COMMITTEE ON OVERSIGHT AND ACCOUNTABILITY,

SELECT SUBCOMMITTEE ON THE CORONAVIRUS PANDEMIC,

U.S. HOUSE OF REPRESENTATIVES,

WASHINGTON, D.C.

INTERVIEW OF: PETER HOTEZ

Thursday, October 10, 2024

Washington, D.C.

The interview in the above matter was held in room 6400, O'Neill House Office Building, commencing at 10:01 a.m.

Appearances:

For the SELECT SUBCOMMITTEE ON THE CORONAVIRUS PANDEMIC:

MITCH BENZINE, STAFF DIRECTOR.
ERIC OSTERHUES, CHIEF COUNSEL
PETER SPECTRE, PROFESSIONAL STAFF MEMBER
[redacted], MINORITY STAFF DIRECTOR
[redacted], MINORITY SENIOR INVESTIGATIVE COUNSEL
[redacted], MINORITY CHIEF COUNSEL

For PETER HOTEZ and the BAYLOR COLLEGE OF MEDICINE:

KELSEY CLINTON, ASSOCIATE
AARON CUMMINGS, PARTNER
JAMES FLOOD, PARTNER
CROWELL & MORING LLP

Mr. Benzine. This is a transcribed interview of Dr. Peter Hotez conducted by the House Select Subcommittee on the Coronavirus Pandemic under the authority granted to it by House Resolution 5 and the rules of the Committee on Oversight and Accountability. This interview was requested by Chairman Brad Wenstrup as part of the select subcommittee's oversight of the Federal Government's response to the coronavirus pandemic.

Further, pursuant to House Resolution 5, the select subcommittee has wide-ranging jurisdiction, but specifically to investigate the origins of the coronavirus pandemic, including but not limited to the Federal Government's funding of gain-of-function research.

Can the witness please state his name and spell his last name for the record?

Dr. Hotez. It's Dr. Peter Hotez, H-o-t-e-z.

Mr. Benzine. Thank you, Dr. Hotez.

My name is Mitch Benzine, and I'm the staff director for the majority staff of the select subcommittee. I want to thank you for coming in today for this interview. The select subcommittee recognizes that you are here voluntarily, and we appreciate that.

Under the select subcommittee and Committee on Oversight and Accountability's rules, you're allowed to have an attorney present to advise you during this interview.

Do you have an attorney representing you in a personal capacity present with you today?

Dr. Hotez. Yes.

Mr. Benzine. Will counsel please identify themselves for the record?

Mr. Flood. Yes. James G. Flood of Crowell & Moring.

Mr. Cummings. Aaron Cummings, Crowell & Moring. We're both partners, and we represent Dr. Hotez, as well as the Baylor College of Medicine.

Ms. Clinton. Kelsey Clinton, Crowell & Moring. I'm an associate.

Mr. Benzine. You jumped to my next question.

Is there also an attorney present representing the Baylor College of Medicine with you today?

Dr. Hotez. Yes.

Mr. Benzine. And counsel already identified that.

Mr. Flood. Same counsel, for the record.

Mr. Benzine. All right. Thank you.

For the record, starting with the remainder of the majority staff, can the additional staff members please introduce themselves with their name, title, and affiliation?

Mr. Osterhues. Eric Osterhues, chief counsel for the majority, select subcommittee.

Mr. Spectre. Peter Spectre, professional staff member with the select subcommittee majority.

[redacted]. [redacted], Democratic staff director.

[redacted], Democratic chief counsel.

[redacted]. [redacted], senior investigative counsel, Democratic staff.

Mr. Benzine. Thank you all.

Dr. Hotez, before we begin, I would like to go over the ground rules for this interview. The way this interview will proceed is as follows.

The majority and minority staff will alternate asking you questions one hour per side per round until each side is finished with their questioning. The majority staff will begin and proceed for an hour and then the minority staff will have an hour to ask questions. We will then alternate back and forth in this manner until both sides have no more questions.

If either side is in the middle of a specific line of questions, they may choose to end a few minutes past an hour to ensure completion of that specific line of questioning, including any pertinent follow-ups.

In this interview, while one member of the staff for each side may lead the questioning, additional staff may ask questions.

There is a court reporter taking down everything I say and everything you say to make a written record of the interview. For the record to be clear, please wait until the staffer questioning you finishes each question before you begin your answer, and the staffer will wait until you finish your response before proceeding to the next question.

To ensure the court reporter can properly record this interview, please speak clearly, concisely, and slowly. Also, the court reporter cannot record nonverbal answers, such as nodding or shaking your head, so it is important that you answer each question with an audible verbal answer.

Exhibits may be entered into the record. Majority exhibits will be identified numerically. Minority exhibits will be identified alphabetically.

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. We want you to answer our questions in the most complete and truthful manner possible, so we will take our time. If you have any questions or do not fully understand the question, please let us know. We will attempt to clarify, add context to, or rephrase our questions.

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. If we ask about specific conversations or events in the past and you are unable to recall the exact words or details, you should testify to the substance of

those conversations or events to the best of your recollection. If you recall only a part of a conversation or event, you should give us your best recollection of those events or parts of conversations that you do recall.

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. Although you are here voluntarily and we will not swear you in, you are required, pursuant to Title 18, Section 1001 of the United States Code, to answer questions from Congress truthfully. This also applies to questions posed by congressional staff in this interview.

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. If at any time you knowingly make false statements, you could be subject to criminal prosecution.

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. Is there any reason you are unable to provide truthful testimony in today's interview?

Dr. Hotez. No.

Mr. Benzine. The select subcommittee follows the rules of the Committee on Oversight and Accountability. Please note that if you wish to assert a privilege over any statement today, that assertion must comply with the rules of the Committee on Oversight and Accountability.

Pursuant to that, Committee Rule 16(c)(1) states: "For the Chair to consider assertions of privilege over testimony or statements, witnesses or entities must clearly state the specific privilege being asserted and the reason for the assertion on or before

the scheduled date of testimony or appearance."

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. Ordinarily, we take a 5-minute break at the end of each hour of questioning, but if you need a longer break or a break before that, please let us know, and we will be happy to accommodate. However, to the extent that there is a pending question, we would ask that you finish answering the question before we take the break.

Do you understand?

Dr. Hotez. Yes.

Mr. Benzine. Do you have any other questions before we begin?

Dr. Hotez. No.

Mr. Benzine. Thank you. I want to again thank you for being here voluntarily. We certainly appreciate it, and it certainly makes everybody on the table's lives easier.

A Sure.

EXAMINATION

BY MR. BENZINE:

Q I want to start with baseline questions on your education and experience up until now. And I know it's a long CV and a long resume, so we'll try to keep it as brief as possible.

Where did you attend undergraduate school, and what degree did you graduate with?

A I was an undergraduate at Yale University. I graduated Phi Beta Kappa with a major in molecular biophysics and biochemistry.

Q And then I know you have an M.D., but I believe you have a Ph.D. as well? Can you -- where --

A Yes. So after graduating, I went to the combined M.D., Ph.D. medical scientist training program at Cornell Medical College -- now called Weill Cornell Medical College -- and Rockefeller University -- it used to be called the Rockefeller Institute for Medical Research -- it was a combined M.D., Ph.D. -- where I first developed our human hookworm anemia vaccine that's now showing protection in clinical trials.

Q Thank you.

Who is your current employer and your current job title?

A My current employer is Baylor College -- Baylor College of Medicine. My job title is professor of pediatrics and molecular virology and microbiology. I'm also the dean, founding dean of our National School of Tropical Medicine, and I'm also co-director of our Texas Children's Hospital Center for Vaccine Development. Texas Children's is the pediatric affiliate of Baylor College of Medicine.

Q Thank you.

A I also have joint appointments at other universities.

Q That's a follow-up question.

A Okay.

Q Very briefly, maybe just going back a little while, like your last two employment stints before Baylor College of Medicine, can you run through your professional career?

A Oh, yeah. So after I did my M.D., Ph.D. in New York, I did pediatrics because that was the most closely allied with vaccines. So I did pediatrics at Mass General Brigham Hospital in Boston. I did a pediatric infectious disease fellowship at Yale. Stayed on the faculty for almost a decade until 2000 in pediatric infectious diseases.

And then in 2000, I came to D.C. to become chair of microbiology at George

Washington University where I did that for 11 years, up till 2011, and then relocated to Texas in 2011. So I've been in Texas for almost 14 years.

Q Thank you.

Do you currently hold or have you previously held any honorary positions?

A I have both honorary and adjunct positions.

So I'm also with the James A. Baker III Institute for Public Policy at Rice University in what's called the fellow in disease and poverty.

I have an appointment at the George Bush School of Government at Texas A&M with the Scowcroft Institute for International Affairs. Also, with the Hagler Institute for Advanced Studies there.

And I also am one of the few Baylor College of Medicine professors who is also a professor at Baylor University in Waco, and I'm university professor of biology there.

Q Thank you.

Do you currently hold or previously held any positions on boards of companies or nonprofits?

A I was the -- for many years, I was simultaneously when I was at GW the president of Baylor -- of the Sabin Vaccine Institute, which is a nonprofit.

And I serve on several boards. I'm on the board of the U.S.-Israel Binational Science Foundation jointly with the State Department on the Board of Governors; also with the Korean RIGHT Foundation. That stands for Research Innovation in Global Health Technologies. I'm with that as well.

Q Thank you.

Are you a member of the National Academies?

A A member of the National Academy of Medicine. I was elected in 2008. And I also served as U.S. science envoy in the Obama administration 2015 to 2016, but

that was as a private citizen. I was not a government employee. And served two Texas Governors, Governors Rick Perry and Greg Abbott, on their infectious disease task force.

Q And I don't what they are called. Do you serve on any task forces or subcommittees within the National Academies?

A The National Academies? I was on their global health subcommittee for many years but not recently.

Q All right.

And then you've kind of mentioned this, the special envoy a little bit, and then maybe a State Department board as well, but have you ever been on any government advisory boards?

A Like what's an example of a government advisory board?

Q That State Department one would be one.

A Yeah, certainly that one.

Q Any other like --

A Certainly the WHO board, the World Health Organization. I was on their Science and Technical Advisory Group for what's called TDR, their tropical disease research. And I was on their STAG, Scientific and Technical Advisory Group for Neglected Tropical Disease, at the World Health Organization.

Q Can you go into a little bit more detail on the science envoy position?

A Yes. This was a position started by Obama, by President Obama, in 2009. It was to hire distinguished -- I mean, to bring in distinguished scientists to serve as kind of science emissaries for different parts of the world. And he, I mean the President, did this after his Cairo speech in 2009, shortly after he was inaugurated, by reaching out to the Muslim world in the arts and sciences.

And I was one of the cohorts of individuals. So I was the U.S. science envoy for

the Middle East, in North Africa, focusing a lot on Saudi Arabia and Morocco and Tunisia, those were my three major countries, to build -- it's for science diplomacy, to build scientific relationships between countries where we could have improved diplomatic relations.

Q And you said you were -- that role was not an official government employee. It was as a private citizen?

A That's right. So I carried -- I did not carry a diplomatic passport. I carried just my usual U.S. passport. And I would travel with State Department staff in the embassies.

Q Do you currently hold or have you previously held a security clearance?

A No.

Q Thank you.

I'm going to -- if you've read our previous transcripts, you know I go through a long list of names and just ask yes or no.

A That's fine.

Q So if you don't recall specifics about the communications but recall that you communicated, say yes or no but don't recall specifics. And then the prompt is any kind of communication --

Mr. Flood. Apologies. No, just coughing.

Mr. Benzine. Okay.

Mr. Flood. Sorry, Mitch.

BY MR. BENZINE:

Q Any kind of communication with the following individuals regarding the origins of COVID-19, Wuhan Institute of Virology --

A Hold on. Hold on.

Q Yeah.

A Origins of COVID. What is it? Wuhan Institute?

Q Uh-huh. Or EcoHealth.

A Or EcoHealth. Okay.

Yes, go ahead.

Q Secretary Alex Azar?

A Not on those issues.

Q Dr. Deborah Birx?

A Not on those issues. I have certainly communicated with her but not on those issues. More for --

Q On vaccine issues?

A Vaccines and when COVID was starting up in the U.S., it was more about how to manage the pandemic.

Q Okay.

A Same with Azar and same with -- with Azar, he had me -- I was -- I have a daughter with autism and had been writing -- I've written a book called "Vaccines Did Not Cause Rachel's Autism." So he brought me out to the World Health Assembly to talk on that.

Q Dr. Robert Redfield?

A Not on those topics.

Q Dr. Ashish Jha?

A Not on those topics. I mean, I've talked a lot -- worked a lot with Ashish but not on those issues.

Q Yeah.

Mr. Jeff Zients?

A No. I have no relationship with Jeff Zients.

Q Mr. Andy Slavitt?

A Not on those topics. Well, no, that's not true. I have talked with -- I have had conversations with him, peripheral conversations.

Q And we'll come back and try to jog specifics.

Mr. Rob Flaherty?

A I don't know him.

Q Secretary Xavier Becerra?

A Not on those topics.

Q I'm going to butcher this name. Dr. Arati Prabhakar?

A I don't think I know him.

Q Dr. Susan Rice?

A I don't know Susan Rice.

Q Ms. Neera Tanden?

A Don't know.

Q Ms. Shalanda Young?

A Don't know.

Q Dr. Anthony Fauci?

A Not on those -- not on these -- those topics. I've talked with Dr. Fauci a lot but not on those topics.

Q Dr. Lawrence Tabak?

A Not on those topics.

Q Dr. Hugh Auchincloss?

A Not on those topics.

Q Dr. David Morens?

A Just the email. Just emails.

Q Dr. Ping Chen?

A I don't know of Ping Chen.

Q Dr. Cliff Lane?

A Not on those topics. More on the vaccine side.

Q Dr. Michael Lauer?

A I don't know him.

Q Dr. David Christian Hassell?

A I don't know him.

Q Mr. Gray Handley?

A Don't know.

Q Mr. Greg Folkers?

A Don't know.

Q Dr. Erik Stemmy?

A He was my program officer for our vaccine grant but not on these -- not on those topics.

Q Dr. Emily Erbelding?

A Just for vaccines.

Q Dr. Tedros?

A Yes.

Q Dr. Jeremy Farrar?

A Yes.

Q Dr. Kristian Andersen?

A Yes.

Q Dr. Michael Farzan?

A Don't know him.
Q Dr. Eddie Holmes?
A I've certainly talked with Eddie, but I don't think we've talked about those issues.
Q Dr. Ian Lipkin?
A Not about those issues.
Q Dr. Andrew Rambaut?
A Don't know him.
Q Dr. Christian Drosten?
A No.
Q Dr. Ron Fouchier?
A No.
Q Dr. Marion Koopmans?
A Yes.
Q Dr. Peter Daszak?
A Yes.
Q Dr. Hongying Li?
A Don't know.
Q Dr. Michael Worobey?
A Yes.
Q Dr. Jonathan Pekar?
A I know his papers. I don't think I've spoken to him, though.
Q Dr. James LeDuc?
A I don't think we've spoken about that. Certainly I know Jim very well.
Q And he's down in Texas, too.

