Dr. Peter Hotez on the anti-science movement and declining Joe Rogan’s debate challenge

AMA Update covers a range of health care topics affecting the lives of physicians, residents, medical students and patients. From private practice and health system leaders to scientists and public health officials, hear from the experts in medicine on COVID-19, medical education, advocacy issues, burnout, vaccines and more.

Featured topic and speakers

In today’s AMA Update, Peter Hotez, MD, PhD, discusses why he declined Joe Rogan’s challenge to debate Robert F. Kennedy, the state of the anti-vaccine movement and whether he’s leaving Twitter for Threads. AMA Chief Experience Officer Todd Unger hosts.

Speaker

- Peter Hotez, MD, PhD, dean, National School of Tropical Medicine, Baylor College of Medicine

Transcript

Unger: Hello and welcome to the AMA Update video and podcast. Today we’re checking in with friend of the show, Dr. Peter Hotez, the dean of the National School of Tropical Medicine at Baylor College of Medicine and co-director of the Texas Children’s Hospital Center for Vaccine Development in Houston.

I'm Todd Unger, AMA's chief experience officer in Chicago. Dr. Hotez, welcome back. It's great to see you.

Dr. Hotez: It's great to see you, Todd. It's been a little bit, but I'm happy to see you.
Unger: It has been six months and a lot has changed. But unfortunately, one thing hasn't changed, which is the level of anti-science aggression that we've seen grow over the last few years. And in the "I can't believe I know someone this is happening to" file, you recently had a very public run with this kind of aggression when Joe Rogan challenged you to debate Robert F. Kennedy, Jr., about the safety of vaccines on his show and offered a startling $100,000 charitable donation for that appearance.

And then, thanks to a pile-on via Twitter, that amount quickly grew to $2 million and prompted online harassment, death threats and even physical stalking. So before we get into the details, I just want to ask, how are you doing? I hope these threats have subsided.

Dr. Hotez: Yeah, doing OK. You know, actually, this actually began a few days before. Many people don't realize it. I'd liken the start of this to when Steve Bannon, of all people, publicly announced on his social media feed that I was a criminal, which I thought was kind of interesting, given the source.

And I think that may have started this whole wave, because it seems like a pretty coordinated wave from people with political motivations. And so then, on the Rogan podcast, RFK Jr. started going after me, saying the usual nonsense tied to the pharma companies and Pfizer, totally tone-deaf or deliberately misleading.

Because in fact, as we've been talking throughout the pandemic. We've developed at Texas Children's Hospital in Baylor, a low-cost COVID vaccine technology that was licensed, with no patent, to vaccine producers in India and Indonesia. More than 100 million people—100 million people—received our COVID vaccine technology at the lowest possible cost, $2 to $3 a dose, no patent, minimizing strings attached.

So we actually provided an alternative model that said, you don't need to be a multinational pharma company to do this. So if anything, we help you maybe—even kept some of the big companies out of some of their biggest markets. So it's just the opposite. But that's just an inconvenient truth for these guys. And so—

And then came the pile on. Elon Musk, of all people, started trying to discredit me, and then Roger Stone weighed in. So it was really quite a den of thieves. And the problem is, when that type of attack is launched—it's not the first time that happened.

If you remember, Todd, we spoke about a year beforehand. It was actually on the day I was co-nominated for the Nobel Peace Prize. That evening, Tucker Carlson launched a rant against me and that set off a similar wave of aggression.

So when these guys—they know what they're doing, actually. When they lob grenades, they know the hordes will follow. And so it's been these unremitting attacks, with very much far-right extremist
leanings to it. So it's not been fun, you know.

You know, I already have built a really good relationship with the Houston Police Department and the Texas Medical Center Police, the FBI, the Anti-Defamation League, out of necessity. So—and they quickly rallied and helped out. But it's—you know, unfortunately, it's part of the new normal of standing up to this anti-vaccine, anti-science aggression.

It's become what started out with phony baloney around autism. And that's how I got involved, because I'd written the book, Vaccines Did Not Cause Rachel's Autism, which made me a public target. It has now become more or less a political movement with a lot of far-right extremist leanings.

And that's what I'm going up against. And so that helps people to understand why Steve Bannon would be targeting me. These are people I have never met—Steve Bannon or Roger Stone and that sort of thing.

