The Institute's 12 Takeaways from the 2023 Symposium

Science alone does not tell us what we ought to do. It informs our decisions and choices, both of which are based on values. But science can provide important data and information to help us be better informed. So how we talk about it, how we communicate it, that is important. That's why our 6th annual symposium focused on The Ethics of Science Communication. Here are 12 big ideas we took away from this year's discussions.

1

Show the Good With the Bad. We should communicate aspects of science that show trustworthiness but also highlight aspects that are not trustworthy. The three essentials for trustworthy science are (i) the presence of expertise; (ii) a critical and diverse scientific community; and (iii) shared values.

2

Ethical Communication Means We Need Values. Consensus on values can take a long time, but pushing for values is not something the scientific community can do without bringing in diverse perspectives. Diverse perspectives can shape how we frame questions and how we communicate in different communities to make science more trustworthy.

3

Surprise! Science Is Done By Humans. This means that science is not purely objective. Humans do science, and we have motivations. It's important to recognize and acknowledge this rather than ignore it, and then rely on critical debate and processes within the scientific community to address biases.

4

Correct Failures To Rebuild Trust. Airing the failures of science – such as overpromising, hype, or fraud – helps to build trust both in the scientific process and also in institutions. Also when people have been harmed, we need to bring those injustices into the conversation.

5

Ask. Don't Assume. Ask communities what kind of information they are looking for rather than assuming. Science communication means knowing your audience and recognizing the differences between audiences and different types of media.

6

Embrace Humility. Science communication isn't about cheerleading for science. There are risks, tradeoffs, and limitations. Science isn't good or bad. It's a way of knowing. We need to be humble about the limitations because it's not just science alone that can make change. It's science coupled with social policies, support, and people.

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7

Be Okay With Persuasion. Communication is about persuasion, because of what we choose to say or not say. But it's important to ask when is it okay to be persuadable and when is it not, and to steer clear of manipulation or coercion.

8

It Might Be More About Relationships. When engaging with scientific information or decision-making, it might be more of a relationship challenge than a communication challenge. Build relationships ethically by treating each other as equals, and then communicate at a person-to-person level to be more impactful. This also helps lessen the embarrassment if someone changes their mind.

9

Engage In The Messiness. Communicators should be more critical about what science can contribute to conversations and what other information is needed. Sometimes science is not the answer, and sometimes science is only part of the answer.

10

More Than Facts. We need to consider how people understand and engage in science and not just provide more facts. Because we know that the <u>information deficit model</u> doesn't work – that more information will not make people trust science or use it for a decision. Science communicators must take into context people's cultures, values, and the realities they are living in.

11

Avoid Either/Or. We live in a society where people want dichotomy. Good vs bad. Big vs small. Right vs wrong. Us vs them. It's important to avoid these either/or framings when communicating the implications and nuances of science.

12

Everyone Is Doing It. People are talking about science all the time... many are just not calling it that. We need to rethink who feels empowered to communicate about science, remove the gatekeeping (the expert-only position), and support communicators with training.

Read a more in-depth article about the Symposium from Nicole Kelp, Colorado State University, on <u>Humility: The Key Ethical Consideration at the Intersection of Science Communication & Trust</u>.

Watch the recordings from the Symposium

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