Meetings

Science in Public Policy

The Santa Cruz campus of the University of California opened less than 3 years ago as a State "collegiate" university, a cluster of small residential colleges on a large campus. Four of the two dozen planned colleges are now in operation, with facilities partially funded by private gifts. On 9–10 April 1968 one of them, the science-oriented Crown College (named in appreciation of a \$500,000 gift from Crown Zellerbach Foundation), held a dedication symposium on The Future of Science in Public Policy.

In his opening remarks, Chancellor Dean E. McHenry noted that his campus had already attracted many notables. During 1967-68, the faculty included a member of the National Academy of Engineering, two members of the American Academy of Arts and Sciences, and ten members of the National Academy of Sciences (one more than had taught at Cornell in the previous year). The young faculty includes among its numbers Crown College provost Kenneth V. Thimann, famous plant physiologist, and political scientist F. Glenn Willson, who is the provost of Stevenson College. Both are Englishmen who are strongly committed to making the Oxbridge concept work in the setting of a 100-year-old American state university devoted to mass education.

George S. Pake, provost of Washington University in St. Louis and member of the President's Science Advisory Council, pointed out in his opening talk on "The role of scientific counsel in the federal government" that the Council now spends less than half of its time on defense matters. (During the Eisenhower era, the proportion was nine-tenths.) He expressed his satisfaction with the apparatus of scientific advice-giving available to the executive branch and proposed a Congressional Advisory Scientific Panel to do a similar job for the legislative branch, which has a harder time obtaining objective scientific counsel. Even more important is for Congress to obtain separate expert advice in the social sciences, a field in which many a legislator considers himself more expert than the professionals, whom he moreover looks down on as impractical theoreticians.

Berkeley historian A. Hunter Dupree, who spoke on "The changing govern-ment-university partnership," characterized the era when it was put together (the 1940's) as a true American revolution, but saw the stresses to which the partnership has been subjected since the mid-1960's as its "Time of Troubles" and as a portent of new approaches. The evolution has been from government purchasing of the results of research, to purchasing of research itself, to still more general goals, such as the development of intellectual resources. He ridiculed the prevailing idea that all government money was "tainted" by pointing to the way in which the National Science Foundation, for one, has successfully managed to provide support without seeking con-

"Biomedical research, public health, and public policy" was the subject of a talk by Harvard psychiatrist Seymour S. Kety. Although the United States annually spends more than any other nation on biomedical research (\$1 billion through the National Institutes of Health alone), he said, much of it goes to supporting medical education; and we lag behind many less affluent nations in general standards of health. He thought that what was needed was not a committee-imposed hierarchy of priorities in biomedical research. Rather, the scientific community should be permitted to develop its own "ecology" and its own strategies. His recipe for bringing about this state of affairs was the separation of NIH from the U.S. Public Health Service.

William D. McElroy (Johns Hopkins University) spoke on "Family planning or population control?" Two-thirds of the world's population belong to "havenot" nations. He felt it was up to the other one-third to take the lead in staving off worldwide famine, by taking a

number of affirmative steps ranging from reversing U.S. farming policy to assisting efforts toward population control in other countries without, however, individual or international coercion. Linking family planning with maternity care would be a particularly efficacious approach.

IBM research director Arthur Anderson, pinch-hitting for IBM vice president Emanuel R. Piore, based his talk on his chief's scheduled paper on "Influence of scientists on the defense Services." He called for personal initiative, persistence, and the careful selection of problems (and of communications channels) on the part of individual scientists anxious to help solve public problems. For laboratories doing the government's scientific work, he had a fourfold prescription—high visibility, good motivation, a sound mission, and adequate funding. The absence of any one of these factors is a grave-and sometimes fatal-handicap.

Irving S. Bengelsdorf, science editor of the Los Angeles Times and chemistry lecturer at UCLA, described some of the problems of communicating the substance of science to the general public. Among them are newspaper space; dealing with the daily flood of books, press releases, and "kook" mail; and deciding to which branches of science even a well-prepared reporter must largely limit himself. He suggested that TV, general magazines, and especially university faculties might well do a better job of communicating the results and the joys of scientific work. The chairman of the session, Nobel prizewinning geneticist Joshua Lederberg, added that scientific disciplines were not primarily organized to respond to major social problems, and that it behooved at least some of them to organize themselves partially in that way.

