Pandemic Response Catalyst Conversations:
Validating and Sharing Scientific Information
Fact Sheet

What are the best scientific resources on COVID-19?
During "Validating and Sharing Scientific Information," experts recommended:
- **Medical journals:** JAMA, The New England Journal of Medicine, The Lancet
- **Thought leaders:** Dr. Ashish K. Jha, Dr. Eric Topol, David Leonhardt
- **Government agencies:** CDC, WHO

When asked where to find trusted information and advice, Vin Gupta, M.D., M.P.A., affiliate assistant professor at the University of Washington's Institute for Health Metrics and Evaluation and medical contributor for MSNBC and NBC News, says, "You should cultivate your own network on a social media platform of people that you trust, of sources that you trust, and continue to comb that daily."

What strategies are most important to effectively communicate the facts and scientific information coming out about COVID-19?
According to Dr. Gupta, who is also an ICU doctor that has been treating COVID-19 patients since the pandemic broke, it's "Giving actionable advice. What I try to do is give three-to-four take-home points every week based on the scientific literature that I comb every weekend. What are the three-to-four things that you can do to keep your family safe? State that in the clearest terms possible so that people feel like they're gaining something, not just gaining more noise."

On communicating science effectively, Dr. Gupta advises:
1. Convey science, facts and safety in the form of a **relatable story**.
2. Use **plain language** to break barriers of technical jargon.
3. **Acknowledge areas of uncertainty** to prevent misinformation from spreading.

In the rush for knowledge, how can leaders, media and the scientific community reconcile the immediate need for information with critical validation steps?
According to Nick Lindsay, director of journals and open access at MIT Press, "Papers that are rejected by scientific journals do continue to sit in preprint on repositories and elsewhere, and people are largely going to be unaware that those papers have been rejected… The primary goal is to try and push peer review further upstream so that it occurs at the preprint stage and not after submission. In addition to debunking bad science, we really want to elevate good science that traditional journalism may have missed or perhaps just not gotten to."

On the current landscape of preprints during COVID-19, Lindsay estimates:

- [bioRxiv](#) and [medRxiv](#) are up to **10,000 preprints** on COVID-19. Lindsay estimates that that number is probably **25 percent higher** considering how difficult it is to keep up with the influx of material during the pandemic.
- [Social Science Research Network](#) has **5,000 preprints** on COVID-19 downloaded **19-20,000 times** each.

How can public trust be built and maintained throughout the ongoing process of scientific discovery?

According to David Sun Kong, Ph.D., director of the Community Biotechnology Initiative at MIT's Media Lab, "Right now, all of us that are engaged in science and research, we do have a responsibility and a role to play in science communication… It is really critical for us to learn how to de-jargonify our work."

What barriers or opportunities does today's rapid news cycle pose for global COVID-19 response efforts?

Quoting a [joint statement](#) recently released by key global agencies, Renee Connolly, head of global communications & business markets/services at MilliporeSigma, says, "The World Health Organization, the UN, UNICEF and others noted that COVID-19 is the first pandemic in history in which technology and social media are being used on a massive scale to keep people safe, informed, productive and connected. At the same time, the technology we rely on to keep us connected and informed is enabling and amplifying an 'infodemic' that continues to complicate pandemic response."

WHO defines an **infodemic** as an overabundance of information, both online and offline. It includes accurate information as well as mis- and disinformation.

For more information:

Scientists are collaborating to source solutions to COVID-19 challenges on the Pandemic Response CoLab, an open platform from MIT's Center for Collective Intelligence and Community Biotechnology Initiative. MilliporeSigma is a founding member of the online community, which works to harness collective intelligence and better address public health crises. Join the conversation and view the contributions at www.PandemicResponseCoLab.org.