should be, but were not, fulfilled in this or in contemporary microspectroscopic work of a similar kind: (a) the nuclei should be optically homogeneous, and (b) the nuclei should be randomly studied. Utilizing mechanical procedures for the homogenization and the conversion of tissues into suspensions of nuclei and with controlled conditions of mounting, it has been possible in recent work to fulfill conditions (a) and (b). The nuclei are optically homogeneous as shown by phase and interference microscopy which measure differences in optical path of the order of 0.02 \mu. A preliminary comparison of nuclei so derived from normal cells and cancer cells of certain tissues of the mouse indicates a difference in nucleic acid content substantially similar to that reported herewith for a tissue of the human being.

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News and Notes

Wildlife Disease Association

In conjunction with the seventeenth North American Wildlife Conference, held in Miami, Fla., March 17-19, a number of investigators met informally and officially organized the Wildlife Disease Association. During the previous year a preliminary draft of a statement of scope and purpose had been prepared by Drs. Bell, Cheatum, and Jellison. This was circulated among other members of a committee, and their suggestions were incorporated into the statement where it seemed justified during discussion at the Miami meeting. The revised statement is as follows:

The practice of wildlife management in North America has attained the status of a recognized profession. As professions go, it is a youthful one, but the responsibilities with which it is charged are heavy. It is asked to manage desirable populations of wildlife species so that they may be at least maintained and, in many instances, increased beyond their current numbers. On the other hand, the profession is charged with the control of nuisance species whose populations are believed to conflict so excessively with human health and economy, or with the welfare of more desirable species of wildlife, that their reduction appears warranted.

Much more knowledge than is currently available is required for judicious handling of many of the problems. incident to managing wildlife populations. There are natural limitations to the abundance of all species, limitations that are affected by climate, food, and natural

Among the natural enemies, diseases are of great im-

portance in their effect on wildlife populations. This phase of wildlife research needs more attention and coordination than it has received heretofore. The identification, epizoology, and significance of diseases are subjects of investigation by private, state, and federal agencies. Some of these agencies are primarily concerned with wildlife diseases as they bear on public health, others as they may affect animal industry. State and federal conservation agencies are often primarily concerned with disease factors limiting wildlife resources. The importance of some of the disease agents to the public health, the livestock industry, and the populations of wild animals has already been demonstrated. A closer working relationship is needed between all the investigators whose work is contingent on wildlife disease problems. The Wildlife Disease Association has been formed to achieve this coordination among fields, including population dynamics, nutrition and nutritional diseases, animal pathology, bacteriology, virology, parasitology, immunology, toxicology, therapeutics, and related subjects.

The association should eventually consider ways and means of effectively advising on the organization of wildlife disease studies in areas not adequately serviced for this type of work and to provide information on the kinds of assistance now available from diagnostic laboratories.

It is the intention of the association to establish a newsletter or some other form of communication for disseminating matters of concern to members of the association and other interested agencies or persons.

Scope and purpose of the association shall be to: (1) compile a directory of workers and their specialties in this field; (2) channel pertinent information on current studies and developments to members of the group; (3) provide a means for dissemination of information to organizations concerned with wildlife management, public health, and animal health; (4) provide opportunities for discussion of mutual problems through an annual meeting held in conjunction with the North American Wildlife Conference.

It is planned that a full day of informal discussion will be arranged in conjunction with the eighteenth North American Wildlife Conference, which is to be held in Washington, D. C., March 9-11, 1953. The Wildlife Disease Association will probably meet on March 8.

Anyone interested in becoming affiliated with this association should communicate with Carlton M. Herman, Patuxent Research Refuge, Laurel, Md., or with one of the other members of the committee.

J. F. BELL W. L. JELLISON
W. B. BELL N. D. LEVINE
E. L. CHEATUM M. N. ROSEN

I. McT. COWAN C. M. HERMAN, Chairman

Scientists in the News

William Benesch, graduate physicist at Johns Hopkins University, has been awarded a fellowship by the Belgian-American Educational Foundation, to work in the laboratories of the Astrophysical Institute at Liége. He will also visit other institutes in France, Italy, Germany, and England, consulting with astrophysicists interested in his field.

Lewis K. Dahl has joined Brookhaven National

Laboratory as chief of the Medical Research Service in the hospital. He was formerly assistant physician in the hospital of the Rockefeller Institute for Medical Research in New York City.

Maurice J. Day, metallurgical engineer at U. S. Steel Co., Pittsburgh, has been named manager of the materials and processes division at Armour Research Foundation of Illinois Institute of Technology. He succeeds W. A. Casler, who has been acting manager of the division since May 1951. Mr. Casler continues as assistant director of research and manager of program development.