"Agriculture and the underdeveloped countries" was the title of the talk by Paul C. Mangelsdorf, Harvard emeritus professor of natural history. He said that the gap between the haves and have-nots of nations can be to a considerable extent characterized by the folk saying that "the rich get richer and the poor get children." The dismal catalog extends to a number of other factors, but he saw some hope in the very fact that levels of agricultural production were so low in some countries-they had no way to go but up, and some countries have already made remarkable advances. Illiterate populations can be reached by transistor radios,

new "dwarf" varieties of basic foodplants are being developed that respond to fertilizers in a dramatic way, and the tropics are coming to be recognized as potential major food-producing areas. None of these programs would do any good unless accompanied by a reduction in human fecundity—which has no way to go but down—but population control is next to impossible in countries existing below subsistence levels.

The final talk of the meeting was given by Stanford psychiatrist David A. Hamburg, who spoke on "Mental health and progress in the behavioral sciences." His paper was more technical than the others. He described recent research on behavior under stressful conditions, research with nonhuman primates on the evolution of behavior (especially social), and research on the relations between social learning and hormone production. He exhorted the present generation of students to devote itself in larger numbers than his generation had done to the solution of such vital problems as the sources of aggressive behavior.

In his closing remarks, provost Thimann summarized the proceedings on behalf of the host institution by saying that perhaps a new profession might be in the making, that of the government adviser on science and technology. Educational requirements would not be so very different from those of a good science writer.

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Calendar of Events

National Meetings

August

18-22. American Soc. for **Pharmacology** and **Experimental Therapeutics**, Minneapolis, Minn. (E. B. Cook, 9650 Rockville Pike, Bethesda, Md. 20014)

19-23. American Crystallographic Assoc., Buffalo, N.Y. (W. L. Kehl, Gulf Research and Development Co., P.O. Box 2038, Pittsburgh, Pa. 15230)

19-29. Symposium on Physics of the Magnetosphere, Washington, D.C. (J. Gazin, % Committee on Space Research, 55 Boulevard Malesherbes, Paris 8, France)

20-23. Association of American Geographers, 64th annual, Washington, D.C. (J. W. Nystrom, 1146 16th St., NW, Washington, D.C.)

- 20-23. American Statistical Assoc., 128th annual, Pittsburgh, Pa. (Executive Director, 810 18th St., NW, Washington, D.C. 20006)
- 21–23. Applications of X-ray Analysis, 17th conf., Denver, Colo. (J. B. Newkirk, Metallurgy Div., Univ. of Denver, Denver)
- 21–23. American Soc. of Civil Engineers, Cambridge, Mass. (W. H. Wisley, United Nations Plaza, 345 E. 47 St., New York 10017)
- 22-24. American Nuclear Soc., Schenectady, N.Y. (J. E. Burke, General Electric Research and Development Center, Schenectady)
- 28-30. Society for the Study of **Reproduction**, Nashville, Tenn. (R. P. Amann, 105 Borland Lab., Pennsylvania State Univ., University Park, 16802)
- 30-1. American Psychological Assoc., San Francisco, Calif. (E. Walker, 1200 17th St., NW, Washington, D.C.)

September

- 1-6. American Soc. of Hematology, New York. (J. F. Mustard, Blood and Vascular Disease Research Unit, Univ. of Toronto, Ont., Canada)
- 2-3. American Soc. of **Zoologists**, Hanover, N.H. (F. V. McCann, Dept. of Physiology, Dartmouth Medical School, Hanover 03755)
- 3-7. **Botanical** Soc. of America, Columbus, Ohio. (Botany Dept., Indiana Univ., Bloomington)
- 3-7. American **Bryological** Soc., Columbus, Ohio. (Secretary-Treasurer, The Society, Box 36, Missouri State College, Springfield)
- 3-7. **Ecological** Soc. of America, Columbus, Ohio. (c/o Ecology Secretary, Health Physics Div., Oak Ridge National Lab., Oak Ridge, Tenn.)
- 3-7. Genetics Soc. of America, Columbus, Ohio. (Executive Director, The Society, 3900 Wisconsin Ave., Washington, D. C. 20016)
- 3-7. American Soc. for **Horticultural Science**, Columbus, Ohio. (Executive Director, The Society, 615 Elm St., St. Joseph, Mich. 49085)
- 3-7. American Soc. of **Human Genetics**, Columbus, Ohio. (c/o Div. of Medical Genetics, Dept. of Medicine, Johns Hopkins Hospital, Baltimore, Md.)
- 3-7. Mycological Soc. of America, Columbus, Ohio. (c/o Pioneering Research Div., Natick Labs., Natick, Mass.)
- 3-7. American Soc. of Naturalists, Columbus, Ohio. (Executive Director, 3900 Wisconsin Ave., Washington, D.C. 20016)
- 3-7. Society of Nematologists, Columbus, Ohio. (V. R. Ferris, Entomology Dept., Purdue Univ., Lafayette, Ind. 47906)
- 3-7. American **Phytopathological** Soc., Columbus, Ohio. (C. W. Ellett, Dept. of Botany and Plant Pathology, Ohio State Univ., Columbus)
- 3-7. American Soc. of **Plant Physiologists**, Columbus, Ohio. (c/o Dept. of Biology, Yale Univ., New Haven, Conn. 06520)
- 3-7. American Soc. of **Plant Taxonomists**, Columbus, Ohio. (c/o Botany Dept., Univ. of California, Berkeley)

