

# (Re)building Trust in Science

How scientists and communicators are reimagining the relationship between knowledge and the public



Proceedings of a conference organized by





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# Table of Contents

CONFERENCE OVERVIEW .....	4
OVERALL RECOMMENDATIONS STEMMING FROM THE CONFERENCE .....	6
AT A GLANCE – CONFERENCE SUMMARY .....	8
DETAILED CONFERENCE PROCEEDINGS .....	13
Opening Remarks .....	13
Keynote: Communicating Science for Social Impact in Today’s World .....	15
When Two Tribes Go to War: Polarization and Science Communication .....	19
Climate Communications After the Age of Denial .....	23
<i>Interlude 1: Climate Comedy</i> .....	26
The Power of Public Health Storytelling for Societal Transformation .....	28
<i>Interlude 2: Hip-Hop Public Health</i> .....	31
The Good, Bad, and the Ugly: The Role of Generative AI in Undermining But (Potentially) Rebuilding Trust .....	32
Key Takeaways: Directions for Future Research and Action .....	36

# CONFERENCE OVERVIEW

Building Trust in Science for a More Informed Future, a collaboration between the [Aspen Institute Science & Society Program](#) and the [MIT Press](#), aims to bridge the gap between the evidence-base on how humans process and understand information, and the vulnerabilities to misinformation and propaganda we endure when we fail to leverage this knowledge in communicating science, especially in the age of generative AI.

The [conference](#), held on March 10, 2025, at MIT in Cambridge, MA, brought together science communicators, journalists, researchers, students, policymakers, and other stakeholders interested in mobilizing knowledge for a better world. Across expert-moderated panels and thoughtful audience questions, a cross-sector group of researchers and practitioners explored strategies for:

- Empowering diverse groups to make informed decisions in a complex world;
- Combating disinformation and build trust in science and scientists;
- Amplifying voices and perspectives historically marginalized by science and journalism; and
- Crafting impactful messaging that fosters active and engaged communities where science is a cornerstone.

The following synthesis summarizes each panel discussion and science communication interlude, capturing key themes, insights, and memorable moments from across the event.

Conference Planning Committee, listed alphabetically:

- **Rick Berke** – Co-founder & Executive Editor, STAT
- **Deborah Blum** – Director, MIT Knight Science Journalism Program
- **Amy Brand** – Director and Publisher, The MIT Press (program co-chair)
- **Mariette DiChristina** – Dean of the Boston University College of Communication
- **Michael John Gorman** – Mark R. Epstein (Class of 1963) Director, MIT Museum and Professor of the Practice of Science, Technology and Society at MIT
- **Amml Hussein** – Civic Science Fellow, Boston University; President-elect, National Association of Social Workers (NASW), New Jersey chapter
- **Alfred Ironside** – Vice President for Communications, MIT
- **Aaron Krol** – Managing Editor and Program Officer, MIT Climate Change Engagement Program
- **Thomas Levenson** – Professor of Science Writing and director of the graduate program in science writing, MIT
- **Lee McIntyre** – Senior Advisor for Public Trust in Science at the Aspen Institute
- **Aaron F. Mertz** – Executive Director, Aspen Institute Science & Society Program

- **Seth Mnookin** – MIT Professor & Director of the Graduate Program in Science Writing (program co-chair)
- **Jylana L. Sheats** – Associate Professor, Tulane University School of Public Health; Associate Director, Aspen Institute Science & Society Program (program co-chair)
- **Claire Wardle** – Co-director of the Information Futures Lab, Brown University

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Organizers **Amy Brand** (Director of the MIT Press) and **Aaron Mertz** (Executive Director of the Aspen Institute Science & Society Program) introduced the conference on the MIT campus in March 2025.

# OVERALL RECOMMENDATIONS STEMMING FROM THE CONFERENCE

## Science and Public Health Communication

- Communicate uncertainty confidently and transparently—even at the cost of short-term compliance.
- Understand local values, interests and concerns before delivering information. Avoid top-down moralizing.
- Integrate cultural and religious beliefs into science and health messaging.
- Prioritize listening over debate and argumentation.
- Tell emotionally resonant stories that reflect lived experience and community values rather than relying on data alone

## Audience Engagement and Trust-Building

- Define your audience precisely using audience segmentation tools and narrative organizations to guide messaging (e.g., PolicyLink, Pew Trusts, Harmony Labs).
- Pair information about challenges with actionable steps.
- Empower local leaders, community influencers, and community faith figures

## Media and Storytelling Techniques

- Use entertainment strategically. Low-touch messaging (e.g., in film) can be effective when paired with follow-up actions or public-service announcements (PSAs).
- Emphasis multi-modal communication (e.g., music, images, stories of lived experiences)
- Respect the power of humor to deliver hard truths.
- Prioritize collective stories rather than lone protagonists.

## Equity and Global Inclusion

- Encourage communities to co-create.
- Support Indigenous data sovereignty and inclusive tech governance models.
- Acknowledge that AI is a soon-to-be ubiquitous global tool.

- Use AI as a communication assistant. Embrace “human-powered, AI-supported” models.
- Train and scale up interventions with AI. Use tools like DebunkBot and Fora to handle repetitive labor and misinformation engagement.
- Deploy AI tools in efforts to build discernment and critical thinking.

## Institutional and Research Infrastructure

- Fund longitudinal, multidisciplinary research to evaluate communication strategies over time.
- Partner with entertainment industries to inform and shape narratives.
- Support journalists and fill news gaps. Where journalism is under attack, institutions like universities must step up with credible information.
- Evidence doesn’t always persuade. Educate scientists, health professionals, and researchers about how to communicate clearly and convincingly.
- Embrace humility. Being open to criticism, debate and remediation increases public trust.



The conference gathered **communicators, journalists, researchers, students, and policymakers** interested in mobilizing knowledge for a better world.

# AT A GLANCE - CONFERENCE SUMMARY

In a small village in Sudan, devastating floods had become increasingly common, yet evacuation warnings from government officials often went unheeded. The scientific data were clear: climate change was intensifying these disasters. The communication strategy, however, was failing.

When climate journalist Lina Yassin discovered her technical explanations weren't resonating with local communities who viewed the floods as divine tests, she pivoted dramatically. Instead of "throwing data" at people, she partnered with respected religious leaders who reframed flood safety through Islamic teachings that caution against knowingly endangering one's life—a grave sin in the Quran.

"It was amazing how people listened to the same message we were trying to communicate as soon as it came from a trusted person they look up to," Yassin explained. The result? Increased engagement with evacuation orders and lives saved.

This approach represents the emerging frontier of science communication: recognizing that effective science advocacy isn't merely about transmitting facts, but about connecting those facts to human values, identities, and stories. In an era defined by polarization and information overload, simply asserting scientific consensus no longer suffices. The path forward requires a radical reimagining of how science communicators build relationships with diverse audiences.

## The End of "Just the Facts"

The traditional model of science communication operated on what scholars call the "information deficit" theory—if people don't accept scientific conclusions, they simply need more information. This approach has proven spectacularly ineffective in many contexts, particularly around politically charged topics like climate change, vaccines, and GMOs

"When we're shooting for public trust in science, we're not shooting for a hundred percent—that would actually be democratically undesirable," explains Dietram Scheufele, a leading science communication researcher at the University of Wisconsin-Madison. Instead, healthy skepticism and dialogue about values should accompany scientific discussions. "By overclaiming that there are certain policy outcomes that science can determine, we're doing a disservice to science because science can inform policy outcomes, but it cannot and should not determine them."

Francis Collins, former director of the National Institutes of Health, reflected on communication failures during the COVID-19 pandemic, noting that public health officials didn't consistently emphasize the evolving nature of scientific knowledge. "Lesson number one is if you're in a circumstance where you're communicating scientific evidence, start by saying this is a work in progress," Collins said, regretting not having framed pandemic guidance with more transparent acknowledgment of uncertainty.



The cost of these communication failures was steep: Collins estimates that 235,000 Americans died because they didn't get accurate, trusted information about vaccines. But the problem wasn't necessarily the science itself—it was how that science was communicated, by whom, and in what context.