George Glockler, head of the Department of Chemistry and Chemical Engineering at the State University of Iowa, has been awarded the 1952 Iowa Medal of the American Chemical Society's Iowa Section. Now on leave from his academic post, Glockler is director of the science division of the Office of Ordnance Research, Durham, N. C. The Iowa Award, consisting of an engraved medal, is presented annually to an Iowa chemist or chemical engineer for meritorious achievement in fundamental or applied chemistry.

C. Gilbert Goss, development engineer in electronic circuitry at Oak Ridge National Laboratory for the past several years, has joined Radiation Counter Laboratories, Inc., as director of electronic research.

John D. Green, formerly of Wayne University College of Medicine, has joined the Department of Anatomy, University of California School of Medicine at Los Angeles.

Samuel C. Harvey, professor of surgery in oncology at the Yale School of Medicine, and Roscoe H. Suttie, professor of civil engineering in the School of Engineering, have retired from active teaching at Yale University. Dr. Harvey became resident surgeon in 1919 at the New Haven Hospital and also instructor in surgery at the Yale School of Medicine. In 1924 he was appointed William H. Carmalt professor of surgery, the chair he held until his appointment in oncology in 1947. In his retirement, Dr. Harvey will be William H. Carmalt professor emeritus of surgery. Professor Suttie started as an instructor in civil engineering in 1913 and, after spending a year as assistant engineer in the U.S. Geological Survey, returned to Yale as assistant professor of civil engineering and became a full professor in 1944. His chief interest has been sanitary engineering.

Carl F. Holden (USN, ret.) has been elected president of Federal Telecommunication Laboratories, Inc., Nutley, N. J., research unit of International Telephone and Telegraph Corporation. Harold H. Buttner, who had been president of Federal, will assume duties as vice president of I. T. & T., coordinating the research and development activities of the parent company.

Former President Herbert Hoover has received the award "Engineer of the Century" from the Northwest

Engineering Centennial. Mr. Hoover has been a member of the AAAS for half a century, having joined the Association in 1902.

John L. Kask, assistant director of the Fish and Wildlife Service, has been appointed a U. S. member of the Inter-American Tropical Tuna Commission and the International Commission for the Scientific Investigation of Tuna, succeeding Milton C. James, who retired as assistant director on March 31. Dr. Kask has recently attended the fourth meeting of the Inter-American Tropical Tuna Commission held in San José, Costa Rica, Aug. 13–15.

Garth S. Kennington has joined the faculty at Lawrence College as assistant professor of biology, replacing Robert M. Chew, who has been appointed an instructor in zoology at the University of Southern California.

Merle Lawrence has been appointed associate professor of physiologic acoustics, Department of Otolaryngology, University of Michigan Medical School. He has been associate professor of psychology, Princeton University.

The Damon Runyon Memorial Fund for Cancer Research, Inc., has made a fellowship grant to Gladys M. Mateyko, a research assistant in the biology department laboratories at New York University. Her research will center on the single cell and specific cellular areas that are isolated for individual study. Her work is aimed at the eventual diagnosis of cancer from a single cell.

Paul W. Merrill is retiring after a 33-year astronomical career in Pasadena. Dr. Merrill is a staff member of the Mount Wilson and Palomar observatories, operated jointly by California Institute of Technology and the Carnegie Institution of Washington. He joined the Mount Wilson staff in January 1919. Since 1939 he has been editor of the observatory publications, and in 1949 he was appointed a member of the Observatory Committee, which determines scientific policies for both Wilson and Palomar. He was a councilor and vice president of the American Astronomical Society, and has been president of the Astronomical Society of the Pacific.

Inger Onshuus, Farmaceutisk Industri, Oslo; Mahir Colakoglu, University of Ankara, Turkey; Perttie V. Laakso, University of Helsinki, Finland; and M. de Barros Ferraz, Instituto Agronômico of Campinas, São Paulo, were recent visitors at the Eastern Regional Research Laboratory, Philadelphia.

The Ebert Medal for distinguished pharmaceutical research was presented to Lloyd M. Parks, of the University of Wisconsin School of Pharmacy, at the American Pharmaceutical Association's centennial convention in Philadelphia. Dr. Parks has been a member of the Wisconsin faculty since 1938 and this year is chairman of the A.Ph.A. Scientific Section.

The magazine Archivos de Medicina Internacional, published by the Washington Institute of Medicine for doctors in Mexico, Spain, and all the countries of South America, has devoted a recent issue to the work of Leonard J. Ravitz, of Duke University, on electrical measurements and treatment in mental illness. The feature article was entitled "Fenómenos electrocíclicos y estados emocionales."

