

in this area. Among the planners, however, there is the knowledge that no matter how much wisdom they compress into the civil defense booklet, the uncertainties are such that an honest approach will not produce anything resembling *Life's* conclusions. And if an attempt is made to downgrade the destructiveness of nuclear weapons, the inevitable confrontation of well-founded, conflicting views will undermine public confidence in the entire program.

Further complicating the task of the planners is the fact that it must be conceded at the outset that for a vast number of people—those in an immediate target area—no preparation can be beneficial; while for those outside the target area, survival is predicated on a number of highly optimistic assumptions, including that of no follow-up attacks.

The caution with which the President is approaching the overall subject is illustrated by what he said at his news conference last week. In reply to a question on what could be done to dispel public confusion on civil defense, he stated that "it's very difficult in a large country, with varying problems of geography, with 180 million people, to suddenly organize a civil defense program. . . . I stated in July that we were going to send a book giving the latest information that we had to every household. . . . We are very conscious of the difficulties. We are very conscious of the desire of people to have accurate and precise information."

Whatever accuracy and precision may be achieved by the planners, confusion is, unfortunately, an inevitable by-product of any attempt to prepare the civilian population for the unknowns of nuclear warfare. The confusion is likely to be with us long after the booklet and the policy have been delivered.—D.S.G.

Last year the Supreme Court refused to judge Connecticut's birth-control law on the grounds that the law was not being enforced, and that nobody's rights were being infringed upon. The ruling followed well-established precedents intended to discourage unnecessary litigation. This month the law was invoked, for the first time in this century, against a birth-control clinic in New Haven, and a court ruling on the constitutional question now becomes almost inevitable.—H.M.

## Announcements

**A dental clinic for emotionally disturbed patients**, or for individuals who have fears so severe that they are unable to undergo usual dental treatment, opened this month as an affiliate of the Columbia University School of Dental and Oral Surgery. The staff, in an effort to reduce unfavorable dental associations, will work in street clothes and use amnesic drugs, general anesthetics, and specialized equipment. (Dental Clinic, Grand Central Hospital, 321 E. 42 St., New York 17)

An installation for ground-based scatter radar explorations of **upper atmosphere and outer space** is being constructed by the National Bureau of Standards and the Peruvian Instituto Geofísico de Huancayo. The new Jicamarca Observatory will have a 6-million watt pulse transmitter and a 22-acre antenna, and will be used to measure the intensity of the earth's magnetic field, to observe radar echoes from the sun's corona and from solar gas clouds, to study small-scale irregularities in the outer atmosphere, and to search for radio stars one magnitude weaker than those observed to date. The observatory, located at a site 17 miles east of Lima, Peru, is expected to be operational in December 1961.

Training and career development opportunities in the U.S. Public Health Service's **mental health program** are outlined in *Careers in Psychiatry*, recently published by the National Institutes of Health. The booklet includes descriptions of locations, types, and major phases of the programs; methods of candidate selection; and the pay scale and residencies available. (NIH, Office of Research Information, Bethesda 14, Md.)

**Iodine-125**, a relatively new radioisotope previously available only in research quantities, is currently being produced at Oak Ridge National Laboratory for \$1 per millicurie on a production basis. (ORNL, P.O. Box X, Oak Ridge, Tenn.)

A curriculum guide on establishing **electronics training programs** in secondary schools has been published by the Radio Corporation of America. The volume contains outlines of sample courses, a checklist of considerations in

launching such a program, laboratory equipment requirements, and a description of available training devices. (RCA Audio Products, Meadow Lands, Pa. \$2)

## Grants, Fellowships, and Awards

Applications are being accepted for the 1962 Organization for Economic Cooperation and Development (OECD) **senior visiting fellowships in science and technology** (excluding social science, economics, psychology, pharmacy, and medicine). Candidates, to be nominated by scientific or technical institutions in the United States, its territories, or possessions, must be senior staff scientists, engineers, or mathematicians who (i) are citizens or nationals of the U.S. as of 2 April 1962; (ii) have full professional standing in the field with which the fellowship is to be concerned; and (iii) have at least 5 years of professional research or teaching experience. Recipients will spend from 8 weeks to 6 months studying new techniques and developments at research institutions, primarily in countries that are members of, or cooperating with, the OECD (Austria, Belgium, Canada, Denmark, France, West Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Switzerland, Turkey, the United Kingdom, and Yugoslavia). **Deadline: 5 January 1962.** (Fellowship Office, National Academy of Sciences, Washington 25, D.C.)

