unknown. Nevertheless, the test is a sensitive and accurate diagnostic means. It is now known that a blood factor present in persons with rheumatoid arthritis causes the clumping of sheep cells. This factor is inhibited by a second factor that prevents clumping. The second factor predominates in normal individuals.

A few years ago the sheep-cell test was only 50 percent accurate. Research at the Columbia University College of Physicians and Surgeons, the New York University College of Medicine, the Yale University School of Medicine, and the Grace–New Haven Community Hospital has since increased the accuracy of the test to more than 90 percent. The test also is valuable because it is positive in a high percentage of early cases.

Instructions on how to submit blood samples to the New Haven laboratory for analysis may be obtained by physicians by writing to the Streptococcus Laboratory of the Grace–New Haven Hospital, 789 Howard Ave., New Haven, Conn.

■ The Scientists' Committee on Loyalty and Security, 2153 Yale Station, New Haven, Conn., has become the Scientists' Committee on Security, Inc., at the same address. The members of the committee hope that this change to formal incorporation will allow them to work more effectively and to make better use of the volunteer manpower of the group.

The new committee will try to keep in touch with responsible opinion, to answer inquiries and perform a general clearing house function, to collect information on security matters, and to promote a better popular understanding of the problems of science and security. The committee solicits comments and suggestions from scientists, particularly with regard to security problems.

■ Banding is proving that the monarch butterfly is a true migrant, and first migrant to be confirmed in the insect world. Under Fred Urquhart, director of zoology at the Royal Ontario Museum, Toronto, Canada, a research team of 250 observers in Canada and the United States has put gummed labels on the wings of 33,000 monarchs. The group plans to finish the 4-year study with the banding of 40,000 more specimens in 1956.

Already the project has proved that millions of monarchs born in Ontario and the northeastern states fly south for the winter and instinctively return in the spring to their birthplaces to die. The longest recorded flight was from Hanlan's Point, Ontario, to Virginia Beach, Va.—a straight-line distance of 1000 miles.

Banding is being carried on by a volunteer corps of university professors, government employees, and amateur naturalists. An extremely high birth rate and an equally high casualty rate reduce the chance of a banded butterfly's being recovered to about one in a thousand.

The monarch's migration pattern follows that of a number of birds. In summer many specimens go to southern Ontario and the northeast states, where milkweed—upon which the female lays her 400 eggs—is abundant. The female always dies within a few days after depositing eggs. The young monarchs begin to flock and start southward from Ontario in the last 2 weeks in August.

Scientists in the News

JOHN OLIVER LA GORCE was honored on 7 Nov. at a dinner in Chevy Chase, Md., in recognition of his 50 years with the National Geographic Society, and of the part that he has played in making its name a household word. The society's board of trustees presented him with the Grosvenor medal, which was created in 1949 by Gilbert Grosvenor, former president and editor and now chairman of the society's trustees.

Leading figures and geographic and scientific organizations in all parts of the world, from the Royal Geographical Society in London and the Association of Japanese Geographers in Tokyo to the Geographic Society of Finland in Helsinki, sent their good wishes to La Gorce in honor of his golden anniversary.

J. ROBERT OPPENHEIMER, physicist and director of the Institute for Advanced Study at Princeton, N.J., will give the William James lectures in philosophy and psychology at Harvard University in the spring of 1957. The lecture series, delivered every second year under the auspices of the departments of philosophy and psychology, was established by Edgar Pierce in memory of William James, who taught both subjects at Harvard.

ERNST H. BARANY of the University of Uppsala, Sweden, will present a lecture on 8 Dec. at the National Institutes of Health, Bethesda, Md. As guest of the ophthalmology branch of the National Institute of Neurological Diseases and Blindness, Barany will speak on "Factors controlling the resistance to flow through the chamber angle." All interested persons are invited to attend the lecture.

RONALD C. VICKERY, specialist in rare earths who was formerly a member of the Commonwealth Scientific Industrial Research Organisation in Australia, has become associated with the chemistry and metallurgy research staff of Horizons Incorporated, research organization in Cleveland, Ohio.

