

MEDICINE

Dyes Used to Check Growth Of Cancer-Like Chicken Tumor

Mother and Son Research Team Succeed for First Time in Employing This Means to Destroy Activity of Virus

SCIENTISTS who have been studying chicken tumors in the hope of throwing light on the problem of cancer in man have for the first time been able to destroy the activity of one of the chicken tumor-producing agents by means of dyes, it appears from a report of Dr. Margaret Reed Lewis and Warren Reed Lewis, of the Carnegie Laboratory of Embryology at the Johns Hopkins Medical School in Baltimore, to the *American Journal of Cancer*.

Chicken tumors are cancer-like growths caused by an agent called a filterable virus because it is so small that it will pass through pores of the finest filters. Viruses have been the subject of intense investigation in recent years but so far it has been almost impossible to destroy the activity of any virus by a dye as can be done for larger microscopic organisms. It is not known whether the virus is a living organism or a chemical substance.

Virus Extracted

The Lewises, a mother and son research team, extracted the virus from one of these chicken tumors so they could work with it in a test tube. They combined it with 80 different dyes. After being mixed with the dye, the virus was injected into the chicken to see if it could still produce a tumor. Two of the 80 dyes destroyed the tumor-producing activity of the virus. However, the investigators pointed out that the activity was destroyed in the test tube by an amount of dye which would be impractical to inject directly into the animal in the hope of destroying the tumor-virus in its body.

They consider 80 dyes a small number to have investigated. They feel from the results of their study that when a larger number of dyes are investigated, it may be possible to find more than two which can prevent the growth of tumors even when used in more dilute concentrations. Experiments on injecting the dye directly into the chickens suffering from this

type of tumor are now being planned.

The world of science is already familiar with the studies of cell growth and cancer on which Dr. Margaret Reed Lewis has collaborated with her husband, Dr. Warren H. Lewis, and it is interesting to note that in this latest investigation she had the assistance of another member of her family, her son, Warren Reed Lewis, now a medical student.

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ARCHAEOLOGY

Twenty-Three Buildings Unearthed in Ruined City

THE GRANDEUR and extent of a Mexican Indian city of pre-Conquest days is being revealed by Mexican archaeologists who are unearthing the city of Calixtlahuaca, translated "Prairieville." This city, which spread over mountain slopes and valleys, had an area

of 16 square miles, according to latest estimates of the excavators. Twenty-three of the ancient public buildings have been located.

First ruins of the ancient city were found last year, near Toluca, by José García Payón, who is now excavating the site for the department of archaeology of the State of Mexico.

Debris has now been almost entirely cleared away from the round temple base where the shrine to the Wind God, Quetzalcoatl, stood. This rare style of Mexican architecture consisted of conical and cylindrical sections superimposed to make a tall round pedestal for the temple. Sr. Payón has identified in the building five distinct periods of construction. In some of these an entirely new shell covered a smaller earlier building.

Rain God

The cleared site shows that the temple base stands upon a series of superimposed circular terraces carved and buttressed out of a mountain side.

On top of the highest hill in the city, a spot commanding the mountain scene for miles, is the partly uncovered pyramid which served as a base for the War God's temple. Some distance below on the mountain slope, rises another great pyramid of stone where once the temple of Tlaloc, the Rain God, stood. At the foot of the hill in the valley, lies a ruined ball court, where the Indians played "tlachtli" with rubber balls.

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BITS OF HEAVEN

Universe's largest collection of astronomical photographs, nearly 40,000 plates, portraying millions of stars, are filed in this new building of the Harvard Observatory. Its constant temperature vaults contain the history of thousands of stars since the early days of astronomical photography in 1880 when the Harvard collection began.