to immunize a second rabbit. In most cases the second rabbit responded by forming precipitating antibodies against the serum of the first rabbit and against the serums of some, but not all, normal rabbits. The quantity of precipitate formed with antigens of normal rabbit serums is typical of antigen-antibody reactions amounting to 350 micrograms of nitrogen per milliliter of antiserum.

Study of the precipitin reaction by Oudin's gel-diffusion technique revealed that often a single antigen and rarely more than two antigens were involved in a reacting system. However, the studies so far completed indicate a considerable diversity in antigenic patterns in different rabbits. In testing the serums of 45 normal rabbits with antibodies from six immunized rabbits, Oudin was able to distinguish nine distinct patterns of reaction.

These experiments suggest that the serum protein antigens of individuals within a species may be as distinctive as the blood group antigens. That these specific antigens are serum proteins is indicated by the fact that in the serum of immunized rabbits they can function also as antibodies. The genetic control of these serum antigens has not yet been investigated but should be of considerable interest. Also of interest is the possible extension of these observations to other species of animals. Oudin has proposed the name *allotypy* for this phenomenon.— M. H. A.

Theobald Smith Award Judges

The president of the AAAS, Paul B. Sears, with the unanimous approval of the executive committee, has appointed the following judges for this year's Theobald Smith award: Edward A. Doisy, Sr., professor of biological chemistry, St. Louis University School of Medicine; Charles B. Huggins, professor of surgery and physiology, University of Chicago; Ancel Keys, professor of physiological hygiene, University of Minnesota; and Cecil J. Watson, professor of medicine, University of Minnesota.

Irvine H. Page, director of research of the Cleveland Clinic and vice president of AAAS Section N–Medical Sciences, serves *ex officio* as chairman of this committee, and Allan D. Bass, professor of pharmacology at Vanderbilt University School of Medicine and secretary of Section N, will serve as committee secretary.

News Briefs

■ A paper delivered at the recent National Cancer conference reported that about one-third of those who develop cancer in the United States today would survive for 5 years. This represents a gradual improvement over the last 10 years, since the 5-year survival rate in 1948 was about 1 in four. The difference between the rate of one-quarter and the rate of one-third, when it is applied to current cancer incidence, amounts to roughly 30,000 more patients a year that pass the 5-year survival point.

The figures are based on statistics compiled at central registries in Connecticut, Massachusetts, and California and at seven unnamed hospitals. The report was read by E. Cuyler Hammond, director of statistical research for the American Cancer Society.

■ British geologists are investigating a newly unearthed fossil reptile bed at Shipston-on-Stour in Warwickshire, about 10 miles south of Stratford-on-Avon. Excavations have already disclosed the remains of an ophthalmosaur and the vertebrae of an unidentified terrestrial dinosaur.

Since Warwickshire was submerged under one of the Jurassic seas of some 140 million years ago, it is thought that some of the bones were washed from neighboring land regions, probably toward the Welsh border area. The specimens will be examined at the city museum in Birmingham.

■ The Justice Department has dropped a contempt indictment against Wendell H. Furry, associate professor of physics at Harvard University who acknowledged his own former Communist party membership but refused to answer questions about others [*Science* **121**, 232 (1955)]. United States Attorney Anthony Julian moved for dismissal on the ground that the acquittal in a similar case of Leon J. Kamin, a former research psychologist at Harvard [*Science* **123**, 135 (27 Jan.)], left the Government with evidence "deemed insufficient to warrant further prosecution."

■ The Air Force Office of Scientific Research will be established in its new quarters in Washington, D.C, on 1 July. The move is not related to the recent decision to move the Air Research and Development Command Headquarters from Baltimore to Andrews Air Force Base, Md. The AFOSR was originally formed in 1951 as a part of the ARDC Headquarters, but in August 1955 the office was separated organizationally from ARDC Headquarters.

The office sponsors research in the physical science and bioscience areas through contracts with universities, research foundations, industry, and other government agencies. It also maintains close liaison with the scientific community to insure the integration of significant advances into Air Force systems.

■ United States industry spent $3,700,000,000 for research and development in 1953, of which 4 percent was for basic research.

