There is still much to be learned concerning the period of incubation, accurate methods of early diagnosis in non-paralytic cases, modes of transmission and the length of time persons continue to carry the infection, and, in view of these factors, a scientifically adequate method of control is impossible at the present time.

The committee recommends the closest cooperation possible among the different laboratories and investigators that may enter upon investigation of problems connected with epidemic poliomyelitis.

The committee would suggest the following problems as especially desirable for investigation at this time.

- 1. Methods of culture of the virus of poliomyelitis, with especial reference to corroboration of previous work, to simplification of methods, and to the distribution of the virus in the body of patients.
- 2. The immunologic reactions of patients, supposed carriers of the virus, and others.
- 3. The virulence for animals, of the crude virus, in order to determine if possible whether there are any differences in the virus causing outbreaks in different parts of the country as well as to discover, perchance, more susceptible animals for experimental purposes than are now available.
- 4. The microscopic study of the secretions of the nose and throat and of the intestinal contents of patients suffering from poliomyelitis, persons who have come in close contact with such patients, and others.
- 5. The transmission of the disease by insects and domestic animals and other possible modes of transmission.
- 6. The study of practical methods of disinfection.

SCIENTIFIC NOTES AND NEWS

DR. WILLIAM H. WELCH sailed from New York on August 6 for England to make studies in connection with the organization of the school of hygiene and public health established by the Rockefeller Foundation at the Johns Hopkins University. Dr. Welch will also study, as president of the National Aca-

demy of Sciences, the manner in which England has been organized in scientific lines for the war. He is accompanied by Dr. George Ellery Hale, chairman of the committee of the academy on scientific organization.

The Cartwright Lectures for 1916 of the Association of the Alumni of the College of Physicians and Surgeons, Columbia University, will be given by Dr. Richard M. Pearce, professor of research medicine, University of Pennsylvania, on October 24 and 25. Professor Pearce's subject will be: "The Spleen in its relation to blood destruction and regeneration."

Dr. J. Howard Beard, Urbana, has been appointed health officer of the University of Illinois.

Dr. Gustavus Mann, until last year professor of physiology in Tulane University, has been appointed consulting chemist for the Freeport Oil Company of Texas.

Dr. Donald B. Armstrong has resigned as director of the department of social welfare of the New York Association for Improving the Condition of the Poor, to become assistant secretary and director of the community tuberculosis experiment of the National Association for the Study and Prevention of Tuberculosis.

Dr. Herbert J. Spinden, of the American Museum of Natural History, has been given charge of the archeological survey of Porto Rico undertaken by the New York Academy of Sciences, and has been in the field. In the early part of the season he visited Venezuela for a preliminary archeological reconnaissance.

Professor A. L. Kroeber, of the University of California, has returned to Zuñi for further investigation of their social and ceremonial organization.

Dr. James J. Mills, instructor of ophthalmology at the Johns Hopkins Medical School, has sailed for France, where at Biarritz he will assist in the treatment of injuries to the eyes of the soldiers.

THE Antarctic relief ship *Discovery*, which has been placed at the disposal of the British Admiralty for use in the effort to rescue the

marooned men of Sir Ernest Shackleton's expedition on Elephant Island, sailed from Plymouth Sound on August 10, for Port Stanley, Falkland Islands. Sir Ernest will embark at that port in another effort to reach Elephant Island.

M. Henry Noco has been commissioned to prepare a portrait plaque of the French archeologist and anthropologist, M. Joseph Déchelette, who has been killed in the war. Subscriptions may be sent to M. le Comte O. Costa de Beauregard, Sainte-Foy, par Longueville (Seine-Inférieure). Those sending a subscription of 10 francs are entitled to a replica of the plaque in bronze, those giving 50 francs to one in silver.

Dr. John Benjamin Murphy, the distinguished surgeon, professor of surgery in Northwestern University, died on August 11, aged fifty-nine years.

Dr. Bushell Anningson, lecturer in modical jurisprudence in the University of Cambridge since 1884, has died at the age of seventy-eight years.

Edgar Albert Smith, an authority on conchology, from 1867 to his retirement in 1913 on the scientific staff of the British Museum, died on July 22, aged sixty-nine years.

The death is announced of Dr. R. C. Delgado, of Havana, member of the Cuban Board of Health and secretary of the Havana Academy of Sciences.

THE Swedish government has decided to postpone until July 1, 1917, the distribution of the Nobel prizes in physics, chemistry, medicine and literature.

THE Paris Academy of Medicine, following the precedents of 1914 and 1915, has decided not to suspend its sittings this year. It will continue to meet during the months of August and September for the discussion of questions relating to public health and national defence.

Mr. Richard T. Crane, in a telegram to Mayor Mitchel, of New York, announces a gift of \$25,000 to the individual who may offer the best cure for infantile paralysis, or the best solution to that problem, within a year.