A Yeah. He was heading to Galveston.

Q Dr. Shi Zhengli?

A No.

Q Dr. George Gao?

A No.

Q Dr. Ralph Baric?

A More on the vaccine. I don't think we've spoken about origins.

Q Dr. Lanying Du?

A We're collaborators on vaccines but not about COVID origins.

Q And Dr. Yusen Zhou?

A No.

Q Okay.

Going back to Mr. Slavitt, you said kind of like on the periphery. Do you recall the contents of those conversations?

A Yes. It was -- we had talked off and on during the pandemic, and I was getting concerned that the scientists needed more backing from the White House, and he was kind of my link there. And I inquired why we weren't getting better support from the White House on that.

Q Do you recall about when that conversation took place?

A At least a year ago.

Q So it would be safe to say 2023?

A Probably.

Q All right.

Do you recall how he responded?

A I don't recall the specifics of the answer. It was a friendly conversation.

Q Do you recall what, if anything, specific prompted the phone call?

A No, I don't recall that.

Q Dr. Tedros, was that in the kind of scope of the Lancet review, or were you involved in the WHO review?

A No. No, it was of different auspices.

So I've been there twice in the last couple of years really to get some help in our -- both our COVID vaccine that reached 100 million people in India and Indonesia, talking to him about that, and our hookworm anemia vaccine.

But I did have a conversation with him about China, and we both expressed some concern about the lack of transparency by the Chinese and how we can better work with them.

Q Do you recall about when that conversation had taken place?

A Well, one was in 2020 -- one was this year and the other one was 2023.

Q Dr. Farrar, do you recall the contents of those conversations?

A So primarily about our vaccines, because he's chief scientific officer of WHO. And before then, and I've known him since he was an Oxford professor. And I don't -- there were some emails regarding the Lancet Commission.

Q Specific -- and I'm not going to put words in your mouth -- but specifically regarding Dr. Daszak's position on the Lancet Commission?

A Well, assuming we get into it, the bigger issue of the fact that the entire COVID origin task force was removed from the Lancet Commission and how we can bring back that expertise.

Q All right.

Dr. Andersen, do you remember those conversations?

A Kristian Andersen. I think we had some conversations -- well, we've had

conversations I think about his experiences in this House committee.

Q I imagine those weren't fun conversations.

A They were instructive actually. They weren't bad. I mean, they were --

Q He had quite the experience, I think.

A Yeah, I don't think he wants to go through that again.

Q Probably not.

Dr. Koopmans, do you recall those?

A With Dr. Koopmans -- it's the one at Erasmus University, right?

Q Uh-huh.

A I think those are more direct messages on Twitter regarding our -- we have had discussions about the natural evolution of any zoonotic spillover of COVID-19.

Q Any conversations with her regarding EcoHealth or Dr. Daszak?

A Possibly. I'd have to look back at the direct messages, but it wouldn't surprise me if it came up.

Q And then Dr. Daszak. You're on a lot of emails --

A Yeah.

Q -- but I'm going to -- if you ever had any actual conversations with him?

A Some phone conversations as well.

Q What were those regarding?

A More about how I could support him with his board -- there was a couple of conversations about that -- or support the organization and our mutual -- mostly it was about the fact that -- concern that this is an important organization for global health.

There's so few organizations actually doing these kinds of ecological studies in bats, whether it's for filoviruses that cause Ebola or Marburg or for coronaviruses or for Nipah viruses and the importance of the organization.

Q There were a couple of those emails and text messages where you said that you would reach out to Major General Friedrichs at the White House or the Secretary of NIH to support EcoHealth. Did you ever end up doing that?

A No.

Q Why not?

A Well, I have regular conversations with Paul Friedrichs regarding pandemic preparedness. And on one of those conversations, I do remember -- again, it was in the context of why we need an organization like EcoHealth to do that kind of surveillance and why, if that goes down, that it would be missed.

But I didn't call -- I don't recall calling him specifically to intercede. But it did come up in the conversation, in one of the conversations. We talk every few weeks.

Q In those conversations, it wasn't to be like why are they being debarred or anything? It was just more of an advocacy for surveillance organizations?

A That's what I recall.

Q All right.

Dr. Worobey, again, don't want to, but was this surrounding his market origin papers?

A Yes. And I remember having a very long conversation with him in a -- we shared a taxi to the airport at a conference and talked about his work.

Q Do you recall anything interesting or specific out of that conversation?

A Just that it reinforced my view that this virus arose through zoonotic spillover. And I was very impressed with him also as a scientist.

Q Have specifically Dr. Morens and Dr. Daszak, have you spoken to them about your testimony today?

A Not Morens. With Daszak, in an earlier phone call, I did. It came up in the

conversation.

Q What was the content of the conversation?

A It was more about, again, kind of trying to help him with advocacy for why we need an organization like that, and I mentioned that I'll be meeting with you.

Q Did he try to assist your testimony in any way?

A No.

Q All right.

A No, he did not. He actually said some nice things about you, actually.

Q We can talk about that when we go off the record.

[Laughter.]

There was --

A Actually, a number of -- the other person I spoke to that you didn't mention was Angie Rasmussen. She specifically mentioned you're very smart.

Q Well, I appreciate that. Dr. Rasmussen, we can agree to disagree respectfully on some things.

I want to go back to, just in case something can jog your memory, Dr. Shi. You've collaborated with Dr. Shi?

A No.

Q Nothing? No official collaborations but on papers together I think.

A No, I've only, to my -- I only have had one -- first of all, I never even heard of Dr. Shi until 2020, and I only have one email from her recently, like a couple of months ago, because she's an editor of a journal, and she invited me to review a paper for the journal, which I declined.

Q Okay. That's helpful on that note.

Dr. Du, formerly at the blood center. I think she's at Georgia State now.

A It's Georgia State or Medical College of Georgia. Whichever. Georgia.

Q Down in Georgia now.

A Yeah, it's in Georgia.

Q And most of those --

A She's a close collaborator or has been a close collaborator in the past, and she was on our grant.

Q The, like, MERS spike protein biodefense grant? Is that the one you're talking about?

A SARS and MERS.

Q SARS and MERS?

A Yes.

Q And I'm just getting into kind of like what has been reported out in the ether. It's reported that she was the spouse of Dr. Zhou.

A I've heard that also, but I've never asked her about it. In fact, I didn't -- till then, I didn't even know she was married.

Q Yeah, okay. So that was going to be my question, if you had ever asked her about Dr. Zhou.

So my next --

A I mean, in the time -- we've been in multiple in-person meetings and Zoom calls and things like that. I didn't ask. She didn't offer that she had a husband. So, actually, I was surprised. She's got a husband?

Q Any conversations with her about -- and we'll get into -- and you mentioned it on your -- regarding your conversation with Tedros. Any conversations with her about struggle to get data out of China or transparency or anything in those issues?

A No, because we didn't really need any data out of China. This was -- these

were studies to -- we developed three vaccines, actually, one for SARS, one for MERS, one for COVID, all in collaboration with Langying. And her work was more about looking at cross-reactivity because when we made the SARS vaccine and the sequence of COVID came online in 2020, our first thought was, hey, maybe we could take the SARS vaccines out of the freezer, repurpose it and start vaccinating people with the SARS vaccine. That would cross-protect of our COVID.

So she was instrumental in doing studies to look to see whether there was sufficient cross-reactivity between SARS-1 and SARS-2, which, ultimately, we decided not to pursue that avenue and just to bite the bullet and make a new COVID vaccine, which really worked out great.

Mr. Flood. Could I interrupt for one second?

Could we just be very clear maybe with the spelling of the doctors. There's a Dr. Shi, S-h-i, and another with Shibo in the name. Could we just clarify who you're talking about?

Mr. Benzine. Correct. I'm talking about Zhengli Shi, who was at the Wuhan Institute of Virology until a couple months ago when she went to a different university.

Dr. Hotez. No, no. You're talking about Lanying Du.

Mr. Benzine. In this question, yes. But the Shi question was --

Mr. Flood. Thank you. Just for the record, so we're clear, that when he's answering questions and he knows the doctor that he's responding to.

Mr. Benzine. Yes.

Dr. Hotez. That's Lanying, yeah. I have no relationship with Dr. Shi.

BY MR. BENZINE:

Q But the scientist that he's referring to is Shibo.

A Yes. So Shibo Jiang and Lanying Du were colleagues together at the New

York Blood Center.

Q Yeah. And, again, just for clarity, when I asked about Dr. Shi, it was your understanding I was asking about Dr. Shi Zhengli?

A That's correct.

Q Thank you.

A Just that one email from her.

Q I want to ask, just because I don't know everyone that works at all of these institutions, any communications regarding those three topics with the following institutions.

The Wuhan Institute of Virology?

A I have no relationship with the Wuhan Institute of Virology.

Q The Wuhan Centers for Disease Control and Prevention?

A No. I didn't even know there was a Wuhan.

Q The Chinese Center for Disease Control and Prevention?

A So I, during the 1990s, I worked, did a lot of work at the Institute of Parasitic Diseases, which is part of the Chinese Academy of Preventive Medicine, which became the Chinese CDC. They were one of the only branches of the Chinese CDC in Shanghai. But not about COVID.

Q All right.

Wuhan University?

A No.

Q The Academy of Military Medical Sciences?

A No.

Q Thank you.

I have kind of just -- I'm a lawyer, not a scientist, I've never written a scientific

paper, so I have kind of a structural question on how they happen.

A I think you've learned a lot probably.

Q I have. So there are -- and maybe you'll welcome this question, maybe you won't -- there are a lot of news stories about Dr. Zhou being on some papers that, on the NIH report or I referenced, under that biodefense grant.

In the process of drafting --

A Dr. Yusen Zhou?

Q Yusen Zhou.

A Yeah.

Q And you're not an author on the paper, but you're the PI on the grant that is then cited in the acknowledgements. I believe Dr. Du is the author and maybe she cited the grant? Is that how that would work?

A I think so.

Q Okay.

A So those papers, what happened was, after we had made the SARS vaccine, we were actually offered to green light with NIH to move forward into clinical trials, and basically, it was Erik Stemmy and his colleagues said: What new plan? Because by then MERS had emerged, and they basically said stick -- keep the SARS vaccine in the freezer. Now we want you to make a MERS vaccine. So we said okay, which we ultimately did.

But those papers where I saw Yusen Zhou on were on MERS, or Middle Eastern Respiratory Syndrome, working with Lanying. To my knowledge, there was no funds that went to China. It was all for Lanying's work.

Q So it would have been like the --

A Or Shibo.

Q Yeah. The grant went -- you're the PI on the grant, subgranted to the New York Blood Center at the time?

A Well, so the subgrantees were Walter Reed Army Institute of Research, who also did the manufacturing, so was U.S. Army. The UTMB Galveston, they did the mouse studies showing that it works in mice. And then the New York Blood Center that was doing sort of those antigenicity studies in New York.

Q So separating down to the blood center and then the paper, both of them could be on the paper with your grant acknowledged because Dr. Du acknowledged yours, and Dr. Zhou could have just acknowledged some other funding source from presumably China?

A Yeah, that makes sense.

Q In those situations, how much communication would occur on, like, the process of drafting the paper, or would Dr. Zhou draft his chunk and just, like, copy and paste it in?

A I don't know how they worked together.

Q Okay.

A That would be a good question for Lanying and Shibo.

Q Thank you.

I want to go through some -- and I apologize. The first hour is just really boring.

A No, no, no.

Q We'll get into fun stuff later.

Again, thank you and your counsel for very rapidly producing a number of emails and text messages, and we very much appreciate it. And some of this has been answered previously. The text messages are primarily Dr. Daszak, Dr. Roberts, and then Dr. Keusch, I think are the three that are primary?

A I think on the list I think those are probably the only ones I had.

Q Okay. So that was my answer, if you had any text messages with anyone else on the list in the letter?

A Well, the forensics company, or whatever it is, they had instructions to download everything, and then they gave it to the lawyers.

Q Perfect. Thank you.

The list included some U.S. Government employees. Do you remember ever texting with anybody regarding COVID generally? And then we can --

A Can you give me examples?

Q Dr. Collins?

A With Francis Collins, I don't think I ever had a text with him. It was more emails.

Q Dr. Fauci?

A I have texted Dr. Fauci but not about this.

Q All right. Do you recall was it COVID related?

A I think -- most of the time I just worked through emails. I think there were a couple of texts where he had gotten an award, and I congratulated him or vice versa.

Q Dr. Morens, do you recall any texts with him?

A I don't think I have texts. No.

Q You definitely have multiple of his email addresses, though.

A Yeah, I can't --

Q Yeah, I know.

I think that's it from the government folks.

And, again, just custodial questions. I have no reason to kind of doubt this.

You primarily -- and it sounds like 100 percent of the time -- use your Baylor email

address?

A Only.

Q Only? Okay.

A Just because I'm technologically impaired. So I make it -- I keep it as simple as I possibly can.

Q Both simple and safe.

A And I'm very open. I'm just a very open and transparent individual.

Q I can go through the list, but I think maybe it will -- did you ever communicate with any of those individuals via Slack?

A I don't know what Slack is.

Q What about Teams?

A Microsoft Teams?

Q Uh-huh.

A Only if they were -- only if there was a Microsoft Teams meeting. But I think of it like Zoom. It's a different version of Zoom.

Q Yeah. What about GChat, Google Chat?

A No.

Q You mentioned this. Anyone on that list that you've sent Twitter direct messages to?

A Yes. I'm trying to think. I have to go back and look at the list.

Q I can read it, to the best of your memory, if that helps.

None of the government folks.

Dr. Farrar?

A Maybe, because he's on Twitter I know. But mostly emails to Jeremy.

Q Dr. Andersen?

A I think he's off Twitter now, but I don't think I did direct messages with Dr. Andersen.

Q Dr. Holmes?

A Possibly.

Q And then previously you said Dr. Koopmans you had?

A Yes, definitely Dr. Koopmans. That's the only way I communicate with her.

Mr. Cummings. And just to clarify, that would be about these topics? That's your question? Is that right?

Mr. Benzine. I can come back to that. Just to his memory, I mean.

Mr. Cummings. Okay. Are you asking then -- just to clarify the question -- are you asking whether he's communicated with them on Twitter or whether the communication -- that he's communicated with them on Twitter via direct message about EcoHealth and --

Mr. Benzine. Starting with just communicated and then we'll whittle down to the, like, form that it's going to be and then ask more specific.

BY MR. BENZINE:

Q So we're at, like, a maybe with Farrar and Andersen and a yes with Koopmans. Is that fair?

A Yes.

Q Dr. Daszak?

A Yes.

Q All right. I think that's all of them that have Twitter accounts that were on that list.

A Okay.

Q So then the specific question. Any communications with Dr. Farrar over

Twitter regarding those three topics -- origins, EcoHealth, or WIV?

A I'd have to look.

Q What about Dr. Andersen?

A I'd have to look also.

Q Dr. Koopmans?

A Definitely Dr. Koopmans. But more -- you know, with Twitter, it's been more about -- because it's just such a toxic platform. It's more kind of consoling each other when you come under attack.

Q Yeah.

