News and Notes

Southwestern and Rocky Mountain Division 1955 Meeting

The Southwestern and Rocky Mountain Division of the AAAS will hold at least part of its annual meeting, 24 Apr.–4 May, in historic Santa Fe, N.M. Included in the events scheduled for the period are visits, planned by the local committee on arrangements, to various museums such as the Laboratory of Anthropology, the Hall of Ethnology, the Museum of International Folk Art, and the Palace of the Governors as well as trips to the Indian ruins and modern villages and the interesting and unique Santa Fe shops.

Sessions of the various sections devoted to the presentation of scientific papers will be held 24–26 Apr. Registration, starting 24 Apr., will continue throughout the meeting. A dinner will be held Sunday evening followed by addresses of welcome, and on Monday evening the annual dinner will be climaxed by the Powell lecture to be given this year by Paul B. Sears of Yale University, president-elect of the AAAS. The business meeting for the election of officers will be held Tuesday afternoon at an hour early enough to permit arrival in Albuquerque in time for dinner by those who plan to attend the International Arid Meetings, which the Division is cosponsoring with the AAAS.

The International Arid Lands Meetings, 26–29 Apr., are a culmination of the activities of the Division's committee on arid lands which succeeded, with the aid of the national officers, in obtaining financial aid from the National Science Foundation, the Rockefeller Foundation, and UNESCO. (See *Science,* 11 Feb. 1955, or *The Scientific Monthly,* March 1955, for details. See ad in this issue for registration and housing.)

Because Santa Fe is well provided with hotel and motel facilities, guests are asked to make their own housing arrangements, either directly or through local chambers of commerce. Advance registration for dinners should be made with E. Boyd at the Museum of New Mexico in Santa Fe by 15 Apr.

It has been 20 years since the Division met in Santa Fe, but the choice of this city is a felicitous one for such an organization. It is situated on the southwest slope of the Sangre de Christo range which, with the Jemez range to the west, comprises the most southerly extension of the Rocky Mountain system. The Santa Fe River flows through the city and joins the Rio Grande some 20 mi to the southwest. The Jemez Plateau with its spectacularly eroded volcanic and sedimentary deposits extends from the Jemez range to the Rio Grande varying from 10 to 20 mi in width with a north-south extension of 40 mi. El Valle Grande, a huge volcanic basin, or caldera, is enclosed by numerous prominent Jemez peaks, between which the floor of the Rio Grande Valley lies some 5500 ft above sea level.

Historically, Santa Fe extends in time back to 1609–10 and prehistorically to a background as yet incompletely studied. Vestiges of both historic and prehistoric cultures abound to furnish the visitor with a wealth of scientific data. Among other particularly interesting Santa Fe landmarks are the prehistoric and the living pueblos.

The area's vegetation zones range from *Sonoran* with cottonwoods and willows, juniper and pinon, sages, yuccas, and cacti through the *Transition* zone (western yellow or ponderosa pines, lanceheaded cottonwood, and so forth), and the *Canadian* (Douglas tree, western white pine, fir, spruce, and aspen) to the *Hudsonian* (Englemann spruce, dwarf willow, and Siberian juniper), and into the *Arctic-Alpine* zone (which is treeless with low matted vegetation). Zoologist and geologist, too, will find a wealth of material, ranging from living creatures to interesting fossil deposits.

For all the registrants, there is the added interest of the nearness of Los Alamos, only an hour's drive to the west, and the fact that all this Santa Fe area has recently become of nationwide interest because of uranium prospecting there.

F. E. E. GERMANN

University of Colorado, Boulder

Science News

Chromosome numbers have been recorded for only a very few species of Primates. Of the catarrhine or Old World pithecoid primates, only three species, namely, man (*Homo sapiens*), a chimpanzee (*Pan calvus*), and the rhesus monkey (*Macaca mulatta*), have been reported on; and 48 chromosomes have been claimed for all three of these animals. C. D. Darlington and A. Haque [*Nature* **175,** 32 (1 Jan. 1955)], using newer techniques, have confirmed the **chromosome number** 48 for man, but have found only 42 chromosomes in each of three species of Old World monkeys: the Guinea baboon (*Papio papio*), the pigtailed macaque (*Macaca nemestrinus*), and the rhesus monkey (*M. mulatta*). They found that the chromosomes of man and monkeys are generally not unlike. The three species of monkeys, however, are alike in two respects in which they differ from man: (i) They lack the pair with median centromeres which is the largest pair in man, and (ii) they have a Y chromosome that is much smaller than the human Y.—W.L.S., JR.

