaimer. Sudoplatov's allegations about Fermi, Szilard and Oppenheimer, it declared, "do not correspond to reality." In fact, Oleg Tsarev of the Russian agency, has stated: "Having seen the summary file [on nuclear espionage], I can tell you there is no

such names as Sudoplatov mentions in it."

For their part, the Schecters insist that Sudoplatov "is the surviving institutional memory of the Russian intelligence service's covert operations from the 1920s to 1953" and that "he's telling it the way he remembers it." The call by APS to open the secret archives on nuclear intelligence may be admirable, but even if this happens, it may be impossible to ever prove or disprove Sudoplatov's allegations conclusively. As Robert Conquest, a Russian historian at the Hoover Institution of War, Revolution and Peace in Stanford, California, says in his introduction to Sudoplatov's memoirs: "Individual reminiscences must, indeed, be treated critically—but so must most documents. Both are simply historical evidence, none of which is perfect, and none of which is complete. Even in the spate of documentation now emerging from Russia, Sudoplatov's evidence is vastly informative in major but (as yet, at least) undocumented areas."

On balance, it appears that the judgments of those who knew Oppenheimer, Fermi, Bohr and Szilard outweigh the recollections of a Soviet intelligence officer who rose to the rank of lieutenant general in the KGB for his crimes and deceptions and now asks that his statements should be accepted as historical events.

—IRWIN GOODWIN

WASHINGTON INS & OUTS

NEW FACES APPEAR AT URA AND NSF; OLD ORDER CHANGES AT SCIENCE BOARD

After a six-month search, Universities Research Association, the consortium of 80 research universities in the US, Canada and Japan that operates as a board of directors for Fermilab and what remains of the ill-fated Superconducting Super Collider, has filled its top job. On 7 May URA announced that **Frederick M. Bernthal**, deputy director of the National Science Foundation, will be its next president. Bernthal was appointed by President Bush in 1990 to NSF's second highest position and served as acting director for two periods of about a year each while **Walter Massey** and later **Neal Lane** were awaiting Presidential nomination and Senate confirmation.

Bernthal succeeds **John S. Toll**, who resigned after Congress canceled the SSC last October. Toll will return

to the University of Maryland as chancellor emeritus and professor of physics. Bernthal received a PhD in nuclear chemistry from the University of California at Berkeley in 1969, and then worked as a postdoc at Yale's Heavy Ion Accelerator Laboratory for a year. From 1970 to 1977 he taught chemistry and physics at Michigan State University and spent a year as a visiting NATO scientist at the Niels Bohr Institute in Copenhagen. On his return to the US in 1978 he became an American Physical Society Congressional Fellow and joined the office of Howard Baker Jr, the Tennessee Republican who was then Senate minority leader. When the fellowship ended a year later, Bernthal remained on Baker's staff and became chief legislative assistant when the senator became majority leader in

1980. In 1983 Baker got President Reagan to appoint Bernthal to a five-year term as a member of the Nuclear Regulatory Commission. In the aftermath of the Chernobyl nuclear plant disaster in 1986, Bernthal led a 12-member interagency delegation to the Soviet Union to negotiate the first US-USSR nuclear safety protocol. He subsequently headed NRC teams on examinations of nuclear reactors in Czechoslovakia, Hungary and Bulgaria. In 1988 Reagan appointed Bernthal to the post of Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs. As such, he negotiated the US-USSR Agreement for Cooperation in the Basic Sciences and led several delegations to international meetings on environmental, science and technology issues, including those

of the UN Intergovernmental Panel on Climate Change and the Montreal Protocol on Depletion of Stratospheric Ozone. He came to NSF just six months before the end of **Erich Bloch's** six-year term as director, thrusting Bernthal into the top spot the first time as he awaited Massey's arrival.

URA also announced on 19 April that the organization's board of trustees elected **Agnar Pytte**, president of Case Western University, to be its chairman. He replaces the retiring chairman, **John H. Marburger**, president of the State University of New York at Stony Brook. With a PhD in physics from Harvard in 1958, Pytte specialized in theoretical plasma physics and nuclear fusion. Before becoming president of Case Western in 1987, he was professor of physics and provost at Dartmouth College. At the same meeting at which Pytte was elected, **Robert W. Galvin**, the retired chairman and CEO of Motorola Inc, was reelected vice chairman. Early this year, Energy Secretary Hazel O'Leary placed Galvin at the head of a DOE advisory panel on the future of the national labs.

