

Google doodle says: Happy birthday Rosalind Franklin

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Singapore: Today is the 93rd birth anniversary of Dr Rosalind Elsie Franklin, who was born on July 25, 1920 and departed on April 16, 1958. Google has dedicated today's doodle to celebrate the birthday of this Britain-born X-ray crystallographer and biophysicist. Dr Franklin made critical contributions to the understanding of the fine molecular structures of DNA, RNA, viruses, coal, and graphite.

Dr Franklin is best known for her work on the X-ray diffraction images of DNA which eventually led to the discovery of the DNA double helix. Her data was used by Dr Francis Crick and Dr James Watson in order to formulate their 1953 hypothesis regarding the structure of DNA.

The X-ray diffraction images provided by Dr Franklin confirmed the helical structure of DNA were shown to Dr Watson without her approval or knowledge. However, Dr Franklin's contributions to the discovery of the DNA double helix have been overlooked. Unpublished drafts of her research papers reveal that she had independently discovered the overall B-form of the DNA helix and also the position of the phosphate groups on the outside of the helical structure.

It was the report of Dr Franklin that convinced Dr Crick and Dr Watson that the backbones had to be on the outside. This change in scientific attitude was crucial as prior to this both Watson-Crick and Dr Linus Pauling had independently generated non-illuminating models with the chains inside and the bases pointing outwards.

After finishing her research on DNA, Dr Franklin led pioneering work on the tobacco mosaic virus and the polio virus. She succumbed to ovarian cancer at the age of 37.