

Hottentots and Bushmen show an "essentially African picture," the deviations are not the same in the two groups.

In two communications in the December 1955 issue of the *American Journal of Human Genetics*, D. F. Roberts and I have independently reestimated the amount of white admixture in the present composition of the U.S. Negroes by using the newer blood-group data from Nigeria and other parts of West Africa supplied chiefly by Mourant and his co-workers. Roberts arrives at an estimate of 20-percent white admixture in the Negro gene pool, with a gene flow from the white into the Negro gene pool of 0.02 to 0.025 per generation during the past 250 to 300 years. I have obtained a slightly higher estimate (about 22 percent) or, if the anomalous D^u frequencies in the West Africans are considered as derived from D , an amount of 28 or 29 percent. I have also used recent data on blood-group frequencies in presumably pure American Indians to see whether Indian admixture exists in the present U.S. Negro gene pool. The evidence is reasonably clear that there is no statistically significant component of that origin within the groups sampled.

The number and geographic distribution of such anthropological studies as these—this brief survey makes no pretence to completeness—strikingly demonstrates the activity of the field and the strong new trend in physical anthropology.

BENTLEY GLASS

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U.N. Committee on Radiation Effects

The United Nations Scientific Committee on the effects of Atomic Radiation has ended its first series of meetings. For approximately 10 days the committee discussed in detail the scientific problems involved in carrying out the mandate of the General Assembly that it examine the "effects of radiation on man and his environment." Working groups considered seven topics: genetics, the effects of irradiation by internally absorbed isotopes, the effects of external radiation, natural radiation background, exposures during medical procedures, occupational exposure, and environmental contamination.

It was pointed out that, in the field of genetic effects, for example, sufficient information on which to base definite conclusions is not available. Before making recommendations, the committee has asked the Secretariat to collect by 1 Aug. from U.N. member states and from specialized agencies preliminary measurements of natural radiation background and of environmental contamination

caused by man-made radioactivity. Specific information on local geographic, geophysical, and demographic conditions will be studied to see if any correlation in biological changes can be obtained from areas with different levels of natural radiation background. Methods of estimating the biological effects of small doses of radiation are also considered essential, and the committee has requested August reports on these, too. The committee's next meeting will take place in October.

Other information that the committee plans to collect on the effects of irradiation will come from various sources. Among these are patients who have been treated with radiation or who have undergone repeated radiological examinations and workers who have been exposed to these hazards in their occupations. For all people whose work exposes them to ionizing radiations, the committee has recommended the maintenance of continuing personal files that would include information from periodic medical examinations. The committee has also decided to establish a means of speedy collection and examination of information on any accidental overexposure.

In addition to requesting measurements over the surface of the earth of radioactive fallout, the committee has also asked for information on the amount, distribution, and composition of radioactivity that still remains in the upper atmosphere. Part of this activity falls on the earth each year and is thus a continuing source of possible increases in radiation levels. However, data available to the committee at this time from India, Sweden, the United Kingdom, and the United States indicate that fallout to date is only a fraction of the natural background.

Although it is calling for information almost immediately in several scientific areas, the committee recognized that standard procedures of measurement have not been formulated and accepted internationally. It has been decided to distribute information on known procedures of measurement as quickly as possible. At the same time, the committee will study and compare these procedures prior to its next meeting with the hope that internationally acceptable standards can be established without delay.

U.S. Technical Education

The following facts about the state of technical education in this country were included in recent testimony before the Research and Development Subcommittee of the Joint Congressional Atomic Energy Committee.

The number of trained engineers in

the Soviet Union increased from 41,000 in 1920 to 541,000 in 1954, a 1300-percent rise. In the same period, the United States increase was from 215,000 to 500,000.

The number of engineering graduates from Soviet higher institutes rose from 28,000 in 1950 to 63,000 in 1955. In the same period, the number of United States engineering graduates dropped from 52,000 to 23,000.

