

A wider picture with discovery of DNA

James Watson, who played a key role in the discovery of the structure of the DNA molecule, has died at the ripe old age of 97.

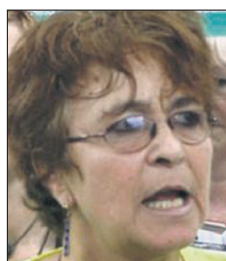
While celebrated for this brilliant discovery, he has died disgraced. He was sexist, a racist and a cheat.

The story of the discovery of the structure of the double helix is well known, but it is also shrouded in misconceptions.

The young Cambridge biochemists Francis Crick and Watson took the glory of the discovery for themselves. In fact, as in most scientific experimentation, their work drew quite heavily on the work of other scientists. It was the American scientist Linus Pauling who worked out the chemical components of the molecule, but had the combination wrong.

But it is the story of how Crick and Watson arrived at the way the atoms fitted together in the DNA that is at the heart of the DNA story. They had found out about the ingredients, but had no idea how they were formed in the molecule.

My aunt, Rosalind Franklin, was working on DNA at King's College, London. Working with her



NHS campaigner Shirley Franklin, left, revisits the history of the discovery of the DNA molecule & her aunt's role

was her doctoral student, Raymond Gosling. In the next lab was another scientist, Maurice Wilkins, also working on DNA, who was really quite perturbed that Rosalind was not working under his leadership. Meanwhile, she thought she had been employed specifically to lead a team in the field.

Her situation was not helped by the sexist practices in the university, which did not allow women staff into the common room, a space where such confusions, and relationships could be addressed.

The photograph, above, shows her making coffee with her colleague, in petri dishes, in her lab!

Rosalind had exceptional skills for DNA molecular experimentation because she used a crystallography technique in X-raying molecules, a

method that she had learnt in Paris.

It is not clear who actually took the now famous Photo 51 (right) which showed the pattern of the DNA molecules.

She had taught Gosling the technique, and it is thought that she set up the camera for him to take the picture.

In this competitive world of science, it matters whose picture it was.

And if you are a female scientist you are still less likely to get recognition than if you were a male.

It is also not totally clear how Crick and Watson got hold of the photo that was to inform their work.

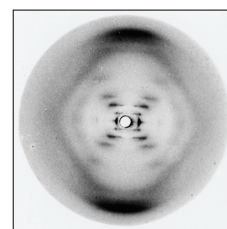
They had heard about Wilkins's work and came to visit him.

They were shown a copy of the Franklin/Watson picture, probably by Wilkins.

I heard him say in a



Rosalind Franklin, left, and colleague in the lab with coffee in petri dishes; and right, the famous Photo 51 x-ray diffraction image of DNA



grandfather and my left-leaning great aunts and uncle, and the telling of jokes.

She was also a modest woman who, while appreciating that her contribution is internationally recognised, would not particularly relish the celebrity status that is being created in her name.

Watson also went on to contribute to the world of science, leading the Human Genome Project, mapping and sequencing the whole of the human genome.

But he died in disgrace. He claimed that black people are less intelligent than white people and continued to describe Rosalind, a brilliant scientist with a strong sense of humour, as a "difficult" woman.

Accolades and honorary titles that had been awarded to him have been removed.

a time-consuming mathematical calculation. She arrived at the same conclusion, a little later.

Watson wrote up the story in his book *The Double Helix*. His description of Rosalind was patronising, calling her Rosy, focusing on her "blue-stocking" appearance.

Rosalind had died by the time the book was published, so my grandmother, who was appalled by the lack of academic acknowledgement of her daughter's contribution, complained to the publishers, and an amended second edition appeared.

Rosalind did not stay long at King's, and went on to work on the

molecular formation of viruses at Birkbeck, using her expertise in crystallography to study the tobacco virus.

Her scientific contribution is said to be immense, not just because of Photo 51, but because of the technique that was behind the discovery of the double helix.

This method formed the basis of the work undertaken to develop the COVID-19 vaccine.

Her commitment to socialism is omitted in the now endless accounts of her and her work.

She was my godmother and my aunt but died when I was nearly nine. But I remember the political debates over the Passover table, with my Tory

email letters@islingtontribune.com

About that speed-limit history!

LABOUR councillor Paul Convery criticised me (Reinventing the speed-limit history, *Tribune Letters*, November 7) for stating that the Green Party was instrumental in ensuring Islington became a 20mph borough.

I am clear that both the party and former councillor Katie Dawson deserve plaudits for ensuring our borough is safer, cleaner, and greener.

One only has to turn to the annals of the Islington papers to be clear.

CLlr Convery credits the Labour Party for delivering 20mph in 2013. But back in 2009 the council was finely balanced between the Labour Party and the Liberal Democrats and CLlr Dawson held a powerful position as a Green councillor.

She managed to secure a budget amendment together with independent Councillor Andrew Cornwell that won funding and a commitment to expand 20mph to all Islington

roads. The council started to roll out 20mph limits to the borough's residential roads that didn't yet have safe speed limits.

CLlr Convery then picked up this work after the 2010 election when Labour took over running the council.

The *Tribune* itself said Katie Dawson "was instrumental in introducing the [20mph] zones" (January 22 2010).

The Evening Standard said "Green Party Islington councillor,

Katie Dawson, has been granted £1million to implement the 20mph zone on all council-controlled residential roads".

It is churlish of CLlr Convery to try to erase the work of Katie like this. But I am perhaps unsurprised to see a growing pool of misstatements, misrepresentations, and misquotes from the Labour Party in Islington.

We must be six months away from an election.

CLLR BENALI HAMDACHE
Green Party, Highbury ward



Bringing about dramatic change on roads

IN a moment of idleness I decided to check whether Labour councillor Paul Convery was correct in claiming that it was he, without any contribution from the Greens, who introduced the 20mph speed limit on Islington roads.

Current Green Party councillor Benali Hamdache was reinventing history when claiming that contribution,

said the Labour councillor (*Tribune Letters*, November 7).

The following is what I found. According to the November 23 2007 *Islington Tribune*: "A revolutionary scheme to make Islington the first borough in the country to have a blanket 20mph speed limit could be only one vote away from reality."

"The borough's only Green Party councillor, Katie

Dawson, plans to use her unique position in the council – where the ruling Lib Dems have a lead of only one over the Labour opposition – to bring about a dramatic change to the Islington's roads."

In other words the Green CLlr Dawson did the legwork to get the 20mph speed limit introduced in Islington, and Labour happened to be in

power when the initiative was finalised.

Would Labour CLlr Convery deny this?

Reportedly Islington Labour councillors burst into laughter when CLlr Dawson first proposed a 20mph speed limit on Islington roads.

Perhaps CLlr Convery can enlighten us on this too.

ANITA FRIZZARIN, N19

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