## Meeting People Where They Are (Without Leaving the Message Behind)

Climate communication has evolved significantly in recent years, moving beyond the era of denial and into questions of action and adaptation. Yet, even as a majority of Americans acknowledge climate change is happening, the percentage who consider it a serious national issue has plateaued at just 54 percent.

Lauren Feldman, Professor of Journalism and Media Studies at Rutgers, explains that rather than targeting the small percentage of outright denialists, communicators should focus on the “movable middle”—those who are concerned but inactive. Despite widespread awareness, only about 10 percent of Americans have taken meaningful political or civic action on climate.

Successful engagement comes through finding shared values, sometimes without explicitly using politically charged terms. Anirudh Tiwathia, Director of Behavioral Science at Rare Center for Behavior & the Environment, pointed to the Inflation Reduction Act as an example of effective climate policy that gained bipartisan support partly because it disproportionately invested in red districts. “You have to decide if you want to use an identity marker like the word ‘climate change,’ or if you want to communicate,” he said.

This principle extends to entertainment media as well. Films like *Twisters* incorporate climate themes without explicit messaging, featuring relatable characters whose values align with conservative audiences—“Oklahomans who care about supporting their small town”—while following the scientific process from hypothesis to data collection to intervention. The approach isn't about diluting the message but delivering it through channels that resonate.

“This is not a call to water things down at all,” Tiwathia insists. “This is very much a call to get creative about how we can get people to care.”

## The Power of Community and Trusted Messengers

The most effective science communication happens through trusted, local sources. Weather forecasters have emerged as crucial climate communicators because they already have established relationships with their communities. Similarly, during the COVID-19 pandemic, the paucity of community-based health educators proved devastating.

“That kind of community-based educational effort was often not really possible because those health experts in the community had kind of all gone away,” Collins observed. Without sufficient infrastructure to support local voices, messaging was primarily driven by officials in Washington and Atlanta, who were often perceived as elitist and disconnected.

Renee Cummings, Professor of Practice in Data Science at the University of Virginia, highlighted how generative AI tools can expand access to trusted messengers, particularly in underserved areas. She described using AI to bring educational resources to high school students in remote villages in Suriname, demonstrating how technology can overcome geographic barriers to scientific information when appropriately deployed.

The critical insight is that messengers matter as much as messages. Research consistently shows that communities respond better to information from sources they already trust—whether religious leaders, local meteorologists, or community health workers. These messengers don't simply repeat facts; they translate scientific information into locally meaningful contexts.

## The Role of Art and Story

Science communication increasingly recognizes the power of narrative and artistic expression in making complex information accessible. Lori Rose Benson, former CEO of Hip Hop Public Health, emphasizes music as an underutilized tool. Quoting collaborator Olajide Williams, she notes, “There’s more real estate in our brains for music than language itself.”

Her organization’s approach leverages multi-sensory and culturally tailored messaging to build engagement around public health. For example, simple tracks about handwashing—like “20 Seconds or More,” later translated into Spanish—evolved into broader initiatives incorporating local features like historically Black colleges and parks to resonate with specific audiences.

Laura Hughes, founder of Gusto Partners, stresses the importance of sensory storytelling in public health. She recounts how people in New Orleans described safe housing as “kids laughing and gumbo that you can smell,” underscoring how emotional and sensory details make abstract concepts like health equity concrete and relatable. “People are looking for an aspirational future. Take them on the journey with you.”

The effectiveness of entertainment media in changing perceptions was demonstrated when an HIV-testing storyline on *How to Get Away with Murder* prompted viewers to seek testing the day after the episode aired, directly citing the show as their motivation. Such examples suggest that entertainment can drive behavioral change in ways that informational campaigns often cannot.

## Navigating Polarization Without Surrendering Truth

The polarization of scientific topics presents unique challenges. Lee McIntyre, Research Fellow at Boston University’s Center for Philosophy and History of Science, distinguishes between misinformation (false information) and disinformation (deliberately false content), warning that disinformation actively manufactures division between groups. “The worst part is that it makes people cynical that there’s no scientific consensus and therefore erodes trust in all experts, not just in one topic of science.”

In highly polarized contexts, science communicators must be political without becoming partisan. “There’s a key distinction between scientists being political actors... which is not just unavoidable,

it's actually desirable—but there's a difference between being political and being partisan,” Scheufele observes.

He criticizes the scientific community's tendency to alienate potential allies unnecessarily, citing examples like “Neil deGrasse Tyson unnecessarily tweeting about Isaac Newton's birthday on Christmas,” which creates friction with Christians, or “climate scientists saying that all Republicans in Congress are unsafe.”

Rather than becoming activists, McIntyre suggests scientists should be more active in their communities to help people put a name and face to science. “The worst way to garner trust is through elite online communication; the best way is face-to-face conversation.”

## The Promise and Peril of AI in Science Communication

Generative AI presents both opportunities and challenges for science communication. David Rand, Professor at MIT, shared research showing that AI-generated conversations led to a 20% reduction in belief in conspiracy theories, with 25% of firm believers converting into non-believers after just a six-minute exchange.

“Large language models like GPT can be really good teachers. They don't just lecture; they respond in a back-and-forth nature,” Rand explains. This dynamic enables effective tutoring and public dialogue but could also facilitate manipulation if models are trained to convince people of falsehoods.

Claire Wardle, Associate Professor at Cornell University, cautions against the binary framing that dominates AI conversations. While headlines often focus on spectacular dangers or inflated promises, AI can assist with important but unglamorous tasks—like helping journalists parse massive documents or generating personalized health information.

However, she warns that we may be repeating mistakes from earlier internet eras, including working in silos, overlooking literacy needs, and failing to invite the broader public to the AI policy table. “My mom's not invited,” she notes, highlighting how discussions about AI governance often exclude non-experts.

## Building a Path Forward

Rebuilding trust in science requires more than improved communication techniques—it demands institutional transformation and a commitment to meaningful dialogue. Lily Tsai, Professor of Political Science at MIT, emphasizes that trustworthiness doesn't always correlate with trust. “One of the problems is that scientists are often thinking about how to make their data trustworthy but not how to make themselves as people trustworthy, too.”

People want to know their values are respected, even if not shared. This human connection is essential to trust-building in science. Tsai frames the ideal engagement as a values-based dialogue: “You value X, tell me why you value X, and let me see whether we can connect about how science helps you to achieve those values X, even if I don't agree with those values X.”

The panelists emphasized several key directions for future action:

1. Scaling up successful communication strategies: Developing research agendas to test and implement effective approaches at scale.
2. Adjusting economic incentives: Restructuring the information ecosystem to reward accurate, accessible science communication.
3. Encouraging scientist adoption: Moving beyond theoretical discussions to practical implementation of reflective communication practices.
4. Demonstrating respect across differences: Finding ways to engage with diverse values without suggesting disagreement equals disrespect.
5. Setting boundaries for engagement: Determining when continued dialogue is productive versus when it becomes an exhausting exercise in debunking.

As Francis Collins noted, wisdom is the “confluence of knowledge, common sense, experience, and moral content.” In science communication, this wisdom emerges not just from what we know but from how we share it—with humility, respect, and a genuine commitment to understanding the human stories behind the data.

In the end, rebuilding trust in science isn’t about convincing people to accept facts. It’s about creating spaces where science becomes part of a shared conversation about our collective future—spaces where, as Lina Yassin’s fourth-grade teacher taught her, uncertainty is welcome, questions are valued, and everyone feels not just talked at, but truly heard.



The conference was attended by **250+ people live** in Cambridge, Massachusetts, and another **350+ virtually**.

# DETAILED CONFERENCE PROCEEDINGS



Moderator **Cara Santa Maria** (health psychologist, science communicator, podcaster, host of *Talk Nerdy*, and co-host of *Skeptics' Guide to the Universe*) kicked off the day's program.

