

PHOTO 51

Who shot it? | Who stole it? | Who got the credit?

Background

In 1920, Rosalind Franklin was born into a family of great fortune and wealth. She and her family are English Jews that came over to England a few centuries before.

Rosalind's Childhood

Ever since a child, Rosalind had a bright mind. She would play memory games as a past-time. Whilst attending St. Paul's Girls' School, there she truly excelled in science, maths, and other academics. Not only that, she was highly active in sports (lacrosse, cricket, football, tennis, etc.). She would use her mind to help play the game skillfully. You could say she was excellent in everything.



The Dark Lady: Rosalind Franklin

Rosalind was a brilliant and shrewd woman. At the precipice of her life, she worked at King's College London, to help in the research of the structure of proteins. But the focus of topic



Francis Harry Compton Crick



James Dewey Watson



Maurice Hugh Frederick Wilkins



The Passion of Rosalind

Throughout her lifetime, Rosalind aimed to succeed the improvement of mankind.

With that, she has done many amazing things, including her research on coal, and DNA, and also especially in the research of the molecular structure of the tobacco mosaic virus and the polio virus.

She was a pioneer and worked well using X-ray crystallography. Using this technique led her to many of her discoveries of molecular structures.

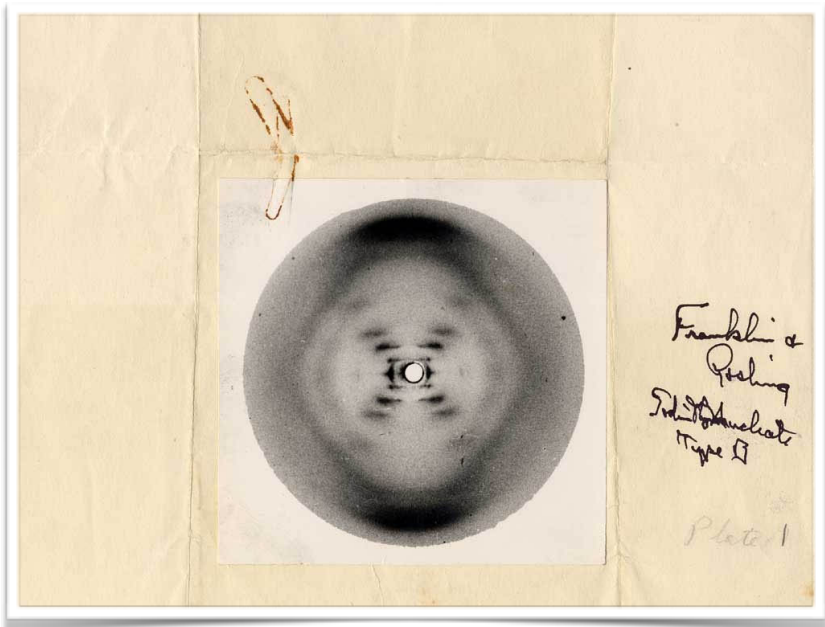
But the continuous exposure to the X-ray cost her her life. Her passion in the end took her life away, unfortunately. She still went on despite the fact that she was sick. But it was her passion, and stuck with it till the end.

changed to DNA; a hot topic at the time that couldn't be understood. DNA at the time, no one had a clear idea of. But that was the calling for Rosalind. Whilst there, she acquired a student Raymond Gosling. With the help of her student, Gosling, over the span of 100 cumbersome hours of X-ray exposure, two forms of DNA were shown, Photo 51 being one of them.

Maurice Wilkins

A man named Maurice Wilkins was supposed to be her assistant, but was on a holiday upon her arrival only to come back to a lab occupied by her and his student under her.

Now Wilkins and Franklin did not work together well. Franklin did not ever receive any word about him, for she was told that only she and Gosling were to work together. She thought she was independently working, but came Wilkins thinking that she's his assistant. Even though teamwork was not working out between them, she Franklin continued with determination on finding the secret of life. He instead became the deputy director of her lab.



James Watson & Francis Crick

Another man comes into the story by the name of James Watson. Watson, from America, basically travels over to Europe to study DNA and unlock the secret of life. There he meets Wilkins whilst Wilkins presents a fuzzy image of DNA. Watson baits him into letting him work with him but is opposed. Instead he is offered to go to a lab at Cambridge University. There he meets his future accomplice Francis Crick.

Watson, sent by Crick, attends a meeting where Franklin shares her newfound data about forms A (dry form) and B (wet form) DNA. From the given info, Crick and Watson build a DNA model that was critically proved wrong by Franklin.

Wilkins, feeling left out of his own topic, and claiming the selfishness of Rosalind, rejoins with Crick, an old friend, to discuss about DNA. A lot of the info from Franklin, to Wilkins, transferred to the Crick and Watson duo. While this was happening, Rosalind and Gosling were ahead of the game. Together, they produced a beautiful picture of form B DNA. It was named Photo 51. There shown the X, a signature of the double helix structure of DNA.

Stolen Work

After storing away the photo for future use, Wilkins somehow gains access to the photo (either shown by Gosling or Rosalind herself). But with Wilkins, comes the access of Watson and Crick. Without the supervision of Rosalind, Wilkins revealed to Watson Photo 51. With this key, Watson brings a sketch back to Crick and immediately start building an accurate model, this time being approved by Rosalind.

But for that model to be made, they stole much data, including unpublished works of hers. Her work was taken without credit and without a sound. Just a look at that photo, that key, helped them finish the race, even though the race was already won. Rosalind already found the key that unlocked the mystery of life after months and a few years of laborious work and research. Now here's Crick and Watson just making it public, but at the same time, giving themselves the credit. Anyways, who would listen to a woman in an environment of men? Especially during a time where women were strongly believed to be nothing more above men?

Nobel Peace Prize

Sadly, Rosalind was not there for the Nobel Peace Prize. Beforehand, after the discovery and leaving the college, Rosalind spent the last few years suffering from ovarian cancer and died at 37. It was most likely due to the amount of exposure she put herself through just for her passion. She was not even posthumously credited. All the credit of research was replaced by the names Crick and Watson, and along with them Wilkins was shared the prize too. No mention of her name was in their talk.

Sexist Conflict

Upon the arrival to King's College London, the struggle against the sexism present became daily. Being the only female in a male ruled environment, she was shunned out of the dining hall and even just a common room. Nicknames like "Rosy" replaced her real one behind her back. She was mocked and made fun of when she was out of the room. She was highly intelligent, yet understated just because of her gender. Of course became clearly upset and unhappy about this. Despite all the sexist acts, she pressed on, making great discoveries and writing rich papers.

A Personal Reflection

When I look back at the whole story, I find it so tense. The struggle, the fight, the unannounced race. After everything that this super woman has done, the work, her work bore not her own name. She was no one. Yet of all the brains and smarts that were around her, she was the genuine genius. No one should be ever rejected regardless of any differences. She was most definitely strong and also self-sacrificing for the benefit of others. She gave what she could and did what she did. A beautiful woman was she. I aspire to have a mindset like hers.

References

- Glassman, G. (Director), Glassman, G. (Producer), & Glassman, G. (Writer). (n.d.). Secret of Photo 51 [Video file]. Retrieved March 15, 2017, from <https://www.youtube.com/watch?v=0tmNf6ec2kU>.
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