The loyalty case of **John P. Peters,** professor of medicine at Yale University [*Science* **119,** 500 (16 Apr. 1954); **120,** 415 (10 Sept. 1954)] is soon to be reviewed by the U.S. Supreme Court. On 3 Mar. the Justice Department submitted a brief to the Court urging that it uphold Peters' dismissal as a consultant for the National Institutes of Health because there was "reasonable doubt" of his loyalty. The brief,

signed by Herbert Brownell, Jr., U.S. Attorney General, said that Government employees are not entitled to judicial review of their dismissals and that the security of the country might be endangered if employees charged with disloyalty are permitted to confront their accusers.

An earlier brief filed last January on behalf of Peters, who has denied under oath that he was a Communist, urged the court to find the Government loyalty program unconstitutional. Peters contends that the constitutional guarantee of due process of law requires that he be informed of the nature of the derogatory matter being used against him and of the identity of those who placed it in the record. He states that he was not given an opportunity to defend himself against "unsworn, second-hand statements to the F.B.I." provided by unnamed informants.

The Justice Department brief emphasizes that the Government's security operations depend heavily on "undercover agents, paid informers and casual informers" whose anonymity must be guaranteed. In contrast, President Eisenhower said in a speech in 1953 that the right to meet one's accuser "face to face" was a basic American privilege that could not be taken away.

The Atomic Energy Commission and the American Society of Mechanical Engineers will share the cost of a $25,000 engineering project to develop information about **high-temperature piping.** The investigations will be performed by the AEC's Knolls Atomic Power Laboratory, Schenectady, New York, which is operated by the General Electric Co. The ASME, on behalf of American industry, will contribute $10,000, and a group of ASME technical experts will be available at no cost to the Government for consultations in the programing and evaluation of the work.

The project will continue studies of thermal fatigue in ductile metals that were originally undertaken by the AEC to aid in the construction of reactors. General engineering information applicable to heat-transfer systems will be developed that will be of future benefit to the AEC program. Private industry has an immediate need for data in this area, and the society has undertaken to sponsor the work for this reason. The testing facilities to be used and the results obtained will be unclassified. The work, which is to be performed under contract between the ASME and the General Electric Co., will be directed by L. F. Coffin, Jr.

Under the sponsorship of the U.S. Department of Agriculture, there was organized a year ago a **National Conference on FAO** (Food and Agriculture Organization of the United Nations). The main objective of the conference is to arrange a meeting of its members and the appropriate U.S. officials (departments of Agriculture and State) to inform members of the conference of the problems, policies, and programs that are currently being considered by FAO. The views and suggestions of the members of the conference on these questions are invited.

The conference is made up of representatives of nongovernmental organizations interested in FAO, such as national farm organizations, agricultural marketing groups, private agencies concerned with foreign aid programs, and scientific societies whose members are taking part in technical-assistance programs related to agriculture.

When the AAAS was invited to send a representative to the conference, the board of directors appointed Noble Clark, associate director of the Agricultural Experiment Station, University of Wisconsin. He advises that current policy issues include such questions as the following.

1) What portion of the U.S. funds for technical agricultural assistance should be administered directly by the United States, and what by the international organization, FAO?

2) Should the assistance to other nations from the United States directly, or through FAO, continue along the same general lines as at present, or should more emphasis be placed on technical aid and research in building up the local educational agencies, in contrast to giving funds for economic assistance?

3) Should the United States welcome larger participation and over-all supervision of technical-aid programs and budgets by the officials of the United Nations in New York, or would it be preferable to have our Government make essentially all of its technical-aid grants directly to the specialized agencies such as FAO, UNESCO, and WHO?

Clark will welcome suggestions and comments, particularly from those who have had firsthand experience in serving as technical advisers in other nations.

The American Institute for Biological Sciences and the American Psychological Association are among the six organizations recently admitted to the **U.S. National Commission for UNESCO.** Sixty national organizations are represented on the commission.

In connection with the Inter-American Medical Convention, held in Panama, Republic of Panama, during observance of the 50th anniversary of the beginning of the Panama Canal, Charles M. Gratz, Greenwich, Conn., delivered an address dealing with **orthopedic and traumatic surgery.** Associate professor of clinical surgery at New York Medical College and Flower Fifth Avenue Hospital and associate attending orthopedic surgeon at New York University and New York City Hospitals, Gratz was also a member of the Pan American Flying Clinic which, in 1930, introduced certain new orthopedic and traumatic advances in 11 inter-American countries.

In his address Gratz paid tribute to the work in Panama of General Gorgas and his medical associates, which "not only made the building of the Panama possible but established a foundation on which preventive medicine has been built."