A That's probably 90 percent of those direct messages.

Q And then Dr. Daszak, those three topics?

A Yeah.

Q Do you have WeChat?

A No.

Q All right.

A Is WeChat like WhatsApp?

Q Yes, but it's the Chinese version of it.

A I have --

Q You have WhatsApp?

Do you recall any COVID EcoHealth-related communications over WhatsApp?

A No. It's for friends.

Q Yeah.

Some more general questions.

You've obviously received taxpayer-funded grants previously?

A Well, that NIH grant is a good example.

Q Do you have an idea as to how much in total?

A You mean over the years?

Q Uh-huh.

A I'd have to look. But the biggest one most recently was that $6 million grant. And then I'm sometimes co-PI or on other people's grants as well for our hookworm anemia vaccine and others.

Q And just because, again, I've seen this on the internet, and I'm hopeful that you welcome this question. Just because it's a $6 million grant doesn't mean you get $6 million, correct?

A Yeah, they think it comes in cash in a suitcase in my drawer.

Q And the salaries per hour or per month are negotiated with NIH?

A One of the things that I say when we start improving science literacy in K through 12, it's not only the content, but we should also educate the American people about the process of science and what it means to get a Federal grant and how it goes to the institution, not to the individual.

Q Yeah.

There have been a lot of online comments from all sorts of people that I know you are aware of.

Do you think Congress has the authority to oversee grant money?

A Absolutely. You provide it.

Q Yeah. Perfect. Thank you.

There was an article -- and we don't need to get into the content of the article. It was written by Michael Hiltzik on June 6th, 2024, about our letter to you. I don't know if you remember it.

A Yes.

Q Did you have any discussions with him prior to that publication?

A I can't remember. If you want to discuss the content of the letter --

Q Yeah, just some of it. And I know -- and I'm going to -- I might jump --

A Well, I mean, I wasn't very happy -- to be honest with you, I wasn't very happy with the tweet because it was written in a very snarky, sarcastic way. And it's not that I have a big ego. It's that when that happens, it launches a wave of death threats. I mean, I am stalked in my home. I'm stalked when I give lectures. I receive threatening emails, phone calls to my office.

And when that thing went out, which I thought was unnecessarily provocative -- and especially for someone like me. What am I doing? I make low-cost vaccines for the world. Our vaccine reached 100 million people in low- and middle-income counties. I mean, what didn't I do during this pandemic to help the American people and to help the world?

And then to make it look like I'm engaged in something nefarious just launched this wave of death threats. So I think that's one of the things the Hiltzik article did, was set the record straight on who Peter Hotez is.

Q And that's actually what I wanted to talk to you about, because it's our understanding that you have received threats, and, obviously, strongly condemn all of them. And it's been in a couple transcripts, so I'm not, like, breaking news here, but I have, too. Again, I put myself out there, so it is what it is. And the chairman has, too.

And don't know if you know that Chairman Wenstrup was on the baseball field when the political assassin went there to kill all of the Republican baseball players.

One of the concerns I had with that article, and the chairman did, too, was what appears to be references to that. Hiltzik wrote, and I'm quoting, "The subcommittee turned" --

A References to what?

Q Shooting.

A Oh, I don't remember that.

Q Hiltzik wrote, I'm quoting, "The subcommittee turned its gun sights on Fauci." And then another quote was, "Wenstrup and his colleagues can't be unaware that their public smear of Hotez may well place him in the crosshairs of people intent on doing him harm."

I know there's -- you just voiced some of the concerns with the tweet. Do you have concerns with that kind of language in an article?

A Well, I think it was -- it's a public rebuke of you putting out -- of the committee putting out a tweet like that. I mean, I can't comment specifically on the type of language he used. And I'm not aware of Representative Wenstrup's history. And I certainly have nothing against Representative Wenstrup.

Q No, I know.

A He's never, unlike some other Members of Congress, he's never personally gone after me. So, you know --

Q No. And it was more of like this is -- we had actually got on the phone with Mr. Hiltzik. I got on the phone with his editor and had to remind him that this is a two-way street. You write that kind of stuff and then we get threats, too.

A Got it.

Q So it's just one of those things.

A Thank you for that.

Q Okay. On topic now. I want to talk about -- and I know vaccinologists by trade that have done a lot of tropical diseases. So I want to talk about kind of like origins of pandemics, origins of viruses, how we get here, what they look like.

Zoonotic event, however that looks, a farmer catching it from his -- catching a virus from his livestock, someone being close to bat caves and spillover occurring that way, or a laboratory research-related accident, are those the two primary pathways for a virus to spill over into the human population?

A I'd say not laboratory accident. That's very rare. I can't think of any significant epidemic that was started by a laboratory accident.

But zoonotic spillover is significant. I write a book called "Preventing the Next Pandemic" that sort of goes into this. And then one of the most common questions I'm asked these days is -- goes like this: "Hey, Doc, what the heck is going on?" That's the question.

So when you try to distill down what they mean by that, what they mean is, why are we seeing this increase in cadence of pandemics? You know, we had SARS, the original SARS in 2002. Then we had H1N1 in 2009. Then we had Middle Eastern Respiratory Syndrome in 2012. Then you had Ebola in West Africa in 2014 and Zika in 2016, Ebola again in 2019, now COVID-19. Now we've got H5N1. What the heck is going on?

And by the way, we have all of these vector-borne virus infections now really scaling up on the Gulf Coast in Texas that we're looking at.

And the answer is we don't know, but this is what really needs to be investigated. And I think climate change is a big factor because it's shifting around our bat habitats so bats are going into new venues that they've never been before. Remember, Ebola, Nipah, coronaviruses all originate from bats.

I think deforestation is a big factor. I think with all the urbanization, people are coming into closer contact with bats and their secondary intermediate animal hosts.

So I think it's a constellation of those 21st century forces that's promoting this.

Q Do you remember how many worldwide cases SARS-1 had?

A I believe it was 800.

Mr. Flood. Can I just ask? If there are very specific numbers, Mitch, you're looking for, if we could -- we'd be happy to provide any information we have on that. But if we could just be very clear about that. I'd prefer he not speculate on very specific answers.

BY MR. BENZINE:

Q It's 8,000? Is that -- do you think you could have --

A Eight hundred deaths, yes.

Q Cases around 8,000?

A I believe so.

Q And MERS, around 3,000?

A I'd have to look back.

Q And then COVID-19 has been like 800 million or something?

A Twenty million deaths.

Q Yeah. Do you have any thoughts on -- I mean, "What's up, Doc?" I'll ask the question that you're asked on the street.

A Another one, why was COVID so much more?

Q So much more.

A I've been asked that a lot. And, of course it's a complicated answer. But I think central to that is the fact that, unlike SARS or MERS, if you had SARS or MERS, you were sick. You were not going to concert venues and hanging out at bars and going to family gatherings. You were either in the hospital or very sick at home, right?

It was a very high lethality disease in terms of double digit percent mortality. And if you had it, you were extremely ill.

The big problem with COVID, which prevented contact tracing and everything else, is for every individual who was in an intensive care unit or in the hospital, you had two or three individuals with either no symptoms or minimal symptoms, and they were out in the community spreading the virus.

I think that simple observation I think could explain a lot.

Q The asymptomatic spread or low symptomatic spread.

A That's right.

Q You mentioned it a little bit earlier that laboratory events have been rare. There have been some. Have lab accidents, laboratory-acquired infections happened before?

A Yes.

Q Have they happened with coronaviruses before?

A They may have. There may have been some with SARS.

Q And, again, the definition of, quote, unquote, "lab leak" has kind of fluctuated through the 5 years. So I want to get your take on some scenarios and whether or not you would consider them to be a laboratory-related spillover.

A researcher in a lab intentionally manipulating viruses and getting infected?

A I don't know why you would have to put in the intent manipulating virus. If a laboratory researcher gets infected, that's -- you know, and gets infected with the virus the individual is working on, that's -- yeah, that's --

Q What about conducting serial passage with a natural virus and getting infected with that virus?

A Again, what the specific nature of the manipulation of the virus is to me seems irrelevant. The fact is if they're working with a virus in the lab and they get infected with that virus. And that has happened with multiple different viruses.

Q So then these two might be the grayer areas.

A researcher sampling viruses in the field and getting infected?

A I don't think of that -- it's not a laboratory, right? They're out in the environment.

Q Thank you.

And, again, some kind of general questions.

As you know, the chairman has said it numerous times, that the kind of overarching goal of this is to investigate, to discover how we can -- what went wrong and what we can do better.

A Well, I would say a little bit more. Remember the reason we need to care. The reason we need to care is we've now had three major coronavirus pandemic epidemics in the 21st century. We had SARS in 2002. We had MERS in 2012, which is still ongoing to some extent. Now we have COVID-19.

So my concern is that what we're seeing now is this regular cadence, this regular sequence of coronaviruses, in part, because you have coronaviruses in bats across the face of East Asia and China. I believe there's a high likelihood we could see another one, a fourth one.

So I think the single most important thing that we've not done is to really do the proper outbreak investigation in the field, sampling bats and other potential animal reservoir hosts, livestock, other intermediate animal hosts, really doing the outbreak investigation in central and southern China and going into Hunan Province and then to Southeast Asia. That's where I think is where the greatest bang for the buck is right now.

Q What would that investigation look like? Like, taking those stalls at the market and seeing what farm they were and tracing them back and doing the testing?

A And going back to the original bat colonies as well also and really understanding how -- because I don't think we truly -- I mean, the papers are beautiful papers. The paper in Cell that just came out. The other one is in Science. But there are still gaps in our understanding in a very granular level how that happens.

I think that's where we really need to have an international team of scientists in China and elsewhere in Asia really doing this and putting resources toward that.

Q Would that kind of investigation require the cooperation of the Chinese?

A Yes, absolutely.

Q And they haven't been terribly cooperative.

A And that's the problem here, right? And that's where the lamenting of the lack of transparency and the frustration that I have, as well as many of my colleagues, that how could we break that impasse.

Q And Dr. Tedros has spoken publicly about that, too.

A And that's what I spoke to Tedros about when I was there, the same kind of wringing your hands. How can we make this happen?

Q And this is a question I think we've now asked 50 witnesses. Is the theory that COVID-19 was the result of a lab-related incident a conspiracy?

A I've written in 2021 that a lab can be considered or should be considered. I think it only spills over into becoming a conspiracy when it moves into science denialism, meaning that it's one thing to say, yeah, overwhelming likelihood it's zoonotic spillover, we cannot entirely rule out a lab leak. That's not a conspiracy.

The conspiracy comes when individuals, especially individuals without qualifications in virology, exclude the likelihood of zoonotic spillover, number one, and also use that as an opportunity to attack hardworking scientists and intimidate them.

I think that's when this -- you know, I kind of use the term conspiracy in a broad

sense, basically science denialism or anti-science. That's where it becomes a conspiracy.

Q Thank you.

In the last couple minutes in this hour I want to talk to you about kind of when you first heard about COVID and how you heard about it.

So reported on ProMED in December 30th and publicly confirmed December 31st-ish 2019?

A I think I first heard about it maybe New Year's Day or January -- early in January.

Q So no awareness prior to public reporting?

A That's correct.

Q All right.

How did you learn about it?

A I think in news reports. And then the big piece was when the SARS-2 sequence came online. I think it was in bioRxiv the second week in January. That's when it put a lot of things into motion.

Q Talking about the sequence, you make an awful lot of vaccines. Can you explain the importance of having the sequence?

A Yes. Well, remember, we had made the SARS vaccine, and it was basically sitting in the freezer. And when the sequence came online in bioRxiv in January, we noticed it was about 70, 80 percent similar -- SARS-2 was 70, 80 percent similar to SARS-1. And I said, wow, potentially if the SARS-1 -- the immune response to the SARS-1 when administered the vaccine could potentially cross-protect against SARS-2.

And I became really interested in the idea that maybe we could hit the ground running on our SARS. I mean, the American taxpayer's already paid for it, right? It's out. We have it. We could start clinical trials almost immediately and work through

the -- work with the FDA, get a clinical trial started, and maybe accelerate a vaccine in a period of weeks or months to have it before the summer.

That's where I really got -- and that was what prompted me to contact the NIH, Erik Stemmy, contact my colleagues at Baylor College of Medicine to see how we can move that forward.

Q And then in Dr. Farrar's book, it's called "Spike," he wrote a paragraph, and I'm quoting, "Eddie has screenshots taken from social media in China about the coronavirus sequence. They suggest the full genome was known by a genomics company in China by December 27th, 2019, and then reported to the Chinese CDC and the hospital who provided the sample on the 27th and 28th of December. The sequence was eventually public January 11th or 12th."

So you were pretty close on the second week of January. And you just kind of said that the original goal when you first saw the sequence was a vaccine by the summer.

Would the 2 and a half weeks between December 27th and January 11th have made a difference?

A Ultimately, we abandoned the idea of making -- we couldn't really get a lot of enthusiasm in the scientific community with our SARS vaccine. Everybody, including the people we spoke to at the NIH, ultimately, they felt strongly you have to move right to SARS-2. And we said, sure, let's do that.

So we actually got some support from NIH through an R56 extension of the original grant to do that. And that's what involved Lanying in our New York Blood Center and our scientists there. And we worked pretty quickly to make that SARS-2 vaccine.

Q And --

A But so you're asking?

Q If the 2 and a half weeks makes a difference.

A Everything could have made a difference. Anything could help, sure.

Q And then in Dr. Daszak's transcribed interview last November, he said that he became aware of a coronavirus that was 20 percent divergent from SARS-1 circulating in China by December 30th.

All the public reporting at that point was undiagnosed pneumonia. I don't think Dr. Gao confirmed it was a coronavirus until early January. The sequence, obviously, January 11th.

Did you have any conversations with Dr. Daszak about how he would have known more specifics than what was being publicly reported?

A I didn't know Dr. Daszak at that time. It didn't happen till later through the Lancet Commission.

Q Any conversations with him afterwards about, "Hey, Doctor, you had a collaboration in China. Did you know anything?"

A No, I did not.

Q And my last couple questions before we take a break.

You have talked and we will continue to talk a little bit about kind of the lack of transparency coming out of China early on. It was -- I don't know if you recall -- but it was Dr. Eddie Holmes that made the sequence available first, and he did it on behalf of a Chinese doctor, Dr. Zhang Yongzhen. Does that sound correct?

A I don't remember who put it up on the original bioRxiv paper.

Q Dr. Yongzhen's lab was then shut down for, I'm quoting, "recertification by the Chinese authorities." Do you have any knowledge of what that could mean?

A No. No.

Mr. Benzine. I think that's a good break. We can go off the record.

[Recess.]

[11:15 a.m.]

[redacted]. Dr. Hotez, my name is [redacted]. I'm with the Democratic staff on the select subcommittee. I want to echo our majority colleagues' thanks and appreciation for you being here.

It goes without saying, but you are one of the Nation's preeminent experts in vaccines, and so I'd like to take a few minutes to collect your perspectives on some topics in this area, and I'd like to begin with the COVID-19 vaccine specifically.

Dr Hotez. Yeah.