Applications are now being accepted for graduate research fellowships, assistantships, and scholarships in **forestry** for 1962-63. Research fellowships carry minimum annual stipends of \$2100; 9-month assistantships, \$1700-\$2000; scholarships, \$300. **Deadline: 1 March 1962.** (Associate Dean for Graduate Studies, New York State University College of Forestry, Syracuse 10)

Applications are now being accepted for the 1962 Lalor Foundation awards given for research on **fertility** and the basic phenomena involved in the fundamental biochemical and physiological mechanisms that are concerned with the early stages of reproduction in various forms of life. The awards, ranging up to \$8000 per year, will be given to members of university and college faculty and staff, with preference to

those who are under 41 years of age.

The foundation will also grant post-doctorate summer or short-term research awards, which will be limited to \$1000 for single applicants (male or female); \$1200 for a married man working at his home institution; and \$1350 for a married man whose principal program is at another institution. Deadline: *15 January 1962*. (Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del.)

Fifty Shell merit fellowships at Stanford University are available for **high school science and mathematics teachers** who wish to obtain advanced study in their teaching fields. The fellowships, awarded on a regional basis, provide full tuition for the 1962 summer session, board and lodging, transportation allowance (not to exceed \$150), and a \$500 cash stipend. Applicants must have a bachelor of science degree and a minimum of 5 years' teaching experience. Deadline: *4 January 1962*. (Paul D. Hurd, Shell Merit Programs, Stanford University, Stanford, California)

The 1962 North Atlantic Treaty Organization fellowships for the **study of science abroad** will again be administered by the National Science Foundation. Applicants, who must have a doctoral degree or equivalent experience, are encouraged to study in a NATO-member country, although consideration will be given to those planning to study elsewhere. Fellows will receive \$5000 for full-year tenures and \$3750 for the academic year, plus limited dependency and round-trip travel allowances. Deadline: *18 December 1961*. (Fellowship Office, National Academy of Sciences, Washington 25, D.C.)

Applications are now being accepted for the 1962 **foreign fellowships for medical students**, available to all students who have satisfactorily completed their junior year of medical education. The program, sponsored by Smith Kline & French Laboratories in Philadelphia, provides clinical experience abroad for an average period of 12 weeks. The amount of the grant is determined according to individual expense and need, varying with different programs and locations. Deadline for receipt of applications (to be obtained from school deans): *31 December 1961*. (Association of American Medical Colleges, 2530 Ridge Ave., Evanston, Ill.)

Applications are being accepted for grants-in-aid of research in **arctic and subarctic North America and Antarctica**. Proposals which include field studies are particularly welcomed. (Arctic Institute of North America, 1530 P St., NW, Washington 5, D.C.)

Applications are being accepted for the 1962-63 research fellowships in **psychometrics** leading to the Ph.D. degree. Fellows will be engaged in training and research with Princeton University's educational testing service on a part-time basis during the academic year and full-time during two of the summer months. Stipends are \$3750 per year plus allowances for dependent children. Deadline for receipt of applications and supporting material: *5 January 1962*. (Psychometric Fellowship Program, Educational Testing Service, Princeton, N.J.)

Applications for the 1962-63 **National Science Foundation graduate and postdoctoral fellowships** are currently being accepted. Fellowships will be awarded in the mathematical, physical, medical, biological, and engineering sciences; and in anthropology, geography, psychology (excluding clinical psychology), sociology (not including social work), economics (excluding business administration), and the history and philosophy of science. Applicants, who must be U.S. citizens, are required to take the graduate record examinations which will be evaluated by appointees of the National Academy of Sciences-National Research Council. A brochure describing the fellowships is available from the National Science Foundation, Washington 25, D.C.

Deadline for receipt of applications: *5 January 1962*. (Fellowship Office, NAS-NRC, 2101 Constitution Ave., NW, Washington 25, D.C.)

