

joint 10-year research and development project. During the first 5 years the Community and the United States will each contribute up to \$50 million to this program. Before the expiration of the first 5 years the participants will determine the financial requirements for the remaining 5 years and will undertake to procure the necessary funds for the program.

The nations which make up the Community are Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, and the Netherlands. The six member countries have a total population of 160 million.

The agreement for cooperation is the product of close and continued negotiations between the United States and Euratom, beginning shortly after the establishment of Euratom on 1 January 1958. The first major step, outlining the scope of the proposed joint undertaking, was accomplished through the signing of a Memorandum of Understanding by representatives of Euratom and the United States in June 1958.

In conformance with U.S. Law, the United States and Euratom then entered into a general international agreement designed to permit cooperation between the United States and Euratom. *Science* 128, 75 (11 July 1958). This preliminary international agreement and the legislative basis for initial U.S. participation in the joint program as contained in the Euratom Cooperation Act of 1958 were approved by Congress in August 1958.

Tuberculosis Infection

The American Trudeau Society reports that there is no drop in the tuberculosis infection rate among young school children, despite a decided drop in death rate in the 10-year period 1947-57. A study, made in Kansas City, Mo., also revealed that in examining grown people in contact with kindergarten children reacting to the tuberculin skin test, active tuberculosis was found at a rate 12 times as high as is found in x-ray surveys of the general population, and that there is a relationship between the size of the reaction and the presence of active tuberculosis among the adult contacts. During the test period, 35,995 kindergarten children were given the tuberculin test, which reveals tuberculosis infection but not necessarily active disease, and the histoplasmin test for histoplasmosis, a fungus disease endemic in the area. Non-reactors, during a seven-year period, were retested in the first grade.

The study was sponsored by the Heart of America Tuberculosis Association and the U.S. Public Health Service. The results were reported in the November issue of *The American Review of Tuberculosis*

and Pulmonary Diseases, in a paper by Lawrence E. Wood of the University of Kansas School of Medicine, Michael L. Furcolow, chief, Kansas City Field Station, PHS Communicable Disease Center, and Myron J. Willis of the Communicable Disease Center, Atlanta, Ga.

Control of Outer Space

A draft resolution on the control of outer space was submitted to the United Nations General Assembly on 13 November by 20 countries, including the United States. Henry Cabot Lodge of the United States introduced the resolution. When discussing it, he commented:

"We can use this new dimension to destroy ourselves through the extension of national rivalries into outer space, or we can use this new development as a vehicle for international collaboration and harmony." Lodge observed that the resolution did not deal with missiles, then added: "Candor compels us to admit that agreement on the disarmament aspects of outer space lies in the future. We cannot await a comprehensive disarmament agreement."

The text of the resolution follows:

"The General Assembly,

"Recognizing the common interest of mankind in outer space and that it is the common aim that it should be used for peaceful purposes only,

"Bearing in mind the provision of Article 2, Paragraph 1, of the Charter, which states that 'the organization is based on the principle of the sovereign equality of all its members,'

"Wishing to avoid the extension of present national rivalries into this new field,

"Desiring to promote energetically the fullest exploration and exploitation of outer space for the benefit of mankind,

"Conscious that recent developments in respect of outer space have added a new dimension to man's existence and opened new possibilities for the increase of his knowledge and the improvement of his life,

"Noting the success of the scientific cooperative program of the International Geophysical Year in the exploration of outer space and the decision to continue and expand this type of cooperation,

"Believing that the development of programs of international and scientific cooperation in the peaceful uses of outer space should be vigorously pursued,

"Believing that progress in this field will materially help to achieve the aim that outer space should be used for peaceful purposes only,

"Desiring to obtain the fullest information on the many problems relating to

the peaceful uses of outer space before recommending specific programs of international cooperation in this field,

"1. Establishes an ad hoc committee on the peaceful uses of outer space consisting of the representatives of . . . and requests it to report to the Fourteenth General Assembly on the following:

"(a) The activities and resources of the United Nations, its specialized agencies, and of other international bodies relating to the peaceful uses of outer space;

"(b) The area of international cooperation and programs in the peaceful uses of outer space which could appropriately be undertaken under United Nations auspices to the benefit of states irrespective of the state of their economic or scientific development;

"(c) The future United Nations organizational arrangements to facilitate international cooperation in this field;

"(d) The nature of legal problems which may arise in the carrying out of programs to explore outer space;

"2. Requests of the Secretary-General to render appropriate assistance to the above-named committee and to recommend any other steps that might be taken within the existing United Nations framework to encourage the fullest international cooperation for the peaceful uses of outer space."

News Briefs

On 18 November the new Laboratory of Microbiology of the Technological University at Delft, Netherlands, was officially opened. During the dedication ceremony, a bust of the former director, the late professor A. J. Kluyver, was unveiled and presented to the university on behalf of former pupils and personnel of the laboratory.

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The United Nations has announced that the prepublication period for the Proceedings of the Second U.N. International Conference on the Peaceful Uses of Atomic Energy, during which complete sets may be ordered at a special price, has been extended to 31 January 1959. The action was taken to facilitate the budgetary arrangements of institutions unable to purchase the complete set of volumes from their 1958 budgets.

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A new technique for calibrating airborne compasses by "rotating the world" around a stationary aircraft or guided missile has been announced by the Air Research and Development Command and the Sperry Gyroscope Company, Great Neck, N.Y. Developed by Sperry in cooperation with ARDC's Wright Air

Development Center, Ohio, the equipment rotates the earth's magnetic field electronically around the aircraft or missile. This eliminates the time-consuming checks by several men that have been necessary heretofore.