Since 1930 when medical pioneers, including Gratz himself, began "preventive surgery" to parallel the work in preventive medicine, the blending of pioneer traumatic limb-saving techniques with modern ortho-

pedic and rehabilitation surgery has resulted in sustained progress along with the successful transplantation of biochemical and living suture techniques from the United States and Canada. The study of human locomotion and the biomechanics of surgery is not of interest only to the surgeon, Gratz pointed out, but to the engineer and the biologist as well. During World War II, all three groups joined to make biomechanics a key to the saving of lives of combat aerial personnel, but the biomechanical program was planned for civilian safety as well as the safety of military personnel. Some of the results were rearward seating in aircraft and vehicular crash research.

Gratz also reviewed the development of fascial and capsular surgery, studies of the functional mechanics of the soft tissues, and modern methods of treating fractures. He stated that he believed that bone grafting with living suture fixation will be used in the surgery of the future instead of metal splice plates, rivets, and bone plates, particularly because hardware is not only subject to corrosion and electrolytic action, but also to engineering stresses, and because of the problem of treating patients in which infection has occurred around hardware.

Gratz concluded his address, which was reprinted in the *Connecticut State Medical Journal* [**18**, 12 (1954)] by stating that the role of biomechanics, human kinetics, and biological enigneering is best visualized in the words of Arthur Steindler:

> . . . We see at long last with great satisfaction that kinetics of the human body has come into its own. It is to be expected that this will be a major issue in the future when the kinetics of the human body becomes fully accepted in clinical practice; when it is given equal rank with anatomy and pathology; and when it is finally realized that without this ancillary science no orthopedic training can be called adequate.

An engineering evaluation of a nuclear power plant system using liquid metal as fuel is under way at the Atomic Energy Commission's Brookhaven National Laboratory in Upton, N.Y. The evaluation or feasibility study is being conducted by Babcock and Wilcox Co., New York, for a group of 17 organizations, 14 of them industrial.

Preliminary designs for the system, known as **Liquid Metal Fuel Reactor,** were developed by Brookhaven. The system is intended to generate electric power, "breed" new fuel for itself, and deliver by-products to waste tanks—all in continuous processes. It would provide the first usage of a liquid metal alloy, in this case uranium-bismuth, as the fuel stream to interconnect continuous processes.

Seventeen scientists and engineers, working full time, and several more part-time consultants are engaged in the work; a preliminary report will be submitted 1 Apr. and a final one 30 June. Under a lump-sum contract, Babcock and Wilcox will receive $72,500 for supplying over-all administration, supervision of the comprehensive analysis of Brookhaven data, and preparation of the detailed report. Glen J. Schoessow of Babcock and Wilcox is heading the study group, and Robert T. Schomer is in charge at Upton. Clarke Williams is chairman of the Brookhaven nuclear engineering department, which developed the LMFR scheme.

On 16 Feb. the **American Society of Mechanical Engineers** celebrated its 75th anniversary with a ceremony that took place in the auditorium of the McGraw-Hill Publishing Co. in New York. Some 30 people participated in the founding meeting on the same date in 1880; the society now has a membership of 40,000 engineers in North America.

Scientists in the News

Three anthropologists, **W. Duncan Strong** of Columbia University, **W. W. Howells** of Harvard University, and **Robert Redfield** of the University of Chicago received Viking Fund medals during the 9th annual dinner of the Wenner-Gren Foundation for Anthropological Research, Inc., in New York on 4 Mar.

Strong was selected as medalist in archaeology by the Society for American Archaeology "for the stimulation he has given projects . . . , for the breadth of his attainments, and for the outstanding students he has developed."

Howells was chosen by the American Association of Physical Anthropologists to receive the medal in physical anthropology in recognition of his studies on physical differentiation and his editorial contributions.

Redfield, medalist in general anthropology, was selected by the American Anthropological Association.

Louis G. Dunn, associate director of the guided missile division of the Ramo-Wooldridge Corp., Los Angeles, has received the certificate of appreciation from the Department of the Army. This certificate, the Army's highest civilian award and one of three awarded within the past 10 yr, was presented to Dunn for his work from 1947 to 1954 as director of the Jet Propulsion Laboratory operated for the Army by California Institute of Technology. The citation read:

> . . . Characteristic of these accomplishments were the development of many rocket propellants now in use, and research leading to improved propellants that will be widely used in future weapons, research and testing supersonic wind tunnels affecting in a major degree almost all planned and existing guided missile programs, and the conversion of a research test missile into the Corporal guided missile system, which provided the using arms with the first rocket-powered surface-to-surface guided missile in the national program.

William E. Adams and his wife, **Huberta M. Livingstone,** both scientists, have just returned from a lecture tour in Mexico. Adams, who is the James Nelson and Anna Louise Raymond professor of surgery at the University of Chicago, was made honorary professor of surgery at the University of Guadalajara, and both were made honorary members of the Guadalajara Surgical Society.

