“In Science We Trust?” a collaboration between The Hastings Center and Knight Science Journalism Program at MIT.

**Panelists**:  
Bioethicist [Lauren Taylor, NYU, The Hastings Center](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.thehastingscenter.org%2Fposts-by-author%2F%3Fid%3D51094&data=05%7C02%7Cgilberts%40thehastingscenter.org%7Cf858aa07b68741ff13f208dc229f7ce4%7C8a1328e2ae0549cea3dce8136ea59b27%7C0%7C0%7C638423315616200324%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=9FcRutDpu2n9JYCQJrRNWeVsiUuR3arrvFYMwSk6Bus%3D&reserved=0)Scientist [Christopher Reddy, Woods Hole Oceanographic Institute/MIT](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fchristopherreddy.com%2F&data=05%7C02%7Cgilberts%40thehastingscenter.org%7Cf858aa07b68741ff13f208dc229f7ce4%7C8a1328e2ae0549cea3dce8136ea59b27%7C0%7C0%7C638423315616210753%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=4gyBK3fjS29QQIuAGYjjVqyk8B0wKDQNoyurGEKfs3U%3D&reserved=0)Journalist [Nicholas St. Fleur, STAT](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.statnews.com%2Fstaff%2Fnicholas-stfleur%2F&data=05%7C02%7Cgilberts%40thehastingscenter.org%7Cf858aa07b68741ff13f208dc229f7ce4%7C8a1328e2ae0549cea3dce8136ea59b27%7C0%7C0%7C638423315616218544%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=o7NSm%2BeJuXVcM7dGkWqiRAWcYg4eNeq2BH4bhmdozu4%3D&reserved=0)**Moderator**:[John Evans, UC-San Diego](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fjohnhevans.ucsd.edu%2F&data=05%7C02%7Cgilberts%40thehastingscenter.org%7Cf858aa07b68741ff13f208dc229f7ce4%7C8a1328e2ae0549cea3dce8136ea59b27%7C0%7C0%7C638423315616224908%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=ywUlSsTXj9MDTNb3CdxiDb8kh1y1tUCp7brLLkSM3yM%3D&reserved=0)

With guest, Hastings Center President Vardit Ravitsky

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00:03:12.140 --> 00:03:14.000

Vardit Ravitsky: Good afternoon.

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Vardit Ravitsky: and welcome. My name is Vardy Travitsky. I am president of the Hastings Center. an independent nonpartisan Bioethics Research Institute.

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Vardit Ravitsky: The Hastings Center is very pleased to partner with a Knight science journalism program to present you this webinar on the growing worldwide trend of distrust in science and medicine.

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Vardit Ravitsky: This crisis of lack of trust is of critical importance to the work of science. Journalists, scientists in general and bioethicists.

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Vardit Ravitsky: Each of us saw first hand, the many ways in which, during the covid pandemic we exposed this breakdown in trust in science, and even in the concept of expertise itself. Misinformation about vaccines, polarized political views of public health, guidance.

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Vardit Ravitsky: conspiracy, theories, all these were not just conceptual issues. They actually tragically cost lives.

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Vardit Ravitsky: So last year the Hastings Center issued a special report on rebuilding trust in healthcare and science. It's available for free. You can find it in the chat as a link, and on the Hastings Center's website. And one of the editors of this special report is with us here today. Lauren Taylor.

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Vardit Ravitsky: a key finding of the report is that scientists and other experts who communicate with the public must develop more effective ways. To communicate what's needed is communication about how science works.

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Vardit Ravitsky: and scientists should feel empowered to better communicate with people who are not scientists. Whether that means during interviews with journalists or writing and speaking themselves directly to the public.

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Vardit Ravitsky: Another key finding is that retaining public trust requires experts to be to be trustworthy. Trust requires belief in both the message and the messenger

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Vardit Ravitsky: so it's on scientists on all of us experts to consider our own behavior alongside our efforts to measure or influence public perceptions. So

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00:05:41.570 --> 00:05:52.039

Vardit Ravitsky: with all this in mind. It is my pleasure to turn to John Evans, the moderator of today's discussion and to the panelists. Thank you so much for being with us.

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Vardit Ravitsky: We're looking forward to hearing more ideas on what we can do to rebuild trust in science and in medicine. John.

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Vardit Ravitsky: onto you.

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00:06:04.990 --> 00:06:06.730

John Evans: Thank you very much. Vardit.

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00:06:08.310 --> 00:06:17.389

John Evans: My name is John Evans. I'm a professor of Sociology at the University of California at San Diego. and, as Verdi just said.

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John Evans: if there was a time when science was instinctively trusted that time is no longer

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00:06:25.070 --> 00:06:28.389

John Evans: this is due to a number of societal changes.

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John Evans: And the report that was just referenced as a discussion about much of that.

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00:06:35.190 --> 00:06:39.450

John Evans: But where do we go from? Here?

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00:06:39.540 --> 00:06:46.519

John Evans: We have a great panel of folks to talk with us today about this. I'm going to briefly introduce them

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John Evans: first. Lauren Taylor is an assistant professor in the Department of Population Health at Nyu.

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John Evans: and a senior advisor to the Haste Center. She's the Co. Editor of that recent report, titled time to rebuild essays on Trust in health care and science.

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00:07:03.850 --> 00:07:05.179

John Evans: Christopher Reddy

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00:07:05.770 --> 00:07:09.839

John Evans: is a senior scientist at the Woods Hole Oceanographic Institute.

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John Evans: He has communicated his research findings to a wide range of interested parties, and recently wrote about these experien titled Science Communication in Crisis, an insider's guide.

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00:07:22.790 --> 00:07:29.290

John Evans: Nicholas Saint Fleur is a general assignment, reporter, associate, editor, director of events

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00:07:29.780 --> 00:07:38.059

John Evans: and host of stats, health equity, Podcast color code. He covers intersection of race medicine and the life sciences.

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John Evans: So the way we will proceed here is, I will pose a question to the panel. They will each give a 4 min response, and then we'll have 15 min of discussion amongst us.

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John Evans: I will ask one final question. Then we'll open up

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00:07:54.720 --> 00:07:57.129

John Evans: questions from the audience.

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John Evans: There should be a button at the bottom of your screen. That, says QA. To enter questions that you have.

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00:08:05.860 --> 00:08:07.919

John Evans: So without further ado.

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John Evans: Let me ask the first question, and the first person will be Lauren. The question is. from your professional point of view.

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John Evans: what are the most significant issues science communicators face when trying to reach the American public.

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John Evans: Lauren.

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00:08:24.680 --> 00:08:30.369

Lauren Taylor: Thanks, John. It's so nice to be with you guys. I'm really looking forward to hearing Nicholas and Christopher's comments.

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Lauren Taylor: Let me just say a word about trust, because that is

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Lauren Taylor: one of the key terms in the title, you know. In science, we trust, question mark.

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Lauren Taylor: And it was also a keyed word for us in the Hastings Center report on Rebuilding trust and Healthcare and Science

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Lauren Taylor: Trust is typically defined as a willingness to be vulnerable at the risk of exploitation. And I just wanted to flag that trust is usually a term that we use between people, or maybe between a person and an organization.

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Lauren Taylor: But to think about trust in science sort of

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Lauren Taylor: boggles my mind a little bit, because typically when we're thinking about trust, we're making an assessment about whether or not I think Nicholas, who I'm deciding whether or not to trust. is competent at what he does

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Lauren Taylor: and has sort of a benevolent intention, and that second part is really key to thinking about whether we should be using the term trust even to think about the public's relationship to science, because I think there's a reasonable

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Lauren Taylor: question about whether or not we should be ascribing benevolent intent or any kind of altruism to science writ large. Now, it's a different story. When we think about science communicators, journalists, researchers, etc., those are individuals. And there I feel like, yeah, trust is totally a fair word to be using, and a fair question to be asking. You know.

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00:09:55.330 --> 00:10:02.609

Lauren Taylor: I'm sure the general public trust in science journalists or scientific communicators. But I just wanted to flag that.

