

Preference will be given to manuscripts not over 50,000 words in length. Entries may be submitted by the author himself or by another person on his behalf. Each entry should be accompanied by four copies of an abstract not to exceed 1200 words in length.

4) Entries will be judged by a committee of three persons considered well qualified to judge material in this field. The judges will be selected by a management committee consisting of the chairman and the secretary of Section K and the executive officer of AAAS. The committee of judges reserves the right to withhold the prize if no worthy essay is submitted.

5) Entries should be sent to Dael Wolfe, Executive Officer, American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington 5, D.C. Entries should be submitted in quadruplicate. The name of the author should not appear anywhere on the entry itself but should be enclosed on a separate sheet of paper which also gives the author's address and the title of his essay. To be eligible for consideration for the prize that will be awarded at the 1956 annual meeting of the Association, entries must be received not later than 1 Sept. 1956.

Mammary Carcinomas in Mice

Alfred Taylor and Roger J. Williams have reported [*Proc. Natl. Acad. Sci. U.S.A.* 42, 54 (1956)] a method of control of C3H mouse mammary carcinoma when grown in the yolk sacs of developing chick eggs. They pointed out that a specific tumor grown under these conditions would not be expected to behave in the same way in its normal host and that any success in controlling cancerous growth in their experiments could not be carried over unchanged to the control of cancer in man.

In one control series of eggs inoculated with mouse tumors, 57 out of 58 of the embryos were dead by the sixteenth day of incubation; the one remaining alive bore a large tumor. In a parallel experimental series, treated as described in a subsequent paragraph, out of 140 similarly inoculated eggs, 86 remained alive on the sixteenth day. Of these, 81 contained traces of what may have been viable tumor tissue and five showed no observable tumor tissue. The effect of the treatment had been to reduce the tumor growth, which in untreated eggs is fairly uniform. Tumors in untreated developing chick egg yolk sacs grow rapidly; for example, they double in size from the eleventh to twelfth day of incubation.

The treatment consisted in the combination of an elevated temperature of

incubation (40°C instead of the usual 37.2°C), which had previously been found to be effective in slowing tumor growth, and the application of chemicals that by themselves showed some inhibitory effect. The chemicals used were aminopterin (4-aminopteroylglutamic acid) and triethylenemelamine. In a series in which the former compound was used, tumor growth for a 24-hour period at 37.2°C was 62 percent as great as it was in the control eggs; at 40°C in the same experiment, the tumors decreased in size during the test period.

Triethylenemelamine was more effective. In similar experiments, the tumors in treated eggs at 37.2°C averaged only 19 percent as large as those of the controls; those at 40°C either failed to grow or regressed in size.—G. DUS.

News Briefs

■ The design and development by Argonne National Laboratory of a multi-billion-volt particle accelerator to be built at its DuPage County site has been authorized by the U.S. Atomic Energy Commission. The Argonne machine, based on a design conceived by the laboratory's staff of scientists, will greatly ease the usual problems of construction. It will permit the rapid attainment at reasonable cost of an energy greatly in excess of that of any machine now in operation.

■ The Salk vaccine is helping win the battle against poliomyelitis in Canada, reported Martin, the Minister of National Health and Welfare, in a reply tabled last month in the House of Commons. He said:

"The use of the Salk vaccine in Canada during 1955 was the most ambitious mass immunization program ever undertaken in this country. It also provided an opportunity for carrying out a nationwide epidemiological study, the results of which have demonstrated the safety and effectiveness of the vaccine as an immunizing agent. In addition, the whole program offered an outstanding example of cooperation between federal, provincial, and local health authorities and served to bring home to the people of Canada in dramatic fashion the value of public health activities generally."

■ Approval of the sale of 129 tons of heavy water to six nations for assistance in their peacetime applications of atomic energy has been announced by the U.S. Atomic Energy Commission. Sixteen tons of the material have been shipped abroad.

The initial consignments of 11 tons to

Great Britain and 5 to France were manufactured at the commission's plant at Dana, Ind. Heavy water also is produced at its facilities in South Carolina. All sales are at the price of \$28 per pound announced 8 Aug. 1955.

The total amounts (in tons) approved for sale are as follows: United Kingdom, 50; France, 30; India, 21; Australia, 11; Italy, 10, and Switzerland, up to 7, with 2 tons to be delivered by August 1957.

Scientists in the News

The Kimber Genetics medal of the National Academy of Sciences for 1956 will be presented to SEWALL WRIGHT, professor of genetics at the University of Wisconsin, during the annual meeting of the academy, 23-25 Apr. 1956. Wright has made important contributions in both theoretical and experimental genetics.

The Kimber Genetics award of the academy was established in 1954 by the Kimber Farms Foundation to provide recognition of great achievement in the science of genetics. In selecting recipients for the Kimber award, the academy has the cooperation of the American Association for the Advancement of Science and the Genetics Society of America.

JOHN R. HANSBROUGH of the Northeastern Forest Experiment Station has been named chief of the Division of Forest Disease Research at Washington, D.C., the U.S. Forest Service announced. He succeeds Lee M. Hutchins, who retired 31 Dec. 1955.

WILLARD F. LIBBY, Commissioner of the U.S. Atomic Energy Commission, will be presented with the medal for scientific achievement of the City College of New York Chemistry Alumni Association on 27 April. Libby will deliver the association's eighth bicentennial science lecture on "Peaceful uses of atomic energy."

LOUIS PILLEMER, professor of biochemistry at Western Reserve University, delivered the fifth R. E. Dyer lecture at the National Institutes of Health. He spoke on "The properdin system." Pillemer and his colleagues identified a new blood protein, properdin or "the destroyer," in natural immunity that may prove to be important in radiation sickness, shock, and experimental infections.

BEN PECKHAM, faculty member at the Northwestern University Medical School, will become professor and chairman of the department of obstetrics and gynecology at the University of Wisconsin Medical School on 1 May.