There is promise of additional finds, since only a portion of the cave deposits has been examined.

The early Neolithic village site investigated by the expedition fits in the stratigraphic record of the long sequence in Shanidar Cave. The stone foundation remains that were uncovered indicate some kind of rude architecture. The site is one of the oldest thus far known in Mesopotamia, predating the village site of Jarmo, excavated in southern Kurdistan by the University of Chicago expeditions several years ago. It appears to equate with Karim Shahir, one of the early village sites identified in Iraq.

The Iraq expedition was supported by grants from the Smithsonian Institution, the American Philosophical Society, the National Science Foundation, the Wenner-Gren Foundation for Anthropological Research, and the William Bayard Cutting Traveling Fellowship of Columbia University. Two oil companies in the Near East, the Iraq Petroleum Company and the Arabian American Oil Company, cooperated in the expedition's work. As in the past two seasons, the Iraq Directorate of Antiquities gave its cooperation.

Deep-Sea Organisms

Live specimens of a sand flea and a sea worm were recently brought up from ocean depths of 13,200 and 16,200 feet, respectively, by a research group aboard the *Vema*, a vessel operated by Columbia University's Lamont Geological Observatory. Robert Menzies, director of biology and research associate in geology at Lamont, was chief scientist of the expedition.

Usually organisms brought to the surface from great depths are dead. The sand flea, really a shellfish that resembles a ⅛-inch lobster, survived a temperature change of from 34°F to 61°F without any apparent ill-effects. It was taken in the Congo Submarine Canyon off the coast of West Africa at latitude 5°S., longitude 8°E. The worm was taken in the Cape Basin off South Africa at latitude 28°S., longitude 8°E., and underwent the same temperature changes as the sand flea.

AEC Program to Aid Nuclear Technology in the Life Sciences

The Atomic Energy Commission has established another program to stimulate education and training in the application of nuclear technology to the life sciences. The commission has announced that it will make grants for the acquisition of specialized radiation equipment and teaching aids by accredited schools of agriculture, veterinary medicine, medicine and pharmacy, and public health, and by departments of biophysics and biology in colleges and universities.

Assistance will be provided for the purchase of radioisotopes and specialized equipment—including radiation detection, monitoring, and counting instruments—equipment for laboratory instruction in the analytical chemistry of radioactive materials of direct application in the life sciences, and equipment for laboratory instruction in health physics. Grants may not exceed $250,000 for any single institution. Further information about the new program may be obtained from the Director, Division of Biology and Medicine, U.S. Atomic Energy Commission, Washington 25, D.C.

Report on Research

The implications of basic research for the Nation's economy and defense are still not properly appreciated in this country, according to a report on *Basic Research–A National Resource* by Alan T. Waterman, director of the National Science Foundation. Waterman compares the financial support given applied research and development with that afforded basic research; he finds economic incentives sufficient to insure the future of the former, but not of the latter. He also emphasizes that basic research needs increased support from private industry, state government, foundations, and the general public; however, when other sources are not available, the Federal Government must assume responsibility for support. The report, which is written in nontechnical language, is on sale for 45 cents a copy at the Government Printing Office, Washington 25, D.C.

Rheumatic Fever Institute Merges with Worcester Foundation

The Rheumatic Fever Research Institute, Chicago, Ill., merged with the Worcester Foundation for Experimental Biology, Shrewsbury, Mass., on 1 October. The institute has turned over its personnel, research projects, assets, grants, and name to the Worcester Foundation and will move to Massachusetts in the fall of 1958, when a new laboratory is expected to be completed. Scientists making the changeover will include Eugene L. Hess, known for his studies of proteins of the lymphatic system, and Yutaka Kobayashi, an entomologist.

The Chicago Institute was incorporated in 1947 under the directorship of A. F. Coburn as an independent, nonprofit medical research institute affiliated with the Northwestern University Medical School. It employed about 25 people, including those working on basic research and physicians studying clinical aspects of rheumatic fever. Under the merger the clinical work has been discontinued, and basic biochemical studies have been emphasized.

Until the new laboratory is completed, adding approximately 25,000 square feet to the Worcester Foundation, a branch of the foundation will be maintained on the top floor of the Municipal Contagious Disease Hospital in Chicago.

NSF Fellowships

The National Science Foundation has announced that applications are now being accepted in four of its fellowship programs for advanced study and research in the natural sciences: a predoctoral fellowship program for which college seniors and graduate science students may apply; a postdoctoral fellowship program; a senior postdoctoral fellowship program for candidates who have held the science doctorate for a minimum of 5 years; and a science faculty fellowship program for college teachers of science who wish to improve their competence as teachers.

Approximately 1000 awards will be made to American citizens in March 1958. Under the broadened program, fellowships will be awarded in the mathematical, physical, medical, biological, engineering, and other sciences, including anthropology, psychology (other than clinical), geography, certain interdisciplinary fields, and areas of convergence between the natural and social sciences.

Stipends vary with the academic status of the fellow. First-year fellows, students entering graduate school for the first time or those who have had less than 1 year of graduate study, will receive annual stipends of $1600. Fellows who need one final academic year of training for the doctor's degree will receive annual stipends of $2000. Fellows between these groups will receive stipends at the rate of $1800 annually. The stipends for regular postdoctoral fellows will be $3800 per year. Dependency allowances will be made to all married fellows. Tuition and laboratory fees and limited travel allowances will also be provided.

Senior postdoctoral fellows and science faculty fellows are awarded stipends adjusted to match as closely as feasible the regular salaries of the award recipients up to a maximum of $10,000 per year. A travel allowance is also usually made available.