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Lauren Taylor: It's kind of a nuance point. But it's also potentially important when you think about trust the trust crisis. Generally, I think it's

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Lauren Taylor: it's worth noting that trust really works as a term at the individual level, and it kind of breaks down when you're thinking about these more abstract concepts.

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Lauren Taylor: The biggest challenge, I think, for science communicators as individuals in winning the trust of the public

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Lauren Taylor: is that there we all have a kind of heuristic that we use to make decisions about whether or not to trust that is

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Lauren Taylor: related to consistency. We look for consistency as a marker of whether or not

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00:10:37.560 --> 00:10:44.330

Lauren Taylor: we can predict what someone's going to do in the future, and consistency has just become a hallmark of trustworthiness.

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00:10:44.410 --> 00:10:49.509

Lauren Taylor: And I think that's a challenge for science communicators. Because, of course.

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00:10:49.620 --> 00:11:05.369

Lauren Taylor: as our Kaplan says in his essay in the set that we were referring to earlier, you know, science in some ways is trustworthy because it's fallible, because it changes because it admits error, because it adjusts to new information.

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Lauren Taylor: And so I think the the challenge is how to both present as trustworthy. and show yourself as having some mark of consistency over time, while also staying true to those kind of hallmarks and tenants of science.

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Lauren Taylor: And the last point I might make is just the way that I think we can do that.

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Lauren Taylor: Is slightly new lost. But again, maybe worth, it is to say, look, we're going to be very consistent in process. The scientific inquiry, the scientific process is

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00:11:34.570 --> 00:11:38.700

Lauren Taylor: consistent, or at least has some very consistent fundamental planets.

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00:11:38.730 --> 00:11:57.299

Lauren Taylor: The outcomes of the process may change, you know, one year we may think coffee is great for blood pressure, and 5 years later we might think differently. But the process remains the same, and that's what we should be kind of hanging our hat on in terms of looking for the fundamental trustworthy components of science, and therefore scientific communicators.

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00:11:59.850 --> 00:12:01.520

John Evans: Great. Thank you, Lauren.

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00:12:02.580 --> 00:12:04.799

John Evans: I will move on to Chris ready.

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00:12:05.020 --> 00:12:25.610

Christopher Reddy: So, Chris, take it away. Yeah, no thanks for having me here and joining Lauren and Nicholas. You know I'm a scientist. I've been kind of a boots on the ground, working on oil spills and other crises, and that gets me to communicating my research and findings to a wide range of groups. And we're interested, for whatever reason, how that touches their lives.

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00:12:25.710 --> 00:12:32.309

Christopher Reddy: I'm hopelessly optimistic that we can solve a lot of these problems. And while we've already talked about trust and respect.

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00:12:32.320 --> 00:12:47.090

Christopher Reddy: I think the third kind of key factor is understanding the wants and the needs of the people want science knowledge. You know what is their value system, what matters to them. And how do we satiate them? Having that understanding is really quite critical?

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Christopher Reddy: And also just understand that, you know, just because you don't have a Phd in a lab doesn't mean you're not smart. You don't have any opportunities to contribute. And so scientists can think about being team mates and having a better understanding about who they're talking to, and why and what it matters to them

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00:13:04.030 --> 00:13:07.440

Christopher Reddy: that'll have a great move forward for scientists that

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00:13:07.880 --> 00:13:18.560

Christopher Reddy: it's already been silken twice already today. The challenge is not necessarily whether or not anybody knows how to draw the structure of DNA, the science. It's really understanding how science works.

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00:13:18.590 --> 00:13:24.599

Christopher Reddy: what is the culture of a scientist? Why do scientists do what they do?

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Christopher Reddy: And why does it matter to them?

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00:13:26.630 --> 00:13:35.619

Christopher Reddy: And if the lay public had a better understanding about our value system, what it takes for us to succeed, what isn't success

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Christopher Reddy: and how do we handle when we make a mistake, or what our peers think of us, and what is the retribution? Let me give you an example.

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00:13:45.340 --> 00:13:55.920

Christopher Reddy: Nick gets assigned to interview me. He has 6 h to deliver an outcome. I start working on a research project, and it might take me 6 h, 6 years.

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Christopher Reddy: But so we have a time difference. Nick asks me a question lot of scientists, and this is where the the beginnings of misinformation start off as they're answering the question to make

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Christopher Reddy: their colleagues think that they're not hacked.

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Christopher Reddy: So they start off. So Nick gives me the big softball question tells everybody how talented and smart I am makes my mom really proud. And he gives me the softball question, and I say, Well, we don't know this, and we don't know this. And I, you know I'm a little problem, you know my uncertainties here and models off like this.

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00:14:28.590 --> 00:14:34.670

Christopher Reddy: And when you introduce an expert and the expert starts off with. I don't know.

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00:14:34.930 --> 00:14:41.050

Christopher Reddy: You have a lot of arise from this information, and so scientists need to start telling people what they do know

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00:14:41.590 --> 00:14:50.120

Christopher Reddy: and why it matters, and then they can tell folks about where the uncertainty is so moving forward. A better understanding of culture, what matters to people?

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00:14:50.260 --> 00:14:55.959

Christopher Reddy: And really kind of then really having a better understanding about time and uncertainty.

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Christopher Reddy: I'm a scientist. I only study things that are uncertain. And I'm okay that I don't get the answer in a long time.

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00:15:03.520 --> 00:15:10.980

Christopher Reddy: We live in a world in which you can answer in 4 s with absolute certainty on Wikipedia. And it's not not going to change.

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00:15:11.150 --> 00:15:23.719

Christopher Reddy: and science is willing to be in the long run. It's willing to to deal with uncertainty and willing to understand that science is incremental. It's ever expanding. And it's self correcting.

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00:15:23.780 --> 00:15:25.270

Christopher Reddy: Science is not

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00:15:25.310 --> 00:15:28.679

Christopher Reddy: a house of cards. It's this beautiful, elegant.

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00:15:29.420 --> 00:15:31.350

Christopher Reddy: ever expanding jigsaw puzzle.

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00:15:31.710 --> 00:15:35.930

Christopher Reddy: And we gotta get that transition away from house of cards

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00:15:36.140 --> 00:15:37.610

Christopher Reddy: to

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00:15:38.420 --> 00:15:46.850

Christopher Reddy: to this beautiful jigsaw puzzle, and if we can do that and not apologize that science is maybe slow and uncertain, but celebrate it.

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00:15:46.860 --> 00:15:51.690

Christopher Reddy: We can have a lot of great success in how we move forward. Thank you.

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00:15:53.500 --> 00:15:55.079

John Evans: Thank you, Christopher.

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00:15:55.240 --> 00:15:57.519

John Evans: and off to Nicholas.

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00:15:57.900 --> 00:16:06.929

Nicholas St. Fleur: Wonderful! And again. Thank you. To everyone. I'm very excited to be on this panel and to hear more from Christopher and Lauren.

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00:16:07.440 --> 00:16:11.479

Nicholas St. Fleur: Oh, so I would say in terms of how?

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Nicholas St. Fleur: Answering your question as a journalist, I would say right now, one of the big issues that we assigned journalists are facing when it comes to just communicating science to the public is quite honestly the state of journalism right now. Something about somewhere about 3,000 jobs were lost in news media in the past

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00:16:33.280 --> 00:17:02.679

Nicholas St. Fleur: year, we're losing more and more going forward. And we're seeing a lot of science journalists losing their jobs and also outlets that are getting gutted. I mean, I can just name a few off my top of my head here, just National Geographic. I believe they had laid off a bunch of their staff reporters wired science desk was gutted. Popular science is no longer publishing as a physical magazine. I know 5 38, which did some great dirty data journalism

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Nicholas St. Fleur: gutted inverse Buzzfeed vice the la Times. So all of this is to say that you know, for those of us who are trying to communicate the science to the public as journalists. It's a really rough time right now. So I would say, that's one of the biggest challenges we're facing right now just

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Nicholas St. Fleur: the instability in the industry. You know. There was a great quote that IA colleague of mine, Michael Grestco wrote for the Nieman lab, where he said, you know, we need science journalists now more than ever, but with alarming frequency, legacy, and digital first publications alike are showing that they can't provide these journalists with stability. So who will? So I think part of also answering this question is kind of interrogating the the business model. The journalists that journalism user

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00:17:49.730 --> 00:18:04.259

Nicholas St. Fleur: utilizes right now and see, are there better ways to make sure that people who are that kind of bridge between scientists like Christopher and the and the public that they can do this sustainably. So that's one big one for me. The other one being that

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Nicholas St. Fleur: you know.