Clifton K. Himmelsbach has been appointed chief of the Division of Hospitals, Public Health Service, U.S. Department of Health, Education, and Welfare. Since July 1953, as assistant chief of the division, Himmelsbach has served under Assistant Surgeon General G. Halsey Hunt, whose duties as associate chief, Bureau of Medical Services, included those of chief, Division of Hospitals.

Himmelsbach will have charge of the 16 hospitals and 125 outpatient clinics and offices for legal beneficiaries of the Public Health Service. This nationwide system of medical care facilities includes the hospitals at Lexington, Ky., and Fort Worth, Tex., for treating narcotic addicts, and the hospital at Carville, La., for patients with leprosy.

John H. Garlock of New York, who is at present on a teaching tour of Japan, has been made an honorary fellow of the Chiba Medical Congress and the Tokyo Surgical Congress.

On 16 Feb. a portrait of **Elmer Verner McCollum,** one of the founders of nutritional biochemistry in this country and professor emeritus of biochemistry at Johns Hopkins University, was presented to the Welch Medical Library of that university. Colleagues, former students, and friends combined to provide for the portrait, which was painted by Paul Trebilcock of New York. Approximately 150 guests attended the ceremonies, and two of Dr. McCollum's closest friends, Edwards A. Park, professor emeritus of pediatrics at the Johns Hopkins Medical School, and Lowell J. Reed, president of Johns Hopkins University, spoke about him.

S. R. M. Reynolds, of the department of embryology at the Carnegie Institution of Washington, Baltimore, Md., left 15 Mar. to serve as visiting professor on the faculty of medicine, Montevideo, Uruguay, and on the medical faculty of the University of Recife, Recife, Brazil. He will lecture, hold seminars, give demonstrations, and participate in research programs at both institutions.

M. H. Thornton, until recently director of chemical sciences for Midwest Research Institute, Kansas City, Mo., has been appointed to the newly created post of technical director. All research and development activities will be coordinated under his direction. Thornton has worked on dehydrated foods, basic studies of fats and oils, development of analytical methods, and identification of biologically important glucosides. In cooperation with the U.S. Department of Agriculture, he has developed many new commercial uses for soybean products; he also holds a number of patents on industrial production of plant sterols and plant phosphatides.

Charles C. Buck has been appointed assistant to the chief of the U.S. Forest Service's fire research division in Washington, D.C. **R. Keith Arnold** succeeds him as chief of forest fire research at the California Forest and Range Experiment Station in Berkeley.

Arthur E. Gabriel, formerly of Armour Research Foundation of Illinois Institute of Technology, has been appointed research project leader for the Evans Research and Development Corp., consulting chemists of New York City.

Joseph Greenberg of the section on chemotherapy, Laboratory of Tropical Diseases, National Institutes of Health, has received the Bailey K. Ashford award, consisting of a medal and $1000, in recognition of his work on the mode of action of antimalarial agents. He was honored during the annual meeting of the American Society of Tropical Medicine and Hygiene in Memphis, Tenn.

With the aid of a combined Guggenheim-Fulbright award **Kenneth E. Caster,** professor of geology at the University of Cincinnati, will join the faculty of the University of Tasmania as visiting professor from September 1955 to June 1956. He plans to continue his work on fossils of the Devonian and Silurian periods.

The following mathematicians have been appointed to assistant professorships: **Dean C. Benson** of Iowa State College, to South Dakota School of Mines and Technology; **W. P. Brown** of the University of Michigan, to Michigan State College; **M. D. Davis** of the Institute for Advanced Study, to the University of California, Davis; **E. F. Gillette** of Syracuse University to Harpur College, State University of New York; **E. E. Posey** of the University of Tennessee, to West Virginia University.

Meetings

Three days of scientific papers, panel discussions, and special lectures on pulmonary diseases will mark the 50th anniversary meeting of the **American Trudeau Society,** medical section of the National Tuberculosis Association, beginning 23 May in Milwaukee, Wis. The meeting is being held in conjunction with the annual meeting of the NTA. All sessions will be in the Milwaukee Auditorium. The chemotherapy and other medical aspects of treatment of tuberculosis, the surgical management of tuberculosis and related diseases, and current research will be discussed by specialists from all sections of the country.

The committee in charge of arranging the medical program was under the chairmanship of David T. Carr of Rochester, Minn. John D. Steele of Milwaukee is president of the American Trudeau Society. For information write NTA, 1790 Broadway, New York 19.

