News and Notes

J. Robert Oppenheimer, professor of Physics in the University of California, has returned to Berkeley. He will resume his regular teaching duties on the Berkeley campus at the start of the fall semester. He hopes, as in the past, to act as a consultant to the California Institute of Technology. Dr. Oppenheimer has been on leave of absence since July 1942 and served as director of the Los Alamos Atomic Bomb Laboratory, at Los Alamos, New Mexico, from its inception until after the termination of the war. For the past few months he has worked in Washington, as a member of the Board of Consultants to the State Department, which has recently issued a report on the international control of atomic energy. (See *Science,* 1946, **103**, 451.)

Dr. Alpheus W. Smith, dean of Ohio State University's Graduate School and chairman of the University's Department of Physics and Astronomy, will retire during the coming summer. He has held both positions since 1939 and has been a member of the University's faculty for 37 years. Dr. N. Paul Hudson, who has been professor and chairman of the Department of Bacteriology since 1935 and who was professor of bacteriology at the University of Chicago from 1930–1935, will become the new dean of the Graduate School. Dr. Harald H. Nielsen, who has been on the physics faculty of Ohio State University since 1930, will become the new chairman of the Department of Physics and Astronomy.

Byron N. Cooper, formerly of the Virginia Geological Survey and more recently on the staff of the U. S. National Museum, has been appointed head of the Department of Geology at Virginia Polytechnic Institute, Blacksburg. He succeeds Roy J. Holden, who died last December. Dr. Cooper assumed his new duties on 1 April.

Charles A. Doan, dean and director of medical research, Ohio State University College of Medicine, delivered the Fifth Edwin R. Kretschmer Memorial Lecture on Friday evening, 26 April, at the Palmer House before the Institute of Medicine of Chicago. His subject was "Marrow Hematopoiesis (Synthetic Folic Acid) and Splenic Hematopenia: Experimental and Clinical Studies."

Willis H. Johnson, professor of biology at Stanford University, has been appointed professor of zoology and chairman of the department at Wabash College beginning September 1946. Dr. Johnson recently returned to Stanford after seven months service with the Army Educational Program at Shrivenham, England, and Frankfurt, Germany.

William R. Duryee, formerly assistant professor of biology at New York University, has been appointed technical associate, Committee on Growth, National Research Council. He was recently retired from the Army with the rank of major, after five years in the 27th Division and the Office of the Surgeon General. He was chief of the publications section, Training Division, SGO.

Sir Wallace Akers is resigning from his post as director of atomic bomb research at the Department of Scientific and Industrial Research. After a holiday, he will resume his duties on the board of Imperial Chemical Industries, Ltd.—*The Times* (London).

Dr. John P. Gillin, associate professor of anthropology at Duke University since 1941, has been appointed professor of anthropology and research professor in the Institute for Research in Social Science, University of North Carolina, Chapel Hill, effective 1 September 1946.

Dr. George O. Sharp, formerly of the University of Iowa and the American Medical Association Chemical Laboratories, has recently accepted a position with The Wm. S. Merrell Company as assistant chief chemist.

Dr. Benjamin J. Lazan, vice-president and chief engineer of the Sonntag Scientific Corporation of Greenwich, Connecticut, has been appointed associate professor of metallurgy and director of the Materials Testing Laboratory in the College of Applied Science, Syracuse University. He joined the University faculty on 1 May 1946.

Prof. Egidio Meneghetti, director of the Department of Pharmacology and rector of the University of Padova, continued his research activity more or less normally until 1943, when, with the whole staff of his Department and the majority of the university students and many of the professors, he started active "underground" work. Various inspiring papers of Prof. Meneghetti, who became leader of the underground and later of the armed revolt, have been collected in a volume entitled *Scritti clandestini* (Zanocco, Padova, 1945). Among the 33 members of the university who lost their lives were: Prof. Mario Todesco; Dr. Giovanni Carli and Dr. Otello Pighin, assistant professors in the School of Engineering; Dr. Angelo

Curiel, assistant professor at the Faculty of Sciences; and Dr. Matteo DeLuca, assistant professor at the Faculty of Medicine. Drs. Aldo Cestari and Benigno, also members of the Department of Pharmacology, were arrested by the Nazis, while Dr. Lanfranco Zancan, from his hiding place, gave a valuable contribution to the underground work.

