

NAS and Hungarian Scientists

The material that follows was abstracted from an article in the May-June *News Report* of the National Academy of Sciences-National Research Council on "The Academy's role in the Hungarian scientists' fight for freedom," by Wallace W. Atwood, Jr., and M. H. Trytten [*Science* 125, 187 (1 Feb. 1957); 125, 541 (22 Mar. 1957)].

"The Academy in mid-December offered to initiate a program of professional evaluation and placement of scientifically qualified persons among the refugees arriving in the United States. This offer was promptly accepted by the President's Committee for Hungarian Refugee Relief, appointed on December 12 by President Eisenhower. Seven days later the Academy set up an office at Camp Kilmer, the official refugee reception center. . . . This office remained open continuously including Saturdays, Sundays, and holidays, through April 30, 1957, when the U.S. Immigration and Naturalization Service shifted all refugee operations to the Hotel St. George in Brooklyn, N.Y. The Academy immediately transferred its office to the new location, where it is currently operating. . . .

"Initiation of the Academy's activities in behalf of the Hungarian refugees was made possible by the fact that the Ford Foundation a year earlier had provided a substantial grant to the Academy for its work in international relations. A portion of this grant was made available immediately to launch the program. Later, the Rockefeller Foundation provided funds for evaluation and placement activities, language and orientation courses, and for a limited number of fellowship awards. Valuable professional assistance was rendered by the American Council for Emigres in the Professions, which maintained continuously a staff of two or three people at the Academy's office at Camp Kilmer and later at Brooklyn. . . .

"No one knew whether the operation would continue for a few weeks or several months. Each day brought new developments and new problems. In the face of these conditions the Academy organized its office under the joint direction of the Office of International Relations and the Office of Scientific Personnel. The authors of this article became co-directors of the operation, each spending part of his time at Camp Kilmer. . . . Continuity in direction was maintained by Edmund C. Rowan, Assistant to the Director of the Office of International Relations who was appointed Executive Officer. . . .

"Soon after the Academy's arrival at Camp Kilmer, it became clear that the first order of business was to make known

the existence of the Academy's office to the scientists and other professionally trained people among the refugees arriving at the camp. This was not as easy as might be expected; in fact, complete success was never achieved because eager relatives and sponsors hustled many of the refugees away from the camp almost immediately upon their arrival from Austria. However, more than 750 professional persons (holders of a college degree or the equivalent) came to the office. It is estimated that this figure represents approximately 60 percent of the total number of persons who might have profited by a visit to the Academy's office. Many of those who left camp without calling at the Academy's office have since returned as visitors or have written to the Academy to obtain advice concerning professional placement opportunities. . . .

"Each person was given a preliminary interview, at which time a questionnaire was completed by the interviewer. . . . For professional interviewing the Academy relied on the voluntary services of more than 30 professional members of the universities located within overnight range of Camp Kilmer. Eminent scientists from the Massachusetts Institute of Technology, Columbia, Princeton, Rutgers, Johns Hopkins, and other universities and academic centers gave generously of their time.

"Following the professional interview, a member of the Academy team, usually the placement officer, talked with the scientist concerning his own desires or plans. . . . A master file of position openings, containing literally hundreds of opportunities, was consulted. This file was compiled from the communications received from educational institutions and industrial firms, which had been invited by the Academy to assist in the program or had learned of the undertaking through the press. . . .

"However, all was not smooth sailing in the placement area. . . . There was the continuing problem of coordinating the Academy's work with that of nearly 20 voluntary agencies which were assisting the refugees. Because of the large number of refugees arriving, particularly in January, there was pressure to move people out as rapidly as possible, sometimes making it impossible to give adequate attention to professional placement. Frequently someone interviewed by the Academy disappeared overnight; he had been sent out to some part of the country where his professional placement possibilities were unknown. Physicians presented a special problem because many states make no provision for licensure of foreign trained physicians. Lawyers whose training and experience dealt with a different philosophy of law could not hope to practice their profession in the United States. The placement of en-

gineers, and others seeking industrial employment was complicated because interviews by private industry were not permitted at the camp.