## Opening Remarks

- [Cynthia Barnhardt](#) – MIT Provost
- [Robert Langer](#) – MIT Institute Professor and National Medal of Science recipient

 [Access the opening remarks recording >>>](#)

According to survey data published this January in [Nature](#), most people across 68 countries trust scientists and believe they should be involved in policymaking. In the United States, trust is also the prevailing attitude toward scientists, with the [Pew Research Center](#) finding that 76% of Americans have a great deal or a fair amount of confidence in scientists to act in the public's best interest as of November 2024. Yet, while the public overwhelmingly views scientists as intelligent, the same research shows that less than half of Americans believe scientists are effective communicators.

The consequences of poor science communication can amount to life and death. As scientists grapple with their responsibility to engage the public, the press must also recommit to science reporting that is driven by deep analysis. Through his own experiences combating misinformation around the role of shark cartilage in his lab's cancer research, Robert Langer can attest that media is an amplifier—and that headlines matter greatly. The stories we tell also shape broader perceptions about individual responsibility and collective action. News about COVID-19 published in the United States adopted a [significantly more negative tone](#) than their international counterparts and largely failed

to highlight the individual scientific stories behind the pandemic. Analysis by the National Bureau of Economic Research shows that across major outlets, coverage of President Donald Trump and his promotion of hydroxychloroquine as a treatment for the virus outnumbered all stories about companies and individual researchers.

The communication gaps captured above, particularly when coupled with mounting attacks on both journalism and the scientific enterprise, signal an urgent need to build support and expand capacity for research, discovery, and evidence-based decision-making in society. Initiatives such as the [MIT Graduate Program in Science Writing](#), the [MIT Museum](#), and the [Knight Science Journalism Fellowship at MIT](#)—which has graduated over 400 leaders and allowed the university to forge connections with partners and publications around the world—are all examples of one institution's efforts to meet these needs.

The recommendations and sessions that follow, which speak to topics ranging from polarization and climate communications to public health and generative AI, seek to strengthen this work and build an even stronger coalition for the future.



**Cynthia Barnhart** (Provost at MIT) provided opening remarks.

## Keynote: Communicating Science for Social Impact in Today's World

- [Francis Collins](#) – former director of the National Institutes of Health
- [Lina Yassin](#) – Sudanese climate journalist and policy researcher, International Institute for Environment and Development
- Moderated by [Alfred Ironside](#) – MIT VP for Communications



[Access the keynote recording >>>](#)

What sparks a lifelong passion for science? Is it the thrill of [discovery](#), the guidance of a mentor, or the quiet encouragement of someone who believes in your curiosity? Science communication today is about igniting sparks in a world increasingly divided by ideology and misunderstanding. The question is not whether science communication is “good” or “bad,” but whether it is effective enough to bridge gaps, inspire curiosity, and meet the demands of our complex moment.

At a time when our differences seem to drown out our commonalities, Lina Yassin and Francis Collins used the keynote panel to model a thoughtful dialogue across lived experiences. Whereas Yassin comes to climate science by way of journalism, Islamic faith, and her identity as a Sudanese woman, Collins comes to public health by way of genomics, Evangelical Christianity, and his upbringing in the Shenandoah Valley of Virginia.

Moderator Alfred Ironside opened the discussion by asking Yassin and Collins to reflect on the influences that marked their discovery stories. For Yassin, a fourth-grade Islamic Studies teacher helped make space for questions and real exchange in a class where student perspectives were otherwise dismissed. “One of the things that I remember from his class is that I never felt talked at—I felt heard. I felt welcomed to share ideas. And that’s something that stayed with me,” Yassin recalled. Collins, who was homeschooled until sixth grade, explained that his mother instilled in him a strong love of learning by allowing him to drive the curriculum. Then, in tenth grade, he took a chemistry class with a teacher who presented science like a “detective story” full of experimental tools and blind alleys. This perspective cemented Collins’ desire to pursue a scientific career.

Contrary to the typical portrayal of science as the product of absolute confidence, both Yassin’s and Collins’ mentors made space for uncertainty in their classrooms. Yassin recalls her teacher saying, “It’s okay to live with uncertainty, and it’s okay to have questions all your life. And some of these questions actually end up defining your path, because your journey could be you answering these questions.”

The questions that form the heart of Yassin’s frontline work can be traced back to a major flood in 2013 that devastated her city of Khartoum, Sudan—a country already experiencing overlapping humanitarian crises. The disaster prompted her to ask how the Nile River, closely intertwined with Sudanese identity and agricultural production, could be both a source of life and destruction. After researching the increased frequency and intensity of extreme weather events in her community, Yassin came to understand that these patterns could be traced back to climate change—a topic she had not been taught in school. Eager to share her findings within the community, Yassin started

out by “just telling people the science and throwing the data at them.” Yet, during the panel, she reflected on her initial call to action as deeply misguided because they were not tailored to existing beliefs that considered the floods to be a divine test. Yassin soon switched course, working with local religious leaders to reframe flood safety measures as a religious imperative, grounded in the Quranic teaching that putting one’s life in danger is a grave sin. “It was amazing how people listened to the same message that we were trying to communicate as soon as it came from a trusted person they look up to,” Yassin noted, adding that the interventions kickstarted by herself and colleagues prompted the Sudanese civil defense to report increased engagement and successful evacuations.

The lessons Yassin learned while communicating about climate in Sudan—and later on the world stage through her work with the United Nations Framework Convention on Climate Change (UNFCCC)—map closely onto Collins’ experiences communicating during the COVID-19 pandemic. While Collins views the development of safe and effective mRNA vaccines in record time as a source of scientific pride, he is quick to acknowledge that public health communications fell short during this period. “Lesson number one is if you’re in a circumstance where you’re communicating scientific evidence, start by saying this is a work in progress,” Collins reflected. He regretted not consistently emphasizing the evolving nature of scientific knowledge, particularly around issues like mask mandates. “I wish that every time I got shoved in one of those [news reporting] vans I would’ve taken ten of those seconds to say, ‘I’m going to give you the best information I can, but recognize this is a work in progress,’” Collins elaborated.

Collins stressed that these big-picture shortcomings in messaging were compounded by a broken and long-underfunded public health system. “The kind of community-based educational effort was often not really possible because those health experts in the community had kind of all gone away.” The nonprofit, nonpartisan [Trust for America’s Health](#) reported in 2024 that the Centers for Disease Control (CDC)’s Public Health Emergency Preparedness cooperative agreement with local agencies



**Alfred Ironside** (VP for Communications at MIT) moderated the opening keynote with **Lina Yassin** (climate journalist) and **Francis Collins** (physician and former National Institutes of Health Director).



received \$265 million less than would be needed for its ideal functioning. Without sufficient infrastructure to support local voices, messaging was primarily driven by officials in Washington and Atlanta, who were often perceived as elitist and disconnected. “The recommendations also reflected this; many seemed like they were geared towards someone living in Manhattan, Boston, or DC, not in a rural community,” Collins noted. These failures in messaging, and their associated failures to forge trustworthiness, had [tangible consequences](#). “That’s a scary statistic that we have to look at constantly. 235,000 people are in graveyards now because they didn’t get the information about the vaccines that led them to trust that that was going to be good for them.” Also acknowledging factors like polarization, Collins described the circumstances as a “really awful stew of things.”

Both speakers criticized the top-down moralizing often found in science communication. “It’s Comms 101 not to assume you know more than the people,” Yassin said, providing an example of misguided international aid when consultants had installed solar water pumps for women in Sudan, only to return and find them deliberately broken by the women using them because “They valued that walk as their only time to escape from their home duties and gossip.” She added, “If you don’t know what the real problem is, you’re not going to be able to fix it.”

After stepping down from the National Institutes of Health (NIH), Collins joined [Braver Angels](#), a bipartisan organization aiming to restore civil discourse. “It’s like marriage counseling for the country,” he said. In one event, he shared the stage with conservative podcaster Wilk Wilkinson in a session titled “[A Deplorable and an Elitist Walk Into a Bar](#).” These conversations, he noted, “give you more insight into your own point of view, which allows you to say where your own thinking was less than ideal.”

Bringing the conversation back to the current political context, Collins warned about ongoing threats to American biomedical research: “There is a real assault underway.... I don’t think we can accommodate accepting them without resulting in the dismantling of what has been the envy of the world.” While social media could help, the NIH is restricted from promoting itself with congressional funds. Yassin added that climate communication now faces more than misinformation—it faces intentional disinformation, as “climate change information goes against the interests of many powerful sectors.”