The U.S. Public Health Service has published a brochure outlining **research and training grants in environmental health**—air pollution, environmental engineering and food protection, occupational health, radiological health, and water supply and pollution control. (Office of Resource Development, Bureau of State Services, PHS, Washington 25, D.C.)

Fellowships for **advanced training in health physics** for 1962-63, leading to the doctoral degree, are available through the U.S. Atomic Energy Com-

mission. Applicants, preferably under 32 years of age, must have a minimum of 2 years' experience in health physics (exclusive of training), and should be currently working in the field. A stipend of \$4000 will be awarded for the first year, and may be renewed for up to 3 years. Deadline: *1 February 1962*. (Fellowship Office, Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tenn.)

The National Science Foundation is offering fellowships for **secondary school teachers of science and mathematics**. The fellowships, established to support summer study in the mathematical, physical, and biological sciences at institutions chosen by the fellows, will begin in 1962 and continue for a maximum of 3 successive summers. Applicants must hold a bachelor's degree or its equivalent, and have at least 3 years of secondary-school teaching experience. Stipends of \$75 will be provided for each week of tenure, plus travel, tuition, and dependency allowances. Deadline: *5 January 1962*. Recipients, to be chosen by AAAS-appointed panelists, will be notified by 15 March. (Secondary School Fellowships, AAAS, 1515 Massachusetts Ave., NW, Washington 5, D.C.)

## Courses

An international field institute for U.S. college and university **geology teachers** will be conducted in the Swiss Alps during the summer of 1962. The 8-week program, sponsored by the American Geological Institute under a National Science Foundation grant, will provide an opportunity for geological study of the Alps and adjacent field areas of France, Italy, and Austria, under the leadership of Swiss scientists. Participants will receive travel and subsistence allowances. Deadline: *1 February 1962*. (D. L. Blackstone, Jr., AGI-IFI-Alps 1962, c/o Dept. of Geology, University of Wyoming, Laramie)

The 3rd international course on **freeze-drying** will be presented from 17 to 28 July 1962 in Lyon, France. Lectures covering basic theory, research, and industrial applications will be delivered in both French and English by authorities from France, England, Germany, and the United States. (H. T. Meryman, Naval Medical Research Institute, Bethesda 14, Md.)

## New Journals

*Acta Neuropathologica*, vol. 1, No. 1, June 1961. F. Seitelberger, Managing Ed., World Federation of Neurology. Springer, Heidelberger Platz 3, West Berlin, Germany. Irregular. Maximum price per volume, DM 180.

*Bulletin on Bibliography, Documentation and Terminology*, vol. 1, No. 2, May 1961. Department of Natural Sciences, UNESCO, Place de Fontenoy, Paris 7<sup>e</sup>, France. Free of charge.

*Cahiers du Pacifique*, No. 3, June 1961. Museum National d'Histoire Naturelle, 57, rue Cuvier, Paris 5<sup>e</sup>, France.

*Journal of Psychiatric Research*, vol. 1, No. 1, July 1961. S. S. Kety, Ed. Pergamon Press, Headington Hill Hall, Oxford, England. \$20 per year.

*Journal of the National Research Council of Thailand*, vol. 1, No. 1, 1960. B. Kalakicha, Ed. Office of the National Research Council, Phya Thai, Rama VI Road, Bangkok, Thailand. Quarterly. \$5 per annum.

*National Institute of Animal Health Quarterly*, vol. 1, No. 1, Spring 1961. S. Ishii, director. Extension and Information Service, National Institute of Animal Health, Kodaira-machi, Kitatama-gun, Tokyo, Japan.

*Problems of Psychology* (translation journal), vol. 1, No. 1, June 1961. N. O'Connor, Ed., Pergamon Press, Headington Hill Hall, Oxford, England. Quarterly. \$12 per issue; \$40 per year.

*Quarterly Journal of Crude Drug Research*, vol. 1, No. 1, 1961. E. F. Steinmetz, Ed. E. F. Steinmetz, 347 Keizersgracht, Amsterdam (Netherlands). \$6.90 per annum.

## Scientists in the News

**Frederick N. Andrews**, professor of animal physiology and head of the dairy department, has been named head of the recently formed department of animal sciences at Purdue, effective in January 1962. The new department combines the present separate departments of animal, dairy, and poultry science. **J. Holmes Martin**, head of poultry science at the university, will become assistant head and coordinator of genetic investigations in the department.