The Soviet Union is graduating 120,000 engineers and scientists every year to this country's 70,000. Our new crop of graduate engineers is already only half of the 45,000 to 50,000 we need each year within our own national boundaries.

The number of qualified teachers of science and mathematics in United States high schools has dropped 53 percent in the last 5 years, while high-school enrollment has increased by 16 percent. And even this gives a misleading impression, because not more than half of the qualified teachers in these fields actually go into teaching.

Fifty-three percent of all high schools in the United States do not teach physics and only half of the high schools teach chemistry. In addition, a recent survey indicates that between 250,000 and 400,000 United States high-school students are taking their mathematics and scientific training from teachers who are not qualified to teach these subjects.

News Briefs

■ The Bureau of Economic Research and Statistics of the American Dental Association estimates that there are 97,529 dentists in the United States, one for each 1667 persons. The figures are based on the 1956 *American Dental Directory*, which was issued recently by the association.

The survey of the dental profession indicates that there are 1646 more dentists than last year, when it was estimated that there was one dentist for each 1669 persons, and 3803 more than in 1954, when the ratio was one dentist for each 1677 persons.

■ Another coelacanth [122, 868 (4 Nov. 1955)] was caught on 4 May off the Comoro Islands, between Madagascar and the African mainland. It is 6 feet, 6 inches long and is believed to be a female. A military plane was dispatched from Tananarive, Madagascar, to bring the fish back to local laboratories before it could decompose. Only one other female coelacanth has been caught before.

■ Portugal hopes to establish by the end of 1957 a laboratory for nuclear physics that will include an experimental reactor and other research equipment.

■ R. B. Woodward of Harvard University has reported the total synthesis of reserpine, a tranquilizing agent used in the treatment of hypertensive, nervous, and mental disorders. The synthesis, which is described in a recent issue of the *Journal of the American Chemical Society*, follows less than a year after the chemical structure of the alkaloid was determined in laboratory studies by other chemists. Research associates in the work were three Swiss chemists, F. E. Bader, H. Bickel, and A. J. Frey, and a Canadian, R. W. Kierstead.

In the same issue of the ACS journal Frank L. Weisenborn and Patrick A. Diassi of the Squibb Institute for Medical Research report that working independently they, too, have achieved the synthesis of reserpine. A somewhat similar step has been described by Ciba chemists in the Swiss journal *Experientia*.

Scientists in the News

EDWARD U. CONDON, visiting professor of physics at the University of Pennsylvania, and a former president of the AAAS and of the American Physical Society, has accepted the post of professor of physics and chairman of that department at Washington University (St. Louis), effective 1 Sept. He succeeds GEORGE E. PAKE, who will become professor of physics at Stanford University next fall. Pake will in turn succeed W. E. LAMB, JR., 1955 Nobel prize winner in physics, who has accepted the chair of theoretical physics at Oxford University in England.

Another physics appointment at Washington is that of MICHAEL W. FRIEDLANDER of the University of Bristol, England. He will become a research associate with the task of establishing a nuclear emulsion group to study high-energy nuclear processes.

MELVIN CALVIN, professor of chemistry and director of the bio-organic division of the University of California Radiation Laboratory, has been awarded the 1956 Theodore William Richards medal of the American Chemical Society's Northeastern Section. The award is given biennially for outstanding achievements in research.

PAUL J. BRANDLY has been selected to head the newly formed biological control section in the Meat Inspection Branch of the U.S. Department of Agriculture, with headquarters at the Agricultural Research Center, Beltsville, Md. Almost his entire career has been spent in USDA poultry- and meat-inspection activities, and since 1952 he has served as food bacteriologist in the Meat Inspection Branch.

