

GENETICS

New Hormones Show Whether Boy or Girl Will be Born

Secretion From Expectant Mother Injected Into Rabbit Enables Scientists to Predict Correctly in 80 Out of 85 Cases

A SCIENTIFIC WAY of predicting whether the baby will be a boy or a girl has just been developed by two San Francisco scientists, Dr. John H. Dorn of the University of California Medical School and Edward I. Sugarman of the Sugarman Laboratory in San Francisco.

They were able to predict the sex of unborn children successfully in 80 out of 85 cases, they stated in reporting to the American Medical Association.

The method depends on the discovery that the kidney secretion of the expectant mother contains one kind of hormone if the baby is going to be a girl and another kind if the baby will be a boy. When the baby is going to be a girl, this hormone will stimulate precocious sexual development in immature male rabbits. When it is going to be a boy, the hormone has apparently no effect on the young rabbit's sex glands. The test is made by injecting some of the mother's kidney secretion into the rabbit and examining the animal 48 hours later.

Of the five cases in which their diagnoses were incorrect, they explained that in four of the cases, the rabbits used for the test were probably too old and sexual development had already begun. Consequently the changes they found were attributed wrongly to presence of the female hormone, whereas actually the baby was a boy. They were unable to account for the mistake in the fifth case.

The tests were made anywhere between one week and four months before the child was to be born.

Two of the cases were twins, boy and girl in each case. In these, their test showed that a boy would be born. They suggest that the hormone for the boy neutralized the effect of the hormone for the girl, thus leaving the rabbit unchanged and giving reason to believe that a boy would be born, but giving no indication of his twin sister.

"We are reporting our work at this time so that others may repeat it and confirm or disprove our observations,"

the scientists stated in their recent report to the American Medical Association. They expect to continue their own study.

"As the matter now stands, we believe that we are working with true and hitherto undescribed sex hormones," they declared.

Their work suggests that an old theory, handed down by folk lore from the time of Hippocrates, Father of Medicine himself, that each sex carried two hormones in varying degree may be correct after all.

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MEDICINE

Forty Thousand Protected Against Spotted Fever

DURING the last eight years over 40,000 people have been vaccinated against Rocky Mountain spotted fever, Dr. R. R. Spencer, U. S. Public Health Service scientist who developed the vaccine, told members of the New York Electrical Society at the science forum.

This protective vaccine, which has proved to be effective in saving lives, is the most effective weapon against this dreaded disease which was first discovered in the mountainous northwestern part of the United States. It is transmitted to man by the bite of the common wood tick or dog tick, and is not limited to the Rocky Mountain area.

Vaccination is limited to persons whose occupations necessarily expose them to tick bites.

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Minnesota maid's bones in June of last year.

He had previously asked road crews to preserve carefully any bones they found in their excavations. Without undue haste the unusually complete skeleton was studied. Then the site was re-dug this year for corroborative evidence, and 355 additional fragments were unearthed.

Geologists were asked to date the layers of the earth in which the Minnesota maid was found. Dr. Frank Leverett of the University of Michigan, authority on glacial geology, discovered the extinct glacial Lake Pelican, in the silt of which the skeleton was found. He dates it as some twenty thousand years old. The great ice age Lake Agassiz existed for ten thousand years before natural processes drained it some eight thousand years ago. The geology shows that the earth packed around the bones of the Minnesota maid was washed in by glacier water several thousand years before that great lake was formed. Other geologists concurred with Dr. Leverett's findings.

If further investigations sustain the Minnesota maid's antiquity, she will be written into history as evidence that a primitive type of *Homo sapiens* inhabited America when men of the Stone Age populated Europe.

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PALEONTOLOGY

Field Museum Gets Horned Gopher Skull

THE FIELD MUSEUM of Natural History in Chicago has just received a fossil skull more highly prized than the skull of many a species of giant dinosaur or mammoth would be, although it is only a few inches long. The fossil is extremely rare, only four or five such skulls being known.

It is the skull of a horned gopher, a stout little animal about the size of a woodchuck, which burrowed in the prairies of the West about 7,000,000 years ago, in the late miocene age. The animal had a pair of sharp-pointed conical horns on its nose, which presumably were useful to it in its tunnelling.

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Field Museum

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