William Reiner-Deutsch has been invited to deliver a lecture before the Ophthalmological Society of the East of France in December. Dr. Reiner-Deutsch is director of laboratory research, Department of Research, New York Eye & Ear Infirmary.

Henry T. Skinner has been appointed director of the National Arboretum, Washington, D. C. Dr. Skinner, for the past 12 years curator of the Morris Arboretum in Philadelphia, succeeds B. Y. Morrison, who retired this past year.

Royal W. Sorensen, professor emeritus of electrical engineering, has retired from California Institute of Technology after a 42-year career, the longest service record of any Caltech faculty member. He plans to continue his high voltage equipment research and will also supervise the construction of 200,000-ampere current-testing equipment, being built on the campus to his design.

Adolph J. Stern, chairman of the Department of Chemistry at Wagner College, has been appointed dean of the college, following a ten-year association with Wagner. In 1942 he was appointed instructor in the department, and in 1950 he was chosen chairman. He has also been director of the summer session since 1947.

Roger W. Truesdail, president, Truesdail Laboratories, Inc., Los Angeles, has been invited to address European university and technical groups in Oslo, Bergen, Stockholm, Gothenburg, Copenhagen, Amsterdam, Brussels, Paris, and London. His subject will be "The Role of Commercial Laboratories in Industrial Research in the USA" and "Recent Developments of Food Technology in the USA."

Education

On behalf of the Foundry Educational Foundation, a committee of 19 foundry specialists and educators will serve as advisers to Illinois Institute of Technology during the coming year. The committee will advise engineering students on their scholastic programs and will carry out other local functions of the foundation, which was established in 1947 by the casting industry to improve educational offerings in the field. H. A. White, manager of the Smeeth-Harwood Company, Chicago, is chairman of the committee.

New York University College of Engineering has renamed its Department of Meteorology the Depart-

ment of Meteorology and Oceanography. New curricula will stress physical oceanography and the relationships between oceanography and meteorology. G. Neumann, former oceanographer at the University of Hamburg, has recently joined the department.

The University of North Carolina School of Medicine has made the following staff appointments: R. A. Ross (obstetrics and gynecology); Edward C. Curnen (pediatrics); Ernest Wood and Charles A. Bream (radiology); R. Beverly Raney (orthopedic surgery); Thomas W. Farmer (neurology); Louis G. Welt and John T. Sessions, Jr. (medicine); Edward C. Frank and David R. Hawkins (psychiatry); Paul L. Bunce (surgery).

The University of Tennessee Medical Units in Memphis have appointed the following new staff members: Yo Seup Song, of Seoul; Pierre-Antoine Finck, of the University of Geneva; Bengt Larsson, of Malmo, Sweden; Luis Prieto, Jr., of City Hospital, Cleveland; Helen Prieto, of St. Luke's Hospital, Cleveland; W. S. Gilmer, of the University of Virginia; and Tom D. Norman, of the USAF Hospital, Sheppard AFB, Wichita Falls, Kan. All the new staff members will be instructors in pathology except Dr. Prieto, Jr., who will be an assistant professor.

The University of Texas has appointed Edwin J. Fellows, director of biological sciences of Smith, Kline & French Laboratories, to the position of visiting lecturer in pharmacology and toxicology. Dr. Fellows will retain his position with SKF during the 12 months of his lectureship.

Grants and Fellowships

The following industrial scholarships have been awarded at Illinois Institute of Technology: Ceco Steel Products: Edward Bedrosian and Bert Bergstrom, engineering; Transparent Package: Alan Grossberg and Fred C. Hardtke, chemistry; La Salle Steel: John C. Krone; Witco Chemical: Theodore Lewis; Foundry Educational Foundation: Donald R. Adolphson.

The John and Mary R. Markle Foundation is continuing for the sixth year its Scholar in Medical Science program, in which grants of \$30,000 at the rate of \$6,000 per year are made for the support of each scholar. The number to be named in 1953 has not been determined, but 21 were appointed in 1952. Each accredited medical school is invited to nominate one candidate, and all nominations should be in the hands of the foundation, 14 Wall St., New York 5, on or before Dec. 1.

The National Paraplegia Foundation has awarded the following fellowships for basic studies in spinal functions: Pei-chin Tang, of the University of Washington School of Medicine; Dominick P. Pupura, of Harvard University Medical School; and Ellis C. Berkowitz, of the University of California Medical School at Los Angeles. The foundation will also make a special grant to Donald Monroe, Boston City Hos-

pital, to carry on a study of sex function in paraplegia.

