## Famous New Yorker Jonas Salk

In 1955 the biggest hero in America wasn't a soldier or an athlete, but a scientist. Dr. Jonas Salk was idolized like no scientist before because his research was sure to save untold numbers of lives.

Born on October 28, 1914 in New York City, Jonas Salk was one of three children of a Polish immigrant family who became doctors. The Townsend Harris High School's challenging threeyear program for gifted children prepared him for early admission to the City College of New York, where tuition was free.

Jonas wanted to be a lawyer but his mother encouraged him to become a doctor instead. After graduating from CCNY and New York University, he decided he could be most useful as a research scientist combating infectious diseases. He earned a deferment from military service during World War II when the Army realized he would be more useful developing flu vaccines than as a soldier.



Jonas Salk on April 22, 1955 after receiving a citation from President Eisenhower for his work. Source: Eisenhower Library

After the war, Salk became director of virus research at the University of Pittsburgh Medical School. Looking for a project that would secure research grants, he joined an army of scientists in a new war on polio.

One of the most dreaded diseases on earth, polio could be spread by consuming infected food or water, or by swimming in infected water. It left many victims temporarily or permanently paralyzed. The worst-hit victims needed "iron lungs" in order to breathe. While Salk's team worked on a vaccine in the early 1950s, thousands of people, mostly children, were infected yearly in the nation's worst polio epidemics.

At the National Foundation for Infantile Paralysis, Salk first identified the number of polio strains the vaccine would have to cover. To be effective, the vaccine had to be derived from an actual polio virus. While some scientists wanted to use a live but weakened virus, Salk preferred a deactivated or "killed" virus, as he did while combating flu. He hoped to "trick" the human immune system into creating antibodies, thus immunizing patients to infection by the live virus, without serious risk.

After testing his vaccine on monkeys, Salk started human tests with himself and his family. After his preliminary report, the NFIP authorized a massive field trial involving nearly 2,000,000 children in the spring of 1954. An anxious world awaited the results.

On April 12, 1955, the NFIP declared Salk's vaccine safe and effective. As the vaccine was rushed into mass production, Jonas Salk became an instant global hero. Before the month was over he received the Congressional Gold Medal and met the President. He received honorary degrees from colleges across the country and awards from foreign governments, as well as



**New York City** is home to more than 8 million New Yorkers who live in the five boroughs–more than onethird of whom were born outside the United States. gifts from ordinary citizens. He used the gifts to help more communities purchase the vaccine. He had no share of drugcompany profits from its production.

The number of U.S. polio cases soon shrunk to less than one dozen a year. In the 1960s, after an alternate live-virus oral vaccine supplanted his vaccine, Salk founded the Salk Institute for Biological Studies. He carried on the fight against disease the rest of his life. Before he died on June 23, 1995, he was working on a vaccine for the AIDS virus. Knowing Dr. Salk was on the case still gave people hope.

For more information about Jonas Salk and his work go to the Salk Institute for Biological Studies' website at www.salk.edu/about/ jonas\_salk.html. This is one of a series of Famous New Yorker profiles written by Kevin Gilbert for the NYNPA Newspaper In Education Program. All rights reserved 2015.