

stepped down as president of the Academy [In April 1956 Lysenko asked to be relieved of his duties as president of the All-Union Lenin Academy of Agricultural Science.] had a bad effect on the scientists in Japan and other countries," Dr. Kushner said.

"But to assign to this event anything more than the simple fact that he wanted to return to the laboratory and his scientific studies, was, and is, a grave mistake. He is still a highly respected scientist in the Soviet Union. He is still director of this Institute, a member of the presidium of the Soviet Academy of Sciences, a deputy of the Supreme Soviet of the U.S.S.R., and a member of the commission granting higher degrees to university graduates.

"It is well known that Lysenko is a good scientist, but a poor administrator of science."

Current Research

At this point in the interview, I asked Dr. Kushner if he could describe a current experiment that follows the lines of Lysenko's genetics.

"But of course," he answered traditionally, "we are presently working with chickens and blood transfusions. Blood is taken from purebred red New Hampshires and transfused into purebred White Leghorn pullets ranging in age from three to four months. Twice weekly for five months, each of the Leghorns receives 150 cubic centimeters of the New Hampshire blood."

The treated hens are then crossed to pure White Leghorn cocks and the eggs incubated and hatched. What results, Dr. Kushner explained with satisfaction, are chicks with a definite and noticeable change in plumage. Fifteen to 20% of the first generation appear with anywhere from one to 50 grayish feathers. In the succeeding generations, there is an increase in the number of offspring and the number of feathers with a marked pigmentation change. The percentages are far smaller for the controls that did not receive transfusions, Dr. Kushner said.

"New" Chickens

Here, the good Russian scientist stopped and made a hurried telephone call, and in a few minutes two women assistants dressed in white laboratory smocks and surgeon-like skull-caps arrived carrying both living and dead examples of the experiment.

"They look like Plymouth Rocks," he exclaimed, and I had to agree. The embryos and preserved chicks were left as Exhibit A, but the clucking Exhibit B's were taken away by his assistants.

(Recently Dr. Jacques Benoit and his associates in France reported to the French Academy of Sciences that they had succeeded in changing the hereditary characteristics of ducks by injecting them with a sex gland extract from another type of duck. Although most Western scientists remain skeptical, a few believe these experiments, as well as those by the Russians, will cause a revolution in classical genetics.)

When the assistants left I turned to Dr. Kushner and asked him if one could carry the results of his experimentation a bit further and apply it to humans. Could

one, I asked, transfuse the blood of a man with one color of skin to that of another with a different color of skin and get a pigmentation change in the offspring?

"I cannot answer your question directly," Dr. Kushner said, "because I have had no first-hand experience with this type of experimentation. But, I think someone in your country has.

"When I was a doctor serving with the Red Army on the German front during the Great War, I heard many stories of how your soldiers refused blood transfusions if they knew the blood had come from a black man. I think these soldiers must have had some knowledge of a scientific study carried on in your country that showed the color of a man's skin can be affected by blood transfusions."

My explanations were that what Dr. Kushner had probably heard were cases of deep-seated racial prejudice, and that most, if not all, the scientific evidence on the subject points in the opposite direction, and the added fact that the donor's skin color does not appear on bottles of blood. They were met with a shrug.

Science News Letter, May 10, 1958

MEDICINE

Mother's Polio Shots Protect Unborn Baby

► **WOMEN** who receive polio shots during pregnancy not only protect themselves but provide the unborn infant protection that lasts as long as three months after birth.

Studies of 142 mothers-to-be showed the benefits of Salk shots were passed on to the infants, Dr. Gordon C. Brown of the University of Michigan School of Public Health reported to the Society of American Bacteriologists meeting in Chicago.

Although doctors have long suspected that polio vaccine might have carry-over value for infants, Dr. Brown's study provided the first laboratory confirmation of this belief.

Dr. Brown found the higher the level of protection given the mother, the longer the protection lasted for the infant. Also, vaccinated mothers gave their children protection of the same potency and duration as those mothers who acquired a similar level of immunity through natural exposure to the disease.

However, the polio protection given infants by their mothers diminished as the babies grew older.

The research indicates parents can now insure continuous protection against polio for their children from the moment of birth. Dr. Brown urged prospective mothers to complete the series of three shots and start vaccinations for infants at age three months.

Dr. Catherine J. Carroll, also of the University, assisted in the research, which was supported by the National Foundation for Infantile Paralysis.

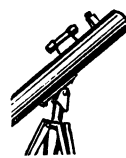
Science News Letter, May 10, 1958

A device to count and measure fog particles makes it possible for one man to measure and record, with one hand, at an average rate of 3,300 particles per hour.

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