"In spite of these difficulties the Academy's office at Camp Kilmer placed or assisted in the placement of more than 500 of the 750 refugees who visited the office. . . . Many of the scientists and engineers accepted industrial positions commanding salaries ranging from \$4,000 to \$15,000 per year. Others found opportunities in universities, research institutions, hospitals, libraries, agricultural experiment stations, and government research laboratories. Still others received pre-doctoral or post-doctoral fellowship appointments in graduate schools from coast to coast. A detailed analysis of the professional placements will be made when the Academy's program is concluded.

"It should be emphasized that in almost all instances the Hungarian refugees have filled positions for which American scientists and engineers were not available. . . .

"Early in the operation the need to provide training in English became apparent, because a number of the refugees could not be placed appropriately until they had acquired some fluency in speaking English. Fortunately through the warm cooperation of Lewis Webster Jones, President of Rutgers University, and David Denker, Assistant Provost, facilities were made available to the Academy in one of the University's new dormitories, and the language training program was launched. This course under the direction of Rev. Bradford Abernathy, Chaplain of the University, lasted 8 weeks. . . .

"Throughout the months of January and February letters arrived at the Academy's office at Camp Kilmer from Hungarian scientists stranded in Austria. . . . The Academy asked one of its members, Paul Weiss of the Rockefeller Institute, to go to Vienna to investigate. He reported that many of the refugees who had written to the Academy had arrived in Austria after December 1, 1956, and thus were not eligible to go to the United States under the parolee program. . . . Dr. Weiss proposed that the Academy establish an office in Vienna to help the scientists among the refugees still stranded there to find professional opportunities in the free nations of the world. . . . Procedures for coordination of Academy operations on both sides of the Atlantic were worked out, and an initial team was selected to undertake the assignment.

"On March 20, three people met at Idlewild Airport: Ralph Cleland, a botanist, Dean of the Graduate School at the University of Indiana; Richard T. Arnold, a chemist, Alfred P. Sloan Foun-

dation, Inc.; and Wallace W. Atwood, Jr., co-author of this article and a geologist-geographer, who was to serve as Director of the Academy's Mission to Vienna. The 18 hours of flying time to Vienna were devoted primarily to speculation. . . .

"A tentative plan was agreed upon: the [American] Embassy would provide space and office equipment for the Academy's operation and the INS would assist the Academy team on matters involving the Immigration Service. The purpose of the mission was clear. . . . Only one question remained unanswered: how many scientists were there among the refugees? . . . No one guessed that the actual total would exceed 500. . . .

"Arrival of the Academy's Mission in Vienna received no notice in the papers or on the radio. However, news of the Mission spread like wildfire and before the ink was dry on the forms, the first Hungarian scientists were knocking at the door. The Academy, however, was not willing to rely completely on the refugee grapevine and decided, therefore, that a formal message should be sent to the scientists and that it should be distributed to the refugee camps, the universities, and the various offices frequently visited by the refugees. . . .

"Distribution of the [message] had a surprising effect. Many scientists who had not requested immigration to any country and had not registered with any of the voluntary agencies literally came out of the woods. This development caused the Academy's team some concern because it had been expressly stated that refugee scientists who had found permanent professional employment in Austria should be encouraged to remain. But as it turned out, these people had no employment and urgently desired to find positions in other countries. Many of them are now on their way to the United States. Why these people had not registered with the immigration authorities is still a mystery. . . .

"Soon after the establishment of the Academy's Vienna office. . . . local newspapers announced that the United States had closed its doors. . . . Fortunately, the newspaper reports were incorrect. The door was closing, but refugees would continue to go to the United States under a restricted program.

