PLENARY SESSION

Questions and Answers

- U.S. EPA: My expertise is in risk communication; how would you view risk communication specifically with social science in responding to a disaster or even a long-term issue like the pandemic? When people's attention span wanes, how can we use social science and risk communication together to reach audiences as they get fatigued?
 - Kim Fortun, UC Irvine: That is a really important question and I would start with two possibilities: one, of course I know you think a lot about as a risk communicator, is understanding the context in which people hear and receive our communications. Also understanding their communication modalities; are they getting their information from Facebook? WhatsApp? In my experience, that varies widely across communities where I work. The other way to enroll communities in information about their context is to enroll them in helping produce it so collaborative production of assessments of the situation is also a mode of communication in itself.
- U.S. EPA: What suggestions do you have for working on interdisciplinary research teams?
 - Kim Fortun, UC Irvine: That is a good question and a challenge. One thing that I have learned is we have to take the time to explain our methods, data types, and modes of analysis because often there are rolling eyes in a room when you are trying to work on interdisciplinary projects. Some people just do not sense that the data used in another field is robust or usable. However, understanding the infrastructure that supports data production in that field, like what monitors are there, where data come from, and how people have learned to work with data despite its imperfections is crucial. That methodological disclosure is a powerfully important first step.
- University of South Florida: Can you please return to the concept of "frame multiplication" and explain this a bit more in terms of helping communities address environmental justice challenges?
 - kim Fortun, UC Irvine: That is my favorite question! So, frame multiplication is when we really leverage the different vantage points from which we experience and see the world, whether that comes from our situatedness in a geographic community or in a community of experts. Imagine that an air chemist sees the parishes between Baton Rouge and New Orleans differently than I do, but together we get a more robust understanding of the phenomena at hand. However, respecting also that people on the ground have vantage points and can contribute to problem characterization in really important ways is crucial. As things get harder to understand and there are more intersecting stressors, it is even more important to multiply the angles from which we examine a problem, and even more so when there is noise in the system; when there is disinformation or greenwashing, that kind of pressure on the system is hard to counter directly. Seeing robust knowledge as a result of multiplied perspective, I think, is a tactic for responding to both the complexity and the noise that are almost inevitable in these kinds of scenarios.
- **U.S. Air Force:** How do you counter misinformation (e.g., people not wanting to get the COVID-19 vaccine due to social media)?
 - Kim Fortun, UC Irvine: Also, a good question. To start with: understanding in very specific ways why there is vaccine hesitancy. I know that is well-acknowledged, but it is hard and takes a lot of resources to actually understand that differentiation. Again, because people tend to be in

very particular media loops that are often reinforcing; we have to find a way to break that loop. Sometimes things like a community meeting that is just a little bit 'outside the loop' can introduce a different possibility for where that communication community is going. I think that seeing it as a combative 'correct-the-errors' approach – we have seen it just does not work. So, imagining it as drawing people into new dialogues, rather than fighting it out in one main arena, I think, is a tactic that is worth pursuing.

- U.S. EPA: How would you recommend addressing communicating during uncertainty and as things change
 – for example, during this pandemic we have seen things change along the way. What is the best way to
 look at that?
 - Kim Fortun, UC Irvine: I think it is important to share the uncertainty. Assuming and helping build people's capacity to deal with it. I think an old mode of risk communication is the sense that you did not want to scare people and wanted to be totally factual before you shared anything. Particularly in complex disaster scenarios, you would be holding your breath for a long time if you wait on that. Part of preparing for disaster is preparing people for the kinds of understanding we have and do not have as disasters unfold. If you think about disaster reduction, are we building the knowledge capacity in our society where we can effectively partner with people undergoing acute stress?