The Senate Public Health Committee, on July 28, voted to report favorably a proposed appropriation of \$2,000,000 to be spent in the care of indigent sufferers from tuberculosis. The object of the appropriation is to relieve the states of the care of invalids who leave their homes in search of health and then become charges on other communities.

THE United States Public Health Service has inaugurated a campaign for the relief of sufferers from hay-fever. The service will endeavor to have state legislatures enact laws to provide means for fighting weeds which are known to provoke the disease. It is said that 2 per cent. of the people of the United States are sufferers from hay-fever.

Nature quotes from the June number of the Bul. Imp. Acad. Sci., Petrograd, the statement of plans to establish a biological station on Lake Baikal. The largest of the fresh-water lakes of Europe and Asia, and said to be the deepest in the world, it possesses a fauna in many respects unique. Some of its fishes are found nowhere else, and some live at a greater depth than any other fresh-water fishes. Among them are very ancient forms, and, according to some investigators, vestiges of the Upper Tertiary and subtropical fauna of Siberia and, possibly, of central Asia. Though Lake Baikal has long since attracted the attention of Russian zoologists, much remains to be done, and it is felt that private research, valuable as its achievements have been, should be supplemented by a fully equipped biological station, which alone can cope with the problems involved in a thorough and systematic investigation. The subject has been mooted for some time past in Russian scientific circles and is now brought within measurable distance of realization by a donation of £1,600 received from a Siberian gentleman, Mr. A. Vtorov, and the academy has appointed a commission to take immediate steps to give concrete form to a project destined to be of great importance for biological science.

Preliminary steps have been taken by the War Department toward the formation of a Reserve Corps of Engineers for the army, as provided by the National Defense Act of June 3 last. By direction of the chief of engineers letters were sent to-day by Lieutenant Colonel E. Eveleth Winslow, of the Army Engineer Corps, to all the district engineer officers of the army throughout the country, paving the way for the creation of these new reserve corps, which will be composed of officers to be commissioned from among the engineers of the country and of an enlisted reserve corps of engineers. The plan for the formation of the new Reserve Corps is set forth in Lieutenant Colonel Winslow's letter as follows: "The importance of engineers in time of war is now universally recognized, and during the past few months steps have been taken to arouse the interest of the engineering profession in the national defense. Congress has now provided a means by which the civil engineers can more fully prepare themselves for that highest duty of citizens—the defense of our country. An engineer section of officers and enlisted reserve corps has been authorized, and in the opinion of the chief of engineers there is for the officers of the Corps of Engineers no more important duty than their active assistance in making a success of the new corps. All the engineers in the country should be informed of the existence of this new corps and those possessing the necessary qualifications should be enrolled as its members. A close cooperation between our engineer officers and the civilian engineers is therefore necessary, and fortunately the first steps in such cooperation have been already taken by the action of some of the most important of the engineering societies in indorsing the campaign for preparedness and in urging upon Congress the passage of the Officers' Reserve Corps law.

THE Senate Committee on Public Health and National Quarantine has reported favorably the bill to promote the efficiency of the United States Public Health Service. The bill has already passed the House of Representatives. The bill limits, according to the Journal of the American Medical Association,

the appointment of the surgeon-general of the Public Health Service to commissioned officers in the service, not lower in grade than surgeon, and require that the surgeon-general at the expiration of his four-year term of office be carried as an extra number in the grade of assistant surgeon-general, unless he be reappointed. As an inducement to physicians to enter the service, the bill provides for the promotion of assistant surgeons to the next higher grade after three years' service, instead of after four years as at present. The chiefs of the bureaus of zoology, pharmacology and chemistry in the hygienic laboratory, are to be commissioned by the president, by and with the advice and consent of the Senate, as professors of zoology, pharmacology and chemistry, respectively, and are to be entitled to leaves of absence as now provided by law for commissioned medical officers. Provision is made for the appointment of five additional professors, qualified for special work in sanitary engineering, epidemiology, pathology, anatomy, bacteriology, housing, or other matters that relate to the propagation and spread of disease. Men of this class, the committee's report says, often do not have medical degrees, and under the present system of commissioned service only doctors of medicine are provided for; and the bill will remove this defect and make places for men who are specially trained in these highly technical fields, but who are not graduates in medicine.

UNIVERSITY AND EDUCATIONAL NEWS

LAFAYETTE COLLEGE is the residuary legatee of Albert N. Seip, of Washington, D. C., a member of the class of 1862. It is said that the college will ultimately receive not less than \$250,000.

Dr. Robert Bennett Bean, now professor of gross anatomy at Tulane University, has been appointed professor of anatomy at the University of Virginia, to take charge of the courses in gross anatomy and neurology formerly given by the late Dr. Richard H. Whitehead.