

Beyond the lab: trust, storytelling and the fight for America's attention

By Aaron F. Mertz & Shruti Naik

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Public trust in science is rapidly declining, but scientists can help to rebuild it. By stepping out of the lab, embracing storytelling and engaging directly with communities, scientists can show the human side of discovery and make science more accessible, relevant and trusted in everyday life. The time to act is now!

At the outset of World War II, the USA made a pivotal decision to harness its scientific talent through bold investments in research, leading to the creation of cornerstone institutions such as the National Institutes of Health (NIH) and the National Science Foundation (NSF). For decades, American scientists were empowered to pursue curiosity-driven research, resulting in transformative advances in biomedicine and public health. These institutions – and the pursuit of knowledge itself – came to symbolize American exceptionalism. Scientists were celebrated as intellectual heroes and enjoyed broad public trust.

In comparison to past decades, the public's confidence in science has plummeted – not just among fringe sceptics but by everyday Americans: teachers and truckers, parents and patients, small business owners and the guy fixing your furnace. According to a recent Pew survey, only 23% of Americans report a high level of trust in scientists, and just 57% believe science has a positive impact on society, a sharp drop from 73% before the COVID-19 pandemic.

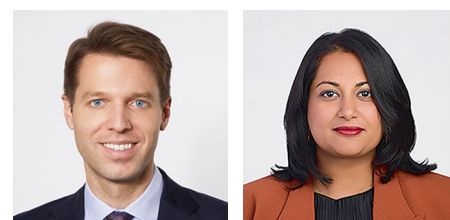
This growing disconnect stems from more than just political division or misinformation and disinformation; it also reflects a deeper failure of communication and engagement from scientists. Trust in institutions is built on consistent performance, transparency and meaningful dialogue. Science funded by the US government has brought about innovations in energy, health care, agriculture and technology – transforming everyday life, driving economic growth and strengthening national security. Yet, the average American remains largely unaware of how science shapes their daily life. This information gap is

exacerbated by a scientific ecosystem that too often communicates within echo chambers – circulating ideas primarily among experts – while neglecting broader audiences. The use of inaccessible jargon, along with a tone that can come across as condescending, further alienates non-experts. As a result, even transformative discoveries fail to resonate beyond academic or institutional walls, missing opportunities to inspire public trust, understanding and engagement.

For most people, their only real exposure to science comes from a middle-school or high-school biology class, where the subject is often taught as a boring list of static facts and certainties. Experiments are presented with predetermined outcomes, and every test question has a single correct answer. There is little appreciation for science as a living, evolving process – a pursuit of questions that humanity hasn't yet solved. The idea that scientists work at the edges of the unknown, to add to future textbooks and cures, feels foreign in a culture that often values simplicity over complexity and certainty over curiosity.

We set out to change those views. We began our journey with a simple premise: to humanize scientists, explain the process of science and showcase the transformative impact that curiosity-driven science has had on the world. We believed that storytelling, especially through film, could be a powerful tool to bridge the growing divide. Our goal was to reveal the people and processes behind life-saving breakthroughs to lay audiences, and to show policymakers and philanthropists the true societal value of science – and what we stand to lose if the American scientific enterprise is allowed to falter – or worse, collapse.

To ground our approach, we conducted informal, qualitative research. As New Yorkers, we chose Times Square – a major tourist attraction that draws people from all over the world. We asked dozens of passersby, some from small-town America and others from Los Angeles and Chicago, a simple question: "Where do your medicines come from?" Most had no idea and noted never giving it much thought. Some mentioned their doctor or pharmacist. A few said "China" or "plants" – answers



not entirely wrong, but incomplete. Out of dozens, only one person mentioned "big pharma", and another said, "science labs". Anecdotally, we saw how little people understood that scientists are behind the cures and treatments they rely on every day. Our findings echoed data from Research!America, which found that four out of five Americans could not name a living scientist, and half could not name a place where health research is conducted.