As part of the annual meeting of the **Tissue Culture Association** in Philadelphia, 5–6 Apr., botanists interested in the study of excised plant cells and organs are invited to participate in a session on the afternoon of 5 Apr. called "Current research in plant tissue cultures." The chairman will be Philip R. White of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me. Scheduled speakers are Wm. G. Boll,

University of Texas; John G. Torrey, University of California; Ralph H. Wetmore, Harvard University; F. C. Steward, Cornell University; Louis G. Nickell, Chas. Pfizer & Co.; Ernest Boll, North Carolina State College; Carl D. LaRue, University of Michigan; Jakob Reinert, Roscoe B. Jackson Memorial Laboratory; and Armin C. Braun, Rockefeller Institute.

Plans for a **Conference on Nuclear Engineering** to take place at the University of California, Los Angeles, 27–29 Apr., have been announced by T. J. Connelly of the university's department of engineering. Topics to be covered are water and liquid metals as primary working fluids, boiling water reactors, radiation sources for industrial applications, and power reactor control during load changes. At a dinner session the speaker will be John von Neumann of the Institute for Advanced Studies and nominee to the Atomic Energy Commission. For information write to the University of California Extension, Los Angeles 24.

The 26th annual meeting of the **Aero Medical Association** will take place 21–23 Mar. at the Hotel Statler in Washington, D.C. More than half of the meeting's 40 scientific presentations will be devoted to military aspects of aviation medicine and flying safety.

A symposium on the newest developments in the field of space medicine, and a round-table discussion of the aeromedical aspects of flight at extreme speed and altitude will be presented by a group of outstanding test pilots.

The first Louis H. Bauer lecture, established in honor of the association's founder and first commandant of the U.S. Air Service School of Aviation Medicine from 1919–1925, will be presented on 21 Mar. by John F. Fulton, physiologist and Sterling professor of the history of medicine at Yale University. Sen. Stuart Symington, who served as first Secretary of the Air Force, will be guest of honor and principal speaker at the society's annual dinner on 23 Mar.

The 13th annual meeting of the **American Association for Cleft Palate Rehabilitation** will meet at the Hotel Statler in Boston, 13–14 May. This meeting will be open to nonmembers. Papers will be presented and symposiums held on topics in the medical, dental, speech, psychological, educational, sociological, and other aspects of cleft palate rehabilitation. Individuals interested in presenting papers or organizing symposiums should write to the program chairman, Dr. Alex Fox, 1653 Main St., Springfield, Mass.

The 20th **Cold Spring Harbor Symposium on Quantitative Biology** will be held 6–13 June on the general theme "Population genetics: the nature and causes of gentic variability in populations." Population genetics is an active but divided branch of genetics. Agricultural geneticists and evolutionary geneticists who study populations have each made rapid progress in the development of theory and experimental techniques. The objective of this year's symposium is to bring leading workers together in an effort to establish an area of agreement on fundamental concepts common to both divisions of population genetics. If such an agreement can be reached, the rapid exploitation of advances in one division by workers in the other will be facilitated.

Discussions will focus on the following topics: general theory of population genetics, theory of quantitative genetics, selection in plants, selection in animals, genetic variability and polymorphism, populations in time and space, and integration of genotypes. Among the invited participants will be 30 from outside the United States, including Belgium, Brazil, Chile, France, Great Britain, Italy, Japan, Spain, Sweden, and Yugoslavia, as well as Africa and Australia.

This year's meeting is being sponsored by the Carnegie Corporation of New York, the National Science Foundation, the U.S. Atomic Energy Commission, the Association for the Aid of Crippled Children, and the Rockefeller Foundation. The symposium is open to all who are interested, but because of space limitations it is important to make reservations. For program and information address the Biological Laboratory, Cold Spring Harbor, N. Y.

The 28th meeting of the **American Association of the History of Medicine** will take place 12–14 May in the Park Shelton Hotel, Detroit, Mich. Alfred H. Whittaker of Detroit is chairman of the committee on local arrangements, and Erwin H. Ackerknecht, professor of the history of medicine at the University of Wisconsin, is chairman of the committee in charge of arranging for the papers on the program. For information, write to either of these men or to the secretary, Dr. Samuel X. Radbill, 7043 Elmwood Ave., Philadelphia 42, Pa.

The question of how to provide for an adequate supply and for the proper utilization of the nation's technological manpower resources has been the subject of much concern since World War II and has been the motivation for many conferences and discussions. Such meetings have most frequently been held by and for persons with a close personal interest in the subject.

A **military-industrial conference,** sponsored primarily by the Society of American Military Engineers, took place 10–11 Feb. in Chicago. The theme of the program was "How can our technical manpower be best utilized in the interests of our national welfare"?