The Department is now starting to work and is in need of books, reprints, and periodicals.

Elton J. Wood, of the Research Department, Radio Corporation of America Laboratories, Princeton, New Jersey, addressed the Philadelphia Science Teachers Association on 28 March on "Phosphors and Their Applications in Electronics." The meeting was held in cooperation with Schoolmen's Week at the University of Pennsylvania.

Dr. Arnold L. Soderwall has been promoted from instructor in zoology to assistant professor of biology at the University of Oregon.

Dr. Charles D. Coryell, of the Clinton Laboratories at Oak Ridge, Tennessee, has been appointed professor of chemistry at the Massachusettts Institute of Technology.

Announcements

The staff of the summer course in embryology of the Marine Biological Laboratory, Woods Hole, Massachusetts, has undergone several changes. Dr. Viktor Hamburger, of Washington University; Dr. W. W. Ballard, of Dartmouth College; and Dr. Jane Oppenheimer, of Bryn Mawr College, have resigned from the course staff. The present staff consists of: Dr. Howard L. Hamilton, of the State University of Iowa; Dr. John A. Moore, of Barnard College; Dr. Albert Tyler, of the California Institute of Technology; and Dr. Donald P. Costello, of the University of North Carolina, instructor in charge of course.

The Central Engineering Laboratory, established by the Government in the Towne Scientific School of the University of Pennsylvania for wartime research and development, has been converted into a University of Pennsylvania Thermodynamics Research Laboratory with a shift of emphasis toward fundamental research in thermodynamics, it has been announced by Dr. George Wm. McClelland, president of the University.

Under its new name it will continue to be housed in the Towne School on the University campus and will be maintained under contract with the Navy Department Bureau of Ships as a focal area of fundamental research designed to benefit both governmental and private agencies.

The Central Engineering Laboratory was established early in 1943 under a contract between the University and the Office of Scientific Research and Development, the latter appropriating nearly $1,000,000 for its work.

Possessing exceptionally diversified and extensive facilities for the production of liquid air, liquid oxygen, and liquid nitrogen, the physical plant of the Laboratory occupies 10,500 square feet of floor space in the Towne School, and by June 1947 will have been expanded by almost 10,000 square feet of additional space.

The Thermodynamics Research Laboratory is at present operating under 18 approved task orders, the term applied by the Navy to approved research authorizations, and several more are being considered for approval. There are 52 persons now engaged in its activities, the group including two linguists who translate seized German documents concerned with oxygen production.

"The program of the new laboratory places greatest emphasis on fundamental research," Dr. John A. Goff, dean of the Towne School, stated. "Its principal objective is to fill important gaps in our knowledge of the thermodynamic properties of substances involved in engineering processes and to apply this knowledge to the analysis of such processes as a necessary means for improving them. A corollary objective is the building of a strong program of graduate study and research in the thermodynamics and related fields to which the armed services may send selected officer personnel for advanced training. At the same time the program also calls for moderate activity along developmental lines to the extent that it makes use of the unique facilities of the laboratory not presently available elsewhere. Thus, provision has been made for cooperation with industry in the investigation of practical problems to which the facilities of the laboratory are especially adapted. The work of the new laboratory will be integrated with the Towne School's regular program of instruction, and to that end a number of members of the school's instructional staff are devoting substantial portions of their time to research in the laboratory as project leaders. A particularly significant development also has been the appointment of an advisory committee of outstanding scientists and engineers who will be active in long-range planning and direction of the laboratory's program."

Serving on that advisory committee, Dr. Goff revealed, are Earl P. Stevenson, president of Arthur C. Little, Inc., Cambridge, Massachusetts; Commodore R. V. Kleinschmidt, USNR (Retired); Lt. Cdr. Ashton T. Scott, Navy Department Bureau of Ships; Prof. Gerhard Herzberg, Yerkes Observatory, University of Chicago; Dr. Frederick D. Rossini, National

Bureau of Standards; Prof. Frederick G. Keyes, Massachusetts Institute of Technology; Prof. Maxwell Gensamer, Pennsylvania State College; and Dr. Hiram S. Lukens, Towne Scientific School.

The 50th Annual Meeting of the Michigan Academy of Arts and Letters was held in Ann Arbor on 12 and 13 April 1946. Alexander G. Ruthven, president of the University of Michigan, and Alfred L. Nelson, president of the Academy, gave the addresses at the 50th Anniversary Dinner on Friday evening, 12 April.