■ The Department of Defense has announced that a team of four specialists has gone to Korea to conduct a survey of the nutritional status and food services of the Korean military forces. The team will be headed by R. R. Williams, formerly of the Bell Telephone Research Laboratories and recently retired president of the Williams-Waterman Fund for the Combat of Dietary Diseases.

Others participating in the survey are Gerald F. Combs of the University of Maryland, W. J. McGanity of the Vanderbilt University School of Medicine, and Z. I. Kertesz of the New York State Agricultural Experiment Station, Cornell University (Geneva, N.Y.). The survey will be conducted under the auspices of the U.S. Interdepartmental Committee on Nutrition for National Defense, of which Frank B. Berry, Assistant Secretary of Defense for Health and Medicine, is chairman.

■ Theodore E. Bond, an agricultural engineer at the University of California, cooled seven Hereford steers with a 42-inch electric fan during hot weather. Each gained 1.03 more pounds in a day than did any of seven steers that were not being cooled.

The fans kept the airflow at 4 miles an hour. Not only did the fanned cattle gain weight rapidly but they needed 400 pounds less feed to put on 100 pounds of meat. Water sprays, air-cooled buildings, and cooled drinking water were not nearly so effective as the fan.

Scientists in the News

JOHN G. FOX has been named head of the department of physics at Carnegie Institute of Technology and ROGER B. SUTTON is the new director of the institute's Nuclear Research Center at Saxonburg. Both positions were formerly held by E. C. CREUTZ, who resigned in November to join the General Dynamics Corporation.

MILTON D. BURDICK has been named to head the new Engineering Ceramics Section in the Mineral Products Division of the National Bureau of Standards. The section was organized from the Porcelain and Pottery Section, which was under the direction of R. F. Geller until his retirement last October.

WILLIAM C. H. PRENTICE, chairman of the department of psychology of Swarthmore College, has been named dean of the college.

On invitation from the organizing committee of the 13th All-Union Congress of Epidemiologists, Virologists, Microbiologists, and Hygienists, ALBERT B. SABIN of the Children's Hospital Research Foundation, and Cincinnati College of Medicine, Cincinnati, Ohio, has left for Leningrad to participate in the congress 20–28 June. He is taking with him a number of different viruses requested by Soviet scientists and will spend several weeks visiting laboratories in the Soviet Union.

JOHN W. McBURNEY, a specialist in building technology, has retired from the National Bureau of Standards after 30 years of service. McBurney was graduated from Ohio State University in 1913 with a B.A. in chemistry and bacteriology; in 1952 he was awarded an honorary doctor of science degree by Marietta College. He first joined the Bureau staff in 1926 as a research associate for the Common Brick Manufacturers Association. In 1932 he became research associate for the Asphalt and Mastic Tile Association, and in 1935 the liaison staff member between the National Bureau of Standards and the American Standards Association. Since 1935 he has worked directly for the NBS.

McBurney has been a leading figure in the preparation of specifications and standards for masonry, mortar, brick, and asphalt tile. The Hirschwald-McBurney coefficient is widely used, especially in Europe, for predicting the weather durability of heavy clay products, and the McBurney indentation test for asphalt tile is also used internationally.

WILLARD F. LIBBY has been nominated by the President to serve a new term as a member of the Atomic Energy Commission. The nomination is for 5 years ending 30 June 1961.

NORMAN BUCKMAN of Fort Defiance, Ariz., received first prize for the outstanding paper presented at the annual meeting of the U.S. Public Health Service Clinical Society in Bethesda, Md. His paper was entitled "Premedication in children's dentistry." A dental officer in the Division of Indian Health of the Department of Health, Education, and Welfare, Buckman is in charge of dental services at the Navajo medical center in Fort Defiance, where he has conducted a 2-year clinical research project with the Indian children. His paper was a report of this project.

DONALD E. KRATOCHVIL, assistant professor of agronomy at South Dakota State College has received the college's $1000 George Lincoln Brown award for "able and inspiring" teaching.