EXAMINATION

BY MR. LICHTMAN:

Q Just as a starting point, can you explain the role that the COVID-19 vaccine had in saving lives and reducing suffering from the COVID-19 pandemic?

A Yes, I'd be happy to do that.

The studies by my colleague and friend Alison Galvani at Yale find that in the United States COVID vaccines probably saved 3.1 or 3.2 million lives and averted 18 million hospitalizations.

So no question this has had a huge impact on the health of the American people. I mean, if it wasn't for those vaccines, instead of 1-plus million deaths, it would be 4 million deaths. I mean, it just would have been absolutely catastrophic.

And, in addition, now we know COVID vaccinations also have other benefits. So this virus is a thromboembolic virus, so it's not only causing respiratory illness. Now we know it's causing heart attacks, it's causing strokes. So the prevention of heart attacks and strokes from vaccination, huge, and also the prevention of long COVID.

So absolutely game-changing in terms of its impact in the United States, and the same globally in places where the vaccines were made available. And that's where we

came in, to make the vaccines that the Pharma companies wouldn't make.

Q Of course. And I believe either similar or perhaps the same research out of the Commonwealth Fund also showed that the COVID-19 vaccines significantly reduced medical expenditures here in the United States and helped contain some of those costs.

Do you agree with that?

A Absolutely. I can't remember the exact figure but it was really high.

Q But despite its historic contributions to moving society past the darkest days of the COVID-19 pandemic, there have been suggestions that COVID-19 vaccines are unsafe.

Can you please share your perspective on the safety profile of the COVID-19 vaccine? More specifically, what do we know about the safety of the COVID-19 vaccine and what steps were taken to ensure and verify its safety, even as efforts were made to accelerate its deployment and development?

A Just for clarification, are you asking specifically about the United States or -- because different -- our vaccine was different from the ones used in the United States.

Q Let's start with the vaccines that are approved here in the United States, but if you would like to offer a perspective on other vaccines, please feel free to do so.

A Yeah. So I think the vaccines for COVID have had an excellent safety record. And not only do they have an excellent safety record, I think one of the things that people don't appreciate is that the FDA, together with the CDC, have one of the most robust systems of vaccine safety monitoring the world has ever seen.

We have multiple parallel systems of vaccine safety monitoring. We have the Vaccine Adverse Events Reporting System, through Vaccine Safety Datalink, through CSIA, and multiple venues.

And as an example of how robust those detection mechanisms are, they were able to pick up extremely rare vaccine side effects.

So it was found during testing that the adenovirus-vectored vaccine from J&J caused thrombotic thrombocytopenia, which is a very serious side effect, in about one in half a million, one to a million individuals. And then the mRNA vaccines in young males, about one in 12,000, one in 20,000 could result in myocarditis. So I think it was pretty impressive that we were able to pick up those rare side effects.

I think what's really important to mention, though, is the anti-vaccine groups tended to exaggerate the side effects of the vaccine without telling the other side of the story, that it's the virus that's causing thromboembolic events, heart attacks, stroke, and myocarditis, and that the vaccines prevented a lot of those things from happening.

Q And with respect to the consideration that went into both the emergency use authorization process for the COVID-19 vaccines here in the United States and then eventual full approval, is it your opinion, of course, that those processes were robust and generated products that were safe for consumers?

A Yes to that question, but I'll even throw in a little bit more. It was impressive how quickly they moved on doing very large clinical trials, 60,000 individual clinical trials, 45,000, I think, for one of the other ones.

So large-scale clinical trials done under very -- done under an amazing quality umbrella. So it was a pretty impressive program.

Q And a similar standard of rigorous safety was maintained and has continued to be maintained both for COVID-19 vaccine booster products as well as updated COVID-19 vaccine products. Is that correct?

A That's correct. And that's why it's so disappointing for me that we've had so much vaccine refusal and hesitancy both around the original vaccines and the

subsequent boosters or annual immunizations.

Q We have heard suggestions, though, that the COVID-19 vaccines could be dangerous for specific populations, including pregnant women, including adolescent men. How do you respond to these types of concerns?

A Without a doubt, the benefits of vaccination vastly outweigh the risks, and it's not by a small margin.

So, for instance, in pregnancy, pregnant women were among the most vulnerable populations in terms of going into the ICU or losing their lives. And vaccines had a huge life-saving effect on -- particularly on pregnant women.

And for the adolescents and younger individuals, I was very concerned that there was this false narrative that was popping up that was saying only older individuals need vaccines and younger populations don't. And they would purely focus on the death rates and cite relatively low death numbers.

But two things about that. One, ignoring the fact that the death rate was still higher than influenza, for which we vaccinate. And remember, this virus does so much more than simply cause -- does so much more than hospitalization and death. It's also causing long COVID, heart attacks, strokes. And young people are still vulnerable to all of those things. And that narrative was always sort of pushed out by the anti-vaccine groups.

So I think this is one of the things that I've been pushing hard on and even recommend, in my discussions with the White House pandemic coordinator and others, to say, in terms of the messaging, why people need to get -- now, with these new rounds of annual immunization, why young people still need to get them, because of the impact on heart disease.

And one of the best ways to protect your heart health is to get vaccinated. One

of the best ways to prevent long COVID is to keep up with your vaccines.

And, of course, we've had the horrific tragedy that I've written about in detail of the massive loss of life among people who refused the COVID vaccine in 2021.

Q Now, to be clear, there is a system that is in place here in the United States to detect and compensate for rare but serious adverse events that are related to vaccines.

You noted this a few minutes ago. But the system was in place during the pandemic and, for example, it detected adverse events in patients who received the Johnson & Johnson COVID-19 vaccine, ultimately leading to its removal from the market.

The system does play an important role for ensuring that Americans can be confident in vaccine safety, and it is important that the Federal Government continue to invest in it as part of its efforts to promote vaccine confidence.

However, it does have some limitations, and these limitations have resulted in misunderstanding regarding the safety of the COVID-19 vaccine, particularly as it relates to detection systems like the Vaccine Adverse Event Reporting System, or VAERS.

Could you discuss the current limitations relating to vaccine-related adverse event detection and reporting systems here in the United States and how members of the public should interpret data from these types of programs, VAERS as an example?

A Yeah. That's a very good point. And that's why I earlier alluded to -- mentioned the fact that a lot of people are told only about the Vaccine Adverse Events Reporting System. That's just one of several parallel systems that we have in place. This is why it's so robust.

The Vaccine Adverse Events Reporting System sometimes will be called a passive system, that any event that happens after an individual gets vaccinated could be included in that, and the vast majority of events that are included in the VAERS reporting system

turn out not to be related to the actual vaccination, the immunization.

And that's something that people don't understand. It's meant as kind of a highly sensitive but not very specific mechanism for looking for adverse events. And the proof's in the pudding, because it picked up two very important, very rare adverse events, both for the mRNA vaccines and for the J&J vaccine.

The problem has been anti-vaccine groups have weaponized the VAERS reporting system by claiming that anything that's in there must be causally related. And that's where we need better public communication to help people understand that.

Q And so while VAERS does play an important role as part of a multilayered surveillance system for adverse events here in the United States, it is not the only layer. It should not be taken as the only layer.

And there are instances where there is not a causal link that's established between what may be reported to VAERS and the vaccine in and of itself?

A That is correct. And that's why we have these other parallel systems. So it's kind of essentially an early warning system of things that need to be investigated, and then you do the next level of investigation with the other systems.

It's a fabulous system, and it's worked beautifully for childhood immunizations for years, and it's been very robust for COVID vaccines.

But, again, you have anti-vaccine groups that weaponize this. And so you see this on social media, this whole "hashtag died suddenly," where anyone who died after some period after they get vaccinated, the anti-vaccine groups want to assign it to it, even famous individuals.

And it causes a lot of damage and requires a lot of advocacy and public debunking of this, which is something that I've gotten involved with because of my daughter Rachel, who has autism and intellectual disabilities.

So a few years back, I wrote this book "Vaccines Did Not Cause Rachel's Autism," because that was the original assertion against vaccines, false claims that vaccines cause autism. And I wrote this not only to do a deep dive, providing the evidence showing there's no link between vaccines and autism, but I found it was very helpful, because the other thing would be, "Okay, Doc, you're saying it's not the vaccines. What does cause autism?"

And there we did a deep dive in the book looking at the genetic causes of autism, the hundred autism genes that have been identified by the Broad Institute of Harvard/MIT, who did helix and genomic sequencing on my daughter Rachel and my wife Ann and I to find Rachel's autism gene at Baylor Genetics.

And now we even have more complete information using brain assembloids or organoids, this is work done out at Stanford Medical School, using neurons with autism genes showing apparent migratory pattern. So it's really a complete story, and that's very important in that kind of message.

The problem is it's a little bit like I call whack-a-mole or moving the goalpost. You've knocked down one assertion and then another one pops up.

So this has been going on -- and I've been doing this for 25 years, and it's become a parallel career for me. Because I feel, as a vaccine scientist, it's almost as important to now counter vaccine misinformation as it is to make vaccines.

So if you go through all of the different assertions, first they said it was the MMR vaccine. That was The Lancet paper in 1998.

And then it was thimerosal preservative that used to be in vaccine. And then it was spacing vaccines too close together. Then it was alum in vaccines.

Then they moved to the HPV vaccine for cervical cancer and other cancers. They said it was causing autoimmunity or causing infertility -- which, by the way, if you notice,

you might have heard COVID-19 causes infertility. They just copied and pasted the false assertion onto the COVID-19 vaccine.

And now the new flavor of the month is something called chronic illness. So they've made it so vague that it was harder to debunk.

And that's why I've spent a lot of effort to debunking that. And, unfortunately, that's what came off the wheels with COVID-19.

Q So from your 25 years of experience in this space -- and, as a brief aside, I note I think the shared priority of both the majority and the minority is the continued work of strengthening our systems that we have in place for future public health response, and, of course, vaccines being a very relevant component of that work.

So from your 25 years of experience, what observations do you have about work the Federal Government could be doing to strengthen these type of detection systems?

A I don't -- well, I think it's -- I think the detection systems are fairly robust. I think the problem is not in the detection systems. I think the problem is in -- two problems.

One, how do we improve our vaccine safety messaging to explain to people why vaccines are safe. For instance, we still don't really explain why you need COVID vaccination to protect your heart health or to prevent long COVID. That message should be repeated over and over again.

I also think that we need to be more cognizant of the damage being done by anti-vaccine groups. And in my book "The Deadly Rise of Anti-Science," I point out that 200,000 Americans needlessly perished because they refused the COVID vaccine during the Delta and BA.1/Omicron waves in 2021 and 2022.

They were victims of a very expanding anti-vaccine ecosystem, and now that's spilling over to childhood immunization.

So I'm very worried about the future of our whole vaccine system in this country.

Q And my sense is while we work to manage the continued and I think incredibly significant threat of vaccine hesitancy here in the United States, there is also a need to approach with empathy and kindness people who have experienced adverse events from vaccines that are serious and making sure that we are not dismissive of any sort of instances of harm that they may have experienced.

I would appreciate your perspective on the role that compensation programs that exist in the government for these serious but rare instances of adverse events related to vaccines. What role do those have in helping to promote and strengthen vaccine confidence in the United States?

A You know, it's not really my area of expertise on the details of the vaccine compensation program. I know it's -- it actually is -- tends to favor those who are filing complaints as opposed to having to go into the courts on their own with attorneys. That's about the basis of understanding.

Q And then when it comes to the broader mission or objective of fortifying declining vaccine confidence here in the United States, what other steps do you think the Federal Government could be taking?

You mentioned improving our vaccine safety messaging. Are there other areas where we can be taking a sort of heavier hand or a stronger role in addressing this issue?

A Yeah. This is where it's become problematic, because it's become an expanding anti-vaccine ecosystem that is promoted on cable news channels -- certain cable news channels. It's promoted by politically motivated anti-vaccine groups on social media. So it's on the cable news channels. It's on social media. Even in some of the mainstream press you're seeing a lot of anti-vaccine content.

And the problem that I'm seeing is that people don't appreciate the urgency of

this. This is not just a sign of sort of an inconvenience. The fact that 200,000 Americans needlessly perished because they refused the COVID vaccines. Remember, they are victims. They are victims of what I consider a predatory movement. This has become a lethal force in the United States -- 200,000 Americans dying, including 40,000 people in my State of Texas after vaccines were widely available.

The big question that I've asked is: How do we begin chipping away at this? Because this is -- it's not really even something I think the health sector knows what to do anymore, because we, with some exceptions, we're putting out a lot of good health information about vaccines. There are things we could do better in the messaging.

But I think the health sector doesn't know what to do at this point in terms of how we can do something more substantially to defeat anti-vaccine activism, because it's such a lethal force.

Q And with respect to this issue of misinformation relating to the COVID-19 vaccines, could you share your perspective on perhaps the distinction between COVID-19 vaccine-related misinformation versus someone who just misunderstands or lacks knowledge about how COVID-19 vaccine works, and whether or not these issues are interrelated, are they separate, that landscape?

A Well, the way I think of this is remember what happened during the Delta wave where at that point -- this is starting in the summer of 2021 -- the vaccines were more than 90 -- were about 80 to 95 percent -- I'm sorry, between 80 and 90-plus percent protective of severe illness or preventing death, and yet so many individuals were refusing to get vaccinated.

And that was horrific to watch, because you knew what was going to happen. People were going to lose their lives. And this really began to speed up during the Delta wave.

And I was getting so frustrated, because you'd see on certain podcasts, Spotify podcasts, they're bringing in all the prominent anti-vaccine activists, even at political conferences, platforming these anti-vaccine activists.

And when it became linked to American politics, I thought that was going to be really dangerous. And what I would say is, look, I don't care about your politics, that's your right as an American citizen, but how do we uncouple the anti-science from this that was causing people to engage in dangerous health behavior.

So I think this is -- when I say the health sector doesn't know what to do at this point, it's going to have to have partly a political solution.

Q And as a result of the misinformation and confusion regarding the safety and effectiveness of the COVID-19 vaccines, we have begun to observe spillover effects into the uptake of other vaccines, childhood vaccines in particular.

And at times it seems like the percentages by which uptake is decreasing are sort of de minimus or small in percentage; but oftentimes even a 1 percent decline in uptake has significant ramifications across the entire childhood population.

Can you speak a little bit more about that phenomenon?

A Yes. So there was a recent Gallup poll which looked at and asked amongst the questions: Do you think a -- the vaccine is more -- for childhood immunizations -- is more dangerous than the disease it's designed to prevent?

And, unfortunately, it's -- the number has gone up significantly. And also, it's the same political partisan divide among -- that's similar to the reason why people refuse COVID vaccines as well.

So it has become fully ensconced in American politics, and this is why it's becoming so dangerous.

So I'm worried that we could see soon an unraveling of our whole vaccine

ecosystem. And we have detected polio in the wastewater of New York. We have seen measles outbreaks in the United States. And I worry this is now going to become a regular occurrence.

So spillover is not only zoonotic spillover, but it's spillover from -- that vaccine hesitancy, the vaccine refusal that accelerated during the time of COVID-19 is now spilling over to childhood immunizations.

And it's expanding globally as well. And that's why I met with Tedros, because that same U.S. style anti-vaccine activism has now moved into the international realm.

