Two American biochemists will share the 1959 Nobel Prize in physiology and medicine for their separate investigations of nucleic acids: (left) Severo Ochoa, chairman of the department of biochemistry at New York University, and (right) Arthur Kornberg, head of the department of biochemistry at Stanford University.

of Madrid in 1929. He did graduate work in Glasgow, Berlin, Heidelberg, and London. He began his career as an educator at the University of Madrid in 1931. Later he moved to Heidelberg, Plymouth, and Oxford, obtaining his first appointment in the United States in 1941, when he became an instructor and research associate in pharmacology at Washington University, St. Louis. In 1942 he accepted a post as research associate in medicine at New York University, where he has remained ever since. He was named chairman of the department of biochemistry in 1954.

Kornberg was born in Brooklyn in 1918. He received a B.S. degree from the College of the City of New York in 1937 and an M.D. degree from the University of Rochester in 1941. For approximately 10 years he was with the U.S. Public Health Service, where he advanced through grades to become a medical director. During this period he served on the staff of the National Institutes of Health in Bethesda, Md. There he spent 3 years in the nutrition section, then became chief of the section on enzymes and metabolism. In 1952 he was named professor and head of the department of microbiology at Washington University, where he remained until last July, when he accepted his present post at Stanford as professor and executive head of the department of biochemistry.

The Karolinska Institutet in Stockholm makes the annual selection for the Nobel awards in physiology and medicine. The physics and chemistry prizes will be announced by the Swedish Royal Academy of Science about 26 October. The three scientific awards will be presented in Stockholm on 10 December, Alfred Nobel's birthday.

U.S., Soviet Student Exchange Program Up for Study

The future of the student exchange program between the United States and the Soviet Union, now beginning its second year, will probably be determined during talks in November between U.S. and Soviet officials. The program is conducted under the Lacy-Zaroubin pact, signed last year, which was also the basis for the recently announced exchange of scientists between the two countries' academies of science.

Experience last year, when 21 American graduate students studied in the U.S.S.R. and 17 Russians studied here, indicates that several problems must be overcome before the future of the program, which is now regarded as experimental, is assured.

The major problem, from the American point of view, is the limited access that U.S. scholars are given to laboratories, archives, and other facilities in the Soviet Union. This handicap, which many students reported after last year's experiment, caused such difficulties that the Inter-University Committee on Travel Grants, the coordinating body for students from American Universities, remonstrated with the Soviet Deputy Minister of Higher Education in a letter sent last month. The letter, sent by David C. Munford, head of the committee, implied that the exchange experiment might be terminated if major improvements were not forthcoming during the current academic year. Although no reply has yet been received from the Soviet minister, M. A. Prokoviev, the American officials are confident that full consideration will be given to problems arising from the exchange. There is often a reluctance on the part of Soviet officials to deal with such problems in correspondence. The approach which has proved most valuable is informal discussions between principals. Such discussions are planned for November. It is expected that either Munford will travel to the Soviet Union, or that a small Soviet delegation will visit the committee's headquarters at Columbia University.

Free Access Given Here

In his letter, Munford stressed the fact that Russian students visiting this country under the plan are given the most free access possible. In addition, American universities go to great lengths to assure the best conditions for the foreign students, including the opening of areas closed to most Russian visitors. On the other hand, according to the reports of American students, the conditions in the U.S.S.R. are quite restrictive. Limited or de-

layed access to archives and libraries hampered work. Travel restrictions were maintained, and difficulties were encountered in establishing free and open social relations with Russian students.

The second year of the program, which is now beginning, calls for the exchange of 32 Soviet graduate students for 27 Americans. The Americans represent 14 universities around the country. Many of the Russian students, following the pattern set last year, will work in science and technology. This year, for the first time, some of the American students will also work in these fields.

Argonne International School To Become International Institute

The International School of Nuclear Science and Engineering at the U.S. Atomic Energy Commission's Argonne National Laboratory, Lemont, Ill., will expand its activities and broaden its program to help meet new scientific needs of nations throughout the world. The change will become effective in February 1960, after completion of the school's ninth session in December. The school will then be known as the International Institute of Nuclear Science and Engineering.