Joining in the sponsorship of this meeting were commercial and industrial organizations such as the Chamber of Commerce of the United States and the National Association of Manufacturers, governmental agencies, including the Department of Defense and the Industrial College of the Armed Forces, and a substantial number of professional societies in the engineering and scientific fields. The conference was, therefore, different, in that the majority of the sponsoring agencies had no immediate selfish motivation. The attendance at the meeting was somewhat extraordinary, considering that it included persons from

the highest management positions in a cross section of leading American industries as well as top-level persons from Government, the services, and the major professional societies. More than 1000 individuals participated in the conference.

The program for the first day was largely a review of the present manpower situation with its implications for the future of industry, the military services, and education. The program on the second day was largely devoted to discussion periods based on questions from the participants.

No action from the conference had been contemplated, since to most of the participants the subject was to some extent new. The value of the conference lay in the fact that, to a very large and important segment of the leadership of American industry and the services, a thorough analysis of the problems of technological manpower was presented for their orientation.

The conference attracted a great deal of attention and newspaper comment. It is expected that the proceedings will be printed and widely distributed so that further benefit may accrue.—M. H. TRYTTEN.

Health officials from 24 nations met in Paris in February to revise the international method of recording diseases, injuries, and causes of death. The conference was sponsored jointly by the World Health Organization and the French Government.

The 2nd **Interamerican Congress of Psychology** took place in Mexico's new University City, 14–19 Dec. 1954. The central theme was the psychology of education from the points of view of applied psychology, social anthropology, psychotherapy, and teaching. Delegates from various Latin American countries, the United States, and Canada, as well as special representatives of the American Psychological Association, were invited guests of the congress committee and its sponsors, the Department of Education and the National University of Mexico.

This congress, which had approximately 150 participants, again gave a survey of psychological and educational work done in the various countries, as illustrated by Blumenfeld from Peru, Donaire from Honduras, Jarquin from Mexico, Knobel from Argentina, Malmo from Canada, Olsen from the United States, and others. Psychotherapists such as Devereux, Fromm, Millan, Pascual del Roncal, Pearlman, Schwartz, and Wolff commented upon educational problems in psychotherapy. The Mexicans illustrated their growing psychotherapeutic program by arranging visits to the Mental Hygiene Clinic, the Medical Center for the Rehabilitation of Exceptional Children, and the Psychiatric Service of the Children's Hospital.

Social-anthropological aspects of education were discussed by Abel, Harold and Gladys Anderson, Devening, and others. Latin American contributions illustrated cultural differences in the manifestation and frequency of psychological traits and disturbances.

The symposium on education and applied psychology included contributions about the role of projective and other tests and the functions of memory and intelligence, by Bunch, Harrower, Palacios. The Latin Americans discussed the use of Rorschach drawings, the new tests of Meili, and so forth, and a large exhibition illustrated the growing importance of diagnostic tools in Mexican schools.

Among the contributions to the symposium on the psychology of teaching were those on the application of psychology in the selection of teachers, on the psychology of teaching exceptional children, and on the training of clinical psychologists; participants included among others, Deutsch, Griffin, Kaback, Krawiec, Kroll, and Worcester. The Latin Americans presented observations on emotional problems of students, thought patterns in different age groups, the influence of school upon personality, and psychological problems of the curriculum. Visits to the Mexican Juvenile Court and to an Orientation Center illustrated Mexican practices of teaching. The latter institution unites children of superior and inferior intelligence having emotional difficulties, the superior ones helping their underdeveloped companions. The occupational therapy includes the children's printing their own books, farming, and painting.

The congress led to various resolutions. A constitution proposed by Willard C. Olson, president of the society, was adopted. Publication of the transactions, a directory of Latin American psychologists, a bibliography of psychology books published in the Spanish language, and a publication of the Interamerican Society of Psychology, as well as research exchanges, and possibilities for fellowships were offered and discussed.

The Atomic Industrial Forum and the Stanford Research Institute will jointly sponsor a meeting on **Atomic Energy—the New Industrial Frontier,** 4–5 Apr. at the Mark Hopkins Hotel in San Francisco. More than 500 industrial leaders from all over the country will attend.

The program will include discussions by Glenn Seaborg, Nobel prize chemist of the University of California; Bruce Morgan, technical director of the Quartermaster Corp's food sterilization program; Edward Teller, research physicist of the University of California; Jesse Johnson, director of the Atomic Energy Commission's raw materials division; Chauncey Starr, director of the atomic energy department of North American Aviation, Inc.; R. P. Peterson, director of atomic energy research for the Republic Steel Corp.; and Melvin Calvin, authority on photosynthesis.