The National Science Foundation graduate fellowship program for 1953-54 will follow the basic pattern set during the current year, in which nearly 600 fellows are receiving advanced training. The majority of awards will be made to graduate students, although a limited number will be made to postdoctoral students. Application forms, returnable by Jan. 5, will be available after Oct. 1 from the foundation, Washington 5, D. C. No awards will be made for study in clinical medicine, although grants will be made to medical students interested in careers in medical research.

Among Ramsay Memorial Fellowships recently awarded was one to David R. Lide, of Harvard, at the University of Oxford. The awards, which are all tenable in British universities, included two British fellowships, one Canadian, one Spanish, and one Swiss. Three fellowships were renewed.

Schenley Laboratories has made a grant of \$17,000 to the Langbord Virus Laboratory at Hahnemann Medical College and Hospital for antivirus research under B. A. Briody, recently appointed director of the laboratory. Wayne University has received \$4500 from Schenley for special research in organic chemistry and natural products, and the University of Wisconsin has received \$3600 for fermentation research.

In the Laboratories

The Atomic Energy Commission will construct a new gaseous diffusion plant for the production of uranium 235 in Pike County, Ohio, about 22 miles north of Portsmouth. Preliminary design calls for an estimated cost of about \$1,200,000,000, and up to 400,000 kw of power, which will be supplied from existing facilities. Later operations will require 1,800,000 kw. Kenneth A. Dunbar has been named area manager for the construction and operation, and R. H. McCulloh deputy area manager.

Baxter Laboratories, Inc., has appointed Fred H. Schultz head of the Department of Physiology-Pharmacology and director of pharmacological research. Harry L. Fevold has been appointed head of the Department of Biological Chemistry and director of biochemical research, and Leonard G. Ginger head of the Department of Organic Chemistry and director of organic chemical research. Myron Usdin has been made executive officer of the Department of Bacteriology. Other recent appointments to the staff of the Scientific Division are Arthur Berger and Bernard C. Wexler.

The Communicable Disease Center, USPHS, Atlanta, Ga., has appointed Donald S. Martin, former dean of the University of Puerto Rico School of Medicine, chief of the Bacteriology Laboratory. He succeeds Martin Frobisher, Jr., who has resigned to become chairman of the new Department of Bacteri-

ology at the University of Georgia. John M. Henderson, until recently professor of sanitary science in the Columbia University School of Public Health, has been appointed a consultant to the Vector Control and Investigations Branch.

Meetings and Elections

The Analytical Section of the International Union of Pure and Applied Chemistry has elected the following officers: president, C. J. van Nieuwenburg, of Delft (1951-53); vice presidents, I. M. Kolthoff, of Minneapolis (1951-53), and P. E. Wenger, of Geneva (1951-55); secretary, S. E. Q. Ashley, of Pittsfield (1951-55). They constitute the Executive Committee. A Section Committee is responsible for the general conduct of activities, and is made up of the following membership: the officers of the section; the president, secretary, and treasurer of the union; and F. E. Beamish, G. Charlot, R. C. Chirnside, F. Feigl, J. Gillis, and J. I. Hoffman. Commissions on Analytical Reactions, Microtechniques, Physico-Chemical Data of Analytical Interest, and on Terminology and Expression of Analytical Results are carrying on the work of the section with the help of eight subcommissions.

The tenth annual Pittsburgh Diffraction Conference will be held at Mellon Institute of Industrial Research, Pittsburgh, Nov. 6–7. Technical sessions on Instrumentation and Methods, Neutron Diffraction, and General Diffraction Studies and a symposium of invited papers in the field of Order-Disorder Studies are being arranged. For further information and a copy of the program, address E. E. Wiker, U. S. Steel Company, 234 Atwood St., Pittsburgh 13, Pa.

Recent Deaths

Angel A. Aballi (71), pediatrician, Havana, July 22; F. A. Abbiati (47), of Longmeadow, Mass., a vice president of Monsanto Chemical Company, Boston, Aug. 13; Ward P. Anderson (50), chemical engineer, Larchmont, N. Y., Aug. 12; Harry Aranow (73), obstetrician and gynecologist, New York, July 31; Carl Beck (88), surgeon, Sayre, Pa., July 21; Clarence H. Bellinger (65), neurologist and psychiatrist, Brooklyn, N. Y., Aug. 12; H. A. Black (79), physician, Pueblo, Colo., Aug. 7; Lloyd A. Blanchard (58), safety engineer, Washington, D. C., July 26; Adelaide L. Brewster (51), educational film expert, New York, Aug. 11; Caxton Brown (73), electrical engineer, Summit, N. J., July 25; Oscar Brunler (58), chemist, physician, and physicist, Santa Barbara, Calif., Aug. 1; Margaret Byington (—), sociologist, Chatham, Mass., Aug. 17; Frederic Grosvenor Carnochan (61), of New City, N. Y., biologist, Suffern, N. Y., Aug. 3; Rose Cohen (57), of New York, dentist, Philadelphia, Aug. 12; Paul A. Collins (67), opthalmologist, New York, Aug. 12; Melville T. Cook (83), of Baton Rouge, La., plant pathologist, Washington, D. C., Aug. 11.