Q And with respect to this anti-vaccine sentiment, I think it may be reasonable to suggest that the rise of this anti-vaccine sentiment is related to some extent to kind of distrust that we see towards scientists and towards public health officials here in the United States.

Would you agree with that characterization?

A Yes, absolutely, that part of the anti-vaccine movement is to portray scientists as kind of shadowy individuals in white coats plotting nefarious things. And we need to do a much better job helping the American people understand what a scientist does on a regular basis and that we're real people also.

Our friends at Research America policy group do these studies every couple of years where they ask the following question: Can you name a living American scientist? Can you name a living scientist? And the numbers are always about the same. Every 2 years, it's 75 percent of Americans cannot name a living scientist, which is amazing.

And when they do attempt to name a living scientist, a lot of times they'll say Einstein or Jonas Salk -- and, of course, they've moved on. Or what they'll do is they'll name Neil deGrasse Tyson or Bill Nye -- who are terrific. I love them to death. They do a lot of important work.

But they're not so much working scientists in the sense of what I do or what my colleagues do, which are in lab meetings, or what it means to do a major revision of a scientific paper, or what it means to submit a grant application and the grant going to the institution, not to the individual, or that most grant applications get turned down for funding and the frustration associated with that, or what goes on at a lab meeting, or what goes on in a scientific conference. Why we don't debate science with unqualified individuals. All of that narrative I think we need to build back into the system.

Q Before we shift gears slightly on topics, I just want to make sure, is there anything else you would like to add on the subject of vaccine safety, vaccine misinformation, addressing vaccine hesitancy?

A I think we do have to have a national dialogue about this, because I think no one in the Federal Government -- and this transcends Republicans or Democrats or administrations -- has really wanted to make a good faith effort for really speaking in very direct terms, like I'm speaking to you now, about vaccine refusal, vaccine hesitancy, and the fact that it's become so lethal.

And how we have that national dialogue and how we can begin chipping away at it I think is going to be a real challenge for the next administration, because it has already reached crisis public health proportions.

Q I'd like to shift gears slightly to the process of developing not just the COVID-19 vaccine but the way that we can replicate some of the successes we saw in developing that vaccine for future novel viruses and future public health threats.

And so I think one of the significant triumphs of the pandemic was the speed with which a safe and effective COVID-19 vaccine was developed and eventually brought to market, a success that was built upon years of vaccine research, meaningful support from the Federal Government, and effective collaboration with the pharmaceutical industry

during the pandemic.

As we look to preparing for future public health threats, what types of lessons or best practices, in your opinion, should we be taking away from the development and deployment of the COVID-19 vaccine, and are there places where the Federal Government could stand to improve in these efforts?

A Yes. I think there's a few points to make.

I think, one, and this was -- Operation Warp Speed did a few things right and they did a few things -- could have done some things better.

What they did right was recognize that we should not invest in any one single technology, that you need a portfolio of technologies to apply to a given disease pathogen, because you never know what's going to be the most effective.

I do worry now that everyone is kind of running to the mRNA basket, but people have to recognize that any given specific technology, each one has advantages versus disadvantages. For mRNA, the advantage is you can make a piece of mRNA very quickly and move into an epidemic situation fairly quickly.

But no technology is perfect. In the case of mRNA, we know that its durability is not as robust as some of the other vaccine technologies. And now we know the mechanism of that. That's because of absence of triggering long-lasting plasma cells.

So the point is that for any new epidemic, any new epidemic pathogen, we should really think about a portfolio of vaccines.

I think the other problem -- among the other issues was there's -- one of the deficiencies of Operation Warp Speed was the exclusive focus on the Big Pharma companies. And the thinking was only the Big Pharma companies have the chops to pull this off and we could never get our vaccine on the radar screen here in the United States, or any support.

So there was about $30 billion in public support went for mRNA and other vaccine technologies. Because we were doing this at Texas Children's Hospital and Baylor College of Medicine we just did not have the lobbying clout and all those other things to really get support from Operation Warp Speed.

Fortunately, one of the blessings of being in Texas and at the Texas Medical Center is we were able to get some private funding, not billions but a few million dollars, enough to move forward and accelerate our COVID vaccine, which we provided, with no patent-minimizing strings attached, to India, to Indonesia, to Bangladesh, and other countries and were able to move pretty quickly and get it scaled up and produced.

And ultimately, a hundred million people got immunized with our -- from our laboratory with the Texas Children's Hospital, Baylor College of Medicine vaccine. Low cost, three dollars a dose, an older technology that parents trusted because it's the same technology as the hepatitis B vaccine that they already vaccinated their kids against, simple refrigeration, no onerous freezer requirements.

It really checked a lot of boxes for global health, and I was thrilled to be able to make that contribution. It got recognized by the National Academy of Medicine with their David and Beatrix Hamburg Award last year.

The frustration we had was we never had a mechanism to -- I think the American people would have benefited from that vaccine as well. I mean, people knew about it. We were getting emails, especially from people from the U.S. military. "Hey, Doc, I heard about your vaccine. My troops will take that. Can you get our vaccine into the U.S.?" And we just never had the help.

I mean, we were set up -- we're set up mostly for a global health vaccine. I think it would have been advantageous if we could have had that vaccine in the U.S. population.

So how do we fix that? How do we -- it's not to demonize the Pharma companies either. They do a lot of good. They provide a lot of vaccines for the Gavi Alliance. But how do we enlarge the tent to say, not only focusing on the Big Pharma companies, recognizing there are other actors who can make a contribution.

Q And so one concrete lesson we could draw from our conversation with you today for future public health responses and vaccine development is the importance of strengthening Federal partnerships with academic research institutions and other settings beyond just industry settings for this work.

A That's absolutely the case.

Q And so you mentioned that you, yourself, of course, did research for COVID-19 vaccine development. And I think we've heard over the arc of the select subcommittee that there were years of preexisting research that formed a strong foundation for the efforts that we saw during the COVID-19 pandemic to quickly develop and deploy a COVID-19 vaccine.

Just out of curiosity, in your estimation, how long might it have taken to get a COVID-19 vaccine to the finish line if we did not have that preexisting body of research in place?

A That's a great question. In fact, this came up a lot. And one of the problems that we had in the pandemic was there was no limits on the communications of the Pharma companies.

And the press releases from the Pharma companies, remember, are not meant for you or for me. They're meant for the shareholders. And they tended to spectacularize their accomplishments and make it sound like they created a miracle.

The problem with that is it negated all of the years or decades of research that went into funding by the National Institutes of Health and other bodies for coronavirus

research, both at the fundamental level and even things like our vaccine.

If it wasn't for that research, there was no way the Pharma companies would have hit the ground running making mRNA vaccines.

And so I think the untold story about the 3 million lives saved through COVID vaccine were the decades of research that the NIH undertook to support basic research on coronaviruses, and also early vaccine development like ours that we've been doing over the course of a decade.

As an example, I talk about my colleague Susan Weiss, who's a National Academy member, and she's a professor at the University of Pennsylvania. She's a coronavirus researcher, but was working on a mouse coronavirus that caused a mouse hepatitis. And people would say, "Well, why is the NIH funding that, it's not even a human-related disease?"

Well, that work provided fundamental virologic research that built up our whole body of knowledge for all -- for human coronaviruses as well, which is always something very unique about the NIH, that they will fund research that could be a couple of degrees of separation from translational medicine, because of that scientific expertise.

And I think that's important, that we keep that going, because that allows us to have the ability to make interventions, that wide portfolio of interventions.

Q And so we've heard I think testimony in the select subcommittee in support of that kind of research, so-called pure research in certain ways, research that does not have sort of an immediate come-to-mind sort of scientific application but that is applicable for future research purposes to both sort of strengthen and tailor in the event of future novel viruses.

In your opinion, what do we lose if we are not funding that kind of research?

A What we lose is we start depending on other countries for them to make

breakthroughs and hope that it will eventually filter to the American people. And so we lose our ability to prioritize the health and safety of the American people if we abandon that.

Q And so at the risk of asking an obvious question, with respect to future pandemic prevention preparedness, is it reasonable to say that now is the time to be investing more resources into research initiatives at the National Institutes of Health and our Federal public health agencies as opposed to less?

A Yeah. You hit it brilliantly. As I said in my earlier comments, we are now having this regular cadence of catastrophic pandemic viruses.

I think there's a high likelihood we're going to have a fourth major coronavirus pandemic potentially even before the end of this decade, that's a possibility, given the fact that we've seen this regular cadence. We already are seeing H5N1 avian influenza occurring in the Great Plains and in Texas.

And something else that nobody's talking about really is the big uptick in vector-borne virus infections, especially on the Gulf Coast and in south Texas and south Florida, in part due to climate change and urbanization. Dengue, Zika, Oropouche virus, Chikungunya, possibly even yellow fever, that's all coming to the Gulf Coast and Texas, and we are not adequately investing in those. And the parasitic diseases.

So this is our new normal. And what I worry is there's a lot of anti-science rhetoric going out there that, to summarize, is basically saying, "Well, we have to contain the virologists, not the viruses."

And this is why it's important to really have a frank discussion about the importance of zoonotic spillover, because this is what's going to be our big threat. If you think about our big -- what are the existential threats to the American people right now, it's nuclear proliferation, climate change, and pandemic threats. And I think we're now

probably less prepared than ever to deal with the pandemics that will surely arise.

Mr. Lichtman. We're approaching a good stopping point. Just let me see if -- unless you have anything you'd like to add at the end of this round, Dr. Hotez, I think we can go off the record.

[Recess.]

BY MR. BENZINE:

Q So, Dr. Hotez, we left off talking a little bit about when COVID first emerged how you heard about it, and then some of the actions -- or I guess lack thereof -- of the Chinese Government and some of the things they talked about.

I want to ask one question, because it's been floating around. Has there ever been a member of the sarbecovirus lineage with a furin cleavage site before?

A There are furin cleavage sites in most subfamilies of coronaviruses.

Q But not sarbecovirus?

A Not particularly in sarbecoviruses that I know of.

Q So we were talking a little bit about China and some of the actions they took. It was also reported that the original kind of whistleblower, Dr. Li Wenliang out of China, eventually passed away. He was forced to sign a nondisclosure agreement, not publicly disclose -- discuss the virus.

A After he passed away or --

Q No, before, before he passed away.

A You know how the Chinese --

Q You know, it's China, you never know.

[Laughter.]

If you know, like, have you heard similar stories, Chinese officials gagging researchers or scientists or anything like that?

A No. My direct experience of China predates all of that.

Q In the beginning of the COVID pandemic, did you have any data or any conversations with Chinese researchers that implied they were being told not to publish something or to delay publication or anything?

A There was that email with Shibo Jiang, and he was the person I worked with at New York Blood Center. And then after the grant was over, he actually went back to China to take a position at Fudan University in Shanghai.

And he -- and when the -- when we knew it was going -- when we saw it was a respiratory virus, he was one of the first and only individuals in China that I knew working on coronaviruses. So I emailed him, saying, "Hey, Shibo, do you think this is a coronavirus?"

And there was some email exchange that you saw where he said, "Yeah, I think it's a coronavirus and it's this and that, but we're going to publish it and we want to keep that confidential until it's published." Something along those lines.

Q Yeah, yeah. Did you ever have any -- and there's a little bit in the email exchange but not specifically -- did you ever have any follow-up conversations with him? Why? Was it just to have a more noteworthy publication? Or did you get any sense of why?

A No, I didn't continue it. I assumed it was because it was in order to get credit for publication.

Q And we talked very briefly about human-to-human transmission and asymptomatic spread and I just want to go through a timeline and get your expertise on when you think things were occurring.

January 3rd was the first permanent update on cases outside of Wuhan, that there were cases in Hong Kong. Do you think that rapid spread outside of Wuhan implied

human-to-human transmission already at that time?

A Hard to say. I think it's -- if -- I'd have to look back. If those were definitely known coronaviruses, most likely it would be human-to-human transmission.

Q Do you recall ever when you thought human-to-human was possible?

A You know, the minute we knew it was a coronavirus, I would have thought there was a high probability of human-to-human transmission, because that's what happened with SARS-1.

In other words, everything I thought about SARS-2 in the beginning, I was basically extrapolating from what we knew about SARS-1. And that was true for significant amounts of --

Q And, again, this is just if you know or have any recollection. Do you think anyone in China was aware of human-to-human transmission prior to them publicly acknowledging it?

Mr. Cummings. I'll just note that that calls for some speculation unless Dr. Hotez has direct knowledge.

Dr. Hotez. Yeah. No, I don't have direct knowledge.

BY MR. BENZINE:

Q We talked about asymptomatic spread. March 11th, 2020, the CDC Director, Dr. Redfield, testified before the subcommittee and said asymptomatic spread was possible, but June 8th, 2020, the WHO was maintaining that it was very rare.

Do you think there was asymptomatic spread prior to June 8th, 2020?

A Oh, I think so, yes, because, remember, this virus came in from Southern Europe into New York and was basically stealth. And the CDC didn't pick it up, which was really unfortunate.

Q Well, again, calling for speculation, if you don't know you don't need to

answer the question. But why do you think the WHO was still saying that it wa,s rare in June?

A Actually, I wasn't even aware that they said it was rare in June. I'm not doubting you. I just -- you know.

Q I appreciate it.

A So many things were -- remember, so many things were happening and, I mean, I was really working. I was working 24-hour days. I was trying to make our vaccines. And I was going on the cable news channels and talking to school groups to keep them safe and African-American churches and Hispanic TV stations. I mean, it was just a crazy time.

Q No, I absolutely understand. To a lesser extent we were all working crazy hours too at that time.

I want to shift gears and talk about the grant process a little bit generally, just your experience with the NIH grant process.

A general question we've asked to Dr. Tabak, we've asked to a couple others: Is any institution or researcher entitled to receive a grant?

A I'm not sure I understand the question.

Q If you apply, are you entitled to receive the money or do you have to earn it?

A Individuals don't receive the money. Remember, the grant goes to the institution, not to the individual.

Q So if an institution applies to the NIH for a grant, are they entitled to win the grant or do you still have to earn the grant?

Mr. Flood. Just one objection just to clarify.

There may be legal requirements, et cetera. He's not a lawyer. I assume you're not -- just to clarify, you're not asking him to opine as a nonlawyer on legal questions,

correct?

Mr. Benzine. Correct.

BY MR. BENZINE:

Q Just as an overarching question, the vast majority of scientific research is publicly funded. If you apply for -- you as a researcher, through your institution, apply for a grant, are you -- is it your -- are you entitled to get the money, like, or can NIH say, "This is a great idea but no"?

A No. Well, first, it's a competitive process. It has to go through a study section. And the study section is an external scientist that -- of your peers, of colleagues -- that rank a grant according by score and priority.

And then it depends how much money is available. And then even then, there's a second level of -- my understanding is there's a second level of review at the NIH.

So it's very -- and it's a very competitive process.

Q So you just -- my next question was, can you briefly run through the process? And you just briefly ran through the process, so I appreciate it.

Have you been a peer reviewer on NIH grants before?

A Yes.

Q During the peer-review process, can you see who the applicant is?