R. N. DOETSCH, associate professor of bacteriology at the University of Maryland, has been appointed a 1956 fellow of the John Simon Guggenheim Memorial Foundation at the Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland. He will work with A. E. Oxford on some aspects of rumen microbiology.

PAUL W. KABLER, HAROLD F. CLARK, EDWIN E. GELDREICH, and HAROLD L. JETER, all of the Robert A. Taft Sanitary Engineering Center of the U.S. Public Health Service at Cincinnati, Ohio, have been selected for the 1955 Kimble Methodology Research award for outstanding contribution to the field of public health. They are being honored for their development of the use of a membrane filter technique for the bacteriological analysis of water samples. Through their method it is possible to incubate, count, and identify the bacteria from a sample of water in as little as 16 hours; conventional analysis methods require from 48 to 96 hours.

LAUCHLIN M. CURRIE has been appointed a vice president of Union Carbide Nuclear Company, a division of the Union Carbide and Carbon Corporation. Currie has been vice president of National Carbon Company, another division of Union Carbide.

SHIRLEIGH SILVERMAN of the Applied Physics Laboratory, Johns Hopkins University, has taken a year's leave, effective 1 Nov., to serve as director of the Physical Sciences Division, Office of Naval Research.

H. H. SMITH will be on leave from the department of plant breeding, Cornell University, until 1 Oct. 1956. During his leave, to be spent at the Brookhaven National Laboratory, special lectures and consultations with students will be offered by a series of visiting professors. These include: for the month of December 1955, M. WESTERGAARD, professor and head of the department of genetics, Copenhagen University; for the spring semester of 1956, A. H. SPARROW, Brookhaven National Laboratory, who will give a course in radiobiology; for June 1956, M. M. RHOADES, professor of botany, University of Illinois; for July 1956, S. G. STEPHENS, head of the genetics faculty, North Carolina State College; for August 1956, R. D. OWEN, professor of biology, California Institute of Technology.

JOHN J. GAVIN, former head of the biological control unit of Smith, Kline and French Laboratories, Philadelphia, Pa., has been appointed chief microbiologist for the Food Research Laboratories, Inc., Long Island City, N.Y.

G. M. ADAMSON, JR., has been appointed head of the homogeneous reactor program of the metallurgy division, Oak Ridge National Laboratory. He succeeds J. L. GREGG, who has returned to Cornell University after a year's leave. J. H. DEVAN has replaced Adamson as head of the dynamic corrosion section.

Other changes in the metallurgy division include the resignation of W. O. HARMS, who has accepted a teaching post at the University of Tennessee. M. L. PICKLESIMER succeeds Harms.

E. C. ELTING has been appointed deputy administrator for Experiment Stations in the U.S. Department of Agriculture's Agricultural Research Service, a post left vacant by the retirement of the late R. W. Trullinger. Elting joined the Department of Agriculture in 1936 as a specialist in dairy husbandry on the staff of the Office of Experiment Stations.

The following appointments to assistant professor have been announced. University of Alabama: GRAY C. BUCK and ORVILLE CLAYTON, surgery; ROBERT EARL ROTH and HAROLD SCHNEIDER, pathology. University of Pittsburgh: PHILLIP BACON, geography; JOHN CAMERON, physics; JOHN ULRICH, speech; IAN MITCHELL SUSSEX, biological sciences. University of Mississippi: JAMES L. KLINE, physics; MALCOLM ROBERTSON, psychology.

Necrology

WAYNE ARNOLD, Ridgefield, Conn.; 35; physicist for Schlumberger Wells Survey Corp.; former member of the staff of the Los Alamos Scientific Laboratory; 15 Nov.

ALFRED T. BEALS, Hackensack, N.J.; 85; photomicrographer; expert on mosses and lichens; 8 Nov.

ALBERT E. BOTHE, Merchantville, N.J.; 64; professor of urology, Graduate School of Medicine, University of Pennsylvania; 11 Nov.

ALVA CLARK, Washington, D.C.; 65; director of research and development in a sector of the U.S. Department of Defense; retired vice president of Bell Telephone Laboratories; 14 Nov.

SAMUEL J. CROWE, Baltimore, Md.; 72; emeritus professor of laryngology at Johns Hopkins University; 13 Nov.