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00:18:06.790 --> 00:18:11.200

Nicholas St. Fleur: More and more of part of the problem that we're seeing with.

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Nicholas St. Fleur: People's trust in Science journal within science and science. Journalism is really related to political partisanship. Which maybe we'll get the opportunity to talk a little bit about. But something that I found was particularly striking. When I was looking into some of these, some of the statistics and details dealing with this was, you know, Pew Research had a study came out where they said something. About half of Republicans now say that science has had a mostly

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Nicholas St. Fleur: only has had a mostly positive effect on society, but about 4 years ago, in 2019, that number was at 70%.

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00:18:44.950 --> 00:18:56.410

Nicholas St. Fleur: So that's one of their biggest findings in that particular case in terms. And it was higher than it was more of a disparity than what we saw amongst Democrats. So I think, talking a little bit about kind of this

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00:18:56.410 --> 00:19:20.409

Nicholas St. Fleur: political divide that we've seen when it comes to the trust in science. And we also are really on center stage with Covid is another big issue that we all are facing and that leads into just trust of the media as well. And also trying to figure out where are people really getting their information. Going back to this idea of sustainability. Excuse me, so many more people are turning to social media sites like Tiktok

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00:19:20.410 --> 00:19:22.510

or Youtube shorts as such.

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00:19:22.510 --> 00:19:47.480

Nicholas St. Fleur: where they're getting information that may not be coming from the most reliable of sources, from journalists who are trained to speak with scientists, or on the ground doing that that work, that reporting and that could lead towards some misinformation, and that can also lead towards, you know, less eyeballs and less traffic for these science stories, going to some of these journalistic outlets that are really paying for science journalists like myself and other really well trained science.

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00:19:47.480 --> 00:19:52.559

Nicholas St. Fleur: So is to be those communicators as well. So to kind of sum that up, I think some of the big issues are

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Nicholas St. Fleur: sustainability in this field

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00:19:55.970 --> 00:20:06.289

Nicholas St. Fleur: looking at politicalization of science and the impact that has a distrust of journalists that we're seeing and how that ties into politicalization and also just

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00:20:06.340 --> 00:20:17.909

Nicholas St. Fleur: where people are kind of getting their information, and how we're seeing fewer and fewer of those people turning to train journalists training even to scientists, to kind of get their scientific information.

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00:20:20.140 --> 00:20:21.299

John Evans: Thank you, Nicholas.

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00:20:21.350 --> 00:20:31.820

John Evans: And so now we'll turn to a discussion among the panelists. Unfortunately, they're the only ones who get to raise their little hand for now. But we'll turn to your questions and answers

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00:20:32.130 --> 00:20:38.060

John Evans: later on. So do any of the panelists have questions for each other. At this point we'll start with Lauren.

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00:20:38.680 --> 00:20:58.200

Lauren Taylor: I was just gonna come back to you, Nicholas, on the point about the rise of kind of influencers as a as a new source, the tick Tock and the Instagram shorts and such like as an organization. Or you've been at a bunch of new organizations is the move there for journalists like yourself to just go to those platforms and develop your own

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00:20:58.300 --> 00:21:11.790

Lauren Taylor: tick, tock presence, or whatever, as Nicholas, same floor with all of your credentials and education. Or is the effort more to try and win those eyeballs back to like statcom on A, Google chrome browser

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00:21:11.790 --> 00:21:35.850

Nicholas St. Fleur: that's a great question I mean, from the business perspective. I think. Journalism outlets would love with those people came back to their own home pages or to their material to kind of convert subscribers but if the goal is really to get that information out, be able to disseminate this scientific knowledge, then yes, us journalists need to be on these platforms, or should be on these platforms. I always caveat that nowadays, with as well as it

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00:21:35.850 --> 00:21:50.139

Nicholas St. Fleur: works with our own mental health for those of you who have been long time uses of Twitter. You realize that Twitter today very different from the twitter of about 5 years ago, 10 years ago, when it was really a great place for nice civil exchange of ideas.

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00:21:50.270 --> 00:21:58.449

Nicholas St. Fleur: But I would say I would also flip this question and kind of put it towards scientists themselves who are looking to communicate with larger audiences.

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00:21:58.630 --> 00:22:16.600

Nicholas St. Fleur: Social media is a great tool for that. So in the idea of communicating science. I would highly recommend folks to go to where those audiences are, if that's on tick tock. In that case, and you have that expertise that might be a spot for you or working with your institutions.

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00:22:17.180 --> 00:22:41.749

Nicholas St. Fleur: press office to kind of see how what is what is their scientific? I. What is their presence on these platforms? And how can you volunteer some of your time to also be to get some of your signs out there. That's what I would say. But yeah, I would say, we are definitely getting some pressure to be on these outlets. I know. Stat, just launched out tech not too long ago. Other media outlets have definitely been on the forefront of this. The Washington Post

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00:22:41.750 --> 00:23:06.099

Nicholas St. Fleur: really great at it. But I would also say, going to my previous point about journalism, just not being the most sustainable of career paths, especially as we're seeing right now. You know you can't put all of your trust in just an institution, you know, working your whole career a place like the Washington Post. The New York Times. You really do have to build yourself as a credible source, and social media does offer that. And I would dare say that that same rush. Now, that same idea

122

00:23:06.150 --> 00:23:18.550

Nicholas St. Fleur: also carries over to scientists themselves. If they're really looking to reach as many people as possible. You know the publish. The scientific publishing process takes a long time, so social media might be the best approach for that as well.

123

00:23:19.770 --> 00:23:22.100

John Evans: Thank you. Another question from the

124

00:23:22.320 --> 00:23:23.260

John Evans: panelists.

125

00:23:28.340 --> 00:23:32.250

John Evans: I'll I'll ask one. I'll have to use the moderate prerogative quickly, if

126

00:23:32.860 --> 00:23:37.229

John Evans: but let me let me start with a quick question for Christopher. So.

127

00:23:37.540 --> 00:23:44.529

John Evans: A couple of years ago there was a article in the academic journal called Science Communication. That said that the

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00:23:44.850 --> 00:23:53.860

John Evans: conflict between the public and sciences is not really about facts, but about values. And you sort of gesture to that. In your introductory remarks

129

00:23:54.080 --> 00:23:57.919

John Evans: it says that people don't trust scientists because they don't trust their values.

130

00:23:59.010 --> 00:24:04.540

John Evans: and that you read that article. It kind of implies that anytime you talk to a journalist, you should start by saying

131

00:24:04.590 --> 00:24:07.339

John Evans: my values are XY and Z.

132

00:24:07.380 --> 00:24:20.250

John Evans: So vouchy should have started by saying, My, what I'm doing here is I'm working for the eradication of human suffering, which sounds ridiculous to scientists, I think, of course, everyone assumes that that's the case.

133

00:24:20.410 --> 00:24:27.259

John Evans: but it establishes a shared value with sort of regular citizens. What do you think of that as a proposal?

134

00:24:27.270 --> 00:24:37.300

Christopher Reddy: No, I absolutely agree. I mean, if it's the same thing, whether it's Dr. Fauci or another responder, if you ask them what their value system is, or what you would say is success.

135

00:24:37.470 --> 00:24:48.280

Christopher Reddy: You could say, success is when I can go home and see my family, and we've solved this problem, or we've done everything we can do to make a bad thing from getting worse.

136

00:24:48.520 --> 00:24:55.540

Christopher Reddy: And that's a pretty impressive statement when you ask, maybe a politician or somebody else what they call success.

