

placed on using and improving educational techniques and devices, such as audiovisual aids. "We found that we first had to get across the fact that it is not an inexorable law of nature for women to bear children every ten or eleven months," he said. "The women in both districts were astonished by this information, and found it rather difficult to accept. But once they grasped this fact, they wanted to know more, and we found that they were hungry for information."

"The whole basis of our approach," Wahren explained, "was to make it perfectly clear that our desire was to promote family planning and not merely to suppress births. We have helped infertile couples to have children. We are in this program to help the people have a better life for themselves and their children; any other goal will not succeed."

The Ceylon project, which may well be the pattern for future Swedish family assistance planning, stuck very carefully to the original aim of training local public health personnel. "This is absolutely necessary for us," said Per-Erik Rönquist, who is chief of the aid agency's planning and budget division. "Sweden does not have manpower to export; our principal asset is technical know-how, and if we are to succeed, we must find ways to use our limited manpower to transmit that know-how to local personnel as quickly and as efficiently as possible." Under the guidance of the lone Swedish physician assigned to the project, Ceylonese personnel quickly became integrally involved in the program. The initial approach to the inhabitants of the district was usually made in a fairly casual manner, often during a pre- or postnatal checkup at a public health clinic. This first contact was followed up by a visit to the home, Rönquist and Wahren explained, where additional information was offered, but in doses no larger than the couple seemed willing to accept. Finally, contraceptive devices, principally condoms provided by the Swedish Government, were made available without charge.

"The project has cost only \$50,000 a year and has employed only one physician. We feel there are a lot of questions that remain to be answered, but we are encouraged," Wahren said.

While the Ceylon project has been entirely under Swedish direction, the Swedish work in Pakistan has been integrated into that country's large-scale family planning program. With an

initial annual budget of \$300,000, the Swedes have sent three medical teams to Pakistan, each consisting of a physician and a nurse. They also have provided a mobile clinic and have brought three Pakistanis to Sweden for training in the production of educational films and other visual aids. "The educational aspects are critical," Wahren explained, "since we keep running into such superstitions as that contraception will make you impotent or will produce sickly children."

Wide Political Support

While the American foreign aid program annually produces a major battle between Congress and the Administration, Sweden's expanded foreign aid program appears to have the nation's blessing. Swedish aid officials point out that there has been some opposition to the plan to commit 1 percent of the gross national product to foreign aid, but it has come from those who feel the contribution should be greater. It is difficult to compute U.S. foreign aid expenditures, but it is a generally accepted estimate that they do not exceed half of 1 percent of the American gross national product.

It might be assumed that Sweden's growing venture in assisting the underdeveloped nations with family planning would be of interest to the Administration, but the Swedes report that they have had no inquiries from American officials; at the American Embassy here there is an awareness, derived principally from published accounts, that Sweden is emphasizing birth control in its foreign aid program, but the embassy does not appear to be greatly interested in the subject. Its behavior seems to reflect the skittishness which afflicts the Kennedy Administration on the subject of birth control. At the outset the Administration quickly reversed its predecessor's policy of refusing to acknowledge publicly that population growth constituted a problem for the underdeveloped nations. In introducing the Alliance for Progress, for example, Kennedy warned that South America's rapidly expanding population imposed a burden on economic development. And last November a State Department official, in the Administration's first full-length statement on American policy toward the population problem, hinted that the U.S., under some circumstances, might accede to requests for assistance. When an inquiry was recently made on whether any requests had been received, the

reply was negative. And during the past few weeks, the Administration's wariness toward the issue was again demonstrated when the Public Health Service announced that it would not release a survey that it had made dealing with fertility. The explanation offered was that the study "might be subject to misunderstanding." The decision was quickly reversed when an investigation was threatened by the House Government Operations Subcommittee, and it was announced that a "revised" version would be released by the end of the year. It is likely that one of the principal revisions will be the deletion of a recommendation that the U.S. Government finance additional research for new means of reducing fecundity.