So we can talk about some of their potential motivations, but that's what we're dealing with. It's still pretty rough out there. But I can't tell you how grateful that I am to you and to the American Medical Association, to the AMA, for your support throughout the pandemic on a number of fronts, including this. And so, AMA has been, really, one of the good guys through all of this, and that's deeply meaningful to me.

Unger: Now, you ultimately decided not to engage in this debate. You've had a lot of support from the news media and from the scientific community for that decision. Was this a hard decision for you? Is it something you would ever even consider doing or think about as being worth doing?

Dr. Hotez: Well, not in this particular instance and there's two reasons for that. I think, one, as I often like to say, science is not something, typically, that we work through a debate mechanism, right? I mean, what do we do in science?

We write our papers, submit them to journals like the Journal of the American Medical Association, JAMA. And it gets peer-reviewed, sometimes rejected, requests for major revisions—and so that's our currency. We work through scientifically peer-reviewed papers.

And also, meetings—again, like the AMA meeting. Right? That's why we have it—so biomedical scientists like myself can present in front of critical audiences—sometimes favorable, sometimes critical—so you can go back to your lab and fix potential problems.

So there is a way of doing it. It's not typically done through debate. As I like to say, you debate 18th-century Enlightenment philosophy and talk about Rousseau versus Bishop, Berkeley versus Hume or you debate politics. But science, we don't typically debate.
So that's as a general rule. Maybe there's some exceptions. We don't typically debate science. And then, there's the particular problem of RFK, Jr., who I've tangled with for years, with a number of phone calls at the request of the U.S. National Institutes of Health, to try to make him understand why vaccines do not cause autism. That was his original assertion.

And those calls were an exercise in frustration. Because he would continually move the goalposts on what his beef about vaccines was. First, it was claims that it was the measles, mumps, rubella vaccine that was causing autism, then thimerosal preservative.

And every time, the scientific community would debunk that then, through large studies that were very expensive, often funded by U.S. taxpayers. And then, there were claims they were spacing vaccines too close together— ... vaccines. So it became this kind of exhausting repertoire of whack-a-mole, where you would knock it down and come up with something else.

Or it was the HPV vaccine for cervical cancer and other cancers—he said—caused infertility or autoimmunity. And people have glommed onto that and copy-pasted that onto COVID-19 vaccines, which isn't true—or they cause something called chronic illness.

So I knew what would happen if I, quote, were to "debate" him or have a public discussion with him. It would just be this endless string of false assertions about vaccines that I'd always be one behind debunking. And I'm sure he'd come up with something new. Because he's not committed to the truth about vaccines. He has another agenda.

So I didn't see this—if I felt it was going to advance the science or advance the field, regardless of the money, I would have done it. But I think talking with someone like RFK around vaccines in public actually sets the field back. And I was pleased to see that The New York Times agreed, and the LA Times agreed.

And so that was—a number of other—U.S.A. Today came to my defense. So that was—and then, people would never expect in a million years—Mark Cuban was very supportive on Twitter. And then, Mark Hamill from Star Wars. I had Luke Skywalker—I have Luke Skywalker behind me. So I mean, so I got that going for me.

Unger: Those are two very good Marks to have on your side.

Dr. Hotez: And Captain Sulu from Star Trek—George Takei came to support me. So that was very sweet and very kind. But I think the bigger message is, this is a new normal, right? I mean, you're seeing these attacks on physicians, on health care providers, on biomedical scientists.

You're seeing this play out right now, with these phony House hearings around COVID origin, that—well, they're real hearings, but they're based on a disproven premise that there was some sort of
conspiracy to make the COVID virus. And that was never the case.

And so how we deal with this attacks, these politically motivated attacks, I think, is—I don't think anybody has the answer. And the health sector, in many ways, doesn't really know what to do. Because they are politically motivated attacks.

So the solution is a political—going to have to be a political solution at some level. And then, there are other things going on as well. When you talk to people from the political realm, it's interesting, what they tell me. They basically said, "Look, part of this is, Dr. Fauci is no longer paid for by the U.S. taxpayers, is no longer a public employee. He doesn't have the same visibility. They need new boogeymen to target, and maybe you're one of those, Peter." And that's not fun, right? But that may be part of it.

The other is the politics that—RFK, Jr., as a third-party candidate, has the ability to take votes away from President Biden in the upcoming election. And so maybe that's what's going on there. They needed me to help prop him up and I didn't go along with that.

But again, now, I'm out of my lane at this point. And so I don't know the basis of it all, but it is—it's a very scary time for medicine and for science in America. And thank goodness for the AMA. That's all. I'll leave it at that.