Among the sections which presented programs at this meeting were those on anthropology, botany, forestry, geography, geology and mineralogy, mathematics, psychology, sanitary and medical science, sociology, and zoology.

The Biological Laboratory, Cold Spring Harbor, is offering a course for research workers, to be given by Prof. Max Delbruck, of Vanderbilt University. The course is designed to acquaint scientists with some of the techniques used in research with bacterial viruses and with recent results of such work. It will be held from 15 July to 2 August.

The New York Hospital, Westchester Division, announces the establishment of a Department of Psychology, according to Clarence O. Cheney, medical director. Edward I. Strongin has been appointed head of the Department, which will be engaged in a systematic research program in addition to providing clinical psychological services. Arthur L. Benton has been appointed attending psychologist.

A position of assistant psychologist has been created and is at present open. Miss Ann Kennard has been appointed psychological interne. Both of the latter positions provide an opportunity for pursuing graduate work in New York City. Interested individuals are invited to write to Dr. Cheney concerning this vacancy.

Dr. Strongin has just returned to civilian life after almost three and one-half years in the Army as classification officer and aviation psychologist, and Dr. Benton has just returned to civilian life after more than four years in the Navy.

The American College of Dentists has authorized the following grants-in-aid for research for the period 1 July 1946 to 30 June 1947:

To H. R. Hunt and C. A. Hoppert, of Michigan State College, is given the sum of $500 for a continuation of their work on the inheritance of dental caries in rats.

To Morris Steggerda, Hartford Seminary Foundation, Hartford, Connecticut, is given the sum of $500 for a study of the incidence of dental caries and the eruption time of teeth of various racial groups located in Africa, India, China, and Latin America.

The Association of Southeastern Biologists held its Seventh Annual Meeting on 19 and 20 April 1946 at the University of South Carolina, Columbia. This was the first meeting of the Association since 1942. Dr. Mary Stuart MacDougall, Agnes Scott College, is president of the Association, and Martin D. Young is secretary-treasurer.

The National Analysts, Inc., of Philadelphia, a complete marketing and research organization, announces the opening of its Washington Branch under the direction of Mrs. W. Charlotte Ewell, 203-A Stoneleigh Court, 1025 Connecticut Avenue, N. W.

The American Society for Horticultural Science announces the award of the Leonard H. Vaughan Memorial Award in Horticulture to Dr. V. T. Stoutemyer, U. S. Plant Introduction Garden, Glenn Dale, Maryland, for his paper on "The influence of changes in molecular configurations of several naphthyl growth substances on the rooting responses of cuttings" (*Proc. Amer. Soc. hort. Sci.,* Vol. 44), and to Dr. P. W. Zimmerman and Dr. A. E. Hitchcock, of the Boyce Thompson Institute for Plant Research, for their paper, "Substances effective for increasing fruit set and inducing seedless tomatoes" (*Proc. Amer. Soc. hort. Sci.,* Vol. 45).

This award is made each year through the generosity of the Vaughan Seed Stores of Chicago, Illinois, in memory of Leonard H. Vaughan. One award is made in floriculture and one in vegetable gardening, each for $500.

Clinical and research activities of the Clinic of Child Development, School of Medicine, Yale University, were depicted in a documentary film, the January issue of *The March of Time.* The film pictures a wide range of infants and preschool children, and is sound scored with dialogue and commentary.

Hitherto secret methods of flying training, employed by the RAF to meet a wartime emergency, proved so successful that they are being adopted as standard throughout the RAF and Dominion Air Forces. The methods were demonstrated at the Empire Central Flying School at Hullavington, Wiltshire, on 20 March, according to *The Times,* London.

The problem of night-flying training was solved by developing a combination of light-absorption filters which isolate the wave lengths of sodium light, which thus remains visible through otherwise dark filters.

The use of these filters has been developed in two ways to meet different requirements. To gain experience of "night" landing in daylight the pupil pilot wears filter goggles through which he can see nothing but the sodium flarepath on the airfield and the aircraft instruments, which are also sodium-lit. The

instructor, sitting at his side without goggles, can, of course, see everything clearly. For training in instrument flying what is known as the two-way method is employed. Simple complementary color filters of blue and amber cut off the light in two stages. The windows of the cockpit are covered with the amber filter and the pupil-pilot wears blue goggles. The instructor has almost normal daylight vision through the amber windows, but the pilot can see only the sodium-lit instruments.

