U.S. SCIENCE POLICY

All-Star Group Prescribes Partnerships for R&D Woes

LA JOLLA, CALIFORNIA—When an all-star cast of politicians, academics, and industry leaders gathered here for a meeting last week to discuss strengthening the R&D enterprise in the United States, they were advised at the outset to focus on prescriptions, not descriptions. The problems "have been described to death," said John Yochelson, president of the Council on Competitiveness, a nonpartisan group that co-sponsored the meeting. One medicine in particular went down well at this conference: partnerships.

ALAN DECKER

Common ground. Academics, politicians, and industry leaders gather to discuss R&D collaborations.

The 24 February meeting, "California and the Future of American Innovation," was the first of three get-togethers being held around the country during the next few months to forge links among universities, companies, and governments. This "national discussion" is an outgrowth of "Endless Frontier, Limited Resources," a report issued last spring by the Council on Competitiveness. While some of the meeting's 200 attendees expressed frustration at the way diverse scientific fields were discussed as a monolithic entity, many gave the day high marks. "It really was tremendously stimulating," said Neal Lane, head of the National Science Foundation.

Although details of several intriguing partnerships surfaced at the meeting, much of its import stemmed simply from the fact that such a high-powered group assembled to discuss the issue. Aside from Lane, the gathering included California Governor Pete Wilson (R), White House science adviser John Gibbons, Representatives George Brown (D–CA) and Steven Schiff (R–NM), and the heads of several universities and corporations.

A central problem repeatedly highlighted during the day was how branches of science that were flush with funds during the Cold War can support long-term research today. Siegfried Hecker, director of Los Alamos National Laboratory, described how Los Alamos has joined forces with the supercomputer-maker Cray/Silicon Graphics Inc. to design computer simulations for testing nuclear weapons in the lab. The project is part of the Department of Energy's Advanced Strategic Computing Initiative, which similarly has hitched Lawrence Livermore National Laboratory to IBM and Sandia National Laboratories to Intel. Hecker stressed that Los Alamos is only collaborating with industry because it enhances the lab's mission: "You don't do it for the money alone."

Governor Wilson described how California is helping promote academic research efforts with a law enacted on 1 January that raises the R&D tax credit from 12% to 24% for companies that invest in university-based research contracts. He's hoping it will spur more of the kinds of partnerships that lie behind the 2-year-old Center for Wireless Communications at the University of California, San Diego—a co-sponsor of the meeting. Sponsored by 13 companies, the center works on "precompetitive," fundamental research.

The meeting was not all happy talk, however. Retired Admiral James Watkins, a former secretary of energy who now heads the Consortium for Oceanographic Research and Education, said that uneven congressional funding poses a "tremendous threat" to big science efforts, such as the International Thermonuclear Experimental Reactor (ITER) project. "We're going to walk up the mountain halfway, destroy all the inventions, and throw it away," predicted Watkins of U.S. participation in ITER.

Thomas Pollard, head of the Salk Institute for Biological Studies in La Jolla, questioned the meeting's premise that fewer federal dollars will be available for basic research. He urged the attendees to take a cue from biomedical researchers—who have enjoyed steady increases in funding—and organize their constituencies to lobby Congress more effectively for funds: "Give up on this defeatist business about going down in flames after the Cold War." Pollard later told *Science* that he also was disappointed by the meeting's focus on large-scale projects. "These big issues of how to get a national lab and a Fortune 500 company into bed together aren't big issues for bench scientists in biology," said Pollard.

The meeting did not result in any concrete recommendations. The council took its pro-partnership message to a second regional meeting in Atlanta on 3 March and will hold a final forum in Indianapolis on 1 to 2 April.

–Jon Cohen

Feds Probe Causes of Academic Stress

When the federal government sneezes, the nation's research universities get the flu. So, when the academic research establishment began feeling stressed out a few years ago, university officials began to wonder about the health of the government-university research nexus. Their concern has led the White House to launch a thorough study in the hope of diagnosing its most serious ills.

"We want to find out how much is whining and how much is reality," says Ernie Moniz, former associate director for science in the White House Office of Science and Technology Policy, who is temporarily heading up a 6-month review of federal policies that affect universities. "But to do that, we need data."

Moniz spoke last week to an invited group of university administrators convened by the Government-University-Industry Research Roundtable at the National Academy of Sciences in Washington, D.C. Participants complained about sudden shifts in federal funding, inadequate reimbursement for the cost of supporting research on campus, and insufficient attention to education and training. They also noted that agencies sometimes carry out programs that satisfy their mission but disregard the needs of the overall scientific community. But some administrators also took themselves to task, saying that their institutions needed to improve undergraduate teaching, encourage partnerships with industry (see main text), and interact more with the public.

The review is being conducted by an interagency task force under the president's National Science and Technology Council (NSTC). It follows a recommendation last fall by an outside panel of experts, the President's Council of Advisors on Science and Technology, that the government examine its policies toward higher education on everything from the support of young investigators to depreciation of buildings.

The task force hopes to collect data this spring from every federal agency that funds academic research. The information will be analyzed and distilled by this fall into a set of recommendations to the NSTC.

–Jeffrey Mervis