To offset our lack of experience in filmmaking, we partnered with Consequential LLC – an impact-driven production company – and Emmy-winning director Marilyn Ness to create a feature-length documentary, *Six Degrees from Science* (working title). We are both serving as executive producers of the project. The film follows three scientists: an immunologist who is rewilding laboratory mice on a research farm; an engineer developing smart prosthetics to restore mobility in amputees and after spinal cord injury; and a marine biologist working to preserve biodiversity in the coral reefs of French Polynesia and build a diverse pipeline of future scientists. But the film is not primarily about their science; instead, science serves as the backdrop to their lives.

This story pulls back the curtain on who scientists really are – mentors, problem-solvers and public servants – fighting to push knowledge forward while navigating personal sacrifice, institutional roadblocks, and a system that too often fails them. *Six Degrees from Science* lays bare the human engine behind discovery: the passion, grit and complexity that rarely make headlines. But this isn't just a portrait – it's a warning. Filmed amid a growing national crisis, our documentary also captures the immediate, devastating effects of funding cuts on our protagonists and their labs. We challenge the audience to confront a hard truth:

what do we lose – what breakthroughs, what cures, what futures – when society drives its brightest minds out of science?

The film is currently in production, with a tentative release date planned in late 2025. Alongside the film, we are launching an impact campaign to bring screenings to universities and institutions across the USA and beyond. The goal is to connect scientists with their local communities – to highlight the vital work happening in their own backyards, underscore what's at stake, and empower people to advocate for research. We will also emphasize the economic benefits of science: how public investment in research fuels innovation, creates local jobs, supports new industries and strengthens America's position as a global leader in discovery and technology.

Scientists can no longer assume a position of automatic trust in American society. In today's attention economy – in which human attention is a fiercely contested resource – scientific voices must compete not only with entertainment and distraction, but also with well-packaged misinformation. Pseudoscience spreads rapidly through emotionally compelling narratives and charismatic messengers, while evidence-based insights often go unnoticed. Without a strong counterbalance – scientists who can communicate effectively and authentically – scientific truth risks being drowned out.

Over the past few years, the Aspen Institute launched the Science & Society Program to identify additional strategies to strengthen the public's relationship with science. By convening a cross-sector group of 'trust-builders', the program explored what fosters trust – and what undermines it. The resulting

report, 'Tactics for Trust: A Practitioner's Playbook for Building Public Trust in Science and Other Domains', emphasizes that trust grows through relatability and human connection. Our film offers a next step in bringing the findings of this report to fruition.

To reclaim public trust, scientists must adapt. We must fundamentally rethink our approach to science communication. The strategies that once relied on public trust in experts, common before the rise of social media, are no longer effective. In today's fragmented and often sceptical information landscape, 'because I said so' arguments fall flat – or, worse, are met with disdain. Instead, we need to replace them with clear, accessible and thoughtful messaging that explains not just what we've discovered, but how we discovered it, what the findings mean, their limitations and why they matter in the daily lives of Americans. Communicating the importance of uncertainty – a hallmark of science – is just as important as communicating the finding itself.

This means stepping beyond the lab and into public discourse. It means embracing new platforms, telling richer stories and making science feel human, relevant and transparent. And it also means this: every single one of us must see ourselves as an ambassador for science. Tell people about what you do. Talk to the person sitting next to you on the plane, the woman in the grocery store checkout line, your Uber driver – any curious 'chatty Cathy' willing to listen. These small conversations, repeated often, are powerful acts of science communication. They build bridges, spark curiosity and remind people that science is not abstract or distant – it is made by real people who care deeply about making life better for everyone.

Immunologists are uniquely positioned to bridge the gap between science and society. The breakthroughs delivered by our field – vaccines, cancer immunotherapies and biologics for inflammatory diseases – have already transformed patient care and improved countless lives. But securing the future of science requires more than innovation in the lab: it demands that we reimagine how we share our work – with humility, with humanity and with a deep commitment to re-building public trust.

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Related links

Aspen Institute publications about building trust in science: <https://www.aspeninstitute.org/programs/science-society/reports-and-publications/>

Research!America blog survey: <https://www.researchamerica.org/blog/survey-most-americans-cannot-name-a-living-scientist-or-a-research-institution/>

Research!America questions: https://www.researchamerica.org/sd_question/can-you-name-any-institution-company-or-organization-where-medical-or-health-research-is-conducted/

Six Degrees from Science Film Website: <https://sixdegreesfromscience.com>