JAMES B. CONANT, chemist and president emeritus of Harvard University, who is now serving as American Ambassador to the Federal Republic of Germany, has received the American Chemical Society's Charles Lathrop Parsons award for outstanding public service.

WILLIAM K. TAFT, manager of the Government laboratories in Akron, Ohio, that are operated by the University of Akron for the National Science Foundation, will join the Aviation Division of Olin Mathieson Chemical Corporation in a research capacity on 1 July. Other members of the Akron staff who will also move to Olin Mathieson are TRESCOTT B. LARCHER, WALLACE R. MITTEN, A. D. SNYDER, DOROTHY C. PREM, JUNE T. DUKE, NORMAN S. TROMMER, and ERWIN KNIEL. The group will be located at the Olin Mathieson research laboratories at Niagara Falls.

HARRY C. SOLOMON of the Harvard Medical School will retire this summer as professor of psychiatry. He will continue as medical director and superintendent of the Boston Psychopathic Hospital, the major center for the teaching of psychiatry in the medical school. In his dual capacity, Solomon has been a leader in coordinating the clinical care of the mentally ill with the teaching of psychiatry at both the graduate and undergraduate levels. He is recognized internationally as a leader in the field of psychiatry as it has emerged as a distinct medical discipline.

At the Psychopathic Hospital he has developed not only patient therapy but education for all those involved in patient care. He also led in the inauguration of a series of children's clinics in mental health that serve for training, research, and treatment.

He has devoted considerable study to the ever-increasing role of psychiatry in the social sciences. He has served as a consultant on plans for new legal medicine facilities for the service of the courts in Massachusetts, and recently he was appointed to the Advisory Committee of the Massachussetts Department of Correction.

The National Science Foundation has announced four new appointments.

E. E. LITKENHOUS has been named program director for engineering sciences. He is on leave of absence from Vanderbilt University, where he has been head of the chemical engineering department since 1941 and executive director, division of industrial research, since 1953.

FRANK K. EDMONDSON has joined the staff as program director for astronomy. He is on leave of absence from Indiana University, where he has been director of the Goethe Link Observatory since 1948 and chairman of the department of astronomy since 1944. He will be assisted during the summer months by MARGUERITE RISLEY, associate professor of mathematics and astronomy at Randolph-Macon Woman's College. ROBERT R. BROWN, assistant professor of physics at the University of New Mexico, has been appointed professional assistant for the physics program.

SIDNEY S. BROWNE, a physicist for the Lockheed Aircraft Corporation, has been appointed assistant director of research, and head of the new analysis and evaluation section, in the Missile Systems Division.

R. A. WILKINS, vice president for research and development, Revere Copper and Brass Inc., Rome, N.Y., has been elected a fellow of the Institute of Metals, London, England. Fellows are limited to 12 in number. Wilkins is the first member resident outside the British Isles to be elected to the fellowship.

E'LISE HARMON, chief research printed circuit engineer for the Aerovox Corporation, New Bedford, Mass., has received the 1956 award of the Society of Women Engineers. It has been her responsibility to direct the research and development, as well as to establish plant procedures, for a new method of printed circuitry and printed circuit components.

Recent Deaths

JULES BEBIE, St. Louis, Mo.; 79; director of research for Monsanto Chemical Company, 1920–30; consulting engineer since 1930; lecturer in the department of chemical engineering, Washington University since 1939; 9 June.

LOUIS J. BLANCHET, South Orange, N.J.; 69; chief engineer in the contracting division of A. C. Horn Corporation; 4 June.

HENRY FURBER, New York, N.Y.; 91; expert in phonotelemetry; 6 June.

WILLIAM H. GESELL, Upper Montclair, N.J.; 66; chemical engineer; vice president of Lehn & Fink, 1920–51; 6 June.

ALLEN P. GREEN, Mexico, Mo.; 80; civil and mining engineer; founder of the American Refractories Institute in 1912; 9 June.

EDWARD B. HUNN, Cranford, N.J.; 60; chemist; technical adviser for the Esso Research Company; 6 June.

GEORGE LAUTRUP, Yonkers, N.Y.; 78; retired consulting engineer for Otis Elevator Company; 9 June.