It appears that the Kennedy Administration, despite early indications to the contrary, has no inclination to incur the enormous political hazards involved in promoting birth control. The field is thereby left to a few American foundations, which, with limited resources, have been assisting the Indian and Pakistani governments, and to Sweden, which appears likely to become the most significant force for attempting to reverse the population explosion in the underdeveloped nations.—D. S. GREENBERG

Announcements

The Voice of America has begun broadcasting a series of 21 half-hour lectures on "**Automation: The New Industrial Revolution.**" The weekly series, which began on 11 September, will be transmitted to over 60 countries. Editorial coordinator is George E. Arnstein, assistant director of the National Education Association's project on the educational implications of automation.

High school and college personnel concerned with the guidance and selection of college students are invited to make use of the University of Michigan's **opinion, attitude, and interest testing program** for college-bound high school seniors and college freshmen. The 14 scores provided include measures of motivation for academic success, creativity, and educational-vocational interest. Test booklets and answer sheets (but not scoring keys) will be supplied by the university; completed answer sheets will be processed, and scores will be reported,

by the Educational Testing Service, Princeton, N.J. (Benno G. Fricke, Evaluation and Examinations Division, 122 Rackham Bldg., University of Michigan, Ann Arbor)

The first of a series of 13 half-hour programs on **nuclear research**, videotaped at Argonne National Laboratory, was shown this month over the 60 affiliated stations of the National Educational Television network. The series, entitled "Challenge," will cover safe handling of radioactive materials; particle accelerators; nuclear reactors and their uses; the use of radiation in genetics, immunology, bone physiology, meteorology, and blood and cancer research; radiation and aging; effects of radiation on single cells; chromatography and separation of radioactive materials; and the future of pure and applied nuclear research. Produced under a grant from the laboratory, the programs will feature over 25 of Argonne's leading scientists.

Preliminary studies to determine the feasibility of a large-scale investigation of the relationship between **diet and heart disease** will begin this year in Baltimore, Boston, Chicago, Minneapolis, and Oakland (Calif.). The 2-year program, recommended by the National Advisory Heart Council and supported by the National Heart Institute, will explore some of the factors and methods involved in a mass study of diet modification.

The executive committee of the program is chaired by Irvine H. Page, of the Cleveland (Ohio) Clinic. Principal investigators are Benjamin M. Baker, Johns Hopkins Hospital; Ancel Keys, University of Minnesota; Lawrence W. Kinsell, Highland-Alameda County (Calif.) Hospital; Jeremiah Stamler, Chicago Board of Health; and Frederick J. Stare, Harvard School of Public Health.

The National Bureau of Standards has announced it will no longer accept orders for **hydrocarbon and sulfur standard samples**. Effective 1 October, the American Petroleum Institute will assume responsibility for the distribution of such standards to all users. Previously, API had issued the standards only to the petroleum industry, and NBS had supplied laboratories not associated with the industry. (Beveridge J. Mair, Petroleum Research Laboratory, Carnegie Institute of Technology, Pittsburgh 13, Pa.)

The National Aeronautics and Space Administration has established an **industrial applications advisory committee** to assist in the transfer of new technology from NASA research and development programs to the industrial community. Recommendations of the committee, chaired by NASA consultant Earl P. Stevenson, former president of Arthur D. Little, Inc., Cambridge, Mass., will be implemented through NASA's Office of Applications, whose major function is to identify practical applications of space technology for general nonspace use.