ARTHUR H. CURTIS, Evanston, Ill.; 74; former head of the department of obstetrics and gynecology of the Northwestern University Medical School; 13 Nov.

BERNARD DE VOTO, Cambridge, Mass.; 58; Pulitzer prize-winning historian who was an emphatic proponent of conservation of the nation's natural resources; 13 Nov.

JONAS FRIEDENWALD, Baltimore, Md.; 58; associate professor of ophthalmology at Johns Hopkins University, Baltimore; 5 Nov.

PAUL F. GAEHR, Auburn, N.Y.; 75; professor emeritus of physics at Wells College; 12 Nov.

WARDLAW MCGILL HAMMOND, Philadelphia., Pa.; 75; photomicrographer; honorary research associate at the Farlow Herbarium of Cryptogamic Botany, Harvard University; 9 Nov.

ELY C. HUTCHINSON, Washington, D.C.; 73; management consulting engineer; World War II consultant on scientific and technical affairs in the Office of Research and Development, the War Production Board, and the Office of Technical Services; 12 Nov.

JOHN J. HYLAND, New York, N.Y.; 51; electronics expert; founder and chairman of the board of Control Instrument Company of Brooklyn; 11 Nov.

JAMES M. SWAINE, Ottawa, Canada; 77; former Dominion entomologist; 11 Nov.

Education

■ Vernon Lippard, dean of the Yale University School of Medicine, recommended recently that medical schools should be "in physical proximity" to the rest of the university and not far distant from the central university campus. In his address as retiring president of the Association of American Medical Colleges, Lippard urged a closer integration between medical schools and the universities with which they are associated.

He contended that a medical school is often more concerned with its hospital than with its university obligations. Blaming both the medical schools and the universities for this situation, he said that "the day has passed when medical education and research can be carried on efficiently in isolation."

Lippard also pointed out that a college education generally has been accepted as a prerequisite for admission to medical school but that the methods of medical instruction have too many of the characteristics of undergraduate education.

"Our curricula are crowded from early morning until late at night with required exercises, the compulsion of frequent and detailed examinations in course is considered necessary, little time or incentive is provided for the pursuit of special interests, and participation in the advancement of knowledge is relegated to the postdoctoral level." He stressed that such practices are "not compatible with graduate study in a university where introduction of the student to severe and self-reliant intellectual effort is the major purpose."

Pointing out that current practices of medical education were conceived before the internship and residency were accepted, he said "the medical student continues to expend what I believe to be an inordinate proportion of his efforts in pursuit of the urine specimen and the hemocytometer, with no decrease in time devoted to these chores as participation in new diagnostic procedures is imposed upon him."

■ The Albert Einstein College of Medicine of Yeshiva University was formally dedicated last month before an audience of 5000 people. Congratulatory messages, including one from President Eisenhower, came from all over the country.

Symbolic of the dedication was an inscribed plaque that was presented by the college's first class of 53 men and 3 women to Hans Albert Einstein, Albert Einstein's son. The plaque included the pledge that the students would "carry on in the spirit of warm humanity and scientific integrity exemplified by Albert Einstein, justifying his high hopes for the college as a valuable instrument for advancing medical science and the national welfare."

Although the school has just opened, it starts more or less full fledged, with adequate teaching and laboratory facilities and the hospitals, and other auxiliaries that usually are acquired slowly through the years.

The college is the heart of a new medical center that is to cost $100 million. It will be open to all who are academically qualified, without regard for race, creed, or nationality.

■ Lehigh University has received a private grant sufficient to support the full expenses of the bioelectric laboratory of the department of psychology for the next 10 years. The primary research program of the laboratory is the study of muscle action potentials in muscular fatigue, with Arnold M. Small, Jr., and Nathan B. Gross as principal investigators.

■ A lecture series designed to acquaint high-school science teachers with recent developments in science has been undertaken by Washington University in cooperation with the St. Louis Public Schools Advisory Committee. It is hoped that the monthly series, entitled the "Frontiers of science," will add to the teachers' ability to stimulate an interest in science among high-school students.

The lectures are open to all teachers in public, private, and parochial schools in the St. Louis area. The St. Louis Public School System is permitting