137

00:24:55.580 --> 00:25:07.300

Christopher Reddy: It might be something as simple as I wanna get reelected. And I think that's where it's really special with fauci and other folks that what they call success was a big picture.

138

00:25:07.490 --> 00:25:21.149

Christopher Reddy: you know, want to help everybody in a in a meaningful and beneficial way, and so I couldn't agree more about trying to define what your value system is. But my point was really understanding the value system of everybody else.

139

00:25:21.160 --> 00:25:26.279

Christopher Reddy: But your point makes it even better about first starting out with what what I call success.

140

00:25:27.710 --> 00:25:31.530

John Evans: Okay, thanks. Another question from the panelists.

141

00:25:32.240 --> 00:25:36.899

Nicholas St. Fleur: Yeah, a question for you, Christopher. So what? What do you hope

142

00:25:36.960 --> 00:25:51.240

Nicholas St. Fleur: journalists like myself do more of when we are speaking to experts like you? To make sure that we are getting the facts right, and to make sure that we are kind of building that trust with you as as a scientist, so that we can relay that trust to the audience.

143

00:25:52.740 --> 00:26:04.429

Christopher Reddy: You know. II think you know I tell scientists when II train them is to first, you know, have a better understanding about what your job is, and, like, you know, actually starting off with saying, Hey, I got this assignment at 110'clock.

144

00:26:04.570 --> 00:26:22.570

Christopher Reddy: It's due at 60'clock. I have 600 words, and I have an editor with a very heavy pen. And so these are my challenges. And this is what I need you to do. Help me so that we can get the right science in the right place, and I think if you framed it like that. And that really goes back to John's statement. I think you have a lot greater success.

145

00:26:23.590 --> 00:26:29.870

Nicholas St. Fleur: That's great. I mean a line I use whenever I'm talking to sources sources, and you know they might be using some jargon.

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00:26:29.870 --> 00:26:54.829

Nicholas St. Fleur: And II will straight. I will say to my sources, like, if I use a a term that the audience won't understand. I'll say, you know, I understand. I get what you're talking about. I get what you're trying to convey here. But my editor is just gonna scratch that out. There's no way that thinking that into my story. So what is it more? Digestible way to say that, and I'm always very, very careful with my words in that. I don't like to ask people to dumb down

147

00:26:54.830 --> 00:26:59.120

science. Actually, II ever asked someone to dub dine on the science, I find

148

00:26:59.350 --> 00:27:14.980

Nicholas St. Fleur: the better approach is to ask people to make your science digestible to me. Myself. Many of my colleagues. We love to use the analogy of like. If you were talking to the average day, Jane and Joe on the street, how would you explain this to them? Why is this important? And that's what I find.

149

00:27:15.270 --> 00:27:18.480

Nicholas St. Fleur: generate some of the best quotes that often end up in my stories.

150

00:27:19.120 --> 00:27:33.589

Christopher Reddy: No, no, and I absolutely agree. I mean, I think, that. You know, scientists, when we try to write for some of the best journals, they don't have a lot of words worth a lot of worth. So you might just say, Listen, I don't have a lot of word count here, so let's figure out how we can get this in a shorter statement.

151

00:27:33.900 --> 00:27:39.370

Christopher Reddy: And the last thing I would do when I was communicating with a journalist is not, let it be a one off?

152

00:27:39.460 --> 00:27:52.360

Christopher Reddy: Why do these relationships have to be a one off? You know, it's more about building a 2 way street, and so that when you need information down the road, and you only have 6 h. You know how to find the right person at the right time. So everybody wins

153

00:27:53.880 --> 00:27:54.970

Nicholas St. Fleur: definitely

154

00:27:57.020 --> 00:28:00.369

Lauren Taylor: as you guys are talking, it just occurs to me how much it really is about

155

00:28:00.640 --> 00:28:12.589

Lauren Taylor: the trust goes all different ways. Right? So if I trust you, Nicholas, as a journalist, to not try and make a mountain out of what I think is like a medium sized finding right? I'm more likely to speak

156

00:28:12.680 --> 00:28:17.200

Lauren Taylor: candidly and clearly, trusting that you will appropriately

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00:28:17.270 --> 00:28:21.690

Lauren Taylor: caveat or include my hesitations or the areas of uncertainty as well.

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00:28:21.760 --> 00:28:37.079

Lauren Taylor: But where, I think, like oh, Nicholas has a very different incentive or value system than I do as a scientist. Then I'm very careful with my words. I want to caveat everything, cause I wanna make sure that kind of you as a journalist don't run away with

159

00:28:37.570 --> 00:28:49.190

Lauren Taylor: a finding that I think needs to be, you know, reined in. And so this is what you find. Every time you talk about trust, trust in government, trust in churches, trust in business.

160

00:28:49.260 --> 00:29:04.089

Lauren Taylor: It's like a fractal, you know. The more I trust you, the more your audience trust you know it all kind of builds in a virtuous cycle, where it can build in a very virtuous cycle, and unfortunately, it feels like at the moment we're sort of in a

161

00:29:04.830 --> 00:29:06.690

Lauren Taylor: degradation cycle. But

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00:29:06.860 --> 00:29:35.830

Nicholas St. Fleur: I like Christopher. I'm determined to leave today on a more optimistic account right? I just wanted to flag the fractal nature of it, of course, of course, and to your your kind of point about making sure that the journalists who, if you're if you're a scientist, the journalist you're speaking to does get the facts right. You know. One thing I try to do with my stories. You know, deadline given depending on the deadlines. But if I have that time, if I'm working on a longer story, and I'll normally say this to my source, I'll say, Hey.

163

00:29:35.990 --> 00:29:57.100

Nicholas St. Fleur: just so often scientists will ask to see your piece before it publishes which, or nearly every outlet, is a big no, no in that case. But what I tend to do is I will say, Hey, before this gets on before this publishes, I'd love to hop on the phone, and we can backcheck together. And what I typically tend to do again depends very much on how much of a deadline I have here.

164

00:29:57.130 --> 00:30:22.079

Nicholas St. Fleur: cause I'll just go through my story. I'll take out each and every fact. I could be just as simple as the correct spelling of your name. Your title to the year paper was published. Those kind of things, no matter how small. I put in a separate document. And I basically call up the source. And I say, Hey, I just wanna go through these facts. Give me a yes or no on this. And I find that that helps build your trust with your source, but it also helps you

165

00:30:22.080 --> 00:30:45.300

Nicholas St. Fleur: prevent you from getting any corrections or getting any of the signs wrong, because you know, in terms of building this trust with the public facts and accuracy is super important. And you know, I love to tell. You know my sources. Just, you know, accuracy is the most important thing to me. So sometimes I'll read back to them while we're having a conversation. Say so you said, This

166

00:30:45.300 --> 00:31:05.449

Nicholas St. Fleur: is that really like, is that what you meant? I just wanna double check to make sure I'm getting that right. And double checking with sources is probably is one of the best ways to ensure that you're getting your facts right. I don't know. There are too many journalists who are listening in on this. Perhaps there are to to Christopher's point about making a relationship with your sources so much of what I tell

167

00:31:05.550 --> 00:31:31.220

Nicholas St. Fleur: early career journalists I speak to is that when you interview a source, if you have some time in the story that doesn't have to be your only interview with them. You can call them back after it's like, Hey, I'm just calling to double check something. You can ask them, what's your cell phone. So I can text you to kind of get this information, or you know, or you can set apart. What I try to do is set apart like a specific time that we can jump on that phone and do the fact check before the story comes up. So often as I say to

168

00:31:31.340 --> 00:31:41.659

Nicholas St. Fleur: Early career journalists is that you know you send a story to your editor. Your editor is going through it, depending on the deadlines. You know they'll have questions for you. Be like, Oh, what's this? What's that? What's this?