A Yes.

Q And --

A Now, it's been a while, so I don't know if the process is --

Q I don't know if it's changed.

In the scoring process, does the greputation of the applicant factor into the score?

A Not so much reputation, but track record of success and publications, yes, certainly.

Q And track record of following guidelines and grant policies?

A All those things, yes.

Q Okay. I'm not going to ask you about grants that you reviewed, but just generally, do peer reviewers have to sign a nondisclosure agreement?

A Maybe now they do. I don't remember doing that when I was last doing it.

Q And we've gone around it a little bit. Can you explain the scoring process a little bit? I know it's like golf, right, the lowest score wins?

A That's right. There are different categories, and it's usually scored on a score of one to ten. The lower the score, the better. And then you look at each of the categories and you combine it into a final score.

Q If a grant receives a fundable score, does it guarantee funding?

A No, because it depends how much -- is the U.S. Government under a continuing resolution? Is the money available?

Q We love a good continuing resolution.

A Yeah, right, right, right.

Q Before I ask specifics, have you ever been awarded a grant that has a foreign component?

A I was part of a large -- in the 1990s, I was part of a large what was called TMRC grant, where the principal investigator was the foreign investigator. And so yes.

Q Not recently, though? Most -- I went through USAspending and NIH RePORTER. It looks like most of your grants -- subgrants -- go to U.S. collaborators.

A Yes. I'm not aware. I don't think we've had foreign collaborators on NIH grants recently.

Q And then the same kind of question. Beyond foreign institutions, any foreign collaborators named on your grant or on grants?

A Specifically on NIH grants?

Q Uh-huh.

A I'd have to look. I don't think so.

Q What other agencies do you have grants from?

A We've had DOD funding for a leishmaniasis vaccine. We have a fair bit of private funding. Because one of the problems with NIH funding is that it's very upstream. It's hypotheses-driven research. And a lot of what we do is we're actually making stuff. We're actually making a vaccine.

So we're a hybrid between a biotech-like and academic-like, and that often doesn't get a high priority score for the NIH. We kind of fall through the cracks on that one.

So I'm actually not a huge NIH grant person. I mean, we have -- I've had a relatively consistent track record with NIH, but I'm not one of these guys that gets a gazillion dollars from NIH.

Q What was the DOD grant for?

A To develop a leishmaniasis vaccine, joint, which is a parasitic infection transmitted by sandflies. We do a lot of parasitic disease vaccine work. And that was jointly with a group at the NIH, actually.

Q And did that have a foreign institution on it?

A I don't think so.

Q I didn't know if that's why you brought up the just specific to NIH grants. You haven't had a foreign subcomponent, but I appreciate it.

I want to -- we again talked about Dr. Daszak a little bit. I want to talk about EcoHealth and kind of the process -- just from what you're aware of, of conversations with Dr. Daszak. I know that you didn't -- you don't and did not work at EcoHealth or

collaborate. I think no official collaboration with EcoHealth. Is that correct?

A No. That is correct. That is correct.

Q And you said earlier but I just want to ask, when did you become aware that EcoHealth existed?

A I can't remember when I've known EcoHealth existed, but I became more involved not with EcoHealth but with Peter over the Lancet Commission.

Q Did you have -- do you recall any involvement with Dr. Daszak prior to the pandemic?

A I don't think so. I knew of him, but I don't think we interacted.

Oh, no, that's -- no, I correct that, because he headed something at the National Academies called the Microbial Threats Forum. And I believe he -- I was invited to speak to the Microbial Threats Forum, and he may have been heading it at that time.

Q You brought up The Lancet. I have heard and read any number of things from both Dr. Sachs and you and Dr. Daszak and everybody under the sun involved with The Lancet.

Can you just describe the situation that occurred, from your knowledge, of the formation of the Commission under Dr. Sachs, the original concerns expressed about Dr. Daszak, the removal of Dr. Daszak from the origins portion, the removal of Dr. Daszak overall, and then kind of where it ended up? Can you just -- a brief synopsis of that?

A Sure. Sure.

So, first of all, the Lancet Commissions are these very comprehensive reports that are commissioned by The Lancet medical journal based in London that's headed by a physician named Richard Horton.

And the duties of the Lancet Commission are on a number of topics, ranging from cardiovascular disease, diabetes. And so Richard Horton wanted one for sort of the

summary statement on COVID-19, what went right, what went wrong. And he invited Jeff to be the head of the entire thing, because -- and even though Jeff is not a biomedical scientist, presumably they wanted to delve into the economic aspects of COVID or the security aspects of COVID.

And then Jeff invited me to head the vaccine section, subcommittee. And I actually ultimately wound up doing that. I turned him down the first time around because we were busy with our own vaccine, but ultimately he persuaded me to do that. And I headed it with my colleague, Maria Elena Bottazzi.

And that went very well. The vaccine subgroup had a number of Zoom calls. We wound up writing a number of -- quite a number of papers. It was a very productive section.

I got involved not only with Peter but the whole COVID origins section. I think it was through a call with Jerry Keusch -- and Jerry was actually the one who introduced me to Jeff 30 years ago -- that he was quite alarmed that Jeff was planning to basically not just get rid of Peter but -- I'm a little murky in the memory, but the whole COVID origins subgroup.

And I was really concerned about that, because that was about the only virologic expertise in the Lancet Commission. I mean, if it wasn't for that COVID origins subgroup, I was kind of last man standing as someone that had worked with the virus. But I'm a vaccine guy, not really a COVID origins guy.

So I thought that would really weaken the Lancet Commission and began a series of emails and calls with Jeff to try to persuade him not to go down that path.

Q And then at some point Dr. Sachs brought to at least Dr. Daszak's attention, in Dr. Sachs' words, it was like a conflict of interest because of the funding at the Wuhan Institute and then the theory that it could have come out of the Wuhan Institute, and he

was upset that Dr. Daszak hadn't disclosed that.

Do you remember any conversations about that?

A I know it was brought up. I didn't get too much into it. One of the things that I said to Jeff, remember, there's not many people who have ever worked on coronaviruses. So once you start excluding people who have worked on coronaviruses, there's going to be nobody left. I mean, I think that was one of the things I said.

I don't remember the specifics about the conflict of interest. I just thought that unless he was planning on replacing the COVID origins group with another solid group, we were going to be -- it was going to severely compromise the quality of the report.

Q You're a researcher and I assume at some point have had to file conflicts of interest disclosures. Do you think Dr. Daszak has one regarding origins?

A I don't know. I don't know.

Q Lancet -- secondarily, the letter that Dr. Daszak and a bunch of others published in February of 2020 about the harassment of Chinese scientists, and it said something along the lines of there's no possible laboratory origin scenario.

And Dr. Horton actually ended up testifying in front of the British Parliament and said that he made Dr. Daszak file a conflict of interest form for that.

Did you ever have any conversations with him about that?

A No, no. I wasn't even aware that Richard Horton testified.

Q The British Parliament, in essence this, but in England.

A I see.

Q And so then going forward, the Lancet Commission product that eventually came out said like -- it, in essence, mimicked the Science article led by Jesse Bloom and David Relman that both pathways need to be investigated thoroughly.

Did you have any concerns with that language?

A The argument -- not arguments, but the differences of opinion that I had with Jeff, which were shared on my side with two other Lancet commissioners, Andy Haines and Salim Karim, were the fact that Jeff initially was very dismissive of zoonotic origins and thought that was a minor likelihood compared to either lab leak or gain-of-function. And so that's what he wanted to focus on in the report, and I thought that would be a terrible mistake.

And then it came down to giving equal weight, which I also thought was a mistake. I thought this was a remote possibility of lab leak being the origins relative to the papers that were already coming out on zoonotic origins.

And finally, I think Jeff kind of won that argument. And, again, I'm a little bit murky on the details so I may not have it right. And so the paper was submitted.

And it was interesting. The peer reviewers came back and they agreed with me, that they thought that the Lancet Commission report was too -- still too skewed towards the lab leak, gain-of-function, that it should be considered a minority hypothesis.

Q Thank you.

I assume I know the answer to this question, but I'll ask it anyway. Have you been following this subcommittee's work regarding EcoHealth?

A Actually, not in so much detail, just because I've been so busy, and I didn't even watch the public hearing. I haven't watched really any of the public hearings except I've seen snippets here and there.

Q The public hearing you're referring to is Dr. Daszak's? Is that the one you know for sure that you didn't watch?

A I think I saw snippets of it afterwards, but I wasn't watching it live.

Q Did you have any conversations with Dr. Daszak prior to his testimony about his testimony?

A I don't -- I may have had conversations, but I don't know that we spoke specifically about that testimony.

Q Again, if you don't know, it's okay. Have you looked at or what is your understanding of the RO1 grant to EcoHealth that has come under the microscope?

A I haven't looked into it. Again, my comments about EcoHealth have been really confined to the fact that we need an organization like EcoHealth Alliance because of the important work it does, given the fact that the next big coronavirus pandemic is likely brewing out there in bats, as well as other bat-related viruses, as well as pandemics in general, and we don't really have an organization that has the size and scope and capabilities that EcoHealth does.

And so it's an important organization for our pandemic preparedness, and I'm concerned, if that goes down, we're going to be severely hampered.

Q There's the notice of award prior to getting an NIH grant. One of the boilerplate things is acceptance of this award, including the terms and conditions, is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

This is kind of like an overarching question. In grant compliance, who does that? Like, in your organization, who would be in charge of grant compliance?

A That would be the Office of Research.

Q Okay. Do you, as the PI, have a like basic-level understanding of what is in or out of compliance?

A Yes, there is some compliance training for research investigations over a number of things, whether it's animal use or human subjects and all those sorts of things.

Mr. Flood. Mitch, let me just object and note for the record, obviously, he's a doctor. He's not a lawyer. He's not -- so within -- we're trying to be reasonable here.

Mr. Benzine. Yeah.

Mr. Flood. But within reason, he's not going to be able to opine on --

BY MR. BENZINE:

Q No. And I just didn't know how much, like, goes through other offices and that kind of thing.

A But, remember, the grant's going to the institution. So it's -- and biomedical research institutions, medical schools have fairly sophisticated Offices of Research to deal with the NIH.

Q And I will absolutely concede it's not an apples-to-apples comparison between Baylor College of Medicine and EcoHealth. Baylor College has a grants office. Dr. Daszak is the president of EcoHealth. In addition to being the PI, he is also the grants office. So, like --

A Right.

Q So it's a little bit different. But I was just trying to get an understanding of, like, how the compliance would go.

[12:30 p.m.]

BY MR. BENZINE:

Q I'll just ask one of them, because some of them are a little bit more in the weeds. Is submitting timely progress reports normal grant compliance?

Mr. Flood. Objection. I don't think that Dr. Hotez is an expert on grant compliance, Mitch, so I don't think this is productive. And he's going to be speculating, and I don't want him to speculate.

BY MR. BENZINE:

Q In your NIH grants, do you have to submit progress reports annually?

A Yes.

Q Do you know when they're due?

A It depends on when the grant was funded in the cycle.

Q But you have a general understanding of when the progress report needs to be submitted?

A Yes.

Q And they need to be on time?

A Yes.

Q Okay. Thank you.

You were -- well, let me step back. Again, it's asking your opinion. I don't know how much you have read, how much you have dove into this stuff.

As a result of NIH oversight over, really, 4 years, the WIV was debarred from receiving Federal funding for 10 years. Do you agree with that decision?

Mr. Flood. Objection. I don't think it's relevant. The NIH looked into this. The HHS OIG looked into this. There's a lot of information on compliance, non-compliance here. I don't think Dr. Hotez is the right witness to attest to that, Mitch.

Mr. Benzine. Okay.

BY MR. BENZINE:

Q NIH, through that process, also conducted oversight of EcoHealth and Dr. Daszak. In one of the emails produced to us, you called that oversight "harassing." Do you stand by that comment?

A I don't believe I called -- would call oversight "harassing."

Q I can -- I can --

A Harassment is harassing, but oversight is not harassing -- per se, it would not be harassing.

Q Do you think the NIH compliance actions against EcoHealth were harassing?

A Again, my concern is what happens if we lose the EcoHealth Alliance and what it means to our pandemic preparedness, so that if there are mechanisms by which these could be worked through, I think the country benefits.

Q You, as both a taxpayer and a receiver of taxpayer funding -- I guess I could ask you more as a taxpayer -- do you believe it's important that Federal grantees follow the terms and conditions of their award?

A Yes.

Q Do you believe it's important to submit your progress reports on time?

A Yes.

Q Have you ever been late?

A I don't know. I don't -- I don't know. I can't answer that.

Q Have you ever been 22 months late?

Mr. Flood. Objection. He's not prepared to answer those questions.

Mr. Benzine. Okay.

BY MR. BENZINE:

Q EcoHealth submitted its year-5 RO1 (ph) progress report 22 months late. It was due September 30th, 2019. It ended up being submitted in August of 2021.

Did you have any conversations with Dr. Daszak regarding that progress report?

A No. Not that I remember.

Q Do you believe it's acceptable to submit a report 22 months late?

A That's fairly late.

Q It was cited in the suspension and Department action against EcoHealth and Dr. Daszak.

I believe when you ran through your experience, you were also a professor. Did you teach?

Mr. Flood. Just clarify the question. Did he teach what?

BY MR. BENZINE:

Q Like, classes. Did you have students?

A Do I teach? Oh, yeah, I teach.

Q What would you do if a student submitted their report 22 months late?

Mr. Flood. Objection. I don't -- if I could articulate for the record, there are good lawyers at NIH and HHS OIG; they've all looked into this. This is not a lawyer, and he's not a witness really. I don't see that there's any value to him commenting on the action that's already in the extensive record on EHA and the grant termination and debarment.

Mr. Cummings. Especially when he's already said that he's supportive of the NIH administering these grants and people complying with the terms of the grant.

Mr. Benzine. And I agree, the witness has made public statements in support of EcoHealth and private statements in support of EcoHealth.

So I'm trying to figure out what the actual thing is here. And I will be the first

one to admit that everyone's Twitter profiles are not what they actually think. And we're trying to figure out what the actual outcome here is.

Dr. Hotez. Well, the action --

Mr. Flood. I don't think there's a question pending, Dr. Hotez.

Mr. Benzine. No.

Dr. Hotez. Okay.

Mr. Flood. You have to wait for the question, please.

Dr. Hotez. Okay.

BY MR. BENZINE:

Q So the last question -- well, second-to-the-last question I asked was, do you believe it was acceptable to submit a report 22 months late, and you said that was fairly late.

You've been a grantee for a long time. Have you ever heard of someone being 2 years late on a progress report?

Mr. Cummings. Pardon me, and sorry for the interruption. I believe what he said was "very late."

Is that correct, Dr. Hotez? What did --

Mr. Flood. I think he said "fairly," I think. We'd have to ask -- can you -- would the court --

The Reporter. I cannot go back.

Mr. Flood. Got it. Okay.

All right. Well, you decide what you said, Dr. Hotez.

BY MR. BENZINE:

Q Did you describe it as "fairly late" or "very late"?

A I think "fairly late."

Q Okay.

A I think.

Q No, I think either one is --

Mr. Cummings. It was late.