- 3-7. Society of **Protozoologists**, Columbus, Ohio. (D. Hammond, Dept. of Zoology, Utah State Univ., Logan 84321)
- 3-7. Society for Applied Spectroscopy, 19th, Columbus, Ohio. (K. Narahari Rao, Dept. of Physics, Ohio State Univ., Columbus)
- 5-7. American Assoc. of **Obstetricians** and **Gynecologists**, Hot Springs, Va. (R. B. Wilson, 200 First St., SW, Rochester, Minn.)
- 5-7. Scoliosis Research Soc., Houston, Tex. (W. J. Kane, Univ. of Minnesota Hospitals, Minneapolis 55455)
- 6-7. Cardiovascular Symp., 9th, Virginia Beach, Va. (J. D. Price, 523 Boush St., Norfolk, Va. 23510)
- 8–13. American Chemical Soc., Atlantic City, N. J. (A. T. Winstead, Natl. Mtgs. and News Div., ACS, 1155 16th St., NW, Washington, D C. 20006)
- 8-13. Illuminating Engineering Soc., Phoenix, Ariz. (National Technical Conf. 345 E. 47 St., New York 10017)
- 9-13. American Fisheries Soc., 98th, Tucson, Ariz. (R. F. Hutton, 1040 Washington Bldg., Washington, D.C. 20005)
- 12-15. American Electroencephalographic Soc., San Francisco, Calif. (P. T. White, Marquette Univ. School of Medicine, 8700 W. Wisconsin Ave., Milwaukee, Wis. 53226)
- 12-17. Pacific **Dermatologic** Assoc., Coronado, Calif. (M. S. Falk, P.O. Box 1268, Reno, Nev. 89504)
- 13-15. Mid-Continent **Psychiatric** Assoc., Little Rock, Ark. (W. Young, 3504 Hill Road, Little Rock 72205)
- 15-21. Electron Microscope Soc. of America, 26th, New Orleans, La. (School of Chemical Engineering, Olin Hall, Cornell Univ., Ithaca, N. Y. 14850)
- 16-19. American Acad. of General Practice, Las Vegas, Nev. (M. F. Cahal, Volker Blvd. at Brookside, Kansas City, Mo. 64112)
- 18-20. Cancer, 6th natl. conf., Denver, Colo. (R. N. Grand, 219 E. 42 St., New York 10017)
- 19-22. American Medical Writers Assoc., Washington, D. C. (E. G. Dailey, P. O. Box 267, Arlington, Va. 22210)
- 22-25. American Fracture Assoc., Houston, Tex. (H. W. Wellmerling, 610 Grieshim Bldg., Bloomington, Ill. 61701) 22-27. Water Pollution Control Federa-
- 22–27. Water Pollution Control Federation, 41st, Chicago, Ill. (The Federation, 3900 Wisconsin Ave., NW, Washington, D. C. 20016)
- 23-25. American Inst. of Aeronautics and Astronautics, El Centro, Calif. (W. J. Brunke, 1290 Sixth Ave., New York 10019)
- 23-26. Transplantation Soc., 2nd, New York. (F. T. Rapaport, New York Univ. Medical Center, 550 First Ave., New York 10016)
- 24-26. American Soc. for Metals, San Francisco, Calif. (American Soc. for Metals, Metals Park, Ohio 44073)
- 24-27. American Soc. for Testing and Materials, Cincinnati, Ohio. (T. A. Marshall, Jr., 1916 Race St., Philadelphia, Pa. 19103)
- 28-2. Western **Orthopaedic** Assoc., Colorado Springs, Colo. (V. Mathiesen, 354 21st Street, Oakland, Calif. 94612)