Courses

A noncredit lecture course on advances in **theoretical organic chemistry** will be given in Evanston, Illinois, on Tuesday evenings from 2 October through 4 December. Tuition is \$30, payable to the Student Finance Office, Northwestern University, 619 Clark St., Evanston, Ill. (Myron L. Bender, Department of Chemistry, Northwestern University)

A short course on **mathematics for information storage and retrieval** will be offered from 3 to 7 December in Atlanta, Georgia. Applicants should have good background in mathematics and some experience in computer programming. Tuition is \$150. (Director, Department of Short Courses, Georgia Institute of Technology, Atlanta 13)

Grants, Fellowships, and Awards

A limited number of fellowships are available for graduate training during the 1963-64 academic year in the **humanities and social sciences** relating to Asia and the Near East, the Soviet Union and Eastern Europe, Africa (South of the Sahara), and Latin America. Fellowships, which provide a monthly allowance of \$210 plus allowances and transportation, will be granted for a maximum of 12 months in the U.S. or 18 months abroad. An additional 6 months may be granted when the proposal includes advanced language training not available in the U.S. Grants are not intended to support graduate work which is not focused on an integrated area program, nor research projects of previously trained scholars. Applicants must be U.S. or Canadian citizens, or permanent residents of the U.S., and under 35 years of age. Deadline: 1

November. (Foreign Area Fellowship Program, 444 Madison Ave., New York 22)

Candidates interested in prolonged study in the Soviet Union (limited to U.S. or Canadian citizens) should write the Inter-University Committee on Travel Grants, Indiana University, Bloomington.

Applications are invited for a limited number of grants in aid of **arctic and subarctic research** in North America and Antarctica. Proposals which include field studies are particularly welcome. Deadline: 1 November, for applications to be considered for the following year.

Also available are opportunities for field research at several facilities in Antarctica. Applications should be submitted a full year in advance of the October-March summer season. (Arctic Institute of North America, 1530 P St., NW, Washington 5, D.C.)

Postgraduate training fellowships for research on **parasitic diseases** are available at the National Autonomous University of Mexico. The 11-month fellowships carry stipends of \$500 per month, plus travel allowances. (W. W. Frye, Louisiana State University School of Medicine, Baton Rouge)

Applications are being accepted for Columbia University's Loubat prizes, awarded for publications on the history, geography, archeology, ethnology, philology, or numismatics of **North America**. Candidates for the two awards—\$1200 and \$600—need not be citizens of the United States, but the books must be publications in English, and they must have appeared prior to January 1963. Applicants should submit four copies of each work to be considered. Deadline: 1 January. (Loubat Prize Competition, Secretary of Columbia University, New York 27, N.Y.)

Meeting Notes

A symposium on **pharmacokinetics and drug dosage** will be held from 25 to 27 October in Borstel, Germany. Topics include pharmacokinetics; drug distribution, absorption, and elimination; and procedures for determining dosage of trial drugs and related clinical problems. (Enno Freerksen, Research Institute Borstel, near Hamburg, 2061 Borstel, Federal Republic of Germany)

A symposium on **nuclear proteins, viruses, and atypical growth** will be held on 26 October in New Haven, Connecticut. Subjects include tumor viruses and cancer causation, the genetic code, gene expression and cellular cybernetics, viral function and gene action, and the spectrum of human genetics. (L. L. Waters, Jane Coffin Childs Memorial Fund for Medical Research, 333 Cedar St., New Haven 11, Conn.)

A science writers' seminar on **respiratory diseases** will be held from 30 October to 2 November in Princeton, N.J. Topics will include research on viral infections, chronic bronchitis and emphysema, failures in the treatment of tuberculosis, and air pollution. (National Tuberculosis Association, 1790 Broadway, New York 19)

The 1st Congress on the **Information System Sciences** will be held from 18 to 21 November at Hot Springs, Virginia. Sponsored by the Air Force Electronic Systems Division and the MITRE Corporation, the meeting will emphasize the role of science in the automation of military information systems. All sessions will be devoted exclusively to technical discussion of the subject matter involved; no papers will be read. Attendance is by invitation only. (Edward M. Bennett, MITRE Corporation, P.O. Box 208, Bedford, Mass.)

Scientists in the News

Richard S. Himes, former lecturer in radiobiology at Thiel College, has joined the medical department of the Norwich Pharmacal Company's Eaton Laboratories Division, New York.

At the U.S. Public Health Service:

Arnold B. Kurlander, recently retired assistant surgeon general of PHS, has been named director of Sinai Hospital, Baltimore, Md.