She also noted that scientific uncertainty is often misrepresented: “One of the issues that I think we need to figure out how to tackle is how to communicate that scientific uncertainty is not subjectivity.” The presence of debate does not mean ignorance: “It’s okay for us not to know the solution right away, but it’s not okay for us to not act now.” She argued that governments frequently “cherry-pick science and interpret it in a way that serves their interest,” which dangerously delays action and costs lives.

When asked how universities can better communicate science, both speakers agreed more could be done to integrate climate reporting across journalistic disciplines. “If it’s just one column or one side of the paper, it’s not going to get to everyone,” Yassin noted. However, Collins remained cautiously optimistic, urging science communicators not to overuse terms like “breakthrough.” Yassin emphasized the growing presence of climate beats in journalism, a hopeful trend that must not become siloed.

Reflecting on her identity, Yassin spoke about realizing that she would not always be the perfect messenger: “Being a woman not wearing a scarf.... Do I want to fight that battle and get the credibility and ask them to listen to me? Or do I want to communicate the message?” She chose the latter, often empowering others to speak for her.

Both Yassin and Collins returned to the idea that faith can be a bridge rather than a barrier. Yassin explained, “The biggest breakthrough that I probably had in my life was when I realized faith was not an obstacle in me communicating. If anything, it was an opportunity.” Yassin has amassed a collection of over 200 Quranic verses related to environmental sustainability. “Climate science is just amplifying them,” she said, pointing to the Quranic principle of humans as *khalifas*, or stewards, of the Earth.

Collins, who simultaneously identifies as a rigorous scientist and a person of faith, lamented the growing perception that scientists are all atheists. He said he lives a richer life by combining scientific and spiritual worldviews. “People perceive that scientists are all atheists,” he noted. “We need to put forward more perspectives from believers who can show their perspective that science is a gift from God.”

In closing, Collins defined wisdom as the “confluence of knowledge, common sense, experience, and moral content.” He shared a parable about a young man seeking wisdom from a guru: the source of wisdom is good judgment, which comes from experience—and experience comes from bad judgment. “That’s where we are right now,” he said. “We’ve had some good judgment. We’ve had some bad judgment. It’s added to our experience. Now we’ve got to take that in this really signal moment for our country and our world, and learn how to do something that will help bring the reality of what science and medical research can do for the human condition.”



For conference participants, **Francis Collins** (physician and former Director of the National Institutes of Health) signed copies of his latest book, [The Road to Wisdom: On Truth, Science, Faith, and Trust](#).

## When Two Tribes Go to War: Polarization and Science Communication

Why do groups become polarized around some scientific topics (climate change, vaccines, GMOs) but not around others (astrophysics, fluid dynamics)? What can science communication practice learn from social psychology and behavioral sciences in relation to the processes of group polarization? What communication strategies can address or mitigate against polarization? Panelists explored the nature of group polarization, its implications for science communication strategies, and its relationship with motivated reasoning, identity, and trust.

- [Lee McIntyre](#) – Research Fellow at the Center for Philosophy and History of Science at Boston University and a Senior Advisor for Public Trust in Science at the Aspen Institute
- [Dietram Scheufele](#) – Taylor-Bascom Chair in Science Communication, University of Wisconsin Madison
- [Lily Tsai](#) – Ford Professor of Political Science, Director, MIT Governance Lab
- Moderated by [Michael John Gorman](#) – Director of the MIT Museum and Professor of the Practice of Science, Technology, and Society



[Access the session recording >>>](#)

Carrying over Francis Collins' warning that polarization is one of the country's most pressing issues, the first panel began with an examination of the foundational group psychology literature. Drawing on studies like the [Solomon Asch conformity experiments](#), panelists explored how social dynamics shape perceptions of truth—highlighting, for instance, how jurors often reach more extreme decisions in groups than as individuals. Citing Cass Sunstein, the panel noted that “a sense of common fate and intergroup similarity tend to increase polarization, as does the introduction of a rival out-group.” This correlate raises an essential question: *Why are some science issues more polarized than others?*

Dietram Scheufele, a leading voice in the field of “science of science communication,” offered insight into this transformation. He and others stressed that once a topic becomes associated with identity or values—particularly when powerful interests are at stake—it is more vulnerable to polarization. Lee McIntyre emphasized the difference between misinformation (false information) and disinformation (deliberately false). Specifically, he cautioned audiences about disinformation's ability to manufacture in- and out-groups and provoke polarization between them. “The worst part is that it makes people cynical that there's no scientific consensus and therefore erodes trust in all experts, not just in one topic of science.”

Scheufele stressed that perfect trust in science is not, and should not, be the goal. “When we're shooting for public trust in science, we're not shooting for a hundred percent—that would actually be democratically undesirable.” He described a U-shaped curve where zero trust would halt scientific progress, but total trust would eliminate healthy democratic skepticism. Instead, society should strive for the sweet spot on that curve. He critiqued the scientific community's tendency to alienate others gratuitously—for example, “Neil deGrasse Tyson unnecessarily tweeting about Isaac

Newton's birthday on Christmas," which creates unnecessary friction with Christians. Likewise, he warned against "climate scientists saying that all Republicans in Congress are unsafe." Importantly, Scheufele urged caution in overclaiming what science can do: "By overclaiming that there are certain policy outcomes that science can determine, we're doing a disservice to science because science can inform policy outcomes, but it cannot and should never determine them."

A critical theme emerged around the political power of science itself. "One important key to understanding the polarization of science has to do with the fact that science and scientists have political power—and they have political power over a lot of people." While Americans still express relatively high trust in science, the perception gap is growing. "Half of Republicans and a quarter of Democrats don't believe that scientists share the moral or care about the moral values of society." Tsai asked audience members to consider, "Would I vote for somebody that I didn't think cared about the moral values of society? Would I take medical advice from somebody who I thought didn't care about the moral values of society?"

Panelists discussed the rise of technocracy since the 1960s—an era that promoted the ideal of purely rational policy—and the geographic and ideological segregation that has deepened since. In 1976, only 25% of counties voted overwhelmingly for one candidate; now, that number is over 90%. Universities, meanwhile, are increasingly left-leaning, and only 20 to 25 Research 1 institutions are located in conservative, rural areas with fewer than 100,000 people.

Addressing the role of social media, Scheufele suggested it has accelerated—but not created—polarization. He cited misinformation in the 2000 election, well before Facebook's rise, but noted that algorithmic sorting now amplifies online and offline homogeneity. "Discussion networks around us that are different in ideology, in belief, in sociodemographic makeup, make us more efficacious politically... and ultimately make us more participatory," he said. Unfortunately, "platforms don't want to rattle that cage," since doing so risks user engagement and profit.

McIntyre elaborated on the concept of narrowcasting, where disinformation is precisely targeted. Conspiracies like microchips in COVID-19 vaccines didn't appear spontaneously—they were traced back to a 2020 article in the *Oriental Review* and a fake link to "patent 666," connected to Russian propaganda. "The primary way you combat it is sunlight," McIntyre explained, "to let people know that they might be being disinformed." He emphasized "prebunking"—warning people that conspiracy theories are coming and arming them with the tools to recognize them. "Once people have already heard the disinformation and begun to spread it, it's almost a little bit too late."

Lily Tsai spoke of a deeper issue—that trustworthiness does not always correlate with trust. Research from Yale shows that people interpret apolitical data, like skincare outcomes, accurately—but [political framing warps their conclusions](#). "One of the problems is that scientists are often thinking about how to make their data trustworthy but not how to make themselves as people trustworthy, too." People want to know their values are respected, even if not shared. This human connection is essential to trust-building in science.

Scheufele added that bias affects everyone, including scientists. In a *Proceedings of the National Academy of Sciences* (PNAS) study on gender bias, [male scientists rated papers](#) authored by women as being of lower methodological quality, using this finding as an outlet for sexism. "All of us are susceptible to the same biases as the climate deniers," he said.