169

00:31:41.660 --> 00:32:10.389

Nicholas St. Fleur: And instead of spending like a few hours searching through the Internet trying to find the answers for your editor. Call your source back up and say, Hey, my editor has a question on this. What is the correctness? What is the correct answer. What is the how do I accurately explain this? And this source normally has the answer like that? To both Chris's point and Lawrence point. Us is Jo. We journalists should build that relationship with our sources and constantly be in contact with them. And never be afraid to call them back before we're working on a story.

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00:32:10.450 --> 00:32:11.190

Lauren Taylor: Hmm.

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00:32:13.580 --> 00:32:18.450

Lauren Taylor: One other question for you, which is just how you think about

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00:32:18.830 --> 00:32:20.360

Lauren Taylor: the challenge of

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00:32:22.200 --> 00:32:39.900

Lauren Taylor: I don't know. For lack of a better word. It feels like we're up against a gap in civic education like, where are we doing? The bedrock like this is sort of the scientific process where this is how science works, or you were describing, like wanting to do some education. Around these are the incentives or the culture of a scientific lab.

174

00:32:39.900 --> 00:32:53.149

Lauren Taylor: I mean, is that stuff that you find you can do or like good scientific communicators can do on the fly, meaning I've got this finding about oceanography, and I can kind of slip that in or do we need dedicated resources to be doing that

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00:32:53.370 --> 00:32:56.630

Lauren Taylor: like in K through 12 education that we're not doing right now.

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00:32:57.650 --> 00:33:21.379

Christopher Reddy: as you would be hard to get, indicate to 12. But I think on a more grander scale, you know, having a you know, journalist and elected officials have a little bit better understanding of how science works which certainly generate that. And and also, maybe you know, in these interviews with the reporters, and, you know, trying to give some sense of the culture of it, and and why they said that. And and why does that matter?

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00:33:21.450 --> 00:33:30.659

Christopher Reddy: You know, I think it drive. Science is crazy. When 99% of a populace has an finding agreement on a finding and

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00:33:30.690 --> 00:33:41.130

Christopher Reddy: in the in the story comes out balanced as 99 and one. And I think that's really one of the hard parts, and and in some respects that plays out like a house of cards

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00:33:41.140 --> 00:33:43.729

Lauren Taylor: rather than science is a jigsaw puzzle.

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00:33:43.790 --> 00:33:50.330

Christopher Reddy: So II don't think we can get into K. Through 12. But I do think we can get into professional societies and different groups.

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00:33:52.560 --> 00:34:01.189

John Evans: Okay, let me do a quick one with Lauren before we end this session. So there are people who don't trust science for good reason.

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00:34:01.240 --> 00:34:07.869

John Evans: There are people who don't trust science because they don't trust the values of scientists there is. People don't understand the nature of science.

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00:34:07.990 --> 00:34:25.680

John Evans: I think in recent years we've encountered people who they know in their hearts that they can trust with the side to same. But for sort of self, interested political reasons, they're going to promote distrust in science. In your earlier project. Do you have any insights for us as to what to do about that?

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00:34:26.310 --> 00:34:37.029

Lauren Taylor: Yeah, exactly. Solve political polarization in America. You know, I don't know that we

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00:34:37.310 --> 00:34:43.309

Lauren Taylor: I don't know that I have specific things to say about what to do about people who intentionally manipulate

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00:34:43.350 --> 00:34:47.479

Lauren Taylor: kind of the public discourse for the purposes of sewing, miss, or distrust.

187

00:34:47.750 --> 00:35:03.830

Lauren Taylor: there's I hosted a conversation back in May that was fascinating on this point with 2 diametrically opposing opinions. One was, you have to engage these people head on, you have to go straight at it and say, Look.

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00:35:04.060 --> 00:35:21.870

Lauren Taylor: this person is saying this patently untrue thing, and let me tell you all about. Why, it's not true and kind of like, I said. Do direct head on head engagement. And the other person's view was, Nope, you have to just ignore it and let it die in darkness. You know it will fizzle out eventually.

189

00:35:21.930 --> 00:35:43.630

Lauren Taylor: And I have to say, John, I was really left at the end of the conversation, not knowing how I felt about it. The context of the conversation was specifically going back to Nicolas's point about Twitter, and so in some ways it was kind of about Twitter trolls, but I think that the question still stands, and I feel flummoxed about what to do, even in a non twitter space.

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00:35:43.790 --> 00:35:56.419

Lauren Taylor: there's a big part of me that thinks that Jeannie is out of the bag, you know. Kind of certain kinds of conspiracy beliefs. Anti-vaccination concerns COVID-19

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00:35:56.500 --> 00:36:04.309

Lauren Taylor: mythologies have become so prominent that the idea that we can put our head in the sand and ignore them feels misguided.

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00:36:04.310 --> 00:36:31.709

Lauren Taylor: And yet maybe there's just a part of me that wishes it were the case that we could say like, No, no, no, just don't engage you. Give it more air time when you kind of address it head on. So we should just stay in our lane, be trustworthy, do work, that is, you know, deserving of the public's trust, and that stuff will eventually burn itself out. But I don't know. Maybe I can throw this on Nicholas and Christopher, who may have strong reviews, because I really have gone back and forth on this myself.

193

00:36:32.760 --> 00:36:45.080

Christopher Reddy: You know. What I would add ask, is a scientist to try to get an understanding of what there might be a disconnect or misagreement. And and maybe when we communicate to scientists in the future how we can

194

00:36:45.080 --> 00:37:07.680

Christopher Reddy: incorporate. Maybe this, you know this uncertainty these folks have so going to school about? Why, there is an opposition, and maybe how we answer in the future may have be helpful down the road. And so, having an awareness, you know, these people are necessarily dumb. I don't think that's true at all, you know. Where are they getting the information. And how can we insert clarity? And and in a meaningful way.

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00:37:08.140 --> 00:37:11.250

John Evans: finish up with Nicholas, if you have anything to add to this?

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00:37:14.000 --> 00:37:18.540

Nicholas St. Fleur: Yeah, Lauren, I guess. Hmm, it's it's interesting. Because I

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00:37:18.900 --> 00:37:22.430

Nicholas St. Fleur: and my colleagues definitely find ourselves in positions where

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00:37:23.790 --> 00:37:51.560

Nicholas St. Fleur: you want to. Fact, check things that are happening in real time, especially on Twitter and such. And you want to provide all the sources you want to say to people who are spreading kind of like misinformation like, no, you're wrong, he is. Y. ABC. And then you also want to preserve yourself and wonder. Can you really add up every single troll out there on Twitter, who many of them are in our bad faith actors is a lot of what we're seeing, especially on social, on aspects of social media. So

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00:37:51.790 --> 00:38:04.009

Nicholas St. Fleur: I don't know. It really is a balance between. You know. Do you have the time to debunk everything? Do you have the will, talking to debunk everything. I wish there was a

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00:38:05.320 --> 00:38:28.179

Nicholas St. Fleur: I wish there was a way where anytime, you know, we discuss these things on on whether be not so much online. But like, I mean, if you have like a a debate amongst like politicians and such. And you have those fact checks happening live. I wish we had more of those in nearly any conversation really like, how do you do more live facting?

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00:38:28.330 --> 00:38:35.340

Nicholas St. Fleur: okay, so we are. The time is up on this section of the presentation. We'll move on

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00:38:35.610 --> 00:38:41.529

John Evans: to the final question that I will be asking each person I'm starting again with Lauren.

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00:38:41.780 --> 00:38:50.939

John Evans: And the question is, what is to be done? How can institutions work to better prepare science communicators communicators to overcome these issues?

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00:38:51.060 --> 00:38:54.190

John Evans: And what can be done to repair public trust

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00:38:54.200 --> 00:38:55.400

John Evans: in science?

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00:38:57.900 --> 00:39:00.759

Lauren Taylor: Well, maybe I'll just return.

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00:39:01.280 --> 00:39:21.660

Lauren Taylor: by way of framing to the fractal comment and say that I really do think that rebuilt trust anywhere is good for trust everywhere, meaning whether you are a journalist or you are a scientist, or you're on this call from some other professional position, or you're on this call as just like a citizen who goes to the grocery store, and, you know, lives in a community.