The International Union of Biochemistry, which was founded on 1 Mar. 1953, was formally constituted at its first general assembly in London 5–6 Jan. Of the 15 countries that adhere to the union to date, the following 12 were represented at the assembly: Austria, Belgium, Denmark, France, Germany, Italy, Japan, the Netherlands, Sweden, the United King-

dom, the United States, and the U.S.S.R. In accordance with its statutes, the assembly elected the council of the union, and the council appointed from among its members the following officers: pres., M. Florkin (Belgium); treas., E. H. Stotz (U.S.A.); sec.-gen., R. H. S. Thompson (U.K.)

The following delegates make up the remaining members of the council: S. Akabori (Japan), J. Courtois (France), V. A. Engelhardt (U.S.S.R.), A. H. Ennor (Australian), O. Hoffman-Ostenhof (Austria), K. Linderstrom-Lang (Denmark), K. Lohmann (Germany), R. Nicolaysen (Norway), S. Ochoa (U.S.A.), A. I. Oparine (U.S.S.R.), Rudolph Peters (U. K.), J. Roche (France), A. Rossi-Panelli (Italy), A. Virtanen (Finland), and H. G. K. Westenbrink (Netherlands).

Charles Harington, former chairman of the International Committee for Biochemistry that was set up at the 1st International Congress of Biochemistry at Cambridge in 1949, was elected an honorary member of the council. Following the unanimous decision of the assembly, formal application has now been made on behalf of the union for membership in the International Council of Scientific Unions.

Education

Prompted by the announcement of Louisiana State University's initiation of the use of closed-circuit television as a regularly scheduled component of its current course in medical physiology [*Science* **121**, 237 (18 Feb. 1955)], a reader at **Albany Medical College** has written:

> . . . it was our own Dr. Frank Ferguson, chairman of the department of pharmacology, who introduced this method in September and October of 1954 in connection with certain techniques of laboratory procedure, as well as the projection of live experiments. . . . The demonstration was carried out each time with the class in the same room, so that both direct and television-screen observations might be made.

Educational television programs, developed for national distribution by the Educational Television and Radio Center, Ann Arbor, Mich., will be made available for classroom and other audio-visual purposes through an arrangement just completed with Indiana University. Under terms of the agreement, the university will serve as the national center for nontelevision distribution of these educational program materials. The project will be self-liquidating, with income from sales and rentals paying for the cost of the service.

By means of this service, benefits from educational television production will be extended to universities, colleges, school systems, and other educational agencies in every part of the nation. The programs available will include lectures, discussions, and illustrations of scientific and other developments in education.

The Indiana audio-visual department, which is headed by L. C. Larson, began the new service on 15 Feb. The center will continue to handle all television distribution of its programs. At the present time it is distributing programs on a regular basis to 11 educational television stations and to an additional four universities for use on local commercial stations in areas without ETV stations.

The University of Pennsylvania has received a grant of $25,000 from the Fels Fund to study policies and practices which contribute most effectively to the development of the **strongest possible faculty** working under the best possible conditions. The study, looking toward the development of an affirmative policy for faculty personnel, will be made by a committee of the university faculty that is under the chairmanship of David R. Goddard, professor of botany. The responsibility of the committee will involve both the initiation and conduct of its investigation and the recommendation of policies.

The department of geology of **Rice Institute,** Houston, Tex., is conducting a series of 25 public seminars that are being presented by a group of geologists, geochemists, geophysicists, and oil producers who have consented to serve as visiting lecturers.

After 30 June **Columbia University's** 5-yr-old Institute of Administrative Medicine will be merged into the university's 34-yr-old School of Public Health. The unit will be known as the School of Public Health and Administrative Medicine.

Available Fellowships and Awards

The department of zoology, Duke University, invites applications for the Charles W. Hargitt **fellowship in zoology.** The fellowship is awarded at the postdoctoral level in support of full-time research in cellular studies. The stipend varies with the qualifications and needs of the recipient, and is ordinarily from $4000 to $5000. The recipient has no departmental duties. Work may be done at Duke University and/or the Duke Marine Laboratory.

The present holder of the fellowship is Paul L. Risley, who is engaged in cytological research during a sabbatical leave from the department of biology, University of Oregon. Inquiries and applications should be addressed to Dr. H. S. Roberts, Department of Zoology, Duke University, Durham, N.C.

The **University of Vermont College of Agriculture** has announced that three graduate assistantships are available in biochemistry for 1955–56. These research grants allow half-time study for the M.S. degree. The work deals with plant growth stimulation, and the $1700 assistantships have been financed by the Atomic Energy Commission. For information, write Jack E. Little, Hills Science Building, University of Vermont, Burlington.

The State College of Washington has announced the allocation of funds for two postdoctoral research fellowships in the department of **poultry science,** effective 1 Sept. The stipend for each of these fellow-

ships is $4400 per year, $3600 of which is tax exempt.