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A small exploratory mission of the International Atomic Energy Agency in Vienna has gone to Cairo to consult with the government of the United Arab Republic on the possible production of uranium phosphate ores and on the production of heavy water. The experts of the mission are B. V. Nevsky of the U.S.S.R. and Victor Thayer of the United States.

Grants, Fellowships, and Awards

General. The National Science Foundation has announced a new program of cooperative graduate fellowships under which approximately 1000 fellowships will be provided for graduate students in the sciences and engineering. Fellows will be selected solely on the basis of ability. This program is in addition to the foundation's regular predoctoral, postdoctoral, senior postdoctoral, and science faculty fellowship programs.

In the first experimental year of operation, applicants may apply to study at one of 115 designated colleges and universities—those which have awarded an average of at least one doctoral degree annually over the last 4 years of record in the disciplines covered. Applicants will apply through the institution of their choice and initially will be evaluated by the faculty. Applications will be forwarded, together with the institution's recommendations, to the NSF.

Tenures of from 9 to 12 months are optional with the fellow. Fellows will receive a basic annual stipend of \$2200 from NSF funds. Modest supplemental support may be extended by the institutions themselves to encourage responsibilities. In addition, the foundation will provide to each institution, in lieu of tuition and fees, a fixed amount for each cooperative graduate fellow enrolled at the institution.

Application materials can be obtained from the graduate dean of a participating institution or from the Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Applications must be submitted to the graduate dean of the participating institution of the applicant's choice by 15 December.

Natural sciences. The Weizmann Institute of Science, Rehovoth, Israel, has announced two Chaim Weizmann Me-

morial Fellowships for 1959-60. These annual fellowships in the natural sciences are tenable for a period of 12 months. They are intended for scientists with several years of postdoctoral research experience. It is expected that the candidate will have worked in a field close enough to one of the subjects under investigation at the Weizmann Institute to be able to join an existing research team.

The stipend includes round-trip fare by air for the scientist and his family and an adequate living allowance in Israel in local currency. The institute endeavors to help find suitable accommodations. Applications should reach the Academic Secretary, Weizmann Institute of Science, Rehovoth, Israel, *not later than 31 December*. Further particulars and application forms may be obtained from the academic secretary.

Science teaching. The National Science Foundation has announced a new program of summer fellowships for graduate teaching assistants. Designed to enable graduate teaching assistants to devote their full summer to study and research, the fellowships, approximately 550 in number, will be offered for study in the sciences and in engineering.

In the first experimental year of operation, 115 colleges and universities which have awarded an average of at least one doctoral degree annually for the last 4 years of record in the disciplines covered will participate in the program. Applicants, who must be citizens of the United States now serving as teaching assistants in these colleges and universities, will apply through their own institutions and will be screened and evaluated initially by their faculties. They will be judged solely on the basis of ability. The applications will be forwarded, together with the institution's recommendations, to the National Science Foundation.

Summer tenures from 8 to 12 weeks may be selected by the fellow. The weekly stipend will range from a minimum \$50 up to a maximum of \$75 per week, the exact amount to be determined by the fellow's institution according to local conditions. Payment of stipends will be made by the participating institutions from funds provided them for that purpose by the foundation. In addition, the foundation will pay to each institution the tuition and fees of its fellows.

Application materials may be obtained from the graduate dean of a participating institution or from the Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Teaching assistants in participating institutions must submit their applications to their graduate deans by 15 December.

Scientists in the News

ALBERT H. COONS, visiting professor of bacteriology and immunology at the Harvard Medical School and career investigator of the American Heart Association, received the eighth annual Kimble Methodology Research Award at the recent Conference of State and Provincial Public Health Laboratory Directors in St. Louis. He was honored for his development of a method for the prompt diagnosis of such infectious virus diseases as influenza, measles, mumps, and chicken pox.

Coons' method uses a fluorescent dye and ultraviolet light to identify infectious disease viruses. The key to the work which Coons and his associates began in 1941 is the fact that antibodies formed in the body to combat disease are specific; for example, an antibody against influenza will react only with an influenza virus. Such antibodies may be tagged with a fluorescent dye so that they will glow under ultraviolet light.

To find a cell infected with a virus such as influenza, serum containing tagged influenza antibodies is put on a slice of tissue. The antibodies will adhere only to the influenza virus. Under a microscope, the specific virus may then be detected and accurately located within the cell.

LAURENCE H. SNYDER, president of the AAAS and of the University of Hawaii, has been invited to serve as president of the next Pacific Science Congress, which is scheduled to be held in Hawaii during the last week of August and the first week of September 1961. The National Academy of Sciences-National Research Council and the Bernice P. Bishop Museum, Honolulu, the representative institutions sponsoring the tenth congress of the Pacific Science Association, issued the invitation to Snyder.

B. Q. WARD, bacteriologist and associate professor of biology at Mississippi Southern College, has been designated director of the Mississippi Institute of Microbiology that has recently been established as a unit of the college's department of biology. The institute is the only organization of its kind in the state. It is essentially a research establishment and is empowered to accept and administer grants.

The staff of the institute also has responsibility for preparing an annual report that is to include recommendations for teaching and course work within the academic department. However, appointment to the faculty of biology at Mississippi Southern does not confer institute membership, nor need a research