In both these methods of training the degree of "darkness" can be varied by the intensity of the filter used, so as to simulate conditions ranging from dusk to starlight, bright moonlight, and a very dark night.

The Radiolocation Convention, held at the Institution of Electrical Engineers, Savoy Place, London, 26–28 March, had an attendance of approximately 1,000. An attempt was made to review the developments in the field of radiolocation during the last six years. Those invited include delegations from eight other countries—Canada, the United States, France, Russia, Poland, Norway, Holland, and Switzerland.

The convention was opened by John Wilmot, Minister of Supply and Aircraft Production, P. Dunsheath, president of the Institution of Electrical Engineers, presiding.

Mr. Wilmot said he thought that only one other wartime development, penicillin, had as many possibilities for benefiting humanity as radar.

The opening session was also addressed by F. B. Llewellyn, president of the Institute of Radio Engineers of America, who said it was possible that radar was the best example of cooperative technical effort that the world has ever known. As radar had served during the war, so it could also serve during the peace.

Sir Robert Watson-Watt, speaking on the British contribution to the evolution of radiolocation, said it would be foolish to claim priority in the inception of radar for either Britain or America. The work done before the autumn of 1940 was completely independent in the two countries, while the work done thereafter was completely interdependent.

Every radar-equipped combat aircraft, ship, gun, and searchlight was, after every offsetting factor had been allowed for, much more than doubled in effectiveness by its radar aids.—*The Times* (London).

Southern Methodist University has announced a gift of $1,000,000 from Mrs. W. W. Fondren of Houston, Texas, for the construction of a building for the natural sciences. The Fondren School of Science will be housed in the building, which will include the Departments of Physics, Biology, Chemistry, Geology, and Geography.

The American Anthropological Association, at its annual meeting on 28 December adopted the following resolutions:

1. That the appropriate United States authorities be apprised of the strong opinion of the American Anthropological Association that scientific documents and specimens and works of art, legitimately acquired in the first instance by public institutions in enemy countries, be not made subject to seizure or to alienation by the United States as reparations and that as soon as possible such materials be restored to the institutions originally housing them.

2. That the American Anthropological Association, constituted of scientists interested in the study of human nature and society, recognizes the responsibility of anthropologists to study the effects of the discovery of the use of atomic energy, and to participate actively with other scientists in efforts to make appropriate social inventions to guard against the dangers and utilize the promise inherent in atomic use.

Dr. Frederick V. Hunt, associate professor of physics and communication engineering, who was director of Harvard's Underwater Sound Laboratory during the war, has been named chairman of a new department, Engineering Sciences and Applied Physics.

Several faculty groups now giving instruction in electronics, communication engineering, applied mathematics, acoustics, metallurgy, and mechanical engineering will be merged as a nucleus for the new department, which has been allotted $2,000,000 from the McKay Endowment.

Insect pests develop relative immunity to poisons by evolving new strains, presumably through normal processes of evolution. This is one of the chief reasons why the codling moth has remained a pest of apple orchards throughout the United States for more than a century, according to Dr. B. A. Porter, of the Department of Agriculture, in a report just issued by the Smithsonian Institution.

This insect is familiar everywhere. About 40 investigators, employees of federal and state governments, devote their entire time to studying means of combating it. The chief means used is that of spraying trees with lead arsenate. Yet it seems impossible to eliminate the pest, and from year to year it seems about as abundant as ever.

Recent experiments have shown, Dr. Porter says, that moth larvae from well-sprayed orchards show much greater ability to survive lead arsenate than those from poorly sprayed orchards, indicating the phenomenon of evolution in the survival of the fittest.

"The evidence indicates," he continues, "that, instead of remaining constant and static while the evolution

of control measures was going on, the codling moth as a species has undergone considerable adaptation or evolution on its own account in the direction of greater ability to survive in the presence of insecticides. The segregation of resistant strains, together with certain practices on the part of the fruit industry, have permitted the insect to maintain its position as the most seriously destructive pest of the apple, in spite of the development of control by insecticides to a high degree of efficiency.

"The codling moth is only one of several insect pests known to have undergone development in this general direction, and many other insects may be developing in a similar way but at a slower rate."