"With this near catastrophe passed, interviews proceeded at an accelerated rate. In less than 8 weeks, 375 persons were interviewed. Dr. Arnold maintained a daily schedule from 8:30 to 6:00, 5 days a week. He was later aided by Arpad Csapo of the Rockefeller Institute, who interviewed the majority of the medical people among the refugees who called at the Academy's office. Additional professional interviewers included Samuel H. Williams, professor of zoology at the Uni-

versity of Vienna; Gabor Szego, professor of mathematics at Stanford University; and Lester Hawkins, a physicist on the staff of the U.S. Army Attache. The professional contributions of these American scientists, some of them temporary residents of Austria, made it possible for the Academy to carry out its mission. . . .

"It is appropriate to ask: How successful was the Academy's Mission to Austria? How many of those interviewed will actually reach the countries of their choice? Reports indicate that very few of the refugees seeking opportunities outside Austria failed to learn of the Academy's Mission, and all those whom the Academy believed it could assist within its restricted program were interviewed before the Mission departed. Although it is not possible as yet to say how many of these people will reach the countries of their choice, information currently available indicates that very few will fail to realize their desires. . . .

"This was a new type of activity for the Academy and, consequently, new methods of operation had to be devised. The major objectives of the Academy's participation in large measure have been attained. . . . Although the daily influx of Hungarian scientists has nearly ended, the Academy will maintain its Brooklyn office so long as it is needed to assist the remaining emigres to find places where they can exercise their talents in personal and scientific freedom."

American Institute of Physics

The American Institute of Physics has moved its national headquarters from 57 E. 55 St., New York, to its new home at 335 E. 45 St., near the United Nations Plaza. The remodeled building increases by three times the amount of space available for the expanded activities of the institute, which is an association of five professional societies with more than 18,000 members in this country and abroad.

The institute—founded in 1931 by the late Karl T. Compton, Paul D. Foote, George B. Pegram, and their colleagues—is a unified service organization that includes the American Physical Society, Optical Society of America, Acoustical Society of America, Society of Rheology, and the American Association of Physics Teachers.

The new headquarters was made necessary by expansion of the number and activities of physicists during and after World War II. In the past 14 years, the AIP headquarters staff has grown from 25 to 65, its membership has more than doubled, and the number of journal pages published annually has increased more than four times.

One of the reasons for the move was

to ease the publishing crisis facing the field of physics; another was to provide for projects for improving the quality of physics teaching. At present, more than 19,000 pages appear in journals published by the institute; another 5000 pages are needed in order to report new research effectively. New journals are being planned and, in some instances, existing publications will be expanded.

Japanese Geneticists on Radiation

The following "Statement concerning the genetic effects of radiation upon man" was prepared in April by the Genetics Society of Japan and the Japan Society of Human Genetics and sent out by them to a number of colleagues in other countries.

"With the increasing utilization of atomic energy, man inevitably has greater chance of being exposed to radiation than he has previously had. Generally speaking, any kind of radiations causes some damage to organisms. Particularly, their genetic effect is serious for the following reasons:

"1. It has been demonstrated by many experiments that radiations induce genetic changes or 'mutations' in organisms. Man cannot be exempt from this rule. Some such mutations occur naturally, but radiations raise their frequency.

"2. The great majority of these mutations are deleterious to mankind. Their effect may appear in the next generation, but more commonly only in subsequent generations. Therefore, the apparent escape of the next generation from such an effect does not ensure the genetic safety of all descendants.

"3. The incidence of mutation increases in proportion to the total dose of radiation given to the gonad. Whether irradiation is continuous or intermittent, the same amount of mutation is induced in either case, provided that the total dose is the same, since the mutation which was once induced persists even after the end of irradiation and is handed down to progeny. Thus the genetic effect of radiations through the gonad is fundamentally distinct from their direct damage to the body, which may disappear after the end of irradiation.

"4. Human population acquires natural mutations which are of very low incidence. These mutations are removed by natural selection, and the newly-appearing mutations and those removed by selection are mutually balanced; the incidence of mutant genes is thus kept in equilibrium. Additional mutations artificially induced by irradiation cause the break-down of this equilibrium, and an increase of the mutant genes possessed by the population. Such a change will lead to a gradual increase of individuals