STANLEY S. BALLARD, research physicist at the Scripps Institution of Oceanography of the University of California, has been elected president of the International Commission of Optics for a 3-year term. The ICO is affiliated with the International Union of Pure and Applied Physics but in a semi-independent category. Its objective is to contribute, on an international basis, to the advancement of theoretical and applied optics, including the optics of the human eye. The commission now has 14 member countries: Belgium, Canada, Czechoslovakia, France, Germany, Great Britain, Italy, Japan, Netherlands, Poland, Spain, Sweden, Switzerland, and the United States.

JEAN OLIVER, emeritus distinguished service professor of pathology, State University of New York, College of Medicine, Renal Research Unit, Overlook Hospital, Summit, N.J., has been awarded the second Addis memorial medal of the Los Angeles chapter of the National Nephrosis Foundation. Oliver was recognized for his years of work on the anatomy of the kidney and for his pioneer ideas in correlating structure and function in that organ.

BERT E. CHRISTENSEN, a member of the faculty of Oregon State College for 25 years, has been named chairman of the department of chemistry at the college. At the close of the academic year he will succeed E. C. GILBERT, chairman since 1940, who will continue in the department in full-time teaching and research.

SAUL B. SELLS, head of the department of clinical psychology at the U.S. Air Force School of Aviation Medicine, Randolph Air Force Base, Tex., has received the Raymond F. Longacre award of the Aero Medical Association. Sells was honored for his work in developing a group of psychiatric tests that will reveal the future reactions of Air Force flyers to the stresses of combat missions.

LESLIE B. AREY, chairman of the department of anatomy and Robert L. Rea professor of anatomy at Northwestern University, will retire at the close of the current academic year. He will be succeeded in these posts by BARRY J. ANSON, a faculty member for 30 years. Arey will continue at Northwestern in a teaching and research capacity.

More than 600 colleagues and former students met this month at a faculty-alumni reunion dinner to honor Arey for his 41 years of service and for his contributions to anatomy. Best known as an expert on embryology, Arey wrote *Developmental Anatomy*, a textbook that is widely used in undergraduate and medical-school courses.

ERNEST KENNAWAY, English cancer specialist, arrived in this country on 7 May to lecture at the Sloan-Kettering Institute and at Harvard and Yale universities.

WILLIAM I. THOMPSON, chemical engineering consultant, has been named chief of process engineering for the General Dynamics Corporation's General Atomic Division, San Diego, Calif. His group will work on the design and evaluation of reactor systems and components.

ROBERT G. STONE, chief of the technical information and publications division at Air Weather Service headquarters, has received the American Meteorological Society award "for his many years of faithful editorship of the *Bulletin of the American Meteorological Society* and his active participation in committee council work."

The society's Meisinger award was presented jointly to ERNEST J. FAWBUSH, commander of the 29th Weather Squadron, and ROBERT C. MILLER, officer in charge, Severe Weather Warning Center, Kansas City, Mo. They were honored "for their pioneering studies of the genesis and the practical prognosis of tornadoes and other destructive local storms."

WARREN O. NELSON and ROBERT C. COOK have received the \$500 Lasker awards of the Planned Parenthood Federation of America. Nelson is on leave of absence from his post as professor of anatomy at the State University of Iowa to serve as medical director of the Population Council. His citation pointed out that "his studies of the biology of spermatogenesis have made a fundamental contribution to the field of human reproduction. . . . In the past two years . . . he has concentrated his strong talents on the physiologic control of conception. Touring the world as a veritable ambassador of science, he has inspired, advised, and guided investigators all over the globe on the problems of reproductive physiology allied to population control." Nelson's research has included a series of studies that produced the classification scheme now used for diagnosis and treatment of various types of male infertility.

Cook, author of *Human Fertility: the Modern Dilemma*, and for 35 years editor of the *Journal of Heredity*, now makes his headquarters in Washington, D.C., where he directs the Population Reference Bureau, edits its publication, *The Population Bulletin*, and serves as a member of the biology department of George Washington University. He was cited for "his outstanding contribution to wider understanding of the world population problem."