On 12 April President Clinton announced what Washington science policy insiders had gossiped about for months: that **Anne C. Petersen**, vice president for research and dean of the graduate school at the University of Minnesota, would be nominated as NSF's deputy director. If confirmed by the Senate, Petersen, a psychologist and statistician who also is professor of adolescent development and pediatrics at Minnesota, would be the first woman in one of the two top management jobs at NSF since the agency was founded in 1950. Prior to her multiple positions at Minnesota, she was dean of the college of health and human development at Pennsylvania State University. The Clinton Administration has wanted women scientists for NSF's leadership. Before choosing Lane as director, the White House had approached **Sandra M. Faber**, a highly regarded optical astronomer at the University of California in Santa Cruz, who turned down the offer.

Petersen also has been a faculty member of the department of psychiatry at the University of Chicago, where she earned all of her degrees, the last being a PhD in mathematics in 1973. She began her career as a mathematician and computer systems analyst with the National Security Agency at Fort Meade, Maryland. In addition to her academic activities,

Petersen has consulted on health programs for the Robert Wood Johnson Foundation as well as the John D. and Catherine T. MacArthur Foundation, where she was an associate director in 1980–82.

The old order changeth at the National Science Board. In earlier times physicists ruled the board's roost, but the most recent election of the chairman and vice chairman suggest that other types are in the ascendancy. The new chairman, elected on 5 May, is **Frank H. T. Rhodes**, who is retiring from the presidency of Cornell, a post he has held since 1977. Rhodes is a geologist who received a PhD in 1950 from the University of Birmingham in England. He succeeds **James J. Duderstadt**, president of the University of Michigan and recipient of a PhD in engineering science and physics from Caltech in 1967. Elected vice chairman is **Marye Ann Fox**, a chemistry professor at the University of Texas in Austin, who got her doctorate from Dartmouth in 1974. She was elected to the National Academy of Sciences at its April meeting. Fox replaces **Thomas B. Day**, a physicist who is president of San Diego State University. Day received his PhD from Cornell in 1957.

While grappling with major budget and policy questions, NASA Administrator Daniel S. Goldin continues to shake up the principals at his field centers and at the new agency headquarters. The latest appointments include **Charles F. Kennel**, associate director of UCLA's Institute for Plasma Physics and Fusion Research, to be associate administrator for the agency's Mission to Planet Earth program and **Mark Abbott**, a professor at the college of oceanic and atmospheric sciences at Oregon State University, who is now chief scientist at the Planet Earth office. Kennel and Abbott take over for **Shelby G. Tilford**, who was both associate administrator and chief scientist. Tilford has retired from NASA.

As principal staffer of the House appropriations subcommittee for the Departments of Veterans Affairs and Housing and Urban Development and independent agencies, **Richard N. Malow** was frequently the commanding figure in approving budgets for the National Science Foundation, NASA and the Environmental Protection Agency. As it happens, Malow handled the NSF and NASA budgets himself, as well as overseeing the accounts of 18 other government agencies. After 22 years on Capitol Hill, he left on 30 March to become special assistant to Goetz Oertel, presi-

dent of the Association of Universities for Research in Astronomy. AURA is a consortium of 23 US universities and two affiliated foreign universities that manages the National Optical Astronomy Observatories, which are funded by NSF, the twin Gemini telescopes, another NSF project now under construction, and the Space Telescope Science Institute, supported by NASA. In his House job, Malow was a powerful influence on the funding of ground-based and space-based astronomy for more than a decade, as well as a friendly voice for NSF and NASA budgets in the ears of House appropriations committee members. "Dick understands university research and the problems it faces," says Ray Bye Jr, NSF's legislative and public affairs director. "His institutional memory with regard to science research was unmatched on any of the appropriations committees."

Once **John H. Gibbons** became President Clinton's science adviser and director of the Office of Science and Technology Policy, his leather swivel chair at Congress's Office of Technology Assessment needed another occupant. Who better than the person Gibbons handpicked as his own assistant director? So it was no surprise that on 6 May OTA's Congressional Board, with some prompting by Gibbons, chose **Roger C. Herdman** for the position. In fact, before Gibbons departed after running OTA for more than 13 years, he had selected Herdman to be acting director. Indeed, with health-care reform at or near the top of just about every lawmaker's list of favorite issues in Washington, Herdman appears to be in the right spot for the times. OTA is often described by members of Congress as their best source of information on issues involving science and technology. And as it happens, Herdman is a physician. He received his BS and MD degrees from Yale and became a professor of pediatrics specializing in kidney diseases and organ transplants at Albany Medical College in New York. He served as director of New York's Kidney Disease Institute and as the state's director of public health. He also was vice president of Memorial Sloan-Kettering Cancer Center in New York City. In announcing the appointment of Herdman, Senator Edward M. Kennedy of Massachusetts, OTA's board chairman, called him "a superb choice to lead the agency at a moment in history when medicine and technology are on top of the nation's agenda."

—IRWIN GOODWIN ■