The research problem for one of the fellowships relates to unidentified factors required for different strains of bacteria. Interested persons should have had training in chemistry and biochemistry.

The second fellowship is for turkey embryology. Applicants should have a background in physiology, biochemistry, and biophysics. For information, write to J. S. Carver, Chairman, Department of Poultry Science, State College of Washington, Pullman.

Miscellaneous

The **Council for Old World Archaeology,** first established at the 1951 annual meeting of the AAAS by Section H, has now completed its organization. An incorporated, nonprofit group, the council was set up primarily for the purpose of disseminating, through appropriate publications, findings concerning all Old World periods of cultural development that are investigated by archeological techniques. For this purpose, editors have been chosen for 22 areas. These editors will relay materials to four continental editors (for Europe, Africa, Asia, and Oceania, including Southeast Asia) who, in turn, will rely on an international roster of contributors. A chief editor will coordinate all material after it has been approved by the area and continental editors and will handle details of publication and distribution. Grants from the Wenner-Gren Foundation and from several individuals have provided sufficient funds to cover organizational operating costs and the first year's expenses of publishing area surveys and bibliographies.

Administratively, the council consists of a president, clerk, treasurer, executive committee, board of trustees, and a group of charter members who elect the officers and trustees. Lauriston Ward is currently serving as president. The council is the joint operating agency of the following well-established scientific societies: Section H of AAAS, American Anthropological Association, American Association of Physical Anthropology, American Numismatic Society, American Oriental Society, American School of Prehistoric Research, American Schools of Oriental Research, Archaeological Institute of America, Society for American Archaeology.

An **exhibit of chemicals and synthetics** sponsored by the U.S. Patent Office is on display in the lobby of the Commerce Department Building, Washington. The exhibit, which continues through 25 Mar., is designed to show the technological advances made by inventors and industries under the American patent system.

The new **American Astronautical Society** is exclusively devoted to the development of the astronautical sciences, which deal with all aspects of space-travel planning and theory. The society publishes a quarterly journal, *Astronautics,* which is available to the membership. It includes all material relevant to astronautics or space flight from general-interest level material to the most profound. All scientific fields are represented, that is, sociological, biological, and physiological as well as the technical fields closely related to the existing rocketry and missile sciences.

Through its journal, through meetings, symposiums, field trips, and so forth, the A.A.S. serves its members in all areas within the broad science of astronautics. The organization of the A.A.S. is similar to that of existing technical societies, and it is incorporated in the state of New York. The society is a member of the International Astronautical Federation.

With the assistance of the Society for Social Responsibility in Science and the Food and Agriculture Organization of the United Nations, Wilmington College plans to set up a Small Tools Laboratory and is **looking for a responsible engineer** to be in charge of this work. Since there is considerable latitude in the development of this project, engineers of any of several branches may be interested, but it is expected that mechanical or metallurgical engineers would be interested primarily.

It is essential that the applicants be in accord with the nature and purpose of the college, which is under the sponsorship of the Religious Society of Friends, and with the fact that the work will be intergovernmental in scope.

In carrying out this work, the activities of the college demonstration farm, the nearby Ohio State University with its agricultural and engineering departments, and the strong engineering libraries of the Fels Memorial Institute, Antioch College, and the University of Cincinnati will be helpful. The salary range under consideration is from $5000 to $6000 per year. For further information, write to Samuel D. Marble, President of Wilmington College, Wilmington, Ohio.

Academic Press, Inc., New York, has announced a new journal, *Virology,* for which the following scientists have accepted editorial responsibility: George K. Hirst, Public Health Research Institute of the City of New York, Inc. (editor-in-chief); L. M. Black and S. E. Luria, University of Illinois, Urbana, (editors); C. H. Andrewes, C. A. Brandly, Seymour S. Cohen, A. H. Doermann, John F. Enders, Charles A. Evans, Werner Henle, A. D. Hershey, Francis O. Holmes, Frank L. Horsfalls, Jr., Hilary Koprowski, Andre Lwoff, James W. Moulder, Glenn S. Pound, Theodore T. Puck, A. F. Ross, H. K. Schachman, Edward A. Steinhaus, Robley C. Williams, C. E. Yarwood (associate editors).

The purpose of *Virology* will be to publish articles on the biological, biochemical, and biophysical aspects of the subject, stressing articles of a fundamental rather than an applied nature. It is hoped that the journal will contribute to the integration of virus science by providing a ready introduction to all its fields.

Erratum. William L. Thomas, Jr., is assistant director of research at Wenner-Gren Foundation for Anthropological Research and not at the National Science Foundation, as is stated in *Science,* 11 Mar., page 357. Paul Fejos is director of research at Wenner-Gren and not at NSF, as is implied in the same issue.