208

00:39:21.800 --> 00:39:24.030

Lauren Taylor: The work of knitting back.

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00:39:24.750 --> 00:39:28.360

Lauren Taylor: Trusting relations in the United States is a.

210

00:39:28.480 --> 00:39:33.319

Lauren Taylor: It has to be all of our work. We cannot look strictly to

211

00:39:33.400 --> 00:39:45.769

Lauren Taylor: scientist or elected officials to kind of do this work for us. We all contributed to the breakdown. We all have a responsibility to be part of building trust backup. And that can happen in really micro

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00:39:45.940 --> 00:39:56.320

Lauren Taylor: interactions in your community, you know, with your employer, etc., etc. I think the things that we can do assigns communicators.

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00:39:56.430 --> 00:40:11.189

Lauren Taylor: One is, I think, consistent acknowledgement that things almost certainly will change. And that is something that I really look back at the COVID-19 pandemic and think there had been better sign posting of

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00:40:11.250 --> 00:40:22.330

Lauren Taylor: early on. It was a new virus. We knew that we were gonna learn and learn quickly, and I think we were too committed to providing

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00:40:22.450 --> 00:40:27.680

Lauren Taylor: assurance or the veneer of like confidence.

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00:40:27.970 --> 00:40:30.970

and if I could do it all over again. I think.

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00:40:31.040 --> 00:40:43.010

Lauren Taylor: that would be something that I would certainly change. not being able to change it in retrospect. It's something I'm gonna carry forward right, that we're clear on how and why science may change, even though the process

218

00:40:43.140 --> 00:40:46.810

Lauren Taylor: is consistent and reliable and deserving of the public's trust.

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00:40:47.160 --> 00:41:06.409

Lauren Taylor: And then the second thing is especially coming out of Christopher's comments today about kind of scientists values. I think just personally, I'm gonna go to my own professional website. And I think, update the way I talk about myself. To be more candid about where I come from, what my values are.

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00:41:06.590 --> 00:41:33.409

Lauren Taylor: And I don't love this word, but like in some ways what my biases are right, and let people then apply the discount rate that they're going to apply, and I can't control what discount rate they're gonna apply. But I can control what I say about myself making sure that it is forthright transparent. And you know, for some people that's probably gonna earn me credibility for others. It may diminish my credibility, but I can't control that. And I think

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00:41:33.720 --> 00:41:37.729

Lauren Taylor: that's one very candid to do for me coming out of this.

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00:41:39.520 --> 00:41:42.560

John Evans: Okay, thank you, Lauren. I'll turn to Christopher.

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00:41:43.680 --> 00:41:57.850

Christopher Reddy: Yeah, no. Again, you know, working coming from this as a scientist. First thing I would say is to tell scientists that to do it for themselves, to communicate science and excel in public engagement for themselves and the start local.

224

00:41:57.980 --> 00:42:04.260

Christopher Reddy: You know this, this perception in in, in science and research, of that, you have to check the box

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00:42:04.390 --> 00:42:17.190

Christopher Reddy: on your broader impacts. And you have to figure out a way to satisfy. People say that you're doing it, and in some institutions they do that for promotions. There's no really good metric or monetary system for that, and

226

00:42:17.290 --> 00:42:18.699

Christopher Reddy: So to me.

227

00:42:18.760 --> 00:42:24.689

Christopher Reddy: public engagement is a way to make me be a better scientist and a better person.

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00:42:24.900 --> 00:42:45.899

Christopher Reddy: and in a world where in in the science world, we're only 20% of our grants get funded and 25% of our papers get accepted. It's pretty feels pretty good when you can tell a neighbor, your honor, your uncle, maybe a stranger, something about science. It helps them, and maybe you get that Aha! Moment

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00:42:46.110 --> 00:43:08.840

Christopher Reddy: and you know, as scientists I struggle with impostor syndrome right? And that's a really nice elixir to an impostor syndrome is recognizing, that you can make a difference for people now moving forward. If I was gonna train scientists, the first thing I would do is to give them a lesson in anthropology and kind of the cultures and the value systems. Then

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00:43:08.840 --> 00:43:18.629

Christopher Reddy: I would teach them about avoiding the metric system and no jargon and elevated speeches. There's a place for that. But first you understand why you're doing it, and what would be success?

231

00:43:19.010 --> 00:43:24.990

Christopher Reddy: I'd also train scientists to understand the risk versus the reward of what they're doing and why they're doing it.

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00:43:25.150 --> 00:43:35.249

Christopher Reddy: And then last, I would start local local is really powerful for scientists, because the risk is usually lower, the opportunities are much higher.

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00:43:35.260 --> 00:43:54.349

Christopher Reddy: and the opportunities also to to keep working and trying to refine. Your message is gonna work better and better. So constantly practicing local also works, because I'm absolutely convinced that the more the local scientists and that's more than just geographic, it could be any type of cultural connection.

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00:43:54.380 --> 00:44:02.040

Christopher Reddy: The more you have an expert who has a closer, a local connection with somebody who wants to know they're going to have a beneficial outcome.

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00:44:02.240 --> 00:44:17.830

Christopher Reddy: So working local training, local and using local sciences to communicate sciences where the victory is former common off the United States Coast Guard fat Allen had this statement during the Deep water horizon, he said, you don't exchange business cards at a crisis.

236

00:44:18.130 --> 00:44:36.650

Christopher Reddy: So my advice to scientists is, and other folks is to go out and meet other groups locally and understand their value system. And what matters to them? It's cheap, it's accessible. And there's lots of victories on the way, starting local and doing it for yourself and not for the Nsf. Or for promotion.

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00:44:37.270 --> 00:44:38.100

Christopher Reddy: that's all.

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00:44:38.550 --> 00:44:45.309

Nicholas St. Fleur: Thank you, Christopher. And finally. Nicholas. Yes, Chris, thank you so much for for what you just shared, because

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00:44:45.310 --> 00:45:02.579

Nicholas St. Fleur: it resonates so strongly with kind of how I feel about this subject, which is that whole local aspect. Over at Stat, you know, we've written stories, and I've interviewed a gentleman named Dr. Robert Wynn, who's over at the Vcu Massi answer center. And he does a lot of work where he goes door to door

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00:45:02.580 --> 00:45:17.630

Nicholas St. Fleur: talking to people in a predominantly black area about cancer, clinical trials, and why? It might be something that they might be interested in. And many folks in these communities, especially in that area which has, like a a history of medical mistrust.

241

00:45:17.870 --> 00:45:42.939

Nicholas St. Fleur: it's something that we covered in an episode of my podcast. Color code, where people there just don't didn't trust the local medical institutions. For very good reasons. Historical reasons medical exploitation to present day reasons about you know, when you go in to get a doctor check and your doctor is not believing you. You feel like you're not you know, not being believed, or you're being gas lit. So what he's doing is very much to that same point of, you know.

242

00:45:42.940 --> 00:45:52.940

Nicholas St. Fleur: outside of times of crisis, just going in meeting the people around you in your community saying, Hi, I'm a scientist. I'm a medical scientist. This is the kind of work we do over here. Let me tell you about

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00:45:52.940 --> 00:46:05.369

Nicholas St. Fleur: clinical trials, what they are. What you said also reminds me of the work of Dr. Uche Blackstock, who, in her book Legacy this is also a source of mine who I've interviewed, who during the Covid

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00:46:05.790 --> 00:46:29.329

Nicholas St. Fleur: pandemic, you know she did a lot of things where she would appear on television, and she would be talking a bit about the virus, and how to stay safe, and such, and she mo notes in her book, and she's noted in interviews as well, you know. She'll be walking down the streets, and people like, Hey, Doc, like I saw you on TV, like, Tell me more about the vaccine. Tell me more about this, and she would do things in her communities to to kind of talk people about the importance of this, of of getting the vaccine or the importance of staying safe

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00:46:29.330 --> 00:46:38.330

Nicholas St. Fleur: safe during Covid. So that local aspect is so so important. And then what you just said about, you know, business cards aren't shared during a crisis.

