Virtual meeting blues

The end of the COVID-19 pandemic is still a long way away. However, it is already a good time to reflect on how we have tried to maintain a vibrant research community.

We have all been forced to adapt to the unusual circumstances of the past 15 months. Researchers have managed to maintain productivity — at least if the number of submissions that *Nature Plants* have received is anything to go by. This has been achieved in part by adopting creative ways to do remotely what was previously done in person. Some of these ideas have proven so successful that they deserve to become permanent fixtures of the life scientific. Others that were commonplace and thought essential before 2020 have been so easily replaced that they may never return.

Despite additional security and safety measures, performing experimental work has not substantially changed. The culture of the laboratory will hopefully return as well. Meetings held on programmes such as Zoom or Teams are functional but a poor substitute for an in-person ‘coffee and cake’ session. Most researchers will be missing the regular gatherings that pull a laboratory together and make it more than the sum of its members. Similarly, there is an ‘activation energy’ required for instant messaging that is not present when sharing an office with colleagues — colleagues who may unexpectedly have the answer to the problem you are struggling over.

Lectures and seminars have also been moved online. In early 2020, this mostly entailed the speaker sharing their screen with attendees and delivering their standard script. However, online talks have developed. They do not have to be live but can be pre-recorded, removing the problems of recalcitrant technology and unreliable internet connections. This allows lecturers to ensure that their presentations appear exactly as intended (and fit within their allotted time slot). Technically minded individuals can seamlessly integrate all sorts of media — a live question session can still follow, but written questions submitted through a chat window are easier to moderate.

These are excellent developments that were already happening to some degree before COVID-19 accelerated their adoption. Another advantage is that these recordings can be made available for consumption at a later date, increasing their reach to anyone interested, at any time.

It seems very likely that the pre-recorded lecture will become much more common or even the norm.

This is an obvious advantage to lecturers, especially for undergraduate teaching. If a presentation can be recorded, it can be reused. For ‘research’ lectures this may not be particularly helpful as there is a desire to include the most up-to-date results, even if 90% of the story has been told before. However, undergraduate lectures do not change much from year to year. The same recording of ‘Introduction to Plant Genetics 101’ can be rereleased each year? This idea is seductive but has its downsides; even basic lectures will become stale and out of date quite quickly, and it is far from easy to ignite a student’s interest without the personal experience of an expert’s enthusiasm.

Of course, lectures that have been recorded for one university can be easily used at other schools. There are already companies that sell recordings of ‘great courses’ of lectures delivered over the internet. These seem to be primarily aimed at the amateur, infotainment-seeking user, but this business model could be easily adapted. If so, freed from the need for a balanced range of expertise available, universities may start over-specializing in particular subjects, or even decide that they do not need as many experienced staff — a threat to the continued health of less charismatic research areas, including many aspects of plant biology.

Two members of the *Nature Plants* editorial team are based in China, and are currently making the rest of us jealous by their ability to attend conferences and visit research institutes in person. For the rest of us, meetings great and small have had to be virtual affairs. Even when it is again possible to fill lecture halls with delegates, the emergence of new variants of the SARS-CoV-2 virus will make international travel less straightforward than pre-pandemic. Virtual conferences, or at least conferences with a virtual component, are here to stay. The time saved in not travelling to attend in person will be very welcome, and we are all well aware that fewer journeys by plane will be a help in addressing climate change. But other important aspects will be lost.

Despite the internet’s undoubted ability to connect people across continents, it is not a good venue for serendipity. The chance encounters that take place during coffee breaks or lunches, on shuttle buses or while hanging around the conference venue, are very difficult to reproduce virtually. It is exactly these fortuitous meetings that can lead to the unexpected collaborations and research approaches that drive science forward.

As editors we particularly value these less formal conversations. This is where researchers will talk freely about the experiments they have not yet completed. We can learn about alliances and collaborations that could affect the effectiveness of the peer-review process, and meet early-career researchers often long before we see (or publish) their papers. As a consequence, the most important part of a conference for an editor is probably the poster sessions.

Sadly, the poster session experience has proven to be highly unsatisfactory when reproduced virtually. Displaying a poster online is easy enough, but in a remote environment these have to be actively sought by scanning through a list of titles and abstracts. Perhaps there should be a ‘random shuffle’ for virtual poster sessions, but I haven’t yet seen any conference employing one. It must also be a dispiriting experience for the poster presenter, waiting in an empty chat room hoping that someone will join them. When they do it tends to be to ask very specific questions that fail to develop into a discussion. You can’t even chat to the person with the poster next to you!

Scientific research has managed to weather this pandemic relatively well, and some of the new ways of working have positive advantages that will continue far into the future. However, the essence of our community, forged through shared experiences, is threatened if too many of our interactions continue to be online.

Or maybe I just can’t wait to get back to the thrill of cruising down aisles of poster boards, not knowing what fascinating and unexpected research and researcher will be just around the next corner. □

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