

Interview Guide

“Open Science – Crucial for effective COVID research?”,

Intro

Thank you for agreeing to participate in this interview.

In the project “Open Science – Crucial for effective COVID research?”, funded by Frontiers and conducted by an independent researcher, Daniel Spichtinger, we provide empirical evidence to explore whether and to what extent open science practices, most notably open access to publications and open research data have influenced the speed of COVID related research in general and the development of COVID vaccines in particular.

We are looking in particular to obtain your feedback on the interim results of our literature review and the survey of over 200 researchers.

You have been recommended as a potential respondent due to the fact that you have engaged in COVID related research.

Participation in the interview is of course voluntary and in line with GDPR regulation you may refuse to take part or exit the interview any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason.

Without further ado, lets then commence with the interview.

Before we begin, could you give me a short summary of the kind of COVID related research you have been conducting?

Answer

Intro Q1 In public documents (not necessarily scientific articles) explaining the speed of covid research the most prominent factors refer to

- previous research (e.g. on SARS),
- unprecedented funding,
- worldwide collaboration,
- new technology as well as
- regulatory and management factors (parallel phasing and manufacturing).

In our survey the factor with by far the most survey responses (78% or 160 responses) is the worldwide collaboration between all actors, followed by fast track funding through dedicated instruments from research funders (51% or 105 responses). Access to previous research on SARS and MERS comes in third place (37,56% or 77 responses).

- 1. Do you agree with these factors, or do you find them surprising? What was for your personally the most important factor leading to the unprecedented speed of COVID research, treatments & vaccine development`?**

Answer

Intro Q2 Our survey respondents ranked **access to scientific publications** of as a contributing factor to the unparalleled speed of COVID research with a weighted average of 4,19 out of 5 (1-not important, 5-very important). Respondents said that on average 72% of the literature sources they used were open and 82% consider themselves very satisfied or satisfied with this level of access.

- 2. How does this chime in with your own experience? Was the majority of the literature you used open to you? Did you encounter cases where in collaboration with other researchers you or your collaborator did not have access to relevant literature? (Given that licences to COVID articles are not always creative commons, do you think it is a problem that big publishers may close access to COVID literature again after the pandemic?)**

Answer

Intro Q3 In our literature review we found that there were a number of contributions to scientific journals which voiced concerns about the impact of the speed to and of publication on impact and peer review. However, the survey respondents took a more positive view.

- 3. Do you share concerns that quality of publications has been compromised due to the speed to and of publications? In this context, do you see pre-prints in a generally positive or in a negative light? Why? Since peer review has been controversially discussed as part of quality, do you think we need to further reform it? How?**

Answer

Intro Q4 Turning now to research data, our survey respondents ranked access to data a contributing factor to the unparalleled speed of COVID research with a weighted average of 3,88 out of 5 (1-not important, 5-very important). Respondents said that on average 58% of the data they used were open and 64% consider themselves very satisfied or satisfied with this level of access.

- 4. How does this chime in with your own experience? Was the majority of the data you used open to you? Did you encounter cases where in collaboration with other researchers you or your collaborator did not have access to relevant data? Do you generally consider that COVID has led to more data being shared than before?**

Answer

Intro Q5 Data quality was also an issue that was remarked on critically in the literature review, with one author stating that the quality of the data that is shared is “not always good and rarely FAIR”. In our survey, 53% were very satisfied or satisfied with the quality of the available COVID data.

- 5. What is your view on this? Did you encounter bad quality data in your COVID research? If so, what do we need to do to increase data quality?**

Answer

Intro Q6 As we can see (*show statistics*) the number of survey respondents that considered sharing publications an important factor for the speed of COVID research is higher than the number of people that put the same importance on sharing of research data.

6. Do you share this view? How would you explain this?

Answer

Intro Q7: In our survey we also asked a couple of questions on other open science issues beyond open access and data sharing.

7. Do you think we need to address other open science issues such as researcher assessment? Do any other open science issues come to mind that we need to tackle to address COVID in the longer term?

Answer

Intro Q8 – In the literature review we found a number of people that were concerned with how well the scientific system coped with COVID. However, this was not reflected in the survey.

8. What do you think? All in all, has the scientific system has worked well in addressing the COVID pandemic? It is more important to foster more open practices to ensure the quality of research or do we need traditional gatekeepers to ensure the quality of research?

9. Are there any final thoughts you want to share concerning open science and COVID research, in particular regarding the speed of the research?

YES/NO

If yes:

Answer

Finish: Thank you for your time