The panel explored how to engage polarized audiences around controversial science topics. Tsai referenced work by Dan Kahan and Kathleen Hall Jamieson, which shows that [scientific curiosity](#)—not just literacy—correlates with openness and decreased bias. Tsai called for more effective communication strategies, making clear that “scientists and science do not have a disdain for faith, religion, or other value systems,” and that “even when we don’t share those value systems, we have a basic respect for them.”

Scheufele distinguished between political engagement and partisanship: “There’s a key distinction between scientists being political actors... which is not just unavoidable, it’s actually desirable—but there’s a difference between being political and being partisan.” He critiqued well-meaning but problematic public actions: “That’s why I see the real danger.... Every time a ‘Trump needs a brain transplant’ sign goes up, that’s where that idea goes off the rails pretty quickly.” He pointed out that being “pro-science” has increasingly become a partisan marker, contributing to the divide.

Rather than becoming activists, McIntyre called for scientists to be more active in their communities and help people put a name and face to science. He stressed that “the worst way to garner trust is through elite online communication; the best way is face-to-face conversation.” People reported trusting vaccines when “scientists were warm and took the time to answer all of their questions.” McIntyre recommended that scientists “make an effort to speak to people because scientists are warm and delightful and curious people, and the public doesn’t know that. And I think if they knew that, there would be more trust.”



**Michael John Gorman** (Director of the MIT Museum) discussed polarization and science communication with **Lily Tsai** (Ford Professor of Political Science and Director the MIT Governance Lab), **Dietram Scheufele** (Taylor-Bascom Chair in Science Communication, University of Wisconsin Madison), and **Lee McIntyre** (Research Fellow at the Center for Philosophy and History of Science at Boston University and a Senior Advisor for Public Trust in Science at the Aspen Institute).

Michael John Gorman summarized this point by emphasizing the importance of “embodied encounters.” The panelists discussed institutional and short-term fixes, stressing the need to build warmth in scientific encounters. Medium-term solutions might include “slower, cooler” platforms that are less driven by virality. The panelists also identified a need to bring science to rural and underserved communities in exciting and local ways, such as the [STARS College Network](#) or mobile MIT Museum initiatives. “We used to train small-town doctors and lawyers and send them back to their communities—we don’t do that anymore.”

McIntyre urged compassion for those taken in by disinformation: “They are victims being hurt.” He added, “Stories are sometimes what convinced people—not arguments.” Sharing his own discovery story, he recalled: “I got interested in science when I was just very tiny when my mom, who never went to college, would wrap me up on a cold night and run outside and look at the stars.” Personal stories can connect across political divides, especially when tied to lived experiences and the benefits of science in saving lives.

The session closed with a call for humility. “The idea of listening—listening without the possibility of change—is not listening,” Scheufele declared. Scientists must be open to negotiation and mutual understanding. “Real humility and real listening means that we may not go ahead with certain areas of science.” He cited precedents like the 1975 Asilomar Meeting in Pacific Grove, California, where geneticists agreed to ethical standards around DNA recombinant technology.

Tsai echoed this sentiment, framing the ideal engagement as a values-based dialogue: “You value X, tell me why you value X, and let me see whether we can connect about how science helps you to achieve those values X, even if I don’t agree with those values X.”

In a final reflection, the session considered how funding, training, and infrastructure could support these shifts. Tsai said it wasn’t about money, while Scheufele argued it would cost less than assumed—pointing to science communication graduate programs in Wisconsin. McIntyre advocated expanding training centers like the Allen Alda Center for Communicating Science at Stony Brook University and the Center for Public Engagement with Science at the University of Cincinnati. Gorman concluded with a proposal: a mobile museum that brings science to every corner of the country.

## Climate Communications After the Age of Denial

*As a large majority of the public has come to accept the reality of climate change, the frontiers of climate communication have moved on to the pressing questions of how we will respond and how fast. But what do we really know about how communicators can best inform and influence behavior change around climate issues? This panel unpacked the state of knowledge on how audiences receive different types of climate messaging, which behaviors communicators can impact and how, and how non-traditional science communication in entertainment, news, and popular and social media offer unique opportunities to influence public opinion and action.*

- [Lauren Feldman](#) – Professor of Journalism and Media Studies, Rutgers School of Communication and Information
- [Bernadette Woods Placky](#) – Chief Meteorologist and Director of Climate Matters, Climate Central
- [Anirudh Tiwathia](#) – Director of Behavioral Science, Rare Center for Behavior & the Environment
- Moderated by [Deborah Blum](#) – Executive Director, Knight Science Journalism program



[Access the session recording >>>](#)

Despite public perception that the climate denial era is ending, data suggest a more complicated picture. A Pew report from 1997 showed that only 24% of Americans believed climate change was a serious national issue. By 2023, that number increased to 54%, but the level has plateaued, suggesting significant resistance to more profound shifts in public engagement.

Bernadette Woods Placky urged a departure from using the word “belief” in climate discourse, preferring “understanding” instead. Referencing Yale and George Mason University’s [Six Americas study](#), she noted that while most people agree the climate is changing, support drops sharply when the discussion moves to causes—especially human activity. Lauren Feldman added that messaging efforts must be strategically targeted. “We have to think about the audience as those who can be reached and those who can’t,” she said, highlighting that outright denialists now make up just 10% of the population. Feldman warned that the real opportunity is the “movable middle”—those who are concerned but inactive. Despite widespread concern, only about 10% of Americans have taken meaningful political or civic action.

Anirudh Tiwathia emphasized the importance of values-consistent communication. He pointed to the Inflation Reduction Act (IRA) as a success, in part because it [disproportionately invested in red districts](#), fostering bipartisan support. “You have to decide if you want to use an identity marker like the word ‘climate change,’ or if you want to communicate,” he said. These remarks led to a broader conversation about how to talk about climate change without ever saying the phrase. Feldman’s work suggests co-benefits—like reducing air pollution or improving energy security—can reach more conservative audiences, although she still advocated for normalizing the term “climate change.” Woods Placky agreed that audience understanding is key and encouraged leaning into cultural

connectors like sports rather than emphasizing division. She cited post-election research from the Potential Energy Coalition showing that “it is possible to use the word climate change—it’s just about the how.”

Woods Placky’s remarks prompted a discussion on “low-touch” climate messaging, where films like [Don’t Look Up](#) offer explicit commentary while others like [Twisters](#) do so subtly. Tiwathia argued that *Twisters*, while not marketed as a climate movie, is a strong example of climate communication: the characters are “values consistent—Oklahomans who care about supporting their small town,” and the plot “literally follows the scientific process from bad hypothesis to data collection to updated models and large-scale intervention.” He noted how the film was criticized by outlets like *Salon* and *The New York Times* for not explicitly naming climate change, but he stressed that “we need to expand what we mean by climate communications.” Woods Placky added that the film had strong institutional backing, including partnerships with the National Severe Storms Laboratory and the National Oceanic and Atmospheric Administration (NOAA). Building on this idea, Deborah Blum described such indirect approaches as a form of “subversive education”—communicating science without explicitly labeling it as such.

The conversation then turned to trusted messengers. TV meteorologists, for example, were cited as essential communicators. Woods Placky shared the success of the “Climate Matters” program, which provides localized, timely, and trusted content to audiences across the U.S.—including in Spanish and through partnerships with local journalists. “Education and listening for what types of questions people want support in answering” was her first recommendation, followed by providing accessible materials and building networks of support.



**Deborah Blum** (Executive Director of the Knight Science Journalism Program) moderated a session about effective climate communication with panelists **Lauren Feldman** (Professor of Journalism and Media Studies at Rutgers School of Communication and Information), **Bernadette Woods Placky** (Chief Meteorologist and Director of Climate Matters at Climate Central), and **Anirudh Tiwathia** (Director of Behavioral Science at Rare Center for Behavior & the Environment).



On the topic of backlash, Feldman mentioned her organization’s research on *The Guardian*’s [editorial shift](#) from “climate change” to “climate emergency.” While the language change did not shift most engagement metrics, it did impact perceived credibility. She also referenced unpublished research that suggests class-based narratives about climate impact resonate more broadly than those focused on race. Tiwathia accentuated the power of storytelling, noting that “sometimes the good story is the right way.”

