

Science in a Time of Pandemic

The pandemic placed science in the spotlight. The rapid development of biomedical and engineering interventions has given it a heightened public profile. Scientists regularly appear on screens to describe their research and its possible implications, often very effectively. Podcasts on the science of the virus, epidemiology, vaccine development, etc. abound. It would appear to be a moment of significant shift in the public ownership of science – in public trust of science.

Yet, we continue to see high levels of vaccine hesitancy, popular pushback against recommended science advice and the proliferation of fake news. Perhaps of most concern are dislocations between science and policy even at the highest political levels with their signature populism associated with a slide into anti-intellectualism. Interestingly, this heightened publicly mediated role of science in combating the pandemic, together with the appearance of Fauci-type scientists with politicians on TV screens and internet feeds across the world, also places science at significant risk as it navigates the complex relations at the nexus of science, power, policy and profit.

There are deepening divisions in society about the place of science in society, the ownership of science. There is deepening skepticism within large swathes of populations around the world at the same time as one sees awe and appreciation in other parts of population. What is the future of the public 'ownership' of science?

In addition, we have seen the emergence of rapid science ushering in new forms and protocols of scientific practice. An explosion in preprint publishing, fast-track peer review mechanisms and open access to the databases of some of the world's most prestigious and expensive journals open the way to new norms. The devising of new protocols for clinical trials (of treatments and vaccines) and the use of data analytics and artificial intelligence in discovery processes have been very quickly operationalised. These will shape the future of science. What implications do these have on increasing the credibility of science?

What we see in the time of CoViD-19 also appears in other grand challenges being faced by humanity such as global warming, where science is again implicated in such science-power-policy intersections.

What are the key shifts required to make science more credible, more trustworthy, more dependable for its many publics? One can imagine for example, the need to consider issues of consilience, the need to bring together different domains of research, innovation and knowledge in addressing these grand challenges. The development of new paradigms of citizen science may create new voices at that science, power and policy nexus. This is a key question in this next period of the 21st century.

Questions:

1. What other interventions can we think about that would enhance the relationship between science and its publics?
2. How serious is the risk to science as it directly engages policymaking at a time of crisis? What kinds of interventions will help to mitigate these risks?
3. Is there an opportunity to move towards a global commons approach to science and its impact on society and will this help to halt the slide towards anti-intellectualism.