Mr. Benzine. It was late.

BY MR. BENZINE:

Q There was an effort by NIH to confirm the results of experiments between year 4 and year 5 of the EcoHealth grant. EcoHealth had a special award after -- a special award condition after the implementation of the P3CO process that --

A I don't know what "P3CO" is.

Q It's the Potential Pandemic Pathogen Care and Oversight -- it's the gain-of-function board.

A I see.

Q They had a special award condition dropped into a grant after that, that if any virus showed up greater than 1 log growth, they would have to immediately report it.

There is a disagreement between EcoHealth and NIH about whether or not they accurately reported that. Do you recall any conversations with Dr. Daszak about that reporting?

A No. And we never have got into the weeds on those kinds of issues, nor his -- nor his interactions with NIH. Again, it was big picture, "We shouldn't let this organization go down."

Q I appreciate that. Just keep saying that you didn't talk about it if you didn't talk about it.

To confirm those experiments, NIH requested the underlying data and lab notebooks from EcoHealth. Did you have any conversations with him about that?

A Not that I recall.

Q Did you have any conversations -- that ended up being a very public point of issue.

NIH ended up submitting a proposed rule change to make it very clear that they could have access to foreign laboratory notebooks. Did you have any conversations with anyone about that rule change?

A Not with -- I don't think with Peter, but I remember talking to other colleagues about it.

Q Which ones?

A I can't remember specifically who, but the issue that came up was having access to foreign laboratory notebooks and would that have a chilling effect on future foreign collaborations, because we've never done that before in our -- to my knowledge, so this is something new, and would that discourage either U.S. investigators from embarking on foreign collaborations, and would this discourage foreign collaborators from wanting to work with U.S. institutions, at a time when we really should be expanding our foreign collaborations because of the pandemic threats.

Q And I think we will all agree and the chairman will agree that foreign collaborations are important. I think the chairman, sitting on Intel, has some concerns about Chinese collaborations particularly at this point in time.

A Uh-huh. Right.

Q But agree that working -- viruses don't have order, so working globally is what we need to do.

A Right.

Q And understanding you're kind of on the periphery of the debate surrounding that rule, NIH's position is that they actually didn't need to make that rule

clarification. It's that, under the regulations, it already applied, that Dr. Daszak should've already had access to these lab notebooks -- the theory being, it's U.S. money that went to Dr. Daszak that then went to the WIV, so anything resulting from that is U.S. property.

A I see.

Q So, to your recollection, no conversations with Dr. Daszak specific to the lab notebooks?

A Nor any aspect of the NIH grant. We just didn't get into that.

Q As we talked about, HHS suspended and proposed EcoHealth and Dr. Daszak for debarment, and we just got into it a little bit.

You've publicly criticized this decision, I think, as you've said, more so because you want that kind of organization to exist, not necessarily -- I don't want to put words in your mouth, but why have you publicly criticized this decision?

A Because it would cut off one of the major avenues that we have for virus surveillance in areas where they're emerging among zoonotic hosts.

Q You've also said that you believe following the rules is important, you believe being a good steward of taxpayer dollars is important.

The report was late. I just walked through some things -- you don't need to confirm it -- that they also violated the rules that were in the Department memo.

Is there no one else that can do this?

Mr. Flood. Sorry. Objection. I just want to be careful. For the record, I'm not sure he said that, the last part. You just said something about him acknowledging that they violated the rules --

Mr. Benzine. No. I walked through it --

Mr. Flood. Okay.

Mr. Benzine. -- and acknowledged that --

Mr. Flood. I just -- I mean no disrespect. I just want to be clear about what is Dr. Hotez's testimony and what is the preamble to a question.

Mr. Benzine. Correct. No. It was me saying, and NIH and HHS and the White House saying, that EcoHealth violated the rules.

Mr. Flood. Fair enough.

BY MR. BENZINE:

Q Is it just that there isn't another organization out there that does this?

A Yes, there are organizations, and there are university researchers, right? There's -- and we've spoken about them this morning. People like Michael Worobey, right --

Q Uh-huh.

A -- you know, is an outstanding researcher. But -- or Dr. Pekar or some of the others.

But these are modest in scope and depth and breadth. And, to my knowledge, there's no other organization like EcoHealth that has that depth and breadth and ability to do big things at scale like the EcoHealth Alliance.

And that's why I think it's important that we find mechanisms to see how we can work through these. And if there's corrective action that needs to happen, I think that's very reasonable. And maybe greater oversight, I think that's very reasonable.

But I am concerned about, if we let this organization go down, at least in the near term, that's going to create some -- that's going to make it much more difficult to continue to monitor this continuous cadence of pandemics that we've been speaking about.

Q And, again -- I don't want to get objected to, but I'm going to ask the

question anyway.

Dr. Tabak, he was -- I think he was Principal Deputy Director when he testified before us, not Acting Director -- but was asked: "Yesterday, HHS proposed debarring EcoHealth from receiving Federal funds. Does NIH agree with that decision?" And he said, "Yes, we do."

My presumption is you disagree with Dr. Tabak?

Mr. Flood. Could you just clarify -- objection -- clarify the question or ask it a little more clearly, please?

Mr. Benzine. Yes.

BY MR. BENZINE:

Q Do you disagree with Dr. Tabak and NIH's determination to debar EcoHealth?

A You know, without hearing it directly from Dr. Tabak, I don't want to comment.

Q The --

A I haven't spoken with Dr. Tabak about this.

Q It was under oath, so I'm assuming he's not lying.

A Well, no, I don't think he's lying. I'm also confused why it would be Dr. Tabak when we actually have an NIH Director.

Q He was just the one testifying. He was also the one primarily in charge of Michael Lauer and the compliance action.

The --

Mr. Cummings. Well, I think -- just -- I think it's important to point out that Dr. Hotez has already indicated that, if there are problems with grant compliance, that he supports an effort for those problems to be addressed, you know, by NIH.

Mr. Benzine. I appreciate that. I think NIH's position is the problems are unaddressable, hence debarment.

BY MR. BENZINE:

Q The similar question was posed to Dr. Fauci in his public hearing, again, under oath. "Sitting here today, do you support the suspension and debarment of EcoHealth?" And he said yes.

Do you have any reason to doubt that testimony?

A I don't doubt -- I don't doubt his testimony.

But, again, I keep bringing it back to the same thing: This is going to have really difficult consequences for the American people. I don't think it's in our best security interest and public health interest to let this organization go down if we can work through it.

Q Because I didn't ask it the exact same way those two were asked, do you support the suspension and debarment of EcoHealth?

A I support using every mechanism possible to salvage this, to see if we can let -- allow the work to continue.

Q Have you communicated with Dr. Daszak recently?

A Um --

Q I can rephrase. When was the last time you communicated with Dr. Daszak?

A Probably, I think, a month ago.

Q Did the current status of EcoHealth come up in that communication?

A Yes.

Q What is it?

A The fact that he was already laying off significant numbers of staff.

Q Has he told you anything about the debarment process?

A I don't think it was on this last call; I think he mentioned something about it. I think it was, they were going to issue a document to address the debarment and they were going to issue a public statement on why they felt they shouldn't be debarred.

Q Has he had any conversations with you about any communications he's had with HHS regarding the debarment?

A No.

Q So you don't --

A Not that I remember. I don't -- yeah, no, I'm not aware.

Q So you don't know if they have actually been debarred yet? He has not said that?

A No, I don't think -- no, I don't -- no, I can't remember whether --

Q Okay.

A -- he said he's debarred, whether -- either that he was debarred and he's appealing it or whether --

Q No, it's a very --

A -- or if he's still trying to head off the debarment.

Q Yes, it's a very convoluted process of they, like, instituted this immediate suspension and funding freeze while the debarment is pending. So I was just wondering if he had heard anything and communicated to you of the debarment becoming finalized.

A No.

Q Okay.

A I only know the recent public document that they issued, which I have not read in detail.

Q It's long.

A Yeah.

Q Yeah, 140 pages or so, with a lot of appendices.

I'm going to shift gears to Dr. Morens a little bit. We talked about him a little bit earlier. And I want to give you the opportunity to clarify anything.

You're on a bunch of emails with him. You don't communicate a whole lot. Is that a fair characterization of your level of communication with Dr. Morens, that you're more of a CC line guy than a To/From line?

A Yes, and the fact that -- and the vast majority of those emails are probably unread.

Q Do you recall the last time you communicated with Dr. Morens?

A You mean through a direct email exchange between the two of us, or do you mean --

Q Or over the phone or --

A I don't talk to him over the phone. I don't remember the last time.

Q I think it was in one of the emails -- and my apologies, I don't remember the exact date. Like, earlier this year, did you go to dinner with Dr. Morens and Dr. Daszak?

A There was a dinner at the Cosmos Club.

Q What was discussed at the dinner?

A Actually, I don't think we -- it wasn't really a business dinner. It was more about families and what people do. It was really a social event more than anything.

Q Okay. So not a lot of discussion about Dr. Daszak's grant situation or Dr. Morens's current situation?

A Undoubtedly it came up, but I think it was more just to have a relaxing evening.

Q Do you recall any conversations with Dr. Morens about his testimony before

the committee?

A I can't remember having that discussion.

Q Do you recall any discussions with him about his employment situation?

A I have, yes. I can't -- not recently, but --

Q I think -- and, again, you can correct me if I'm wrong. And I apologize, I don't have the email in front of me. I think in one of them you had mentioned calling the NIH about his employment situation. Does that ring a bell?

A I'm not sure who I would call at the NIH.

Q Then maybe I'm conflating the two situations here.

A Yeah. I don't remember that.

Q Does -- and I know I'm just going to get objected to more, but it's okay. Does Baylor College of Medicine have employment policies?

Mr. Flood. Yeah, objection. He's not a lawyer for Baylor. He's a professor there, he's an employee.

I mean, to the extent that you know in your own capacity as an employee of the college --

BY MR. BENZINE:

Q Are there policies and procedures as an employee of Baylor College of Medicine that you have to follow?

A Oh, of course. Of course.

Q Regarding email or document retention?

A Probably. I'd have to look into specific terms of -- I couldn't answer questions about specifics.

Q In general, do you agree that following your employer's policy is important?

A Yes. In fact, that's what I do. I mean, I only keep one email at Baylor

College and I use it for everything. It's completely open and transparent to everyone, as you remarked yourself --

Q Yes.

A -- in your nasty tweet that -- you remarked on my transparency. At least you gave me that satisfaction.

Q And you have been very open and cooperative with the committee --

A Yes. Yes.

Q -- and we do appreciate that.

A It's easy. You sleep better that way.

Q I'm just going to, just for the record, just roll through some of the previous testimony. I'm not going to ask you about NIH policies and procedures for their employees. You're not an NIH employee. You don't know them.

A Thank you.

Q Dr. Morens in one email said, quoting, "I learned from our FOIA lady here how to make emails disappear after FOIA but before the search starts. So I think we're all safe. Plus, I deleted most of those earlier emails after sending them to Gmail."

Dr. Tabak was asked if that's consistent with NIH policies. He said it's not. And, for the record, we had the FOIA officer in, and she pled the Fifth to the question about that.

Chairman Comer also asked Dr. Tabak, quote -- the email that Dr. Morens wrote said, quote, "We are all smart enough to know to never have smoking guns, and if we did, we wouldn't put them in emails. And if we found them, we would delete them." Dr. Tabak was then asked if that was consistent with policy, and he said it is not.

And Chairman Comer also said that there are emails that show Dr. Morens forwarding internal discussions regarding NIH policy with Dr. Daszak and helping

Dr. Daszak craft letters and responses to NIH oversight, and was asked if those were consistent, and Dr. Tabak said they would not be consistent.

Do you recall any conversations with Dr. Morens about him editing EcoHealth documents?

A No, I'm not aware of that.

Q The same theme with Dr. Fauci's testimony.

Mr. Comer said, "Do you agree that it violates NIAID policy to use personal email for official purposes?" Dr. Fauci said, "Yes, that would violate NIH policy."

Mr. Comer said, "Does it violate NIAID policy to delete records?" Dr. Fauci said, "Yes."

And Mr. Comer asked the same question about working on EcoHealth documents while an NIH employee and said, does that violate policy? And Dr. Fauci said it was inappropriate and a conflict of interest.

Again, you were involved in a lot of these communications, and I think what you're saying is you may not have even read them or seen them.

And I'll ask it a little bit differently, and one last time, I promise. Did you have any conversations with Dr. Morens regarding his official email address or using his official email address?

A I know I was puzzled because he kept -- it kept changing. There were several different email addresses, and I couldn't keep up with what I was supposed to send -- so I just -- if I had to have it -- if there was an email exchange, I just replied to what was ever there.

Q You don't recall any specific conversations with him regarding these topics?

A No. No. No. Because, you know, I think FOIA is important. I don't think you should bypass FOIA. You know, I'm not a lawyer, I'm not a FOIA expert, but,

you know, I've had my NIH grants FOIA'd, and they've even given me the opportunity to do redaction and I've said, no, just let it go. I mean, there's nothing that's in my documents that I haven't said in public.

Q Thank you.

I want to -- hopefully, we can probably get it done in this hour -- talk about vaccines, your actual specialty. You're --

A Right.

Q -- not a specialist in origin discovery.

A Right.

Q And you were talking to the minority a little bit about the overall safety and efficacy profile of the COVID vaccine, that it was very good. You flagged some minor adverse events.

Has the efficacy -- like, obviously, there have been recommended boosters throughout the last 3 years. How is the -- in kind of layman's terms, why? Like, how has the efficacy waned? What's the rationale for more boosters?

A Oh. Well, you know, this is -- one of the weaknesses of the mRNA vaccine technology is the durability of protective immunity, and it starts to wane, you know, after, you know, 6 months or more. And so this does create -- so that's one problem.

The other is the changing nature of the variants, and this is a very plastic genome virus. And so that means that we're going to require -- we don't even call them "boosters" anymore, we call them "annual immunizations." And that may require a booster at the annual immunization in order to maintain high levels of protective immunity, both to keep you out of the hospital, prevent death, as well as reduce the likelihood of heart disease and long COVID.

Q I think you might've explained it a little bit. This is kind of the first

mass-scale mRNA vaccine.

A That's correct.

Q How are those different than traditional immunizations?

A Many of the principles are the same. The issue is, with a brand-new technology, there's a learning curve before you know all the full performance features of the vaccine.

Like, for example, the short durability of protective immunity, full protective immunity, that was something that you had to find out, you know, when you were immunizing large populations.

Q Uh-huh. And the chairman is a big fan of Operation Warp Speed and a big fan of vaccines overall --

A Uh-huh.

Q -- and agrees with you, it saved millions of lives.

To your knowledge -- like, obviously, there wasn't the long-run clinical trial that we normally have with new therapeutics and vaccines. What was the outcome of the trials prior to the vaccines being introduced into the population in December? Like, did it show -- what were the safety and efficacy profiles that it showed at that point in time?

A Excellent. High levels of protective immunity, 90-, 95-percent protective immunity against symptomatic infection, which is how they were set up, and quite a good safety profile as well.

Q And, then, the next summer was the Delta wave.