The active participation of all botanists in the Southeast was made the goal of the Southeastern Section of the Botanical Society of America at a luncheon meeting of the section on 28 March in St. Louis, attended by members and visitors representing 13 institutions and 7 states in the area. The section chairman, Orland White, presided, and S. L. Meyer acted as secretary in the absence of Dr. Hunt; John Karling; secretary of the Botanical Society, was a visitor. New officers were chosen, who will determine the time and place for a spring or summer meeting of the Southeastern Section. They are L. R. Hesler, University of Tennessee, chairman; John N. Couch, University of North Carolina, secretary; and Velma Matthews, Coker College, Hartsville, South Carolina, and Ruth Schornherst, Florida State College for Women, Tallahassee, members of the Activities Committee.

A committee of three members of the American Association of Physics Teachers has been formed to assist in the improvement of the teaching of physics to premedical students and students of biology, following a recommendation from the Scientific Advisory Committee of the Baruch Committee on Physical Medicine.

The efforts of the committee are to be directed along two lines: (1) to assemble and make available to teachers of the first course in college physics illustrative material from biology and medicine which will show physical principles at work in biological processes and physical principles applied in the study of biological processes; (2) the planning of a second course in physics for students of biology and premedical students.

The committee requests those biologists, physicists, and physicians interested in this project who have suggestions for content to correspond directly with LeRoy L. Barnes, Rockefeller Hall, Ithaca, New York, chairman. Other members of the committee are Lester I. Bockstahler and Louis A. Strait.

A project in internal medicine at the New York Hospital has been announced by Cornell University. Designed to deal clinically and experimentally with psychosomatics, the project has three main objectives: (1) to develop a practical method for dealing with ambulatory clinic patients who suffer from symptoms related to their emotional states and life situations; (2) to engage in experimental study of the mechanisms involved in illness of this nature; and (3) to train especially able young physicians in experimental methods and to develop a critical psychosomatic approach to the care of the sick. Approximately half of the time will be spent in the diagnosis and management of patients, and the remainder in research dealing mainly with mechanisms underlying symptoms.

The project will be directed by Dr. Harold G. Wolff, with the assistance of an internist, Dr. Stewart Wolf; a psychiatrist, Dr. Herbert S. Ripley, Jr.; and six fellows. Fellows will be appointed for a period of one year with the expectation of serving for two or more. Their salary for the first year will be $2,500. Candidates for fellowships should have at least two years training in internal medicine and give evidence of a psychiatric orientation. They need not have had experience in research but must have a serious interest in investigation, energy, and curiosity.

Prospective candidates should arrange for a personal interview through Dr. David P. Barr, Professor of Medicine, The New York Hospital, 525 East 68th Street, New York City.

The Hematology Research Foundation, Chicago, invites applications for the Ruth Reader Fellowship for research in blood diseases. The value of this fellowship is $1,500 for one year. Applications must be submitted no later than 1 June to Dr. Ludwig Hektoen, 21 West Elm Street, Chicago, the chairman of the Medical Advisory Council for the Foundation. The Council will choose the applicant and the institution in Chicago.

Meetings

The American Association of Physics Teachers, in cooperation with the Society for the Promotion of Engineering Education, will hold a meeting at St. Louis, Missouri, 20–22 June 1946. Headquarters for this meeting and its sessions will be the Jefferson Hotel, and members are advised to make room reservations as soon as possible. The program for this meeting will be mailed to all AAPT members shortly after the deadline date for abstracts, 10 May 1946. C. J. Overbeck, of the Physics Department, Northwestern University, Evanston, Illinois, is the secretary.

The Society for Applied Spectroscopy is sponsoring a meeting on the subject of spectroscopic nomenclature to be held Saturday, 11 May, at the Pennsylvania Hotel in New York. Duane Roller, of Wabash College, editor of the *American Journal of Physics,* will discuss physics nomenclature in general; B. F. Scribner, of the National Bureau of Standards, will discuss nomenclature for emission spectroscopy; and a speaker to be announced will discuss nomenclature for absorption spectroscopy at the morning session beginning at 9:30.

The afternoon meeting will be devoted to general group discussions of specific proposals presented by special committees of the Society. There will be separate sessions for those interested in emission and in absorption. It is hoped that the final result of the meeting will be the adoption of a definitive nomenclature for all branches of spectroscopy.

