

What Rosalind Franklin truly contributed to the discovery of the structure of DNA

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A previously overlooked letter and a news article that was never published, both written in 1953, add to other lines of evidence showing Rosalind Franklin was an equal contributor—not a victim—in the

discovery of DNA's structure.

Matthew Cobb, from The University of Manchester and Nathaniel Comfort from the John Hopkins University School of Medicine make the case for the scientist in a comment article in this week's *Nature*.

The seminal paper by James Watson and Francis Crick on the discovery of the DNA [double helix](#) was published in *Nature* 70 years ago this week.

Many believe the eureka moment came when Watson was shown an X-ray image of DNA taken by Franklin, without her permission or knowledge.

Known as Photograph 51, the image is treated as "the philosopher's stone of [molecular biology](#)," write Cobb and Comfort. "It has become the emblem of both Franklin's achievement and her mistreatment," they explain.

In this version of events, Franklin is portrayed as a brilliant scientist, but one who was ultimately unable to decipher what her own data were telling her about DNA. She supposedly sat on the image for months without realizing its significance, only for Watson to understand it at a glance.

But when visiting Franklin's archive at Churchill College in Cambridge, the authors found a hitherto unstudied draft news article—written by journalist Joan Bruce in consultation with Franklin and meant for publication in *Time* magazine—as well as an overlooked letter from one of Franklin's colleagues to Crick.

Together, the documents show that Franklin did not fail to understand the structure of DNA. Cobb and Comfort argue that Franklin was "an

equal member of a quartet who solved the double helix." Along with Maurice Wilkins, she was "one-half of the team that articulated the scientific question, took important early steps towards a solution, provided crucial data and verified the result."

Getting Franklin's story right is crucial, write Cobb and Comfort. "She was up against not just the routine sexism of the day, but also more subtle forms embedded in science—some of which are still present today."

More information: Matthew Cobb, What Rosalind Franklin truly contributed to the discovery of the structure of DNA, *Nature* (2023). DOI: [10.1038/d41586-023-01313-5](https://doi.org/10.1038/d41586-023-01313-5).
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