meeting was "Organization for Research," in which he developed the idea of scientific research as a public service, not only in time of war but in time of peace as well, using the University of Wisconsin as an example of a state university functioning as a great public service institution through research work for the public good. He further showed how the modern state university is distinguished from the academy, the earlier type of educational institution, from the college, the modern institution which has replaced the academy in the matter of instruction, and from the modern endowed university, by the enlarged program of research for the public good which distinguishes the state university. Dr. Jones suggested as a means of fulfilling this public trust at state institutions the organization of "research committees" and "faculty subject groups" which are formed without regard to collegiate divisions. These are definite means of promulgating throughout the institution the relative importance of research as compared with other lines of activity and of emphasizing research as a much needed form of public service.

At the meeting it was voted by the members to petition the national council for a charter to form a local branch to be known as the Pennsylvania State College Branch of the American Association for the Advancement of Science. The purpose of the organization is to promote and stimulate research in the institution.

SIGMA XI LECTURES AT YALE UNIVERSITY

At a meeting on November 8 of the Yale Chapter of the Society of Sigma Xi, which was addressed by President James R. Angell of the University, announcement was made of a series of lectures to be given under the auspices of the Yale Chapter on the general topic of "The evolution of man." The lecturers and their subjects are considered of such general interest that it has been decided to hold the series this year in Lampson Lyceum, and to invite the public to attend the lectures without charge. The first lecture of the series will be given on the evening of December 2, on "The antiquity of man," by Professor Richard S. Lull of the university faculty. The following are the subjects of the succeeding four lectures, which will continue through the month of March:

- The natural history of man-Professor H. B. Ferris.
- The evolution of the nervous system of man-Professor G. H. Parker.
- Societal evolution-Professor A. G. Keller.
- The direction of evolution-Professor Edwin G. Conklin.

It is expected that the 1921-22 lectures under the auspices of the Society of Sigma Xi will, as in the past, be published by the Yale University Press.

SCIENTIFIC NOTES AND NEWS

As a memorial to the late Edward C. Pickering, for forty-two years director of the Harvard College Observatory, it is proposed to erect near Cambridge an astronomical observatory, whose work will be largely concerned with the study of variable stars.

DR. HARVEY CUSHING, of Harvard University and the Peter Bent Brigham Hospital, was elected president of the American College of Surgeons at its recent meeting in Philadelphia.

THE Franklin Institute of Pennsylvania has awarded its Howard N. Potts gold medal to Dr. E. V. McCollum, professor of chemical hygiene in the School of Hygiene and Public Health of the Johns Hopkins University. The medal is awarded "for distinguished work in science or the mechanic arts," and was presented by the institute in recognition of a lecture on "Nutrition and physical efficiency," delivered before its members in 1920.

SIR J. J. THOMSON succeeds Sir Richard Glazebrook as president of the Institute of Physics, London.

THE Royal Society of Edinburgh has elected as president Professor F. O. Bower. The vicepresidents are Sir G. A. Berry, Professor W. Peddie, Sir J. A. Ewing, Professor J. W. Gregory, Major-General W. B. Bannerman and Dr. W. A. Tait.

WE learn from *Nature* that Professor Léon Fredericq is to be presented with a medallion in recognition of his distinguished services as professor of physiology for fifty years in the University of Liège. The presentation will take place this month, when his son will take the chair which Professor Léon Fredericq has held so long.

THE quinquennial prize for the best work in medical sciences, offered by the Brussels Academy of Medicine, has been awarded to Dr. A. Brachet, professor of anatomy and embryology of the University of Brussels, for his contributions to topographical anatomy.

THE Italian Society of Internal Medicine at its eighteenth congress in Naples on October 26, celebrated the ninetieth year of Professor Cardarelli, and the fortieth year of Professor Maragliano's work as teacher. These physicians are the directors of *La Riforma Medica*, one of the chief medical journals published in Italy.

PROFESSOR P. GUTHNICK has been appointed director of the Babelsberg Observatory in succession to the late Herman Struve.

ERNEST P. BICKNELL, who has been representing the Red Cross abroad, has been appointed American National Red Cross Commissioner for Europe.

DR. H. C. DICKINSON, chief of the automotive investigations division of the Bureau of Standards, has been granted a leave of absence to become director of research for the Society of Automotive Engineers. He will continue to assist in the work of the bureau in a consulting capacity.

SECRETARY OF LABOR DAVIS has appointed a special committee to consider the welfare of immigrants coming through the principal ports of entry of the United States. The members are: Fred C. Croxton, chairman of the Ohio Council of Social Agencies; Miss Julia Lathrop, former head of the U. S. Children's Bureau; Miss Lola D. Lasker, of New York. DR. WILFRED H. OSGOOD has been appointed curator of the department of zoology in the Field Museum of Natural History.

