

## Why Has COVID-19 Impacted Scientific Research?

The outbreak of coronavirus has disrupted working practices and ways of life for people all over the globe – and the scientific community is no different. Since the discovery of the first case in Wuhan City on 31<sup>st</sup> December 2019, the disease has spread all across the planet, forcing researchers to mothball their ongoing studies.

While some have used the enforced downtime to write up their findings from previous investigations and catch up on menial administrative tasks, many others have taken the opportunity to repurpose their skills in the fight against <a href="COVID-19">COVID-19</a> and its rapid spread. Scientists from backgrounds as diverse as biomedicine, nanotechnology and air pollution have come together to contribute whatever help they can to overcoming the pandemic.

## The best laid plans

Just as office employees have been forced to work from home over the last few months, so too have scientists been prevented from enter the laboratory for fear of catching and spreading the virus. This has meant that many ongoing projects have had to be put on hold, since the equipment and infrastructure of a working lab can rarely be replicated in a home setting.

As a result, countless researchers have found themselves at a loose end and have occupied their time by collating existing papers, writing up new ones from previously conducted research and preparing themselves for the reopening of the lab once more. While some countries are now beginning to emerge from lockdown, many still find themselves unable to work, and even those who do may not be able to pick up exactly where they left off due to the delicate nature of their studies.

## Repurposing research skills

One positive to arise from the present difficult situation is that it has encouraged scientists from all fields to pool their talents and concentrate their efforts on finding ways to overcome COVID-19.

For example, a Jordanian biomedical engineering department has struck upon a cheaper and faster coronavirus testing kit, while a Beirut-based associate professor of internal medicine has switched from studying the carcinogenic effects of smoking



shisha to analysing transmission rates in the intensive care wards of hospitals to identify best practices in dealing with the disease.

Elsewhere in Lebanon, a chemistry professor has adapted her air pollution investigations to study how lockdown has affected air quality in her part of the world.

"It's delightful to see the number of scientists who got on board to see how they could help," <u>explains Susu Zughaier</u>, an associate professor at Qatar University, who is coordinating coronavirus-related research and conducting video-link training sessions for vulnerable people. "Researchers don't have to be medical experts to have something to contribute in these times. Everyone's efforts are the blessing in disguise to have come out of COVID-19."