

This is five-year-old me cheesing next to my Nana after my first ballet recital. I grew up watching my mom, who is actually here today, watching her story musicals and knowing that my aunts performed on TV and Broadway and in churches all over the place, and that my grandma could transform fabric into beautiful designs. For me, art was life and also the family business.

But as much as I love the creativity around me, I found myself drawn to something else. Now, my mom kind of thought I was going to become a lawyer or a journalist, and honestly, she might still be holding out hope. But instead, I think that surprised us both and committed my life to science.

When I got to college, I found my way to neuroscience. I think because it's inherently interdisciplinary, a field that taught me to flex to the left brain, right brain model, a concept that I found initially fascinating from a science perspective. [Audio disrupts] The discipline neuroscience lab. Mice. Monkeys. Petri Dishes. Oh, no. Remember? Oh, okay. You guys know? No problem. Can you guys hear me now? All right. I remember studying the neuronal activity of the giant squid. A fascinating but very removed experience. Honestly, maybe it's the Scorpio in me, but I am drawn to the complex and messy world. And I didn't just want to understand science.

I wanted to use it to help people. So, enter epidemiology. Now, epidemiology is often thought of as solely a left brained field. Data driven, analytical and evidence based. But is it really? What if epidemiology is also right brained, rooted in creativity, intuition, and human connection? And what if that right brain part of epidemiology is actually our superpower?

So now I'm going to ask you guys to go back to school with me. But don't worry, there's not going to be a pop quiz. I want you to think back to your first stats class or some first-year science course. The rules were clear. If this was an epidemiology or Bio Stats 101 course, you might have learned how to structure a case definition, how to interpret a p value two.

How to calculate a confidence interval. There was comfort in the clarity that if you followed the method, you would always get the right answer. It was straightforward. Left brain work.

But the longer you stay in public health and epidemiology, the more complicated things get. The communities we serve, they don't live in controlled environments. Problems don't always fit neatly into case definitions, and the best approach isn't the one with the significant p value. It's the one that actually works for the people you're trying to help. And here's the thing.

Early on, we're also taught to stay objective, remove the bias, keep a professional distance, and follow the data. But real life doesn't work that way. Communities aren't data points. They're people. And people bring nuanced context and unpredictability. So that's where the art issue comes in. The way we engage with communities, the way we adjust our approach in real time, that's not in the textbooks.

That's the part we create for ourselves. And this is a perfect example of this artistry in action. Some officers investigate foodborne outbreaks. Others respond to environmental exposures or infectious disease threats. And when we're deployed on an EPI-Aid, like you all just talked about, we leave our primary work behind and adapt to an entirely new challenge, bring our own signature approach to the work.

Because public health isn't one size fits all. We have to figure out what works, and that requires both science and creativity. So now I've told you about my love for the arts, but that extends to the culinary arts too. If someone was to peek at my TV algorithm, they'd see a whole lot of true crime. Messy Scorpio enters from stage right and cooking shows.

If ...and honestly, public health sometimes feels like one of those cooking competition shows where you are handed a box of random, sometimes questionable ingredients and have to make something great out of it. So

here is Melissa Danielson, a mentor of mine, a brilliant statistician and a health scientist, also a fellow foodie and a master at making something out of nothing when it comes to health data.

So, in recent years, our team in the Child Development in Disability branch was facing a real gap. We had almost no public health data on adults with ADHD. Clinicians and advocates had been sounding the alarm for years. Adults were struggling to get diagnosed and treated, but we didn't have the national data to support their stories. So, Melissa did what great chefs and great scientists do.

She opened the fridge, saw we had healthcare claims data, a meaty but sometimes messy ingredient, and figured out how to make it work. That analysis gave us a new lens. It showed who was providing care to millions of adults with ADHD. It gave shape to a problem that had gone unmeasured for far too long. And when the opportunity came to collect new prevalence data on adults with ADHD, thanks to Melissa and others on my team, they trusted me and handed me the apron.

Melissa passed away last June while we were working on that paper. But her influence is all over it. And when we released the research, we didn't just publish the numbers, we paired them with lived experience stories. Clinicians shared the clinical view, and adults with ADHD shared how it shaped their lives. And in doing so, we were able to elevate a story that had long been overlooked and amplify it in the voices of those who are living it.

Because the data gave us the facts, but the stories gave them power. And here's another reason why this matters in today's climate. Data and science don't always resonate the way they should. If we don't tell the story of our science clearly and carefully, someone else will. And the way it's framed might not be the way it was intended.

Because the truth is, stories last. Okay, now pop quiz. Just kidding. I promise I wouldn't do that. But seriously, if I asked you to name the most cited memoir of the past decade, what comes to mind? Now, I think I see some of you pulling out your phones now, and that's not the point. Because most of us will have to look that up.

As important as the scientific papers are, and they really are important, they don't always stick. But now, if I ask you to picture the Mona Lisa, you can see it almost instantly without me pulling it up on the screen. Not because it's the most detailed or even the most correct piece of art, but because it's memorable. It endures.

It tells the story and makes you feel something. But part of the reason why it endures is because we were taught to remember it. For many of us, we first encounter it in a textbook or on a t shirt far from its original context. The Mona Lisa didn't just last. It was curated into history, reproduced, promoted, and preserved.

Now, for some of us, the memorable works of art of ours don't exist in the Louvre. Maybe they're Basquiat or, Frida Kahlo. But the point is that art, like science, can reflect power. Who creates it? Who frames it, and who gets remembered? Now, another element of art is the technique. And I know for the epidemiologists in the room, we all love our technique as well.

We nerd out over clean code predictive models, a regression that runs on the first try without throwing an error. Thank you. But the most powerful work resonates whether or not you understand the technique. Because the best art transcends its tools. Technique isn't the point. It's just the path. And the point isn't the syntax. It's the story. And if we want our science to stick to mean something, we have to bring it back to the heart of the matter.

So when I started this talk, I started with a story about my family and this discipline that many of us hold dear. I've tried to convince you that we are both scientists and artists, and to see the power of the lived experience. But there something that was missing from this story. After that ballet recital, I remember Nana dealing with cancer, and I remember feeling helpless, partly because I was a little girl.

But as I grew up, I watched other members of my family face their own health struggles. And then I started seeing patterns, health challenges that weren't just personal but shared across my community, which at that time was Oakland, California. And when I went away to a suburban boarding school, I saw a stark contrast. Health struggles were still there, but they were different.

So, in Oakland, a diverse working class city, health challenges were urgent: invisible asthma, community violence, addiction, inadequate access to care. In Southborough, a small, affluent town, the issues are quieter, anxiety disordered eating, private struggles behind closed doors. These differences weren't just random, though. They reflected the context of people, the context people were living in, the environments, the resources, the systems.

And it's this idea that haunts me, reminding me that even the de-identified data represent real people in real context.

And those contexts sometimes include injustice, bias, and the other nefarious impacts of countless isms, all of which can systematically chip away at people's agency and power. And this is even more important now, as the language we use, the way we frame our stories is increasingly under scrutiny. So to those outside of public health, wave your hands. I think there's some people in here.

Awesome. Your stories matter more than you know when you share them with us.

Just as importantly, be mindful of the stories you share on our behalf, because each week, truth, care and trust to spread even faster.

Okay. All right. And to my people, the epidemiologists, the public health practitioners, the ones behind the data...Our job isn't just to analyze. It's to listen too.

To tell the story right. And tell it well, because that's how we build connection. That's how we build trust. That's how you build something that lasts. Data aren't just data. They represent real people, real communities, and real lives. And that's why public health can't just be science. It has to be art. Thank you.