Peer influence was another major area of focus for the panel. “What do I think my neighbors are doing, and what do I think my neighbors want me to do? That second part is the most [important],” Tiwathia introduced the “social permission structure” which reveals how seemingly trivial yet relatable acts in mainstream media create far-reaching ripple effects. He described an experiment splicing scenes from an HBO show to change a character’s food order from meat to plant-based tacos. “If it’s a small touch, but you can have that small touch aggregate... those aggregations will start becoming more durable,” he said. “This isn’t propaganda. This is literally helping people move in the direction they already want to move.”

Feldman, who just completed a book on comedy and social justice, emphasized that change happens through aggregation and normalization—not from a single film or campaign. She stressed the need to “package” the urgency of climate change and actionable solutions in the same communication. “Either people are getting scared without information about what they can do about it, or they’re getting information about solutions without the context to appreciate the problem.”

Woods Placky highlighted a climate IQ gap: “Information about the science comes from long-standing institutions like NOAA, but the solutions are coming out of smaller organizations and startups that may be harder for journalists to trust.” Tiwathia argued for practical roadmaps to accompany these solutions. “Not just asking our friends to switch to solar or go plant-based, but giving them roadmaps of next steps like the recipes, shopping list, etc.”

The question arose as to whether these communication strategies still hold up under a federal administration that actively removes climate-related resources from public websites. Tiwathia pointed out the need to weigh rural concerns more heavily due to the Electoral College, suggesting emphasis on farm and home insurance. “Not surprisingly, the federal government pulled down the risk map.... That is a very great way to communicate.” Woods Placky noted that even when hard data isn’t being used directly, attribution science helps reporters confidently tie weather events to climate change. Her team’s [Climate Shift Index](#) quantifies the role of climate change in daily temperatures globally. Encouragingly, she said, “across counties, around 70% of people care about renewable energy,” which aligns with core American values of independence.

Feldman added that younger audiences are shaped by a “news-finds-me” dynamic through social media. It’s important to explain how climate change affects them and emphasize the benefits of taking action. As federal trust erodes, local action must be uplifted. Woods Placky reinforced this by noting that communication itself is what gets people ready to take the next steps—such as “talk to five people about what they learned.”

The panel also discussed how storytellers and institutions can guide audiences toward action. Feldman mentioned how *Don’t Look Up* paired with a platform that met users at varying comfort levels—from eating meat one fewer day a week to contacting elected officials. Organizations like

museums, who have a more direct link to audiences, can provide actionable steps on the way out the door, like asking visitors to tell five friends about what they learned. Woods Placky echoed that point, and Tiwathia shared how [The Wild Robot](#) paired PSAs with their screenings as an impact multiplier. He explained, “It’s going to be a lot about pairing it with secondary messages... and then pairing those secondary campaigns with people who are on the ground who can help you... actually move you into action.”

Finally, the discussion returned to the idea of message integrity. “At what point are we responsible for the message becoming water by meeting people where they are?” someone asked. The consensus was clear: relevance is not dilution. Feldman responded by citing her book [A Comedian and an Activist Walk Into a Bar: The Serious Role of Comedy in Social Justice](#), arguing that comedy can be a vehicle for powerful truths. “Comedy can deliver really harsh societal truths... it just does it in a way that’s more palatable, relatable, and entertaining.” Tiwathia added, “This is not a call to water things down at all. This is very much a call to get creative about how we can get people to care.” He noted that sometimes behavior change leads to belief, not the other way around: “You start driving the electric vehicle, and now you suddenly might start caring more about carbon.”

## Interlude 1: Climate Comedy



[Access the interlude recording >>>](#)

For the past three years, comedian **Stuart Goldsmith** has focused his stand-up sets exclusively on the climate crisis. Goldsmith is quick to note that he is not a scientist, activist, or expert of any kind, telling audiences, “I’m just you.”

For Goldsmith, comedy serves as a trusted, intimate hotline into someone else’s life—much like a podcast—and allows people to share unspoken truths in a communal setting. Motivated by his own eco-anxiety and eco-dread, Goldsmith embarked on this project after feeling that “climate has a huge branding problem,” in the sense that many people feel that imperfect actions like using disposable diapers for their children mean they aren’t entitled to an opinion. To help break out of the “[spiral of science](#)” in climate communication, Goldsmith solicits “climate confessions” during his sets that help people see how we are all connected to the carbon economy.

“I’m interested in softening those boundaries and trying to draw more people into that conversation, all the while saying, ‘Hey, I’m not trying to draw anyone into a conversation here.’ As a comedian, I get to have my cake and eat it. I get to do material about climate activists, and I can say, ‘Hey, look, I’m not one of these climate activists. But isn’t it interesting the way they think and why they do that and what their tactics are and why those might be useful?’ without needing to sort of plant a flag and go, ‘I’m like this and you must be as well,’” he explained.

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Like Feldman, Goldsmith often receives questions about the danger of pairing existential content with the lighter tone of comedy, which critics argue may act as a “pressure release valve” that takes away from the steam needed for change. While Goldsmith acknowledges this risk, he makes a point of reaching broad audiences. When naming a show, he follows an approach similar to Blum’s idea of a “subversive education,” seeking to bring in groups who haven’t fully opted in. At the same time, he finds that “preaching to the congregation”—in this context, people who are already fired up about the climate—is a way to “make them feel better, turbocharge their efforts, and make them feel less alone, afraid, and burnt out.”

While comedy can help inform personal choices, it is also a tool for motivating collective action. As Goldsmith develops his future sets, his mission has evolved to include landing his jokes in front of people who have their hands on their levers of power.



**Stuart Goldsmith** (comedian) introduced comedy as an effective method to engage audiences about climate.

## The Power of Public Health Storytelling for Societal Transformation

This session explored how storytelling can be a powerful driver of societal change and a tool for rebuilding trust in public health. Fostering trust is crucial, as it significantly impacts how communities respond to and recover from public health crises. Through real-world examples and expert insights, participants will discover how narratives can bridge the gap between complex health information and the lived experiences of diverse communities. Grounded in evidence and theory, this session highlighted storytelling strategies that resonate emotionally and culturally, fostering understanding, driving behavior change, and improving public health outcomes.

- [Lori Rose Benson](#) – Former CEO, Hip Hop Public Health; Principal, Sanus Advisors
- [Melissa Fleming](#) – Under-Secretary-General for Global Communications, UN Department of Global Communications
- [Laura Hughes](#) – Principal & Founder of Gusto Partners, LLC; former Director of Narrative Strategies, PolicyLink
- [Erica Rosenthal](#) – Director of Research, USC Annenberg Norman Lear Center
- Co-moderated by [Amml Hussein](#) – Civic Science Fellow, Boston University; President-elect, National Association of Social Workers (NASW), New Jersey chapter
- Co-moderated by [Jylana L. Sheats](#) – Associate Professor, Tulane University School of Public Health; Associate Director, Aspen Institute Science & Society Program



[Access the session recording >>>](#)

The session opened with a call to reframe how we understand the power of storytelling in public health. As co-moderator Jylana Sheats explained, “Public health storytelling isn’t just about sharing information. It shapes how people perceive challenges, how they make decisions, and how they take action.” She emphasized that while some narratives can build trust and inspire transformation, others may confuse or reinforce inequities. In an era where trust in public health is both fragile and vital, storytelling can serve as a bridge—translating complex health issues and lived experiences into something more relevant, accessible, and actionable.

Fleming underscored this need with insights from the United Nations’ forthcoming global risks report, which surveyed stakeholders across 193 countries. The top concern identified was mis- and disinformation—a phenomenon that people fear most but feel least prepared to confront. She warned, “The explosion of disinformation as a weaponized tool to manipulate people, to disarm, to attack and to seize power and also to make profit is now the landscape in which we operate.” Ultimately, the goal is to re-establish a shared basis of facts: “And that’s something that we have to all join forces to reach.”

Benson focused on the potential of music as an underused tool in health communication. Quoting her collaborator, Olajide Williams of Hip Hop Public Health, she said, “There’s more real estate in our brains for music than language itself.” Her work with young people and artists leverages

multi-sensory and culturally tailored messaging to build neural and social engagement around public health. She noted that this approach—often used in consumer marketing to sell products—could be repurposed to uplift communities.

