# Podcast: Remembering Rosalind Franklin: The overlooked scientist who helped discover the DNA double helix

Everyone knows that James Watson and Francis Crick discovered the double helix structure of DNA. But fewer people are aware of the contribution of the talented team of X-ray crystallographers at King's College London, including Rosalind Franklin, or the controversies surrounding their work. There's an old joke among geneticists that captures the scandalous story: "What did Watson and Crick discover? Rosalind Franklin's notes!"

Photo 51
Photo 51. Image: Raymond Gosling/King's College London via Wikipedia

On this episode of Genetics Unzipped, biologist Kat Arney explores the hidden story behind the double helix, and asks whether Franklin truly got the recognition she deserved for her work. Watson and Crick without a doubt deserved the accolades they received. Their 1953 Nature paper describing the DNA double helix provided a key insight into how genetic information is replicated.

But the pair of scientists never did any experimental work to confirm that their model of DNA was accurate. Franklin and her colleagues at King's College provided the crucial X-ray evidence, in particular the famous "photo 51," that validated Watson and Crick's hypothesis, and they produced it independently of the famous duo.

However, Franklin was hesitant to publish the research until she was absolutely certain it was correct. Watson later invited Franklin to collaborate, but she found his condescending attitude overwhelming and eventually moved on to conduct important research describing the structure of viruses. Without Franklin's contributions, it's possible Watson and Crick may have required more time to validate their model, allowing someone else to publish the groundbreaking discovery before they did.

Though later recognized for her important work on DNA, Franklin's premature death resulting from ovarian cancer in 1958 prevented her from receiving the Nobel Prize, which isn't awarded posthumously. Her cancer may have been hastened by exposure to X-rays incurred while conducting her DNA research.

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Arney also explains why three is the magic number when it comes to cracking the DNA code, and the curious connection between a common genetic diagram and a box of strawberries.

Full transcript, credits and show notes here.

**Genetics Unzipped is presented by award-winning science communicator and biologist Kat Arney and produced by First Create the Media for the UK Genetics Society. Follow Kat on Twitter @Kat_Arney and Genetics Unzipped @geneticsunzip**

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