The New England Section of the American Society of Plant Physiologists will resume its schedule of annual meetings on 17–18 May at Harvard University. Dr. Kenneth V. Thimann, Harvard University, is chairman, and Dr. Linus H. Jones, Massachusetts State College, is secretary. The meeting will be held in the Harvard Biological Laboratories beginning on the afternoon of 17 May and is open to all interested in the subject of plant physiology.

Elections

Prof. Sidney Chapman, Imperial College of Science and Technology, London, and Peter Leonidovich Kapitza, director of the Institute for Physical Problems of the Academy of Sciences, Moscow, were elected foreign associates of the National Academy of Sciences, which held its annual meeting 22–24 April in Washington, D. C.

Detlev W. Bronk, director of the Johnson Research Foundation, University of Pennsylvania, was elected foreign secretary, while I. I. Rabi, professor of physics, Columbia University, and Walter R. Miles, professor of psychology, Yale University School of Medicine and chairman of the Division of Anthropology and Psychology of the National Research Council, were elected to the Council of the Academy.

Twenty-nine new members were also elected: Samuel King Allison, director, Institute for Nuclear Studies, University of Chicago; Rudolph John Anderson, professor of chemistry, Yale University; Ernest Brown Babcock, professor of genetics, University of California, Berkeley; Kenneth T. Bainbridge, associate professor of physics, Harvard University; Elmer K. Bolton, director, Chemical Department, E. I. duPont de Nemours and Company, Wilmington, Delaware; Wilmot Hyde Bradley, chief geologist, U. S. Geological Survey, Washington; Perry Byerly, professor of seismology, University of California, Berkeley; Paul Roberts Cannon, professor of pathology, University of Chicago; Milislav Demerec, director, Department of Genetics, Carnegie Institution of Washington; Jesse Douglas, associate professor of mathematics, Brooklyn College; Clarence Henry Graham, professor of psychology, Columbia University; Morris S. Kharasch, Carl William Eisendrath Professor of Chemistry, University of Chicago; Karl Paul Link, assistant professor of biochemistry, University of Wisconsin; Robert F. Losh, Lambert Professor of Medicine, College of Physicians and Surgeons, Columbia University; Esmond Ray Long, professor of pathology, School of Medicine, and director of laboratories, Henry Phipps Institute, University of Pennsylvania; Joseph E. Mayer, professor of chemistry, Columbia University; Charles Snowden Pigget, physical chemist, Geophysical Laboratory, Carnegie Institution of Washington; Marcus Morton Rhoades, professor of botany, Columbia University; George Scatchard, professor of chemistry, Massachusetts Institute of Technology; Tracy Morton Sonneborn, professor of zoology, Indiana University; Leslie Spier, professor of anthropology, University of New Mexico; Stanley Smith Stevens, associate professor of psychology, Harvard University; Chauncey Guy Suits, director of research laboratory, General Electric Company, Schenectady; Frederick E. Terman, head of Department of Electric Engineering, Stanford University; Merle Antony Tuve, chief physicist, Carnegie Institution of Washington; Chester Hamlin Workman, head of Department of Bacteriology, Iowa State College; Roger John Williams, director of Biochemical Institute, University of Texas; Frank Clifford Whitmore, dean, School of Chemistry and Physics, Pennsylvania State College; and Wendell Phillips Woodring, principal geologist, U. S. Geological Survey, Washington.

The American Association of Pathologists and Bacteriologists elected the following officers for 1946 at its annual meeting in Chicago on 8 March: Wiley D. Forbus, Durham, North Carolina, president; Malcolm H. Soule, Ann Arbor, Michigan, vice-president; Howard T. Karsner, Cleveland, secretary; Alan R. Moritz, Boston, treasurer; Tracy B. Mallory, Boston, incoming member of Council; and William B. Wartman, Cleveland, assistant secretary.

The American Ethnological Society announces the election on 8 January of the following officers for the year 1946–47: Hortense Powdermaker, Queens College, president; E. Adamson Hoebel, New York University, vice-president; Sherwood L. Washburn, Columbia University, vice-president; Esther S. Goldfrank, Columbia University, secretary-treasurer; Marian W. Smith, Co-

lumbia University, editor; and Gladys A. Reichard, Barnard College, Harry L. Shapiro, American Museum of Natural History, and Carl Withers, Brooklyn College, directors.

