sentimental and laudatory as to be of virtually no historical value. Collections of these are periodically published, producing the observation that the Academy exists for the members to write each other's obituaries.

Among the other perquisites of election is the unquestioned right to publish in the Academy's monthly journal, *Proceedings of the National Academy of Sciences* (PNAS), which is one of the very few unrefereed scientific publications of scholarly distinction. PNAS also automatically accepts papers of non-Academy authorship that are submitted by an Academy member. The only limitation is that no paper may exceed eight printed pages. This rule, rarely waived, has evolved from the general maximum of six pages which accompanied PNAS' birth in 1914. As for the absence of refereeing, a PNAS staff member reverently inquires, "Where would you find people superior to the members of the Academy?" Substantive editing, it is explained, is generally limited to "matters of taste," and no changes are made without the author's permission. For example, an author who wrote that a particular hypothesis "is not well founded" acceded to a request to have the sentence read, "does not appear to be well founded." Of PNAS, it may be said that when it is good, it is very good, and when it is bad it is often ridiculous. But, refereed or unrefereed, that description can probably be applied to all publications.

Such, then, is the ceremonial, scholarly, often-scoffed-at aspect of the Academy. Viewed as such, it would not even qualify for the commendation that Addison, 2½ centuries ago, bestowed upon the founders of the Royal Society. By establishing that learned institution, he wrote, they had "turned many of the greatest geniuses of that age to the disquisitions of natural knowledge, who, if they had engaged in politics with the same parts and applications might have set their country aflame."

But then, we have so far surveyed only the most readily visible portions of the Academy, the portions which, in fact, are significant mainly because of the prestige and power that they infuse into other activities. For, organically linked to the ceremonial, scholarly Academy is an incredibly vast network of activity that consumes the services, in Washington, of 700 full-time employees, 4000 unpaid consultants, and a budget of $19 million a year.

We began with the question, What is the National Academy? For the American scientific community, it is, in part, the Established Church, the House of Lords, the Supreme Court, and headquarters of the politics of science. It has made itself the community's duly delegated emissary to the U.S. Congress and the Executive Branch of Government at a time when both are increasingly involved with scientific and technical issues. There are other emissaries, of course, and the two governmental branches can pick and choose the advisers they invite and heed. But the Academy is ever-growing in importance among these advisers. The Academy is also vigorously engaged in the role of being the Foreign Ministry of American science. Its Office of the Foreign Secretary, with a powerful staff, including several members who came directly from the Central Intelligence Agency, is deeply involved in promoting international scientific activities and close relationships with the scientific communities of other nations.

It was the Academy that spawned Universities Research Associates, a nationwide consortium of universities that has designs of becoming the great holding company of American "big science."

It was the Academy that deftly defused the biggest scientific-pork-barrel issue in American history—selection of a site for the 200-Bev accelerator.

Through a series of interlocking appointments and longstanding relationships, the Academy serves as a little-known but powerful link between the nation's defense establishment and the civilian scientific community. Its president, Frederick Seitz, not only chairs the Defense Department's highest scientific advisory body, the Defense Science Board, but also sits as a member of the White House's highest science advisory board, the President's Science Advisory Committee.

The Academy, in short, is today a remarkable organization. But, though its roots go back to 1863, the contemporary Academy actually was born in 1950 with a tumultuous and never publicly revealed episode involving some of the most eminent figures of American science. Along with other matters, this will be discussed in another article.—D. S. GREENBERG

Courses

Information on courses and summer institutes will be listed in forthcoming issues of Science *as part of "Calendar of Events," a section that will follow Meetings.*

DNA-RNA Hybridization. International Laboratory of Genetics and Biophysics, Naples, Italy, 5–24 June. Limited to 16 postgraduate students in mathematics, physics, chemistry, and biology. Fellowships covering travel and living expenses available. Deadline, 30 April. (The Laboratory, Casella Postale 3061, Napoli, Italy)

Histochemistry. University of British Columbia, 12–21 June. Intended for physicians and graduate students. Tuition, $150. Deadline: *1 May*. (Department of Continuing Medical Education, University of British Columbia, Vancouver 8, B.C., Canada)

Histochemistry. Vanderbilt University, 30 July–19 August. For zoology teachers in accredited colleges and universities. Living and travel expenses for 20 participants provided by NSF. No tuition. Deadline: *1 May*. (Burton J. Bogitsh, Box 1733, Station B, Vanderbilt University, Nashville, Tenn. 37203)

Recent Deaths

Edward A. Avery, 62; museum specialist, department of botany, Smithsonian Institution; 24 February.

Jacob Fong, 53; professor of medical microbiology and immunology, School of Public Health, University of California at Berkeley; 28 February.

Max Frederick Meyer, 93; professor emeritus of experimental psychology at the University of Missouri; 14 March.

Albert J. Paquin, 46; professor and chairman of urology at the University of Virginia; 13 March.

Vladimir N. Sukachev, 87; director of the Laboratory of Biogeocenology, U.S.S.R. Academy of Sciences; 12 February.

Vittorio Tonolli, 53; director of the Istituto Italiano di Idrobiologia, Pallanza; 13 March.

Jane R. Wilhelmi, 56; professor of biochemistry, Emory University; 12 March.

Erratum: In the article of 31 March on antiballistic missile defense, the last sentence of paragraph 2, p. 1654, should read: "Manpower for producing . . . but the outer limit would be about 200,000, or half the number of contractor employees and civil servants working for NASA at the peak of the Apollo program."