Rosenthal highlighted the power of entertainment media, referencing her organization’s collaboration with *How to Get Away with Murder* on an HIV-testing storyline. One health educator reported that five individuals sought testing the day after the episode aired, directly citing the show as their reason. Despite media fragmentation, she argued, “we can still reach mass audiences.”

Yet, not all stories land as intended. Fleming explained that “facts are sometimes boring and nuanced, and are often changing,” making storytelling more complex. She offered the UN’s communication framework—“what, why care, and what now?”—as a guide for effective public communication in an “infodemic.” During the pandemic, the UN shifted from institutional messaging to supporting individual scientists and doctors in getting verified on platforms like TikTok, empowering them to become trusted messengers. A similar strategy is now being employed for climate messaging through lifestyle influencers.

Benson expanded on Williams’ call for a “multi-sensory, multi-level health education” model using the four Ms: the message, the messenger, the medium, and the moment. In a time when attention is a scarce resource, she stressed that trusted messengers—especially young people—are crucial to reaching communities.

Hughes added that relevance begins with knowing your audience. “If you tell me that your audience is everyone, that means to me you’re talking to no one,” she said. Drawing on segmentation tools from [PolicyLink](#), [Pew Trusts](#), and [Harmony Labs](#), she emphasized the importance of targeting narratives based on values and persuadability. Republicans, she argued, excel at picking audiences and tailoring messages to them, while progressives often pick issues and try to message broadly. Hughes advocated nuanced, interconnected storytelling: “They’re interested in stories that represent a full



**Jylana Sheats** (Assistant Professor at the Tulane University School of Public Health and Associate Director of the Aspen Institute Science & Society Program) co-moderated a session about public health storytelling for societal transformation featuring **Erica Rosenthal** (Director of Research at the USC Annenberg Norman Lear Center), **Lori Rose Benson** (Principal of Sanus Advisors), **Laura Hughes** (Principal & Founder of Gusto Partners, LLC), and **Melissa Fleming** (Under-Secretary-General for Global Communications at the UN Department of Global Communications), along with co-moderator **Amml Hussein** (Civic Science Fellow at Boston University).

movement, connect to other pieces..., particularly if you're thinking about health and science storytelling.”

Rosenthal shared a variety of metrics for measuring narrative impact, including content analysis, audience segmentation, mood tracking, attitude shifts, and behavioral intention surveys. While long-term behavior change is expensive to track, precursors—like increased self-efficacy or online engagement—can serve as useful proxies. “We’re not trying to tell [entertainment writers] how to tell their stories, but here are some things that you might want to be aware of,” she said, citing work with [Define American](#) and [illumiNative](#) to improve the representation of immigrants and Native Americans.

On institutional priorities, Fleming acknowledged the decline of science journalism and the urgent need to fill those gaps. “We’re seeing an assault on journalism... and where we have news deserts, I think we need to step in.” She described the UN Newswire as a credible, free service supported by former journalists, capable of offering both factual reporting and advocacy in environments where journalism is under attack.

In a conversation about fostering trust, Benson said the youth mental health crisis can’t be solved by simply “sharing resources.” Instead, Hip Hop Public Health’s [Moving the Needle](#) speaker series brings artists and communities together to co-create and share healing content. Hughes urged institutions to paint an aspirational vision: “What does health equity look like? What does it feel like? What does it sound like?” She recounted how people in New Orleans described safe housing as “kids laughing and gumbo that you can smell,” underscoring the emotional power of sensory storytelling. “People are looking for an aspirational future. Take them on the journey with you.”

Rosenthal stressed that public health storytelling must reflect lived experience—not just by consulting scientific experts but by connecting with those who understand the real-world implications of the data. Hughes echoed the need for co-designed, non-extractive storytelling. “You need a grass-roots person who will tell it to you straight when things aren’t resonating.” Representation of race, gender, and class, she added, must be baked into every step of the storytelling process.

Benson reflected on how artistic integration had evolved in her work, beginning with simple tracks about handwashing—like “20 Seconds or More,” later translated into Spanish—and growing into broader initiatives like [Teen Takeover](#). These projects incorporated local features like historically Black colleges and universities (HBCUs) and parks to resonate with specific audiences, then adapted visuals for global distribution.

Rosenthal cautioned that public interest in systemic issues began to wane after the initial wave of COVID-19 communications. “We tend to tell stories that are focused on individual responsibility... and at some point people got tired of hearing about COVID.” The missed opportunity, she argued, was in failing to sustain the thread between social determinants and health outcomes. She criticized the prevalent “hero doctor” narrative, which identifies structural problems but often defaults to individual solutions—preventing audiences from imagining structural change.

Fleming advocated for “Solutions Journalism,” a model spreading across the U.S. and Europe. “It’s the five Ws plus an additional dimension: Did anybody solve that problem?” Readers stay engaged

longer, she noted, when stories offer not just critique but concrete solutions. “One antidote to news avoidance is to offer this kind of journalism; it turns journalism back into that pillar of democracy.”

Benson highlighted similar work with the Skoll Foundation’s [Solutions Insight Lab](#), which maps existing nonprofit efforts so that “we don’t need to reinvent the wheel.” She noted the importance of showcasing public health solutions that are cost-effective or free, such as promoting movement and wellness through community efforts.

The panel also addressed global disinformation. Fleming warned that the “license to attack science advocates” is worsening, especially online. As official communicators withdrew from the conversation post-pandemic, bad actors continued to shape narratives—even in places where they hindered vaccination campaigns in Africa. She pointed to vaccines saving 154 million lives in the last 50 years as a key example of messaging that must be sustained.

Hughes closed with a guiding principle: “Those who are closest to the challenges are closest to the solutions.” When done with care, relevance, and inclusivity, public health storytelling is not just a method of education—it is a lever for societal transformation.

## Interlude 2: Hip-Hop Public Health

[Hip Hop Public Health](#), founded by hip-hop legend Doug E. Fresh and neurologist and public health innovator Dr. Olajide Williams, is a creative force in science and health communication. The organization has developed over 300 free multimedia resources, including videos, that blend music, repetition, and melody to promote health literacy and behavior change—especially among youth. “These two visionaries have collaborated with acclaimed artists, educators, researchers, and medical experts to create a transformative learning studio,” said Benson.

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**Lori Rose Benson** (former CEO of Hip Hop Public Health and Principal of Sanus Advisors) led an activity integrating music and movement to demonstrate Hip-Hop Public Health’s strategy for engagement.

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Their approach is not just engaging—it’s evidence-based. Benson noted that randomized controlled trials in New York public schools have demonstrated that HHPH’s content is an effective tool for improving public health communication knowledge and health literacy, leading to sustained behavior change.

For example, one [video series](#) teaches children how to recognize the signs of a stroke and how to respond, equipping them to help their parents or grandparents. Another, the [community immunity video series](#), uses hip-hop music to increase understanding of vaccines and public health measures during the COVID-19 pandemic.

This interlude also highlighted the importance of trust and listening, especially to young people. The 2023 Crisis Text Line’s “[Unity in Empathy](#)” report, one of the largest sources of real-time youth mental health data, asked young people what they turn to after a crisis to self-soothe. The top response was music, followed closely by creative expression, physical activity, and social connection—all elements at the heart of Hip Hop Public Health’s model.

## The Good, Bad, and the Ugly: The Role of Generative AI in Undermining But (Potentially) Rebuilding Trust

*It’s early days, but one thing is clear: Generative AI is disrupting a number of industries, including media, education, research, and medicine. On one hand, it is supercharging the production of disinformation and propaganda, it’s automating workflows and creative processes, putting a large number of careers in jeopardy. But it also offers exciting investigative journalism opportunities, translation and synthesis, and more empathetic communication. This expert panel took a broad look at how AI tools are shaping our trust in the media we consume and what that means for rebuilding trust in our society.*

- [Renee Cummings](#) – Professor of Practice in Data Science at the University of Virginia (UVA), 2023 VentureBeat AI Innovator Award winner, and the first Data Activist-in-Residence at the UVA School of Data Science
- [David Rand](#) – Erwin H. Schell Professor and Professor of Management Science and Brain and Cognitive Sciences at MIT, the director of the Applied Cooperation Initiative
- [Claire Wardle](#) – Associate Professor, Department of Communication at Cornell University
- Moderated by [Mariette DiChristina](#) – Dean of the Boston University College of Communication



[Access the session recording >>>](#)



An oft-used phrase is “communication moves at the speed of trust,” a sentiment that framed the conversation on the social and global dimensions of generative AI.

