

Joshua Lederberg

- Determined various bacteria can combine their genetic material

Joshua Lederberg was born in New Jersey on May 23, 1925. He attended public school in New York City, including the prestigious Stuyvesant High School. He received his bachelor's degree in zoology from Columbia University. While Lederberg went on to study medicine at Columbia as well as in the U.S. Navy, he never finished medical school. Instead, he ventured on to Yale in 1945 and earned his Ph.D. in zoology there in 1948. During this time he had the opportunity to work with Edward Tatum researching genetic recombination and the organization of the genetic material in bacteria. This opportunity arose as a result of a paper published by Oswald Avery, Colin MacLeod, and Maclyn McCarty the previous year. The paper specified the chemical nature of DNA and inspired Lederberg to research the possibility of sexual reproduction in bacteria. At the time bacteria were thought to reproduce only asexually, but Lederberg's studies led him to determine that various bacteria can indeed combine their genetic material. As a result of his research and discovery, Lederberg was awarded the Nobel Prize in 1958.



Lederberg went on to work as a genetics professor at the University of Wisconsin and Stanford University. He is currently a professor emeritus of molecular genetics and informatics at The Rockefeller University, New York.

Resources

<http://profiles.nlm.nih.gov/BB/Views/Exhibit/narrative/biographical.html>

<http://nobelprize.org/medicine/laureates/1958/lederberg-bio.html>