Bernhard Dattner (65), neuropsychiatrist, New York, Aug. 12; Lincoln Davis (80), surgeon, Needham, Mass., July 29; Frederick J. De Natale (47), psychiatrist, Poughkeepsie, N. Y., Aug. 3; Charles W. Dowsett (77), metallurgist, Toronto, Aug. 18; Lammot du Pont (71), former president, E. I. du Pont de Nemours & Co., Fishers' Island, Conn., July 24; Harry E. Ehrlich (43), surgeon, New York, July 29; Mark Fishberg (55), urologist, Brooklyn, N. Y., Aug. 19; Ralph W. Gallagher (71), former president, Standard Oil Company (New Jersey), New York, July 31; Robert L. Gray (71), physician, Philadelphia, Aug. 11; William T. Griffiths (57), metallurgist, Redhill, Eng., July 30; M. E. Haas (45), president, Bussey Products Co., Chicago, June 13; John P. Hall (56), of New York, mining engineer, Chicago, Aug. 14; Andrew J. Higgins (65), inventor, New Orleans, Aug. 1; Otto K. Hunerwadel (60), agriculturist, Rangoon, Burma, July 30; Andrew Hutton (63), of Groton, Conn., design and development engineer, Westerly, R. I., Aug. 1.

P. J. Iverson (69), educator, Fargo, N. D., Aug. 12; John D. Jungman (76), physician, Philadelphia, July 24; Edward M. Keefe (83), physician and surgeon, Cincinnati, July 21; H. A. Kohman (71), research chemist, Pittsburgh, Aug. 16; Harland A. Ladd (48), educator, Augusta, Me., July 20; Searle H. Lanyon (56), physician, Philadelphia, Aug. 11; Clinton C. Lawrence (59), plant pathologist and forester, Stamford, Conn., Aug. 18; George C. Low (78), expert on tropical diseases, London, July 31; James F. McDonald (75), neuropsychiatrist, New York, Aug. 15; Mary W. Marvell (80), physician, Fall River, Mass., Aug. 9; R. B. Mildon (74), former vice president, Westinghouse Electric Corporation, New York, Aug. 4; George I. Miller (81), surgeon, Brooklyn, N. Y., July 29; Albert J. Newlin (64), meteorologist, San Jose, Calif., Aug. 14; Boris Nikitin (-), chemist, Moscow, July 23; Carl M. Nye (78), engineer, Chatham, Mass., July 27; William A. Orton (63), of Northampton, Mass., economist, Damariscotta, Me., Aug. 13; Newdigate M. Owensby (69), psychiatrist, Atlanta, Aug. 10.

Leonard Peckitt (92), industrialist and chemist, Allentown, Pa., July 21; William R. Redden (71), former national medical officer, American Red Cross, Brooklyn, N. Y., Aug. 11; Edith Rockwood (-), sociologist, Washington, D. C., Aug. 17; William T. Salter (50), pharmacologist, New Haven, Conn., July 30; Frank J. Sensenbrenner (87), of Kimberly-Clark Corporation, Neenah, Wis., July 22; David Sheitlis (-), pathologist, New York, Aug. 11; Henry J. Sherman (82), civil engineer, Moorestown, N. J., July 29; Joseph Skapier (48), cytologist, New York, Aug. 15; Charles S. Smith (65), physiologist, San Marcos, Tex., Aug. 1; Arthur K. Stone (90), tuberculosis specialist, Framingham, Mass., July 31; Charles B. Sullivan (79), psychiatrist, Boston, July 23; Rueben S. Tour (62), chemical engineer, Cincinnati, Aug. 1; G. Harold Warfield (59), of New Rochelle, N. Y., engineer, Vineyard Haven, Mass., Aug. 6; Harry D. Watts (67), engineer, Southampton, N. Y., July 27; W. Lawrence White (44), botanist, Concord, Mass., July 31; Virgil Zener (74), educator, Reading, Pa., Aug. 12.