Wallace L. Chan, the Service's director of investigations, has resigned to become vice chancellor for research and development at the University of California (Davis).

Elizabeth F. O'Connor, chief technologist in the Illinois Bell Telephone Company's medical department, has received the 1962 Corning award as the year's "outstanding medical technologist in the United States."

Ragnar Rollefson, former chairman of the department of physics at the University of Wisconsin, has been appointed director of international scientific affairs for the U.S. Department of State. He will also act as adviser to the Secretary of State on scientific and technological matters.

Recipients of the American Heart Association's 1962 Howard W. Blakeslee awards for "outstanding reporting on diseases of the heart and blood vessels" are:

Alexander Gifford, medical reporter for the *Baltimore News-Post and Sunday American*.

Robert K. Plumb, science writer for the *New York Times*.

Robert A. Kuhn, New Jersey physician, for his article in the May 1961 *Everywoman's Family Circle Magazine*.

Bernard Seeman, New York, for his book, *The River of Life* (Norton, New York).

CBS Reports: "The Fat American," presented over the CBS-TV network on 18 January.

Floyd T. Gould, physicist at Knolls Atomic Power Laboratory, has been appointed manager of the physics department at Isomet Corporation, Palisades Park, N.J.

W. J. Burke, head of the department of chemistry at the University of Utah, has resigned to accept a position as executive vice president and professor of chemistry at Arizona State University. He is succeeded by **David M. Grant**, a member of the department staff.

Fred H. Harrington, until recently president-designate of the University of Hawaii, has been released from that commitment so that he may accept the presidency of the University of Wisconsin. He succeeds the late **Conrad A. Elvehjem**.

Recently elected foreign associates of the National Academy of Sciences:

Edoardo Amaldi, professor of experimental physics, University of Rome.

Feodor Lynen, director, Max-Planck-Institut für Zellchemie, Munich.

Sir William G. Penny, deputy chairman, United Kingdom Atomic Energy Authority, London.

Rutherford N. Robertson, professor of botany, University of Adelaide, South Australia.

Edward J. Dijksterhuis, professor at the University of Utrecht (Holland), has received the \$1500 George Sarton award for "outstanding performance in the history of science."

LeRoy C. Keagle, former president and dean of the New England College of Pharmacy, is dean of the recently established Northeastern University College of Pharmacy. The new college was created by the merger of NECP and Northeastern.

Recent Deaths

Cornelius Betten, 84; emeritus professor of entomology and former dean of the faculty at Cornell University's New York State College of Agriculture; 27 Aug.

John H. Bradley, 63; paleontologist and educational and scientific writer; 18 Aug.

Thomas C. Carter, 83; retired professor and head of the biology department and dean of administration at Northwestern State College; 27 June.

Daniel G. Clark, 61; plant physiologist in the department of botany, Cornell University; 13 Apr.

William W. Coblenz, 88; physicist and founder and retired chief of the radiometry section in the National Bureau of Standards; 13 Sept.

Nelson C. Dale, 82; retired professor of geology at Hamilton College, Clinton, N.Y.; 15 Sept.

A. J. Goldforb, 81; emeritus professor of biology at the City College of the City of New York; 17 Mar.

Clarence O. Grandfield, 69; retired U.S. Department of Agriculture agronomist at Kansas State University; 30 Aug.

Perly M. Lombard, 76; horticulturist with the Department of Agriculture for 38 years; 27 Aug.

Jeannette E. Muther, 51; research staff member at Brookings Institution; 27 Aug.

Judson H. Robertson, 70; professor of chemistry at the University of Tennessee; 23 Aug.

Robert E. Snodgrass, 87; entomologist formerly with the U.S. Department of Agriculture; 3 Sept.

Norman N. Tilley, 70; retired aeronautical engineer with the Bureau of Naval Weapons; 25 Aug.

Gordon L. Walls, 57; professor of physiological optics at the University of California School of Optometry; 22 Aug.