
HOW A FORMER STUDENT OF THE COTSWOLD SCHOOL BECAME A COVID-19 RESEARCHER AT OXFORD UNIVERSITY

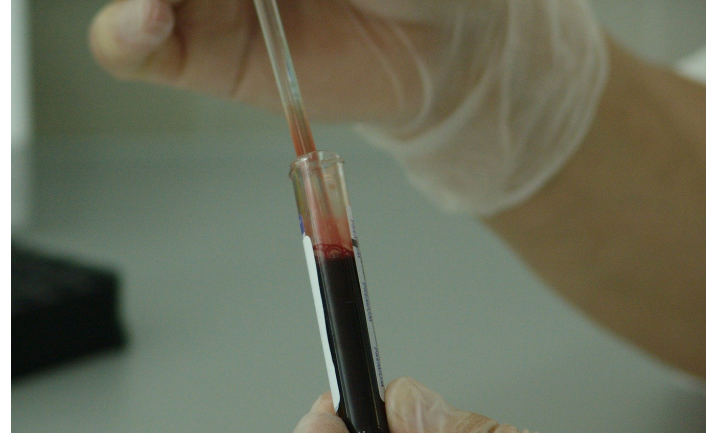
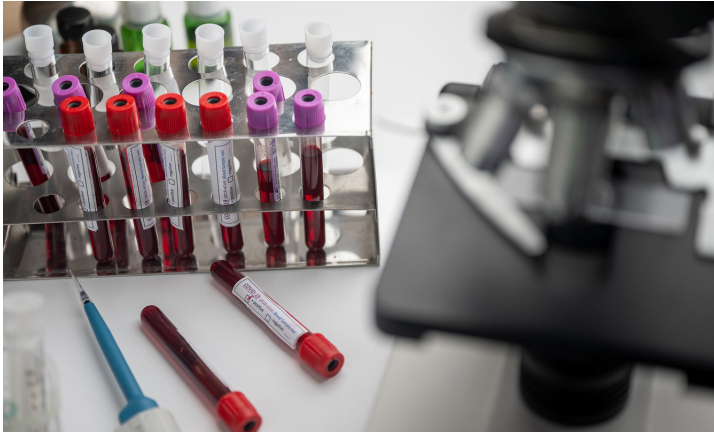
To help us mark British Science Week, Charlotte Rich tells the story of how she has built her scientific career so far and the challenges she has overcome.

Oxford University has a whole range of Covid research projects, including Covid vaccine research. My project is to investigate all the different types of cells in the immune system to work out how they behave in Covid. By looking at the differences between patients with mild Covid and severe Covid we can better understand what causes the difference. This in turn can help other researchers develop better treatments for severe Covid.

School was not particularly easy as I was ill with CFS/ME for the majority of the time. This meant that I could not attend school full time and I struggled to keep up with classes. I ended up taking a reduced number of GCSEs and I spread my four A levels over three years.



Taking my time over my A levels, supported by my teachers and Mr Morgan, who was Head of Sixth Form at the time, meant that I achieved an A*ABC in my A levels. I was able to recover enough to attend the University of Warwick to study a BSc in Biochemistry, followed by a PhD in Computational Biology also at Warwick.



After my PhD, I moved to Oxford and started doing research on autoimmune diseases. As a computational biologist, my job is to analyse big genomics datasets. Day-to-day, this means I use computer programming and statistics to try and untangle highly complex biological questions, such as why some patients with a disease respond well to treatment and others do not?

When the first lockdown happened, my colleagues and I had already switched to work full time on Covid research, analysing blood samples from patients taken right from the start of the pandemic.

Whilst I found it challenging, I enjoyed my time at The Cotswold School and I still remain close to many of the friends I made there. Science and Maths were my favourite subjects, but I also loved Music. Through music and violin lessons I had many opportunities to perform with the school, and I remember Christmas concerts at Gloucester Cathedral particularly fondly.

"THIS SUCCESS WAS ALMOST UNIMAGINABLE FOR ME WHEN I WAS AT SCHOOL. IT GOES TO SHOW THAT YOU CAN'T PREDICT THE FUTURE, AND YOU SHOULD ALWAYS AIM HIGH!"