The institute will give greater emphasis to advanced training and will offer less background instruction, inasmuch as this type of training now is becoming available in colleges and universities. Personnel enrolled in the institute will represent the United States and many foreign countries. Instruction in the institute, like that of the school, will be on an unclassified basis.

Appointment to the Institute

Rollin G. Taecker, director of the international school, who will be director of the institute, emphasized that the new curriculum will be entirely on a postgraduate level, requiring for entry the equivalent of a master's degree from a United States university. As is the case with the present international school, all those taking part in the new program must be sponsored by industry, government, or the atomic energy agency in their home country. Scientists and engineers appointed to the institute will follow two types of program objectives. The first, the "participant" appointment, will require the equivalent of a United States university's master's degree and a background in fundamental nuclear studies. Participants may be selected for one or two 16-week terms. Instruction will emphasize the applied aspects of nuclear science. Tuition for participant appointees will be $1000 per term.

The second, or "affiliate," appointment level will require the equivalent of a United States institution's doctor of philosophy degree. Affiliates will be accepted for no less than two terms. Preferably, their stay at Argonne will be a full calendar year. Their abilities must be such as to enable them to contribute significantly to the over-all Argonne scientific research program.

At the beginning, appointments to the institute will be made in five program areas. These are: reactor science and technology, engineering research and development, physical science research, life science research, and the engineering, administration, and operation of nuclear facilities. When the new International Institute first opens in February, programs in all but the fifth area of instruction will be offered. The engineering, administration, and operation course sequence will start with the institute's second term, which begins in June.

During the last seven of the nine sessions of the school at Argonne, the U.S. Atomic Energy Commission has drawn on the facilities of North Carolina State College and Pennsylvania State University to provide initial training for students enrolled in its international program. Since several other universities throughout the world now have comparable nuclear training courses and equipment, this phase will cease with the beginning of the institute.

Through its first eight sessions, the International School of Nuclear Science and Engineering at Argonne has trained 478 scientists and engineers, 102 from the United States and 376 from 43 foreign countries. Forty-four scientists and engineers are attending the current session of the school.

Conquest Programs Resumed

Conquest, a CBS television series that is prepared in cooperation with the AAAS, will resume broadcasting of weekly half-hour Sunday programs, 5 to 5:30 P.M. EST, beginning 1 November. News correspondent Charles Collingwood is host-narrator of the telecasts, which will explore new developments in various fields of science. The subjects to be covered in the 20 shows scheduled include tuberculosis, embryology, oceanography, fallout, streptococcus, evolution, and solar research.

The opening program deals with the nature of mother love as determined by experiments on baby rhesus monkeys. The work will be demonstrated by Harry Harlow, University of Wisconsin psychologist, who is conducting the research. *Conquest* is sponsored by the Monsanto Chemical Company.

International Committee To Study Technical Literature Problems

A committee representing 10 countries was named at the closing session of the International Conference for Standards on a Common Language for Machine Searching and Translation to continue the work of the conference. Co-sponsors of the meeting, which met in Cleveland, Ohio, 6-12 September, were Western Reserve University and the Rand Development Corporation. The new group will conduct studies under the four main headings of research, nomenclature, exchange of materials, and information and exchange of personnel.

Brian Vickery of Imperial Chemical Industries of Great Britain was elected president of the committee. Allen Kent, associate director of Western Reserve's Center for Documentation and Communication Research, was elected general secretary. Vice-Presidents are J. Dekker of the Netherlands, S. R. Ranganathan of India, Rudolph Bolting of Brazil, and a representative, yet to be named, of the U.S.S.R. Sponsorship will be sought by the committee from existing agencies, such as the International Standards Organization and the United Nations.

The conference in Cleveland was an experimental effort to combat the problems associated with the growing mass of technical literature. More than 200 persons from 10 countries—Brazil, France, India, Italy, Japan, the Netherlands, the United Kingdom, the United States, the U.S.S.R., and West Germany—heard 55 formal papers reviewing work in progress in machine literature searching, machine translation, and language studies for machine searching, correlation, and translation.

The featured speaker of the week was Senator Hubert H. Humphrey (D-Minn.) who, in discussing "Knowledge