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00:46:38.700 --> 00:46:46.789

I agree in the sense that scientists should take every opportunity that they can for public outreach to their local community.

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00:46:46.830 --> 00:46:54.920

Nicholas St. Fleur: Perfect example. Month from now we have something called a great American eclipse happening. I'm a big space fanatic.

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00:46:55.030 --> 00:47:22.889

Nicholas St. Fleur: You guys maybe have seen things on the shelf already. There's going to be a total solar eclipse going across the country. If you're not already aware of this, you should get aware of this. What a great opportunity! Public outreach of science! Look how many cities it hits across! Some of you guys may remember 2017 when this happened. There was so much excitement. We need scientists need to capitalize on these moments where you get to explain to to people what

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00:47:22.890 --> 00:47:47.789

Nicholas St. Fleur: as what science is, how we know that this total solar eclipse is going to happen, how we know the next solar eclipse is will happen for the next hundreds of years and explain the scientific process to them, and then they get to behold this beautiful celestial super bowl if you will, this this this moment. That is just so it it really those of you who have not seen the total solar eclipse use this as the moment to book your trip to be somewhere on the line of totality

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00:47:47.790 --> 00:47:55.500

Nicholas St. Fleur: come April the eighth. But all this is to say, when we have those things, whether it be a transit of Venus, or whether it just be.

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00:47:55.890 --> 00:48:13.170

Nicholas St. Fleur: you know, opportunities to understand more about, you know, climate change, or or any of those cases. We just need more scientists to go out into their local communities and and talk about have, hey? Have a QA. With your local scientist, do it at local libraries as well, so that the public has a better understanding of

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00:48:13.300 --> 00:48:37.509

Nicholas St. Fleur: who scientists are from like that humanistic standpoint. Right? We need to humanize scientists, people. Q. Scientists are people. And when. And I think one of the great things about also just journalism is that we have that ability to talk about what really motivated someone to get into this work. What was their story, and why they're doing this, and why it's so important for them. So all of this to answer your question, John, is

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00:48:37.510 --> 00:48:53.339

Nicholas St. Fleur: going back to what Chris also said that local level use these opportunities. Talk about whether it be the eclipse, or whether it be some other phenomenon that reaches so many people. Use those opportunities as an introduction to talk about science. You don't even have to be

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00:48:53.920 --> 00:49:14.049

Nicholas St. Fleur: a. A an astronomer or an astrophysicist to take this opportunity. Talk about whatever your science is, and say, Hey, here's the scientific process. Here's how we know these things. And you know, if you wanna learn more, this is why you should. You know, also have this interest in science, and you should also be questioning these things. I really think that

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00:49:14.050 --> 00:49:24.440

Nicholas St. Fleur: in a month we have one of the greatest opportunities to do that social to do that scientific outreach across this country. So if you're a scientist, listen to that, take this opportunity as well.

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00:49:25.270 --> 00:49:28.310

John Evans: Okay, so we'll move into the final section

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00:49:28.380 --> 00:49:33.140

John Evans: of this webinar in the audience questions, and I've got one here for Nicholas.

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00:49:34.010 --> 00:49:53.519

John Evans: It says, I think storytelling can be an effective tool. If scientists and science journalists tell their own personal stories. They can humanize the messengers and make the message more palatable. Do you agree? Scientists, sharing their personal journeys, can serve as a point of connection to build trust, human connection, common experiences.

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00:49:53.620 --> 00:50:11.190

Nicholas St. Fleur: 100,000% and you know, scientists have. Like, I was saying, they're they're they're humans. I was just speaking with a guy named Dr. Eric Jarvis yesterday, and he is a neuroscientist who does work looking at the brains of birds and looking at you know

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00:50:11.230 --> 00:50:19.349

Nicholas St. Fleur: how we learn about their vocal like vocal learning, vocal language, and our interview was a bit about how you can apply that information to

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00:50:19.760 --> 00:50:25.100

Nicholas St. Fleur: Tudor standing speech therapy in humans. But here's such an interesting back story. I mean, he

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00:50:25.160 --> 00:50:50.019

Nicholas St. Fleur: was. He's been a professional he's been a a a a dancer for most of his life, and there was a point where he had the opportunity to choose between being a professional dancer in ballet, or going on to be in a scientist and going the route that he went, and he talked to me a little bit about that aspect, and hearing that kind of human side that you know. Not. Every scientist knows exactly that they're going to be a a neuroscientist, or that they're going to

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00:50:50.020 --> 00:51:14.960

Nicholas St. Fleur: be an astronomer or something. They have their lives, they go through their own struggles, they go through their own choices and their own decisions, and he was speaking to me a lot about how you know he still uses he he is such a strong love for art, and how he tries to apply art in all of its capacities to the science he's doing now. Right now. Obviously the most obvious examples, just through the the listening of songing songbirds as well, finding

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00:51:14.960 --> 00:51:34.710

Nicholas St. Fleur: art in that, and so much of that comes from him growing up in a family where art and dancing, and and such was so highly prized, so or was encouraged in that sense. So I would say, you know, finding the human side of scientists is one of the easiest and most effective ways to to connect science

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00:51:34.880 --> 00:51:36.560

Nicholas St. Fleur: to the general public.

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00:51:37.250 --> 00:51:44.450

John Evans: Okay, yeah, the scientists have a problem which is studies. Media studies show that the most famous scientists of all time is Dr. Frankenstein.

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00:51:44.720 --> 00:51:53.180

John Evans: And just, you know, if you do that.

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00:51:53.250 --> 00:52:11.989

Christopher Reddy: you defy stereotypes. You know. Unfortunately, we have a perspective someplace that scientists so last pick and gym plus. And the more you humanize them the more you find out that they're interesting and they're different. And they're not some foolish TV show character. And in reality they're real. And they're and they want to do the right thing for the for society.

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00:52:12.980 --> 00:52:16.330

John Evans: Okay? So the next question. This is for either Chris or Lauren.

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00:52:16.740 --> 00:52:32.179

John Evans: The boundaries between universities and biotech firms have blurred over time, resulting in an unprecedented rise in individual institutional conflicts of interest. What happens to scientists credibility when they may have a financial stake in the outcome of their research?

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00:52:32.190 --> 00:52:41.180

John Evans: Can we blame the public for losing trust when it seems that science is for sale, and scientific scientific experts are somebody's expert.

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00:52:41.840 --> 00:52:43.100

John Evans: one of you unhappy that

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00:52:46.410 --> 00:53:06.590

Lauren Taylor: Christopher, you wanna go first? Well, I would just in some ways validate the question that when you look at the literature on mistrust in healthcare and medicine, there are a couple of roots of it. One is racial discrimination. A second big one is financial conflicts of interest.

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00:53:06.820 --> 00:53:12.580

Lauren Taylor: and a third is kind of advert adverse events or prior experiences of medical mishaps.

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00:53:12.630 --> 00:53:15.679

Lauren Taylor: And I'll have some kernel of like

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00:53:15.690 --> 00:53:21.379

Lauren Taylor: legitimacy. You know these are real risks to the trustworthiness of healthcare. I think.

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00:53:21.760 --> 00:53:31.709

Lauren Taylor: The question of what to do about it. I mean, it brings us to the main way that healthcare has been trying to manage. It's

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00:53:31.820 --> 00:53:39.129

Lauren Taylor: or it's scientists. Relationship to farm and biotech has been on through disclosure, right transparency.

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00:53:40.110 --> 00:53:51.040

Lauren Taylor: healthcare institutions, health systems, universities don't want to be in the business of saying, like categorically, scientists cannot do this because they're free people to pursue interests.

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00:53:51.310 --> 00:54:06.419

Lauren Taylor: And so the the mode has been, you know. Look within some boundaries. You can pursue opportunities for you to patent things or make money through farmland biotech. But you need to disclose it

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00:54:06.470 --> 00:54:09.100

Lauren Taylor: to the university, sometimes to patients.