The American Institute of Nutrition, at a recent meeting in Atlantic City, elected the following officers for 1946–1947: A. H. Smith, president; R. M. Bethke, vice-president; and H. J. Almquist, councillor. H. E. Carter and E. M. Nelson continue as secretary and as treasurer, respectively, and C. A. Elvehjem and D. W. Woolley continue on the Council.

The Louisiana Academy of Sciences has elected the following officers for 1946–1947: Alvin Good, Northwestern State College, Natchitoches, Louisiana, president; John L. Hardin, Centenary College, Shreveport, vice-president; Lauretta E. Fox, Northwestern State College, Natchitoches, chairman of the Biological Sciences Section; H. C. Eshelman, Southwestern Louisiana Institute, Lafayette, chairman of the Physical Sciences Section; Roy E. Hyde, Louisiana State University, Baton Rouge, chairman of the Social Sciences Section; George H. Lowery, Louisiana State University, Baton Rouge, editor; E. A. Fieger, Louisiana State University, Baton Rouge, permanent secretary; and H. Bruce Boudreaux, Louisiana State University, Baton Rouge, secretary-treasurer.

The Limnological Society of America elected the following officers at its recent annual meeting: Paul S. Welch, University of Michigan, president; A. D. Hasler, University of Wisconsin, vice-president; G. L. Clarke, Harvard University and the Woods Hole Oceanographic Institution, secretary-treasurer. All business communications in regard to the Limnological Society should henceforth be addressed to the latter.

The American Society of Plant Taxonomists has elected the following new officers: Philip A. Munz, president; E. E. Sherff, chairman of the Council; and Lincoln Constance, secretary-treasurer.

The American Society for Pharmacology and Experimental Therapeutics held its 34th annual meeting in Atlantic City on 11–15 March 1946. The following officers were elected: Maurice H. Seevers, University of Michigan, president; H. B. van Dyke, Columbia University, vice-president; Harvey B. Haag, Medical College of Virginia, secretary; McKeen Cattell, Cornell University, treasurer. Hamilton H. Anderson, University of California, and Dr. John C. Krantz, Jr., University of Maryland, were elected councilors.

The Branner Geological Club held its annual meeting on 15 March at the California Institute of Technology in Pasadena. Since this was the 25th anniversary of the Club, Dr. Ralph Arnold, a charter member and the first president, told of the formation of the Club and reviewed the life of Dr. John Casper Branner.

New officers elected at this meeting for 1946 are: W. C. Putnam, University of California at Los Angeles, president; W. T. Winham, Standard Oil Company of California, vice-president; Richard Ten Eyck, Continental Oil Company, secretary-treasurer.

Dr. Chester Stock spoke briefly on the Pittsburgh meetings of the Geological Society of America, and Dr. Beno Gutenberg spoke on the earthquake shocks that had been felt during the morning. The principal address was given by Dr. R. Dana Russell, of the University of California Division of War Research at San Diego, on "Geologists and Sonar."

The Association of American State Geologists, which usually meets in Washington, D. C., this year held its annual meeting at Urbana, Illinois, upon invitation of M. M. Leighton, chief of the Illinois Geological Survey. Inspection of the laboratories of the Survey and descriptive papers of the investigations being conducted in them by members of the staff were outstanding features of the three days spent at Urbana. The meetings drew members from all sections of the United States. Addresses were made by W. E. Wrather, director of the U. S. Geological Survey; E. W. Pehrson, representing the U. S. Bureau of Mines; Bruce K. Brown, vice-president of the Standard Oil Company (Indiana); and others. The following new officers were elected: Meredith E. Johnson, of New Jersey, president; A. C. Trowbridge, of Iowa, vice-president; and Edward L. Troxell, of Connecticut, secretary-editor.

The Department of Plant Sciences of the University of Oklahoma has elected Dr. Howard W. Larsh as chairman. It has also recently added the following members to its staff: Dr. George J. Goodman, professor and curator of the Bebb Herbarium; Dr. Norman H. Boke, assistant professor; Dr. Dorothy V. Leake and Dr. Elwyn O. Hughes, instructors; Mr. Robert H. Rucker, landscape architect; Mr. Frank Rinehart, custodian; Miss Marylou Stiemert, Miss Phyllis Thompson, Mr. Tillman Johnson, and Mr. Vernon Scott, assistants; and Mrs. Jean Moore, secretary.