A GEOLOGICAL party of four, consisting of Professors R. A. Daly and Charles Palache of Harvard University, Professor G. A. F. Molengraaf of the University of Delft, Holland, and Dr. F. E. Wright of the Geophysical Laboratory, Carnegie Institution of Washington, will spend the coming winter in southern Africa. in a geologic and petrologic study of the Bushfeld igneous complex in Transvaal.

THE council of the California Academy of Sciences announces the appointment of Dr. Barton Warren Evermann as director of the new Steinhart Aquarium. The duties of this position will be in addition to those of director of the Museum of the California Academy of Sciences, which Dr. Evermann has held for many years. It was through Dr. Evermann's interest in fishes and aquariums that the late Mr. Ignatz Steinhart was induced to give to the California Academy of Sciences \$250,000 for the construction and equipment of a public aquarium building in San Francisco. The council has selected Mr. Alvin Seale to be superintendent of the aquarium. For several years Mr. Seale was director of fisheries of the Philippine Islands. He also planned the Manila Aquarium, of which he was director during his several years' residence in the Philippines. He will be on duty throughout the period of construction and thereafter. The aquarium will be situated in Golden Gate Park, San Francisco, immediately adjoining the present museum of the academy.

THE new hospital of the Manchester and District Radium Institute was opened on October 7, by Lord Derby. It is the first hospital in England to be used exclusively for radium treatment.

BERT HOLMES HITE, chief chemist of the Virginia Experiment Station since 1895, professor of agricultural chemistry in the University of West Virginia since 1898, has died at the age of fifty-five years. MISS EUNICE ROCKWOOD OBERLY, librarian of the Bureau of Plant Industry of the Department of Agriculture since 1908, whose knowledge of the organization and relations of phytopathological literature was probably unique, died suddenly at her home in Washington on the morning of November 5.

JOHN AUGUSTINE ZAHM died in Munich, Bavaria, of pneumonia, on November 11. Dr. Zahm was born in Ohio and graduated in 1871 from Notre Dame, with which university he was connected for many years as head of its scientific department, as curator of its museum, and then as president of the board of trustees. He was the author of numerous books concerned largely with the relations of science to religion.

DR. EMIL A. BUDDE, the German electrical engineer, died recently at the age of eighty. He was president of the International Electrochemical Commission, succeeding Dr. Elihu Thomson.

THE president and council of the Royal Society, London, announce that, in view of the economic condition of the country, the anniversary dinner of the society will not be held this year.

UNIVERSITY AND EDUCATIONAL NEWS

SIR EDWARD ALLEN BROTHERTON, Bt., M.P., has given £20,000 to the University of Leeds for the development of bacterial study and research, more particularly in the interests of public health.

A VERDICT of \$25,000 damages has been rendered against Cornell University in the action brought by Louise Hamburger '20. In making his charge to the jury, Justice Kellogg said that the verdict to be given rested upon one point only, as to whether the university was negligent in employing a small boy in the chemistry stock-room. A motion for retrial has been made.

R. S. Lowe, of the Nitrate Division of the Ordnance Department of the Army, has been appointed dean of the department of chemical engineering of the University of Cincinnati.

C. R. ALDEN, formerly dean of the school of engineering, Institute of Technology,

Detroit, has accepted an appointment as dean of the college of engineering, Ohio Northern University, Ada, Ohio.

AMONG changes in the medical faculty at Yale are: Dr. Francis G. Blake appointed John Slate Ely professor of medicine; Dr. Edwards Albert Park, professor of pediatrics; Dr. Arthur M. Morse, professor and head of the department of obstetrics and gynecology; Dr. John T. Peters, Jr., associate professor of medicine and Dr. Albert T. Shoal, associate professor of pediatrics. Dr. Samuel C. Hardey, associate professor of surgery, has been placed in charge of the surgical department of the school.

DR. LANSING S. WELLS, until recently a research chemist with the Barrett Company, Frankford, Philadelphia, Pa., has accepted an appointment as assistant professor of organic and physical chemistry, Montana State College, Bozeman.

PROFESSOR H. C. PLUMMER, F.R.S., has been appointed professor of mathematics of the Ordnance College, Woolwich, England.

At the opening of the winter session of St. Andrews University, Scotland, the newly appointed professor of chemistry, Dr. Robert Robinson, F.R.S., and the newly appointed professor of bacteriology, Dr. William J. Tullock, were inducted into their respective offices.

DISCUSSION AND CORRESPONDENCE LATITUDE AND VERTEBRÆ

To THE EDITOR OF SCIENCE: IN SCIENCE for December 26, 1919, is a suggestive note by Mr. A. G. Huntsman on the problem of "Latitude and Vertebræ" among fishes, a problem of reality and importance which I have thus had mostly to myself, and to which I have failed to find a solution. As Mr. Huntsman observes, not only have the northern species a progressively increased number of vertebræ, but a similar variation may occur within the limits of the species itself. In the flounder, *Hippoglossoides platessoides*, the northern examples have most vertebræ, while in the herring—*Clupea harengus*, the numbers of vertebræ decrease in passing from the