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00:54:09.170 --> 00:54:28.050

Lauren Taylor: and I think a real challenge is like that doesn't work particularly well. There's been a lot of empirical study on whether or not disclosure of financial conflicts, of interest builds trust. Whether or not patients in particular understand what the disclosure means, how to judge it against like. Well, how conflicted is the next doctor down the line.

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00:54:28.170 --> 00:54:38.589

Lauren Taylor: And so I think healthcare is grappling with. if not disclosure, then what is the other organizational process by which to manage conflicts of interest?

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00:54:38.880 --> 00:54:54.799

Lauren Taylor: You know. Perhaps we all would wish for a day where universities say like there shall not. And you just cannot, have these kinds of relationships. But I think the concern is you would lose a lot of really good labor that would just resign from University post and go work full time for Farmer Biotech.

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00:54:54.940 --> 00:55:03.150

Lauren Taylor: So I think the questionnaire has honestly brought up a legitimate question and a real challenge. For universities and healthcare institutions

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00:55:03.290 --> 00:55:20.760

Lauren Taylor: to which I do not have a ready answer. But I think it's a fair critique and a fair thing to level against the trustworthiness of these places. It's not that they are wholly untrustworthy, but they are struggling with how to maintain their trustworthiness in the face of legitimate potential conflicts.

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00:55:22.520 --> 00:55:41.709

Christopher Reddy: I would just ask that I would only ask that to recognize that a lot of these partnerships have led to significant, meaningful change in society. Right? And so let's not drill on the conflict, but recognize that we have scientists who are willing to work. And it's okay for them to make money, by the way, and get this stuff not lost in the library

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00:55:41.940 --> 00:55:50.560

Christopher Reddy: and changing lives. So yeah, we have a conflict problem. But we should celebrate the opportunity that we're getting our science off the research papers and in Cvs.

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00:55:50.580 --> 00:55:51.889

Christopher Reddy: And that's a victory.

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00:55:52.780 --> 00:56:04.890

John Evans: Thanks, Christopher. So we have another question. do any of the panelists. to what extent do our panelists think that naming and calling out those forces that malign science and the public eye

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00:56:04.920 --> 00:56:10.279

John Evans: is a worthy endeavor in the work of rebuilding trust in science more generally.

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00:56:10.960 --> 00:56:13.270

John Evans: Sort of expansion. What you're saying before Lauren.

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00:56:13.670 --> 00:56:14.500

Lauren Taylor: Yeah.

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00:56:16.260 --> 00:56:22.890

Nicholas St. Fleur: I'll just quickly chime in and say I'm a journalist. Expect perspective.

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00:56:23.140 --> 00:56:36.550

Nicholas St. Fleur: Journalists are also often watchdogs. So if journalists have the facts that show that there are these conflicts of interest in particular, that are biasing results or biasing us?

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00:56:36.590 --> 00:56:54.419

Nicholas St. Fleur: how, how? How certain actors are are portraying their science? Then I think 100 journalists need to first uncover that and and share it. As well. So I think that's base definitely a role of being assigned journalists and a role just being a journalist as well.

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00:56:58.480 --> 00:57:01.399

John Evans: So I also want to add anything to that.

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00:57:04.260 --> 00:57:08.440

John Evans: Let's do one more. I feel like we kind of covered that one?

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00:57:08.660 --> 00:57:12.739

John Evans: there, do you have another question for me here.

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00:57:14.240 --> 00:57:16.139

John Evans: as you're moderating these?

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00:57:16.560 --> 00:57:28.950

John Evans: okay,

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00:57:30.750 --> 00:57:32.399

John Evans: So a question is.

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00:57:33.340 --> 00:57:39.110

John Evans: would we be better off if more stem grads went into public service and politics.

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00:57:49.410 --> 00:58:04.340

Lauren Taylor: I don't know. My mind goes to more than what you know like. If we were on a humanities, po conversation. And people said, Would it be better if the world had more people in humanities and leadership position? I'd probably be like, yeah. And then you as well. Would it be better if there were more people with stem and leadership positions?

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00:58:04.370 --> 00:58:08.099

Lauren Taylor: Yeah, okay.

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00:58:08.150 --> 00:58:18.850

Lauren Taylor: But I do think the the spirit of the question is like, would it be helpful to have more people speaking really, cogently and thoughtfully about the scientific process in public

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00:58:19.120 --> 00:58:21.520

Lauren Taylor: unequivocally? My answer to that is, yes.

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00:58:22.330 --> 00:58:23.080

just.

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00:58:23.240 --> 00:58:32.530

Nicholas St. Fleur: And how do we make all these opportunities financially sustainable? I mean part of the reason why we see such a a a.

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00:58:32.550 --> 00:58:49.669

Nicholas St. Fleur: You know drain of people from Academia, you know, fleeing the pipeline is because it quite frankly doesn't pay that well. And for so many folks you know, it's a lot of hard, hard work, a lot of schooling and in many cases you know.

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00:58:50.250 --> 00:59:15.180

Nicholas St. Fleur: you're you're you're you're not making enough to really be able to support yourself. That's why so many people do leave these opportunities for industry, for pharma, and such so getting some of those great minds into politics and such. Yes, it would certainly be great. But you also wanna make sure that they are in positions where they can support themselves as well cause it would. You know you could be super super smart, and you could provide all this insight. But if you're struggling

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00:59:15.180 --> 00:59:21.560

to really cover some of your basic needs. How much time do you really have to devote towards the greater societal good?

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00:59:22.740 --> 00:59:25.590

Nicholas St. Fleur: I say, I'm journalists.

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00:59:25.680 --> 00:59:30.330

John Evans: So this may be our final question to pair the timing.

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00:59:30.630 --> 00:59:38.829

John Evans: Interesting question here. Commercial communications have been very successful in building trust in brands and products.

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00:59:39.010 --> 00:59:43.320

John Evans: What can science communicators learn from that experience.

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00:59:46.140 --> 01:00:00.839

Lauren Taylor: I actually have a view on this, because people often ask me, as someone who graduate from business school, why, business appears to be the most trusted entity in society at the moment. And my answer is always because people it's legible. People think they know what business does.

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01:00:00.920 --> 01:00:02.819

Lauren Taylor: Business makes money.

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01:00:02.960 --> 01:00:31.760

Lauren Taylor: and whether or not they're making money runs a risk of exploiting you is kind of secondary. If you think you know what business does, then you can judge for yourself whether or not you want to gait engage and how you wanna judge their sort of trustworthiness. And I think this goes back to the core of one of Christopher's comments earlier, we need to be much clear about like, what does science do? What is it after? What is it not after, like? What is the internal logic driving scientific communities?

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01:00:31.860 --> 01:00:35.440

Lauren Taylor: And if we can be clearer about that and succinct.

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01:00:35.470 --> 01:00:43.630

Lauren Taylor: I think that increases the legibility of the scientific enterprise to the public, and increases the likelihood that it will be seen as trustworthy.

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01:00:46.080 --> 01:00:50.329

John Evans: Other comments. Yeah, I you know I would look to, you know I'm not.

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01:00:50.500 --> 01:00:55.069

Christopher Reddy: when I when I look at success in communicating science, I look at the ad console

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01:00:55.340 --> 01:01:20.300

Christopher Reddy: and what they have done about smoking cigarettes vaccines, even going back to their originalation of you know, World War 2, and and trying not to, you know. Give away secrets. Look at these folks will have a cohesive plan and of attack about how they can do it is really powerful. So there are been successes outside of commercialism, and I'd look to what the Ad. Council has done.

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01:01:21.080 --> 01:01:35.890

John Evans: So with that we are out of time. I wanna end this on time is, but I mostly want to thank our 3 wonderful panelists for the discussion and hope that everyone listening can continue to think about what to do about this, because ultimately it's not up to us.

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01:01:35.900 --> 01:01:37.529

John Evans: It's up to all of you.

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01:01:37.660 --> 01:01:41.550

John Evans: So thank you again to everyone who's on the panel

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01:01:42.530 --> 01:01:48.729

Nicholas St. Fleur: and see the eclipse if you can. Thank you. Thank you.