**Unger:** Well, you recently resurfaced an op-ed that you wrote for *The New York Times* back in 2017 before the pandemic. And it was called, "How the Anti-Vaxxers Are Winning." And now, kind of in retrospect, that seems even more relevant today than it was when it was originally published.

I know their arguments are the same. How have we seen the anti-vaxxers' tactics change and become more harmful over time?

**Dr. Hotez:** Well, it's grown in size and scope. It started out with small non-governmental groups making false claims around autism. And in some cases, those groups were monetizing the internet, selling phony autism cures or nutritional supplements. And in fact, the Center for Countering Digital Hate—it's amazing, we have to have something called the Center for Countering Digital Hate—says that these organizations are making millions of dollars monetizing the internet. And that's still around.

But I think what you're seeing now is version 2.0. And that started around this concept of health freedom or medical freedom. And maybe it's because individuals like me were debunking the phony autism claims and it was working, and they needed a new thing, and the new thing was to attach themselves to this concept of health freedom, medical freedom. They started getting PAC money, Political Action Committee money, here in Texas. And so it's become, first and foremost, a political movement.
And it's really taken off during this time of COVID-19, and with deadly consequences. And ultimately, this is why we need to care about it, because—I have a new book coming out in September. It's called "The Deadly Rise of Anti-Science." And it basically says that 200,000 Americans needlessly perished because they refused a COVID vaccine during our terrible delta wave here in Texas in the southern United States, and the BA.1 towards the last half of 2021, and the BA.1 Omicron wave in early '22, way after vaccines became widely available.

You know, 200,000 Americans needlessly perished because they refused the COVID vaccine, so that this anti-science—and they were victims, basically, of this kind of anti-science aggression. So this anti-science movement is a dangerous political force. But we don't frame it in that context. Too often, we toss it off as something called misinformation or infodemic, as though it's just some random junk on the internet, when in fact, it's organized, it's well-financed, and it's politically motivated.

Now, it's a killing force. And that's why we need to care about it—because if we're health care providers or biomedical scientists, you know, it used to be enough just to want to save lives. And now—an added burden is now trying to figure out a way to combat the anti-vaccine, anti-science aggression, because it becomes such a killing force.

**Unger:** Now, again, you have referred to the political underpinnings of this. And I think one of the things you've said is to expect it to get worse as we get closer to the election. It's already kind of bad. You've got people, like you talked about, weighing in on this.

You've got Elon Musk, even Jack Dorsey, getting involved. You've got harassment right outside your home. There's a lot of anger here. I mean, in all of the kind of exploration and interactions you have, do you have an understanding of where that comes from?

**Dr. Hotez:** Yeah, I think—well, part of it is, by my calling out, by naming names and groups that actually cause so many Americans to convince them not to get a COVID vaccine and lose their lives. I think what you're seeing is kind of a doubling down. So rather than use that as a pause for self-reflection, what they're doing is, I think they've decided that the best defense is a good offense.

And what they're basically saying is, it was not the COVID that killed Americans, it was the COVID vaccines, and attempt to blame the scientists for creating the COVID virus. So it's a way to revise history, to change the narrative ahead of the 2024 election. And I think that's part of it.

And I would imagine—I don't see this abating. It looks like the attacks are continuing to step up. And unfortunately, I'm in the middle of it, or in some cases, the lead, which, again, is why I'm so grateful for the AMA and why I was especially grateful to receive your Scientific Achievement Award. That kind of endorsement or backing from the AMA was so important for me professionally and is a sign to say that "We've got your back, Peter, and other biomedical scientists."
So that's why when Todd, when you give me the opportunity to talk to you in this kind of format, I always jump at the opportunity. Because this is how you get the word out to health care providers that—and to physicians and physician scientists—that you're not alone, that we know what's happening. And I think that's really important.

**Unger:** I'm curious, with all the experience that you have and what you've gone through, what advice do you have for physicians that confront this kind of misinformation and anti-science aggression in their practices, in their hospitals—although, hopefully, not getting called out by Joe Rogan, so to speak—although we did have a physician here a couple of months ago that had been through something similar. But how do you advise them on when it's smart and how to engage or when to let that go?

**Dr. Hotez:** Well, there's the engagement in your day-to-day practice, and then there's your engagement at the public level. I think in your day-to-day practice, you know, now, increasingly, you have patients that are coming in—or parents of patients, if you're a pediatrician—with some pretty crazy ideas from stuff they've downloaded on the internet. And it's very frustrating, and it's easy to get upset or angry.