The Union of American Biological Sciences elected the following officers at its recent annual meeting in St. Louis: Robert Chambers, New York University, president; J. S. Karling, Columbia University, secretary; and Frank A. Brown, Jr., Northwestern University; M. Demerec, Carnegie Institution; and Robert F. Griggs, National Research Council, Executive Committee members.

The American Physiological Society has elected the following officers for 1946: Wallace O. Fenn, president; Maurice B. Visscher, secretary; D. B. Dill, treasurer; and Henry C. Bazett, councilor.

Recent Deaths

Jean-Marie-Eugène Derscheid, ornithologist and conservationist, was imprisoned by the Germans in 1941 and executed on 13 March 1944. He had made several trips to the Congo, one of them with the American expedition for studying gorillas, which were headed by Carl Akeley. Dr. Derscheid was the principal promoter of Réserves Naturelles in the Belgian Congo and effected establishment of Le Parc National Albert, of which he was made director. He was an enthusiastic aviculturist, studying in particular the Anatidae, and he was the artist who designed the fine Gyrfalcon on the cover of *Le Gerfaut.* In this journal (1945, **35**, 109–111) Charles Dupond gives an account of Dr. Derscheid's contributions to science and conservation.—*Margaret M. Nice* (Chicago, Illinois).

In the Laboratory

Nucleosis of Skeletal Muscle: Its Value as a Biological Test[1]

RUDOLF ALTSCHUL

Department of Anatomy, University of Saskatchewan Saskatoon, Canada

Damage to skeletal muscle which is not severe enough to cause necrosis provokes not only alterations in the sarcoplasma but intense proliferation of subsarcolemmal nuclei (nucleosis). Such damage may be caused by mechanical or toxic agents, by ischemia or avitaminosis-E; its nature may be unknown, as in either progressive muscular dystrophy or in denervation. The nuclear proliferation is frequently so active that the nuclei fill the sarcolemma producing the "nuclear tubes" of Waldeyer. If nucleosis occurs only in restricted zones of the fiber, it results in "muscle giant cells" or in "fiber clubs."

This proliferation may be interpreted as regenerative or as reactive in nature. It may, however, constitute the initial stage of a metaplasia of skeletal muscle into connective tissue. There is no agreement as to the manner in which the numerical increase of muscle nuclei occurs. While some authors believe that the proliferation is due to mitosis (A. M. Pappenheimer, *3*; Chor, Dolkart, and Davenport, *2*), others regard the process as "amitotic" (Tower, *4*; Altschul, *1*). Whether amitosis occurs at all, whether it is the division of damaged cells, or whether it is limited to syncytia are questions that are still under discussion. A solution of this problem regarding skeletal muscle would not only have a theoretical interest but might explain certain features in muscle degeneration and lead to an improvement of measures for the prevention of muscle degeneration.

If mitosis of subsarcolemmal nuclei does occur in denervated or otherwise damaged muscle, it should be easy to find mitotic figures amongst the great number of recently proliferated nuclei. The writer has examined several hundred sections showing nuclear proliferation in muscle fibers but has been unable to find clear evidence of mitosis; yet there have been many indications of amitosis, in the form of constrictions and, even more frequently, of fissures. These latter were especially clear if the sections were stained with cresyl violet instead of the standard hematoxylin-eosin.

Since the apparent lack of mitotic figures and the presence of morphological changes, suggesting amitosis, are insufficient to justify a final decision on the nature of this nuclear proliferation, an attempt has been made to obtain more conclusive evidence by the use of colchicine. The procedure and preliminary findings were as follows: The skeletal muscles of rabbits, guinea pigs, and white rats were denervated or locally injured by the insertion of catgut or cotton threads. Three months after denervation nucleosis and other histological changes are very pronounced. Subcutaneous injections of 0.2–0.3 mg. of colchicine per 100 grams of body weight, 4 or 9 hours before the animal was killed, failed to arrest a hypothetical mitosis, and the "colchicine effect," with its apparent or real numerical increase of mitotic figures, was lacking. The decomposition of proliferated nuclei was more pronounced than in control cases.

Focal injury by threads permits one to observe and analyze the degree of muscle damage and of tissue reactions. It is found in cross-sections that the dif-

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