National Science Foundation fellows may attend any accredited nonprofit institution of higher education in the United States or a similar institution abroad. Applications for the 1958–59 National Science Foundation graduate and regular postdoctoral fellowship pro-

gram may be obtained from the Fellowship Office, National Academy of Sciences–National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C. The closing dates for receipt of applications are *23 December 1957* for postdoctoral applicants, and *3 January 1958* for graduate students working towards advanced degrees in science.

Applications for the senior postdoctoral and the science faculty fellowships may be obtained from the Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Completed material must be received not later than *13 January 1958*.

Teaching Films

A sound-track teaching film, "Respiratory Gases and the Determination of the Respiratory Quotient," may be purchased or rented from the Bureau of Audio-Visual Instruction, State University of Iowa. The reel, which was produced by the department of physiology, provides demonstrations of several instruments, including the Haldane gas analyzer, and shows a sample calculation that might be required of students. Two additional teaching films are being planned.

Protein Molecule That Contains Cadmium

A protein of low molecular weight that contains 2.2 percent cadmium has been isolated from the cortex of the horse kidney by Marvin Margoshes and Bert L. Vellee of the department of medicine at Harvard Medical School. The exact physiological function of the cadmium has not yet been determined. However, isolation of the cadmium-containing protein bears out an earlier hypothesis that cadmium, like zinc, could be part of protein molecules that occur naturally. The work was reported in a recent issue of the *Journal of the American Chemical Society*.

New Biology Quarterly

A new quarterly journal, *Perspectives in Biology and Medicine,* has been announced by the Division of Biological Sciences at the University of Chicago. The journal, which is dedicated to a multidisciplined approach to the problems of biology and medicine, will present new hypotheses and concepts as well as interpretive essays dealing with recent and current research.

Dwight J. Ingle and S. O. Waife are the editors for the publication. They will be assisted by an 11-member editorial board and by a 12-man advisory board that includes Sir Henry Dale of London, B. A. Houssay of Buenos Aires, and U. S. von Euler of Stockholm. Subscriptions for the journal ($6) are now being accepted by the University of Chicago Press, 5750 Ellis Ave., Chicago, Ill.

Graduate Education

The Carnegie Corporation of New York has announced that it will sponsor a 2-year, $100,000 study of graduate education in the United States. The project will be conducted by Bernard Berelson, who returned to the University of Chicago on 1 October as professor of the behavioral sciences. Since 1951, Berelson has been director of the Ford Foundation's behavioral sciences program.

The survey will be concerned with the objectives, standards, and functions of the graduate school in the American system of higher education. Berelson will make a broad review of the history of graduate education and its institutions in order to locate and interpret major trends and active issues.

Among the specific topics he will examine are the recruitment of students and placement of graduates; relations between graduate education and professional education, and between graduate education and undergraduate programs; the development of postdoctoral programs; and problems of financial support. The final report will discuss the important issues and problems facing graduate education, current policies and alternatives, and make recommendations about the formation of graduate school policies in the coming decades.

News Briefs

A 36-circuit submarine telephone cable system, probably the world's longest and deepest, has recently been completed. The two cables in the system cross the Pacific between Point Arena, Calif., and Hanauma Bay near Honolulu, Hawaii. The lines were laid by the American Telephone and Telegraph and the Hawaiian Telephone Company at a cost of $37 million. American and Canadian operators can now dial any number on the island of Oahu, and conversely, Honolulu operators can dial 6900 American and Canadian towns.

* * *

A new twin-tailed comet has been discovered. It was first sighted by Howard S. Gates of the Mount Palomar Observatory.

* * *

New York University plans a $1,750,000 expansion of its College of Dentistry. A ten-story building has been purchased that will complete the development of a Dental Center. The new quarters will at least double the area for teaching the clinical sciences in dentistry.

* * *

A survey of New York City's high school seniors was conducted recently in an effort to determine the percentage of students who were considering science as a career. The survey was carried out by Samuel Schenberg, Science Supervisor of the New York City Board of Education, and is reported in the 30 September issue of *Chemical and Engineering News*.

* * *

Fifteen scientists from five continents recently participated in a 5-day conference in Washington, D.C., to study the classification of atherosclerotic lesions. The meeting, which was called by the World Health Organization, was conducted by the Pan American Sanitary Bureau with collaboration of the National Heart Institute.

* * *

An educational TV series entitled *International Geophysical Year* has been arranged by National Broadcasting Company and the Educational Television and Radio Center. The 10-week program begins on 28 October. Six well-known scientists are participating: Joseph Kaplan, Roger R. Revelle, Laurence M. Gould, the Rev. J. Joseph Lynch, Lloyd V. Berkner, and Walter O. Roberts.

* * *

Exercises in commemoration of John Clayton, a botanist of the American colonial period, were held on 11 October in Williamsburg, Va., under the sponsorship of the College of William and Mary and the Garden Club of Virginia.

* * *

A safe, portable container for radioisotopes used to x-ray ship structures has been developed at the U.S. Naval Ordnance Laboratory. In addition to its primary purpose, the exposure fixture, which was built by John C. Friedrichs of the X-Ray Laboratory, also provides a means of temporary storage.

Soviet Scientific Literature

An article on the "Publication of Scientific Literature in USSR During 1957" appeared in a recent issue of *Current Science,* a journal that is published in India for the Current Science Association, Bangalore. The article said:

"The USSR Academy of Sciences will put out close to 1,500 titles and issue Journals [containing a total of] . . . 32,000 signatures in 1957. The range of subjects will cover all spheres of the humanitarian, natural and technical sciences.

"In the scientific and technical part of the programme of publications envisaged by the Academy, mention may be made