

Forgotten female firsts

Hedy Lamarr

The Hollywood film star behind the invention of Wi-fi and mobile phones



The Austrian actress Hedy Lamarr was born in Vienna in 1914, as Hedwig Kiesler. She was a very clever girl, always interested in how things worked – she loved taking her music boxes to pieces and putting them together again. However, she also loved acting, so she left school early without qualifications and started drama school.

Hedy the film star

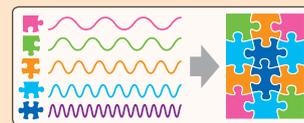
Hedwig first worked in Czechoslovakian films, and she quickly became a successful actress, often called ‘the most beautiful woman in the world’. She married in 1933, but her husband didn’t want her to work, and kept her locked in the house. Finally, in 1937, she ran away to Paris. There she met an American film producer, and under her new name, Hedy Lamarr, she was soon a famous Hollywood actress.

Hedy’s problem was that she soon got bored with film roles that were just about being beautiful. She didn’t enjoy Hollywood parties, and liked to spend her free time inventing things.



Wartime work

During World War II, she had an idea for making it difficult for the Germans to stop American radio signals. She was the first person to think of sending bits of information on different radio waves, and then putting them together when they arrived – like a jigsaw. Sadly, the US Navy didn't take her seriously.

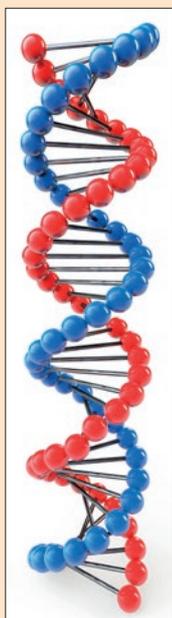


No one understood how important Hedy's work was until many years later, and not many people know that it is her idea that makes Wi-fi and mobile phones possible today. She died in 2000. In 2015, Google told her story in one of their 'doodles' on her birthday.

Rosalind Franklin

The scientist who didn't get the Nobel Prize for discovering the structure of DNA

The British scientist Rosalind Franklin was born in London in 1920. She was a very intelligent girl, and did maths exercises in her free time because she loved it! She went to Cambridge University, where she worked very hard studying Chemistry. However, she didn't actually get a degree when she finished her course – this was in 1938, and at that time only men could receive degrees.



Finding her place

Her first job was in a laboratory in Paris, where she took X-ray photographs of chemicals to learn more about their structure. She enjoyed living in France, and spent her free time walking in the mountains. When she went back to London in 1951, she worked with the scientist Maurice Wilkins in Kings College, and began studying DNA.

Her problem was working with male scientists – they often didn't take female scientists seriously. Wilkins wanted Franklin to be his assistant, and when she wanted to do her own work, he called her a 'dark lady'. In the evenings, Franklin couldn't eat in the same college dining room as the men.

Discovering DNA

Franklin's work went well, and she was the first person to show DNA's structure in a photograph. Wilkins showed the photo and her work to two other scientists, James Watson and Frances Crick – he did this without asking Franklin. When Watson and Crick later won the Nobel Prize for discovering the structure of DNA, they didn't say that Franklin's work was very important in their discovery.

Rosalind died of cancer in 1958, probably because of all her work with X-rays. In 2013, on her birthday, Google told her story in one of their 'doodles'.