# **Rosalind Franklin**



Rosalind Franklin was a British biochemist who used a special X-ray technique to learn about the structure of DNA. This information significantly helped James Watson and Francis Crick in their research on DNA. But while Watson and Crick received awards for their work, Franklin never did.

#### **Early Life**

Rosalind Franklin was born on July 25, 1920, and raised in London. She was an outstanding student in school and excelled in science and Latin. By the age of 15 she knew she wanted to be a scientist. She majored in chemistry at the University of Cambridge in England and earned her Ph.D. in 1945. The next year, Franklin moved to Paris to work in a research laboratory. She learned the technique of X-ray diffraction during her five years in France.

## **Discoveries**

Franklin returned to London in 1951 to work as a researcher at King's College. Scientists were trying to determine the structure of DNA. Franklin joined the search. She used X-ray diffraction techniques to study DNA fibers. To do so, she refined the X-ray machine and modified a miniature camera. After two years and hundreds of trials, she was finally able to take X-ray photographs of DNA. One picture in particular—Photo 51—clearly showed the true structure of DNA.

#### Controversy

Franklin started to write a paper about her discovery. But without her permission, a co-worker showed Photo 51 to his friends Watson and Crick at Cambridge University. The two scientists immediately understood that DNA strands are shaped like a double helix. In March 1953, Watson and Crick published their conclusions. They also took credit for the finding. By the time Franklin's paper was released in April, it appeared to merely support the men's discovery. The finding would earn a Nobel Prize for Watson and Crick in 1962.

## Later Life

Franklin possibly never knew that her work had been stolen. By May 1953 she had moved to a different London laboratory. There she made new discoveries about viruses, including the polio virus. Her findings laid the foundation for the field of structural virology.

Franklin was just 37 years old when she died on April 15, 1958. Recently, her vital contributions to the discovery of the structure of DNA have been widely recognized.

Name:
All About
Born:   Lived in:
Draw an important event from the person's life:
This person is most famous for:
Five words that describe this person are:     1.   2.   3.   4.   5.   Three important facts about this person are:
If I wrote a book about this person, the title would be: