receive live virus vaccines. Moreover, no obvious harm has come from injections with phage-bearing vaccines or phage alone.

Before antibiotics became widely available, people were "therapeutically" injected with phage when they contracted bacterial infections. The theory was that since phages specifically destroy bacteria, they could be used to treat these diseases. Representatives of pharmaceutical and serum firms say that even these deliberate injections with phage caused no apparent harm to people.

Lack of evidence of harm by phage, investigators at these commercial firms believe, should be weighed against the proposal that only sterilely collected serums should be used in the manufacture of live virus vaccines. They stress that increased costs, and possibly decreased availability, of vaccines in the future may not be justified by the hypothetical benefits of the elimination of phage. However, the serum processors are preparing for the forthcoming regulations requiring sterile serum, and they realize, as one representative said, that "the Bureau of Biologics had no choice in the matter." Once the phage contamination became known, public demand would have forced them to eliminate phage from vaccines.

Petricciani thinks that the Bureau of Biologics assessed all available evidence and came to a reasonable conclusion. Moreover, he disagrees with predictions of economic problems associated with the proposed regulations to rid vaccines of phage. The cost of serum, he says, is a very small fraction of the cost of a vaccine. And he agrees with the molecular biologists who claim that, as more and more details about the effects of phage on mammalian cells become known, serum distributors will likely discover that biologists whose research involves tissue cultures as well as pharmaceutical firms will demand sterile serum.—GINA BARI KOLATA

Quiet AAAS Meeting Dominated by Science Policy Talk

At the AAAS meeting in New York this year, quiet prevailed and attendance was down. By the last full day of the meeting, on 31 January, only 4250 paid registrants had been recorded, compared with 4700 at last year's meeting in San Francisco and the 6000 to 8000 expected. Meeting director Arthur Herschman and other AAAS officials attributed the low attendance mainly to the general economic situation. Moving the meeting out of the post-Christmas week may also have had an effect.

One consolation, though, was that the AAAS was not alone. A simultaneous meeting organized by the American Physical Society in Anaheim, California, drew only 1500—reportedly a thousand fewer than expected.

One impression widely shared at the AAAS meeting was that public policy sessions, which, in keeping with a recent trend, made up roughly half the program, were often under-attended while the more focused, hard-science sessions were frequently jammed. Possibly the best-attended session was a public lecture by the well-known writer Isaac Asimov, whose discussion of "the science fiction writer as prophet" drew a 3000 overflow crowd.

All of this led the AAAS board of directors and governing Council members to raise the possibility of increasing the research content of next year's meeting in Boston.

In its meeting this year, the Council focused on minority groups and problems of science and foreign policy. The Council approved a resolution recognizing the contributions to science by women and American Indians and urged the AAAS, as a policy, not to discriminate against scientists who are homosexuals, transsexuals, transvestites, or members of other "sexual minorities."

Other council resolutions deplored the recent barring of Israel from some activities of Unesco and urged other nations to favor maximum freedom for oceanic research at the upcoming United Nations Law of the Sea conference in Vienna.

Throughout, the radical groups once famous for disrupting AAAS meetings were quiescent, even though the issue of American involvement in Vietnam, formerly the source of radical anger, is reviving. A small representation from radical groups operated a literature table peaceably, though at prices that reflected the current inflation.

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Hallway talk at the AAAS meeting was that some of the scientific elite who have called on Vice-President Rockefeller recently have come away with the impression that a recommendation for strengthening the White House science advisory apparatus may be forthcoming within a month or two. Rockefeller is largely preoccupied with the probe of the Central Intelligence Agency he is heading for the President, but he nevertheless has staff working on the science advisory question.

According to one of the Vice-President's recent visitors, the White House decided in late December to elevate National Science Foundation (NSF) director H. Guyford Stever to a science counselor's post within the Executive Office, but then backed away from this decision under a hail of objections from the Domestic Council and the National Security Council (NSC). The lesson, according to this story, is that any new advisory arrangements will have to accommodate the independent systems of advisory panels that the Domestic Council and the NSC have built up in the 2 years since former President Nixon abolished the old Office of Science and Technology.

Stever, who has since had the title of President's science adviser, has established close relations with the Office of Management and Budget but the White House's two other main policy units have preferred largely to go it alone. The NSF's Science and Technology Policy Office has assumed a neutral stance in the debate over advisory structures.

Stever says that in fact no firm decision had been made or rejected to move him to the White House while leaving most of the advisory staff back in the NSF. He told *Science* that this is one of a number of options under consideration, and it is, he acknowledged, "some people's favorite model."—R.G. and D.S.