Presidential election casts shadow on AAAS annual jamboree

Boston

With the presidential election process well underway, the question of how science will fare under a new administration was a dominant theme at the annual meeting of the American Association for the Advancement of Science (AAAS), held here last week.

Although the United States, according to Guyford Stever, former science adviser to President Carter, spends more on basic research than the rest of the non-Socialist world combined, the mood of the meeting was pessimistic.

Major failures of the scientific enterprise were seen as having marred the last few years: the Challenger accident, the tardy and still inadequate response to the epidemic of AIDS (acquired immune deficiency syndrome) and the bitter divisions over the wisdom of pursuing the Strategic Defense Initiative.

No surprise then, that the majority of the speakers appeared to wish themselves back in the 1960s, in the glory days of the Apollo project. Joshua Lederberg, president of the Rockefeller University, called for a revival of the President's Science Advisory Council (PSAC) of that era. Until it was abolished by President Nixon, PSAC, made up of a variety of distinguished leaders from a wide range of scientific disciplines, met periodically to provide advice directly to the president.

Many wished to give the president's science adviser some powerful new teeth. Full cabinet rank was recommended along with the right to sit on the National Security Council and the Economic Policy Council; in other words to take responsibility for science and technology in every sphere of the nation's activity.

The incumbent presidential science adviser, William Graham, made light of all these suggestions. Giving the Science Advisor higher rank would not change anything, he said, for the incumbent is already involved in all relevant decisions. And he could not see the argument for reconstituting PSAC. No substantial difference exists, he said, between PSAC and the present White House Science Council, on which, among others, Edward Teller sits.

William Carey, former executive officer of AAAS, argued that presidential engagement was what mattered most in the quality of science policy. But there may also be a fundamental problem in giving science advice to the president. As Lewis Branscomb, director of the science policy programme at Harvard University, argued, the scientific community wants complete visibility in the advice being given to the president. But the president requires confidentiality that will enable him to be seen as making his own decisions in a timely fashion, rather than being embarrassed by surprises or public dissent among his advisers. Science Advisors cannot be representatives of science as a constituency, nor can they expect to speak out on matters on which they disagree with the president, however much open debate is a part of the scientific tradition.

There will be plenty of problems for the next Science Advisor to take up. Roland Schmitt, chairman of the National Science Board and until recently vice-president of General Electric, outlined the key issues: strengthening links between universities and industry without compromising academic freedom; allowing foreign researchers open access without undermining international competitiveness; distributing federal funds more equitably without harming productivity; restructuring industry without harming the research and development base; and finding ways to increase the national laboratories' contribution to economic development.

An issue stressed by William Graham might be added; that of the growing political importance of international cooperation in basic scientific research. Those attending AAAS would have needed no reminder: another whole day of the meeting was devoted to Soviet science and the new possibilities raised for US-USSR cooperative research. Alun Anderson

Californians thinking bigger in neuroscience for the 1990s

Los Angeles

THE University of Southern California (USC), whose reputation in the past has rested largely on the quality of its professional schools, has decided to make a pitch for a position among the top US research universities. Its vehicle to excellence is an ambitious interdisciplinary programme in Neural, Informational and Behavioral Sciences (NIBS). The university's stated goal is to be number one in neuroscience by the mid-1990s.

William Wagner, dean for interdiscilinary programmes, says the idea for NIBS was not entirely well received when he



introduced it in 1982. Now that interdisciplinary programmes have come of age, with interest growing in areas such as computational neurobiology, many departments have sought to join the NIBS bandwagon. Up to 100 faculty members may participate, from departments ranging from linguistics to electrical engineering, including all the natural sciences, many departments in the medical school, and even the law school.

The university has raised \$18 million for a 65,000-square-foot building, scheduled for completion in 1989, that will house the core of the programme. An additional 45,000 square feet in the university's medical school has also been committed to the programme. USC will create 30 new tenured positions for NIBS over the next 5 years, as well as a minimum of 20 junior faculty positions. All members of the faculty will have appointments in one or more existing university departments.

Wagner, a former student of physicist Murray Gell-Mann at the California Institute of Technology, shares Gell-Mann's passion for interdisciplinary programmes, and is looking for people with "renaissance minds", able to apply their perspectives across disciplinary boundaries. Undaunted by the difficulties of attracting faculty to a programme still largely on the drawing board, he has been recruiting aggressively, offering generous salaries and laboratory support.

After 6 years of planning and fundraising, recruitment is finally gaining momentum, with the arrival of the first 4 new faculty members in the past 6 months. Three more appointments are in the final stages of negotiation, says Wagner.

While neuroscientists praise USC for its efforts, some question its ability to start from scratch and build a neuroscience programme that will rank among the top programmes in the country. Others doubt whether such a broad scope is the best strategy for achieving such excellence. Wagner and those involved in NIBS seem to believe that it is, and much of the programme's fate will ride on their success in persuading others to join them.

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