**Robert F. Tebbe**, of Gordon College in West Pakistan, is a visiting professor of chemistry for 1961-62 at Western Reserve University.

**R. Karl Honaman**, engineer and retired director of publications for Bell Telephone Laboratories, has been elected chairman of the board and chief executive officer of Floating Floors, Inc., in New York, producers of environmental facilities for data processing systems.

**Carl E. Ludwig**, professor of life science and chairman of the department at Sacramento (California) State College, is serving as guest research professor at the West German Zoologisches Institut der Universität Würzburg, during his 1961-62 sabbatical leave. **R. Darby**, assistant professor of life science, is acting chairman of the department.

**Harvey A. Neville**, chief administrative officer and former director of the institute of research at Lehigh University, has been appointed the ninth president of the university.

**Morris E. Rose**, former chief physicist at Oak Ridge National Laboratory, has joined the University of Virginia faculty as professor of physics.

**Max Bender**, senior research chemist with the American Cyanamid Company, has been appointed assistant professor of chemistry at Fairleigh Dickinson University.

Recently appointed associate professors in the University of Maryland's department of physics:

**Rolfe E. Glover, III**, of the University of North Carolina.

**Gianni Quarenzi**, of the University of Bologna.

**Margaret Waggoner**, of Stanford University.

**Gaurang Yodh**, of Carnegie Institute of Technology.

**John T. Cowles**, former professor of psychology and director of educational planning and health professions at the University of Pittsburgh, has been elected president of the Maurice Falk Medical Fund in Pittsburgh, Pa.

**Raymond C. Grills**, chemist, has been appointed to the newly created position of manager of new ventures in the Du Pont Company's film department. He was previously vice president and general manager of Ducilo S.A.I.C., the company's Argentine subsidiary.

**Bert R. Boone**, retired public health officer with the U.S. Public Health Service, has become assistant dean for research at Temple University Medical School.

**Virgil Heniser**, former science department head at the Thomas Carr Howe High School in Indianapolis, has been appointed a coordinator for school science at Indiana University.

## Recent Deaths

**Thomas H. Bartilson**, 62; assistant director of the U.S. Department of Agriculture's animal husbandry research division at Beltsville, Md.; 9 Oct.

**Edward L. Corey**, 59; professor of physiology at the University of Virginia School of Medicine; 28 Apr.

**Glen H. Hoppin**, 81; engineer formerly with the U.S. Naval Ordnance Laboratory; 31 Oct.

**Paul J. Kiefer, Sr.**, 74; retired professor of engineering and thermodynamics at the Naval Academy's postgraduate school; 4 Sept.

**Roscoe E. Lewis**, 57; former chemistry teacher and chairman of the social science department at Hampton (Va.) Institute from 1945 to 1953; 14 Sept.

**Walter L. Lowry**, 54; recently appointed dean of the school of engineering at Clemson College; 14 Sept.

**Jeanette B. Obenchain**, 85; former research associate professor of neurology at the University of Chicago and assistant professor of neurology at Western Reserve University; 29 Sept.

**Vaux Owen, Jr.**, 34; geologist with the U.S. Geological Survey; 28 Oct.

**Ernest Schwarz**, 71; mammalogist and former lecturer in epidemiology at U.S. Naval Medical School in Bethesda, Md.; 23 Sept.

**Edward H. Smith**, 72; former director of the Woods Hole Oceanographic Institution (Mass.); 29 Oct.

*Erratum:* The annual index to products advertised in *Science* [134, 1253 (20 Oct. 1961)] contains an error in the listings for counters on page 1266. The counters now listed under "Counters, Whole Body," which were advertised at various times during 1961 by Packard Instrument Co., Inc., and Nuclear Chicago Corp., should, with one exception, have appeared under "Counters, Liquid Scintillation, Automatic." The exception is that the last entry for Packard Instrument Co. (15 Sept., 702) should remain under "Counters, Whole Body."

*Erratum:* In the announcement on the National Rehabilitation Research-Training Center [*Science* 134, 1351 (27 Oct. 1961)], the U.S. Public Health Service was erroneously credited with establishing the center. The center was established by the U.S. Department of Health, Education, and Welfare's Office of Vocational Rehabilitation.