

Hermann J. Muller Dies at 76; Discovered Perils of Radiation

By Howard Simons
Washington Post Staff Writer

Nobel Prize winner Dr. Hermann J. Muller, 76, the American-born scientist who discovered that radiation can cause hereditary changes, died yesterday in Bloomington, Ind. He had been hospitalized for several months with a heart condition.

Dr. Muller was small in size, five feet three inches, but large in stature as a scientist. He was one of the world's foremost geneticists.

In addition to his pioneering work on radiation's genetic effects, Dr. Muller also discovered that most mutations—changes in the characteristics of plants and animals that can be passed on to their offspring—are lethal.

And he was a leading exponent of sperm banks—reservoirs of the male sperm cell frozen for use by artificial insemination at a future date.

Dr. Muller's ideas often were controversial. And he, himself, often was at the center of controversy.

Derided Lysenko

He went to Russia in 1933 to work at the famed Moscow Institute of Genetics. At that time, Dr. Muller thought communism a likely hope for mankind. After four years at the Institute, he sensed the increasing power of pseudogeneticist Trofim Lysenko. Dr. Muller left Russia in 1937.

As one after another of Dr. Muller's bona fide geneticist friends were sent to Russian labor camps, he became a bitter foe of communism and Lysenko.

Lysenkoism, which dominated and damaged Russian biology for more than two decades, has since lost favor in



Associated Press

DR. HERMANN J. MULLER

Russia. But it is only now that Russian genetics is recovering from the "charlatan" Lysenko, as Dr. Muller once tagged him.

Dispute with AEC

Eighteen years later, in 1955, Dr. Muller tangled with the Atomic Energy Commission over the crude way the then excessively sensitive and secret agency prevented him from delivering a scientific paper at the United Nations Atoms-for-Peace Conference in Geneva.

He was going to talk about what he knew best: "How Radiation Changes the Genetic Constitution." It was a subject that had taken on enormous significance once the full impact of fallout from nuclear testing became known. Though Dr. Muller's paper did not draw conclusions about the genetic damage from atomic testing, the AEC thought otherwise.

On other occasions, Dr. Mul-

ler did speak out about the dangers from radiation to mankind's future. Like most, if not all geneticists, he never subscribed to the idea that there is a tolerable level of radiation. Rather, for geneticists, any amount of radiation is potentially harmful to future generations, whether the radiation comes from atomic testing or X-ray machines.

Reduced X-Ray Danger

Indeed, it was largely through Dr. Muller's subsequent efforts as a member of a National Academy of Sciences' committee that the radiation dose from medical X-ray machines has been greatly reduced in the United States.

It was in 1927 that Dr. Muller drew attention of world biologists by disclosing that genes, the carriers of heredity, can be artificially altered by X-rays. Over the next 20 years his landmark research was repeatedly confirmed. In 1946, he received the Nobel Prize for the discovery.

But not all Dr. Muller's scientific thrusts—and he thrust often—met with universal welcome. His sperm bank proposal, for example, invited some criticism. It was his idea, variously expressed at different times, that the sperm of the great and glorious should be collected, stored, and then used to perpetuate a kind of better civilization.

The idea seemed totalitarian to some thinkers. And curiously, Mr. Muller, who scorned the distorted genetics of Nazi Germany and Stalinist Russia, now was attacked for his approach to eugenics.

Nonetheless, other persons defend Mr. Muller's point of

view. One of his former students, geneticist and educator H. Bentley Glass, for example, suggests that future developments in the control of the reproductive process will go far beyond sperm banks to include, ova banks; transplantable embryos and even "the bottle babies of (Aldous) Huxley's 'Brave New World.'"

What Dr. Muller was propounding, says Glass, was the idea that less moral nations might try to create a race of "supermen" through this means and if this were to succeed it would "set a mark like Sputnik to terrify the rest of the world."

Columbia "Boy Wonder"

Being a cranky conscience of genetics and the social implications of scientific discovery, was Dr. Muller's mark. So, too, was his sense of wit. He once said that the evolution of his hair was from brown to gray to bald.

Dr. Muller was born in New York City and was educated at Columbia University where he was one of three "boy wonders," who with Nobelist Thomas Hunt Morgan catapulted American genetics into a leading world position.

From Columbia he went to Texas where he did his prize-winning research, and from Texas to Germany and Russia and Scotland. Then, back to the United States and Amherst College. Finally, in 1945 Dr. Muller became a professor at Indiana University in Bloomington.

He is survived by his wife, Dorothea; a son, David, professor of mathematics at the University of Illinois; and a daughter, Mrs. K. Moe Hunt, whose husband teaches at the University of Hawaii.

dir
H
Ma
fiel
Wa
da
Sar
L.
gra

BLA
Or
NS