



# Rosalind Franklin

July 25, 1920 - April 16, 1958

- In 1938, Rosalind Franklin became a student at Newnham College of the University of Cambridge in England. She majored in chemistry, and earned her bachelor's degree in addition to Second Class Honors for her studies in 1941.
- After that, she began working as a research assistant at the British Coal Utilisation Research Association. The work that she conducted there on the absorbency of coal became the foundation for her dissertation that earned her a doctoral degree in 1945.
- By the following year, 1946, she earned a position at Paris' Laboratoire Central des Services Chimiques de l'Etat. There, she worked with Jacques Mering on X-ray imaging. This was the foundational education that led to her discovery of the structure of DNA.
- In studying X-rays, Franklin was the first person to discover that they could be used to take imaging of crystalized solid matter.
- In 1951, working at King's College in London, she and John Randall used her X-ray techniques to image DNA structure.
- Rosalind Franklin and her assistant Raymond Gosling made the discoveries when reviewing the images that DNA had a double helix structure. Their photo, which was later referred to as Photograph 51, was the primary evidence for the new understanding of the DNA structure.
- Franklin herself was the person that put in 100 hours of photograph exposure and refining to get the image. Unfortunately, a colleague of hers, Maurice Wilkins, showed Photograph 51, which she had worked so hard on, to James Watson. James Watson and Francis Crick went on to publish a paper on the structure of DNA, using this photograph as evidence without any credit to Rosalind Franklin.
- In 1953, Franklin moved to Birkbeck College to study viral structure and RNA structure. She continued her earlier work on studying coal as well.
- The impact of this work would help build the foundations of understanding for viral structures, which became very important in physiological research.

*"Science and  
everyday life  
cannot and should  
not be separated."  
-Rosalind Franklin*