But I think the way I recommend is recognize that these individuals themselves are victims. They're victims. They were targeted by politically motivated actors. And so to look upon them with some sympathy and empathy—I think that—as best you can do that, I think, that can help in the discussion.

At the public level, it's such a minefield right now, because especially on social media—what I do now is, I have to—if I'm on Twitter, I turn off my replies. Twitter has become especially toxic.

I haven't ventured into the new place yet. Threads sponsored by Instagram—I may give that a try at some point. But I think social media, in general, is—it's just become a lot more toxic.

So one of the things that I say is, if you want to do public engagement, there are things beyond social media. I use social media as just one of several tools that I use to get people to understand what the anti-vaccine, anti-science movement is about, which is my piece of—major piece of public engagement these days.

And then, in my case, I'm writing single-author books and doing interviews, podcast interviews, TV interviews, writing opinion pieces. So there are other ways to make a difference. And in some ways, social media, I find, is the least rewarding by far.

I mean, I do it to help promote the kinds of things I'm trying to get out there. But it is, by far and away, the most toxic and least rewarding. I think the other issue that a lot of physicians and physician scientists face is, the offices of communications of academic health centers are sort of behind the times and don't often understand what this is all about.
And they tend to have a different mindset. They don't—it's not—I mean, it's not that they don't care about social justice issues or combating anti-science. Their first responsibility is to look after the institution and make sure the institution is not placed at risk.

So their priorities are somewhat different. So too often, we get into this situation where scientists want to engage or physicians want to engage or speak out, and basically, the message from the academic health center or the hospital is, well, you have some academic freedom, doc, dot-dot-dot, don't screw this up and place the institution at risk. Otherwise, there'll be consequences.

And that has kind of a sort of—you're doing this feeling like you're doing this with the sword of Damocles over your head. And so that's problematic. So we need to have the leadership of our hospitals and academic health centers a little more in tune with the times and recognize that many physicians or health care providers are doing this to save lives. Because otherwise, a vacuum is created, and that whole vacuum fills up with the RFK Juniors of the world or the Joe Rogans of the world, that are putting out health misinformation that's killing people.

So you know, touting ivermectin over vaccines—that kills people. And it has—my estimate, again, is 200,000 Americans have perished because of this stuff. And so that if we are committed to saving lives, we're going to have to find a way to work around this, even if it does, at some level, create some exposure for the institution.

And so we need—that would be a great topic, I think, at a future AMA summit or conference, for instance—bring together some leaders of academic health centers with physicians who are speaking out and see what we can come up—not as a debate, but as a bona fide discussion of how we can start moving this forward. Because it's not going away. It's getting more and more toxic and more codominant with each passing week. And they say it'll exacerbate as we head closer to 2024, and after that, who knows what happens.

**Unger:** I guess my last question then, given what you've really just talked about—if we're in a situation where it's getting worse and you've got just the continuation of these kinds of conspiracy theories, and they're not fact-based—so if we can't fight this necessarily with facts, how do we fight it?

**Dr. Hotez:** Well, I think one is, it's still important to put out good information. And the AMA is doing that, and a lot of physicians and physician scientists are starting to do that. So that has to continue.

I think the problem is, though, that the anti-science or toxic communication is still dominant and that's what you're seeing if you go to Twitter. That's what you're seeing when you go to other social media platforms or these podcasters.

And how we combat that, I think, again, goes beyond the health sector and into the political realm. And I don't have an easy answer. I just know that it's becoming—this is probably one of the longest "I
don't know the answer to your question” answers I've given in a while. But it is dominant, and it is scary.

And in the past, it was annoying. In the past, it was taking away time from physicians' practice to deal with this nonsense. Now, it’s changed. Now, people are dying because of it. And that’s when it really does spill over into our lane. So we’re going to have to find a way to address it.

**Unger:** Well, Dr. Hotez, as always, it's been such a pleasure to talk with you. I'm sorry for what the last few months have brought and appreciate you standing strong in the face of that. We just really appreciate everything that you do and we'll have you back in the fall.

We want to talk to you about a book that you're writing, that's coming out on September 19, called "The Deadly Rise of Anti-Science" that you mentioned. Until then, stay safe, be strong, and we'll be back with another episode shortly. So in the meantime, you can find all our videos and podcasts at ama-assn.org/podcasts. Everybody out there, thanks for joining us. Please take care.

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