Claire Wardle began by challenging the binary framing that dominates many AI conversations. While headlines often focus on spectacular dangers or inflated promises, she reminded the audience not to overlook the “boring and important tasks” that AI can assist with—such as helping journalists parse massive PDFs or generating personalized health information. “There’s a lot of good to be excited about,” she said, though she also acknowledged that not all potential harms can be controlled. “I do see us repeating mistakes we made from 2016 onwards around misinformation,” she warned. These include working in silos, overlooking literacy, and failing to invite the public—“my mom’s not invited”—to the AI policy table. Her concern extended to what she called “the ugly,” like misuse in surveillance, particularly around student visas, and a general failure to educate the public that humans cannot simply be replaced.

David Rand shared his research on generative AI and conspiracy theory engagement. In a [study published in Science](#), his team found that AI-generated conversations led to a 20% reduction in belief in conspiracy theories, with 25% of firm believers converting into non-believers after just a six-minute exchange. Notably, the effect remained stable two months later. He noted the duality of this technology: “Large language models [LLMs] like GPT can be really good teachers. They don’t just lecture; they respond in a back-and-forth nature.” While this dynamic opens possibilities for effective tutor-



**Mariette DiChristina** (Dean of the Boston University College of Communication) spoke with **David Rand** (Erwin H. Schell Professor and Professor of Management Science and Brain and Cognitive Sciences at MIT), **Claire Wardle** (Associate Professor in the Department of Communication at Cornell University), and **Renee Cummings** (not pictured) (Professor of Practice in Data Science at the University of Virginia) about implications of generative AI.

ing and public dialogue, it also enables manipulation if these models are trained to convince people of falsehoods.

Drawing on her recent visits to Dubai and Suriname, Cummings drew on a global perspective and emphasized that many countries have used algorithmic tools for years—particularly in criminal justice systems. She described using generative AI to bring education to high school students in a remote village in Suriname and called attention to innovation through the World Economic Forum, where her work helps emerging economies reshape both public and private sector models with AI in mind. Generative AI, she argued, is being used to make science communication more transparent, fight online violence against women, support child protection, encourage democratic participation, and improve rural healthcare access. Cummings stressed that governance and risk mitigation must accompany this innovation, but the global potential is enormous.

Returning to misconceptions, Rand cautioned against the tendency to label AI as inherently harmful. “There is some tendency to paint with a broad brush,” drawing a parallel to how some on the political left view social media solely as a negative force, overlooking the nuance that while deactivation may reduce polarization and increase happiness, it can also lead to a loss of information access. “The same is true of AI,” he said, “but even more so because AI encompasses far more than social media ever did.”

Wardle advocated for “human-powered, AI-supported” systems, emphasizing that while AI can help scale interventions, real change relies on people. She described her work on an NPR–Cortico “[tech-enhanced journalism](#)” project that used AI to reach communities otherwise inaccessible, highlighting how AI can help people “see their shared pains.” She also mentioned an app called [Fora](#), which becomes smarter as more conversations are uploaded and tagged.

Rand shared details of [DebunkBot.com](#), a public-facing tool designed to help users respond to misinformation. “It’s doing the cognitive labor of debunking, which is exhausting,” he explained. The bot proved equally or more effective with organic audiences compared to paid research participants. It can even be used for roleplaying with conspiracy theory scenarios, making it a useful tool for non-experts who want to counter misinformation without burning out. Mariette DiChristina noted how tools like this app could have helped entities like *Scientific American*, which shut down its comments section due to the unmanageable burden of debunking misinformation.

On the broader issue of AI battling AI, Rand acknowledged the open research question about whether LLMs can effectively fact-check, especially in short-form content like tweets. He explained that systems perform well in longer conversations but struggle with limited context. The challenge, he said, is helping people remain discerning “without just undermining belief in everything.”

Wardle added that people are adapting to an AI-saturated world by developing new coping strategies: “They just navigate the world knowing that it might be a hallucinated citation.... We can’t fact-check our way out of that.” She emphasized the need to listen to concerns and avoid losing a generation to total cynicism. Cummings pointed out that many communities outside the U.S. are more focused on AI’s opportunities than its threats. “This technology is truly doing some brilliant things in medical research, let’s say in Ghana,” she said. From indigenous data practices in the Amazon to innovations in education, AI is changing lives. She added, “AI is a communication tool. It requires a

requisite amount of literacy..., critical thinking. And once we build those measures in, we can harness the best and mitigate the risks.”

Rand also proposed a research framework that leverages AI’s scalability. Instead of asking people to rate belief in a fixed set of conspiracy theories, he suggested collecting open-ended responses first, then measuring belief on a scale—allowing researchers to reflect the actual heterogeneity of public opinion. Such methods can yield large-scale randomized data to test persuasion strategies more effectively than ever before.

As for scope, Rand reported that about half of Americans believe in at least one conspiracy theory. The relevant question, he noted, is not how widespread belief is but which conspiracies matter for the outcomes we care about. Addressing past communication errors, he cited political scientist Michael Bang Petersen’s research showing that admitting uncertainty may lower compliance in the short term but [builds trust in the long run](#). Wardle added that AI, as a reflection of ourselves, might even “show us how to apologize”—a skill many institutions still lack in the post-COVID era.

While searching for tools to detect miscommunication, Rand emphasized that much of the real problem lies in influencers and elites—not just fringe headlines. Cummings warned against treating generative AI like a cure-all. “It’s not a knowledge model; it’s a language model,” she noted, called for stronger public-private partnerships to ensure the ethical development and deployment of the technology.

The panel also engaged in a speculative exercise: How would today’s information ecosystem shape the public experience of events like 9/11 or the Cuban Missile Crisis? When asked how to respond to legitimate public skepticism around generative AI—due to issues like stolen data or environmental costs—Rand said that while most people don’t think deeply about those issues, the tech already exists, and it’s now our responsibility to put it to good use. Wardle shared an educational example in which students were asked to model their own climate impacts, encouraging critical reflection. Cummings praised the models of indigenous data sovereignty emerging in countries like [New Zealand](#).

During the final takeaways, Wardle reminded funders, researchers, and educators that they have the power to take action. Cummings urged a global, interdisciplinary perspective. Rand emphasized that even people you might not expect are often responsive to evidence, reinforcing the importance of continued dialogue and empathy. DiChristina concluded by describing Boston University’s approach as a “critical embrace of this technology,” highlighting the importance of thoughtful, ethical integration. Wardle left attendees with a roadmap for future research: a multidisciplinary gathering to establish longitudinal studies, integrate audience segmentation at scale, and avoid the real mistake of 2016—failing to think ahead.

## Key Takeaways: Directions for Future Research and Action

- [Rick Berke](#) – co-founder and executive editor of STAT
- [Kai Kupferschmidt](#) – contributing correspondent for Science magazine



[Access the key takeaways recording >>>](#)

**Reflecting on the many perspectives shared throughout the conference, participants identified potential themes for future convenings:**

- *What does a research agenda look like to scale up the communications strategies discussed at the conference and test them at scale?*
- *How do we adjust the economic incentives of the information ecosystem to reflect the visions discussed today?*
- *How can we encourage scientists themselves to adopt these more reflective practices instead of just saying do it?*
- *How do we demonstrate that we respect someone's values in a social climate where disagreement is automatically seen as disrespect?*
- *Sometimes conversations answering questions about science become exhausting. Where do we trace the line between engagement and spending hours debunking disinformation?*



**Rick Berke** (co-founder and Executive Editor of STAT News) and **Kai Kupferschmidt** (contributing correspondent at Science magazine) discuss directions for future research and action

