

Presidential reflection on the current COVID-19 situation and its future impact

The way humans live and work on planet Earth has changed profoundly over the last months. Many lives and livelihoods have been lost. Ways of working, shopping and social interactions are all vastly different for the majority of us. We do not know when the current crisis will end, or how far we will “return” to the ways things were before the pandemic.



There are a few positives. Far more heed is being paid to scientific advice, and evidence-based decision-making is becoming the norm in matters, albeit related to public health matters, such as the relaxation of lockdown measures. It is becoming clear that better preparedness, as recommended by many medical and scientific experts, would have served us better. Sharing of raw data and results, and collaborating rather than competing, can help and is helping in addressing the many challenges in fighting the pandemic and addressing its impacts. Integration of medical, physical and social sciences is essential to understand the pandemic and responses to it, across all demographics, cultures and economic states, from individual to global scales. The reduction in human activity has lowered the threshold for detection of naturally occurring ground motions, potentially improving our understanding of processing leading to a seismic response within the Earth. Our ongoing work using our science and expertise to build resilience to natural hazards, in disaster risk reduction, and to address the United Nations Sustainable Development Goals has provided us with tools to transfer knowledge and technology, and build capacity, which are relevant to dealing with the pandemic.

Many much wiser words than I could ever come up with have already been written about the pandemic. For example, I recommend the articles in [Nature](#), [The President of the ISC's letter to members](#), [AGU President's commentary on the 50th anniversary of Earth Day](#), and [COSPAR's Executive Director's 'Moments of Truth'](#). Each deals with a facet of covid-19 in a slightly different way but relevant to us all.

The IUGG Bureau will meet “virtually” in the next few months to start the discussion on the way forward for our Union. We must anticipate disruptions to travel and hence to face-to-face meetings, conferences and workshops for the foreseeable future. The temptation is to try to replicate them with virtual, or a mixture of face-to-face and virtual, equivalents. These require substantial organisational and logistic efforts and hence the costs of attending will likely remain high. Yet they will not offer the same opportunities and experience. As a senior academic, this represents a distraction and an inconvenience. But for early career scientists, it is disastrous. For example, they will lose the networking opportunities that face-to-face meetings offer, and will not be able to interact with and get feedback from more experienced scientists in the conducive atmosphere a conference setting provides, without, or with fewer of, the distractions of the office. We must also anticipate a reduction in our budget. The enormous economic impact of the pandemic is likely to lead to some nations being unable or unwilling to continue as paying members. We had already noticed a trend of members querying the value of their subscription and requesting specific information to justify it.

This makes it timely to take a fresh look at our activities and how we operate, and consider what the IUGG will look like for the next few years, and even further into the future. In the post-pandemic world, should we continue our face-to-face meeting schedule as before? To what extent should we aim to include virtual participation in these meetings? Do we have the right balance between our Union, Association and Commission meetings, and meetings run by other organisations that we co-sponsor? Are these meetings of the appropriate length and held in the places where the maximum number of scientists can benefit (whether that is face-to-face or remotely)? Is the money set aside to

support individuals to attend meetings the best use of those funds? Our primary means of interacting with partner organisations are through the liaisons we appoint. Do we support them adequately to undertake this task? Does this method serve us in the best possible way to foster the interactions we all need, to advance our science and use it to serve society? Would a set of bespoke approaches, dependent on the organisation, be better than a one-size-fits-all arrangement? We also have looser links with a number of related organisations. Should we scrutinise these to work out better ways of gaining mutual benefit? What about the programs and projects we support? Do we comment enough and in the right places about science policy? Are there better ways of getting our voice heard? Note that not all these questions relate directly or only to funding – most of our activities are carried out without any remuneration by those committed to serving science and the structures and organisations that support it.

Any review would be conducted openly and transparently, in conjunction with our Associations and Commissions, and changes, apart from those imposed by the pandemic, would only happen after broad consultation. We would also welcome input from individuals, including those representing our member countries. We may set up some limited time working groups to consider specific aspects of activity. We anticipate that Associations and Commissions may also be asking themselves questions similar to those posed above, and we welcome dialogue with them. However, we must bear in mind that any changes must be to the benefit of the Union as a whole.

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