A That's right.

Q Summer of 2021 was Delta, and that's when we started to see the protective abilities wane a little bit. Is that accurate?

A That's right.

And then, at some point, there was going to be the need for a booster. In fact, I remember saying that when the vaccines were first rolled out. Because everyone -- you know, a lot of the public messaging was "two doses and you're done." And I said, well, don't be surprised if you're going to need a booster.

Because, in my experience as a pediatric vaccine expert, that's how it works. You give a series of primary immunizations, you wait 6 months to a year, and then you have to give a booster to maintain durable protection.

So don't be disappointed if we hear in a few months that we're going to need a booster. I think part of the problem is, I was one of the few individuals that was saying that. I wish that could've been messaged more.

And then, even after that, it turned out the durability was not as robust as we'd like.

Q And I was going to get into the messaging a little bit and, like, what you said. Like, one of the chairman's big points in this is that, when there are unknowns, we need to be honest about what the unknowns are, like you just said. Like, we need to say, this is --

A I don't think anybody was dishonest.

I think the problem was -- one of the things that I did, which was quite different, was, when I would go on, you know, the cable news channels, I would give my underlying assumptions, as much as you could, you know, with the producers screaming in your ear, "Wrap, wrap, wrap." But I would try to give underlying assumptions to really educate the American people on how this works.

And I think people were -- a lot of people still come up to me saying, "Thank you, Doc. You were one of the few that really helped me understand what was going on."

Because I think there's an old-fashioned way that we still communicate to the

public that says you have to talk to the American people like they're in the 4th grade or the 6th grade, and I found that -- it wasn't my style. I didn't like doing that.

And I found that there was a large segment of the American people that were, "Hey, Doc, I'm all in; just tell me what I need to do to protect myself and my family, and tell me why." And that's what I would try to do.

Q And I think the "why" is the big thing --

A Yeah.

Q -- that the chairman is interested in.

And you bring up some statements that maybe lack some nuance. And I can hear what's going to happen in the next hour, so I'll just -- they can do what they're going to do, and I'll ask you about some statements.

A Uh-huh.

Q In March of 2021, then-CDC Director Walensky said, and quoting, "Our data suggests, you know, vaccinated people do not carry the virus and don't get sick."

That seems to be one of the statements that could've favored some nuance. Were -- I mean --

A Well, she was not wrong, actually. Because, remember, this -- a lot of people don't realize this, but, you know, I had the front-row seat to it all, so I saw it -- which is that, when the vaccines were rolled out in December, they were rolled out on the basis of interrupting symptomatic illness. They were not rolled out on the basis of stopping asymptomatic and transmission, which basically means virus shedding.

But what happened, if you remember, one of the deficiencies that we had early on was, the CDC was not really doing vaccine effectiveness studies. And so, as a result, we depended on the U.K. and Israel for that information. And, of course, the U.K. and Israel only had Pfizer and not the others, but you kind of extrapolated for Moderna, but you

really weren't getting a lot of information about J&J.

But what they showed -- and they published this -- was, during the Alpha wave in the winter of 2021, wait a minute, this vaccine's not only halting symptomatic illness, but it is stopping asymptomatic infection and presumably virus transmission, which was really exciting. I remember looking through that data. And --

Q Was that winter of '21 or winter of '20?

A You know, right after the vaccines were rolled out --

Q Okay.

A -- so, you know, February, March, around there, 2021.

Q Okay.

A And I believe that was the basis by which CDC said masks could come off. The problem with that, I don't know that they messaged -- maybe perhaps they could've messaged that a bit more.

Q I'll just, like --

A And so people, you know, to this day, say the vaccines didn't do anything to stop infection or asymptomatic transmission. That's not true. They did.

And they still do, actually, not to the same extent that they did, but they still have some level of protective immunity against infection, even against the Omicron variant.

Q I'll ask another question. In July of 2021 -- so now we're, like, mid-Delta-ish --

A Uh-huh.

Q -- President Biden went on TV and said, you're not going to get COVID if you have these vaccinations.

Was that true at that point?

A Based on the studies coming out of Israel and other studies, that was

probably what was understood.

Q Were there COVID cases in vaccinated individuals at that time?

A That -- I think the first time that people noticed that this was happening, there was a number of cases, I think it was in Provincetown, Massachusetts, that people realized that they were getting a lot of breakthrough infections.

And this, over time, led to the fact that we're probably going to need a booster.

Q When was that study in Provincetown?

A I want to say -- I don't know. Sometime in 2021.

Q Because I'm just wondering if there were breakthrough infections by the time this statement was made.

A Well, there could have been, but I don't think it was only -- it was -- it took on a large scale to realize that was happening.

Q Okay.

A I don't think there was any attempt to obfuscate or mislead. It was based on what was known at the time.

Q Okay.

So we talked at length about development. I want to talk a little bit about some vaccine policies and then a few followup questions on VAERS, understanding, again, it's not your direct expertise, but a few questions about it.

A Sure.

Q You touched on that Warp Speed only focused on kind of the big players in the vaccine market.

Do you think it was -- like, this is very much a fact-finding question. Do you think it was possible for smaller players to bubble up and play a role?

A It was really tough to get on the radar screen of BARDA, and I --

Q No, I mean, like, were the smaller players even capable of doing it at the rate that Warp Speed desired?

A I think we were.

Q Uh-huh.

A I think we were. And it turns out we weren't that far behind.

Q Yeah.

Do you -- maybe a different answer back in 2021, but do you believe today there are valid medical exemptions to getting the COVID vaccine?

A There's valid exemptions for any vaccine. If you've had a severe allergic reaction to a previous immunization or -- yeah.

Q What about religious exemptions?

A It depends what you're talking about. For -- you know, I can't think of any major religion that has prohibitions against vaccines. I'm not aware of those.

Q Were you supportive of vaccine mandates?

A In general, for pediatric vaccines, for schools, absolutely.

Q What about for the COVID-19 vaccine?

A Yes, I think that was really important when it was -- especially when they were effective against reducing transmission.

Q Should there have been exemptions to the vaccine mandate?

A I thought there were. No? I mean, I think there were for --

Q For some.

A Yeah.

Q Eric can correct me, but I don't think the military approved any exemptions? Very few?

Mr. Osterhues. I don't think any religious ones were approved. There were

medical exemptions, certainly, for people who had contraindications or cancer, you know --

Mr. Benzine. Yeah.

Mr. Osterhues. -- immunocompromised at the time and it was not a good idea for them to be vaccinated.

BY MR. BENZINE:

Q Do you believe the COVID-19 vaccine mandates violate the concept of informed consent?

Mr. Cummings. Objection, inasmuch as he may not be qualified to discuss the concept of informed consent.

Dr. Hotez. But there is informed consent. You usually have to sign --

Mr. Benzine. Not if you --

Dr. Hotez. -- you sign a -- I mean, I, when I would go to CVS to get my vaccination, I had to sign a consent form.

Mr. Benzine. But if you're saying, "Get this vaccine or you're fired," you can't consent.

Mr. Cummings. So I think that sort of implies a knowledge of what "informed consent" is and what the, you know, obligations and responsibilities are of the institution seeking that consent. And I guess I would submit that that's not a question that --

Mr. Benzine. Okay.

Mr. Cummings. -- it'd would be productive to engage Dr. Hotez on.

BY MR. BENZINE:

Q Have there been consequences of COVID-19 vaccine mandates? Negative -- like, have you seen --

A Well, my understanding was the courts struck down the mandates and they

were ultimately not implemented except for healthcare facilities.

Q The DOD one was still implemented. OPM was still implemented --

A What's "OPM"?

Q Office of Personnel Management. Federal employees.

A Oh, okay.

Q During Dr. Fauci's testimony, he was asked, "Could issuing these mandates and removing the notion of informed consent from certain parts of the citizenry lead to vaccine hesitancy?"

And he said, "Yeah. I mentioned this, I believe, in the TI, that, as a matter of fact, that's something that I think we need to go back now, when we do an after-the-event evaluation, about whether or not, given the psyche of the country and the pushback that you get from these types of things, we need to reevaluate the cost-benefit ratio of those types of things" -- "things" referring to vaccine mandates.

A Well, remember, it's important to go back --

Mr. Cummings. Sorry, just to -- I don't think there's a question on the table.

BY MR. BENZINE:

Q I haven't asked a question yet.

A Oh.

Q Do you agree with Dr. Fauci that we should evaluate whether or not vaccine mandates contributed to hesitancy?

A No. I have a -- I have a different take.

Q What is it?

A You know, the idea that it was vaccine mandates that contributed to vaccine hesitancy is false. That's not what this was about.

And remember the consequences of this: 200,000 Americans needlessly died

because they refused a COVID vaccine. And it happened because of a predatory movement that convinced them that the vaccines were safe -- that vaccines weren't safe or didn't work. And people engaged in risky health behaviors because they were victims of a disinformation campaign. And that was the problem.

And the idea, I think, that -- and to say that the mandates were the big cause of vaccine hesitancy is simply not the case.

Q Talking about VAERS really quick -- I know I'm a little bit over the hour, but I want to finish my line of questioning, and then hopefully we can all get out of here sooner.

You touched on it a little bit. Were there side effects of the COVID-19 vaccines? Rare ones, but --

A Yes.

Q -- there were side effects?

A Common and rare.

Q Like, common, sore arm; rare, myocarditis kind of thing?

A Well, myocarditis was a rare event. Arm soreness was a pretty common thing.

Q Yeah.

Have you reviewed the VAERS database for COVID-19 vaccines and the adverse effects?

A Not recently. But, again, the VAERS is just the first step in evaluating vaccine safety, because it's a catch-all mechanism that's highly sensitive to pick up anything that happens after a vaccine. It doesn't tell you what's vaccine-related.

Q And my understanding is, like, I could go in and report --

A That's right.

Q -- an adverse event in VAERS, right?

A That's right.

Q Like, I could go get a shot and have a headache the next day and say, I got this from --

A That's right.

Q Okay.

A The hard work comes after the VAERS reporting. Then you have to look into what may be causally related to the vaccine and what's not causally related to the vaccine.

Q And Dr. Walensky said something similar, when she testified that CDC has a responsibility to comb through all of them, review them, and see if it's actually a causal relationship.

A And pair it with the other vaccine safety monitoring systems.

Q My other understanding -- correct me if I'm wrong -- is the VAERS database -- if I go and google "VAERS" and pull the database up, the public-facing database is the one that we're talking about, with every possible report that hasn't been verified or investigated, but the CDC maintains a backdoor database that has the results of the investigations.

Do you know anything about that?

A I don't.

Q Okay. Do you -- like, understanding you don't know anything about it, and I don't want to -- if you don't want to comment on it -- do you think they should publish their results of the investigations?

A I believe they do. They publish scientific papers on --

Q No, I'm saying, like, the VAERS database for COVID vaccines has, like, a

million adverse events reported or something. I'm making up a number.

A Uh-huh.

Q If there were 500 of them that were verified, why post the million?

A I don't know. I'd have to look into it.

Q Okay.

A I don't have detailed knowledge of that.

Q I think one of the things that -- and one of the things that you talked about with the minority was that, by having such large numbers, it leads people to then come to the conclusion that there are large numbers, instead of not knowing what has been verified.

So one of the things that we want to recommend is that they don't -- like, flip the databases, that you have a reporting system and then it gets investigated and then the results are the public-facing database, instead of the other way around.

I don't know if you have a comment on that?

A I think there's a need for a larger public-facing vaccine reporting system, including on -- and I've recommended this -- on a CDC or FDA website, that you specifically debunk the major anti-vaccine assertions that are out there.

And it's hard to keep pace with it because it moves pretty fast. For instance, you know, when you had the Florida surgeon general make this reckless statement that vaccines are causing turbo cancer, right? First of all, there's no such thing as turbo cancer. Second, the mechanisms he reported have no basis in reality or anyone with a first-year-graduate-student knowledge of molecular biology.

I think it's important that the CDC now respond to that and say: Okay, here's why vaccines don't cause turbo cancer. I mean, I would do it, and if you happen to catch my appearance on CNN or MSNBC talking about it, you would get it. But that's what we

need. I think that's very important.

Q And then one more vaccine question, and then if the minority and the witness --

A Uh-huh.

Q -- will indulge me for two more questions after that. I know I'm over time.

Again, we talked about Warp Speed and how it was sped up. And, again, the chairman has said many times, you know, we liked the speed-up and think it should be applied elsewhere, that it didn't miss any safety checks and it resulted in a safe and effective vaccine.

But without the long-term trials, do you think it's important to continue to monitor vaccinated individuals to see if there are latent or long-term effects to the vaccine?

A And I believe they will be.

Q Perfect.

Final line of questions. I'll ask one and it might eliminate the other ones.

At any point since 2020, have you been contacted by anyone in the intelligence community to assist in their assessments or investigation of the origins of COVID-19?

A Yes.

Q Who?

A The FBI. And that individual for the -- one of the individuals of the FBI was also working for defense intelligence.

Q DIA?

A I think he said "defense intelligence."

Q Okay. That would be --

A I don't know if that's DIA.

Q That would be DIA.

And without getting into the contents of the conversation, where did you have the conversation, I guess is my next question?

A He came and his colleagues came to see us at the college.

Q So not in a classified space?

A No. No.

Q And --

A And -- yeah.

Q -- did you tell them, substantively, what you told us today in response to their questions?

A Their line of questioning was different. This was about whether the Chinese consulate in Houston was spying on the Texas Medical Center.

Q Okay.

A And ultimately they shut down the consulate.

Q Yeah. Was that COVID-oriented? What kind of questions did they ask?

A It was about whether they were spying on Texas Medical Center scientists, at least is my recollection, for cutting-edge technologies around COVID.

Q All right. So not origins-specific, necessarily, but --

A Right.

Q -- surrounding the response to COVID.

A That's right. That's right.

Q Okay. I appreciate it.

All right. Thank you. We can go off the record.

[Break.]

[redacted] We can go back on the record.

BY [redacted]:

Q Dr. Hotez, earlier on today, I think actually one of the earlier questions you were asked involved threats that you received during the COVID-19 pandemic.

A Uh-huh.

Q I know this is going to be unpleasant to talk about, but I think it is important to understand the full level of what that has meant to you and the effect it has had on your life. So I do want to ask you some questions about this.

A Uh-huh. Sure.

Q When -- well, just to confirm, did you receive threats to your safety during the COVID-19 pandemic?

A On a regular basis, yes.

Q Do you recall about when these threats began?

A They started in 2020 and have been building ever since.

Q Do you continue to receive threats today?

A Yes, on a weekly basis, sometimes daily basis.

Q And do you recall if there was anything specific that sort of started off the threats?

A Initially, around my ardent support of vaccines. And it was anti-vaccine groups.

But then a lot of the -- a lot of the -- a lot of it came out of false statements made by activist groups saying that I was involved in COVID origins or -- and then it turned into profiting from the pandemic, and then it was overlaid with a fair bit of antisemitism also.

Q And as much as you're comfortable sharing, what was -- what is the nature of these threats?

A Multimedia.

So certainly on Twitter, especially after Elon Musk took it over, it really amplified. And he invited back all of the contrarians. That was a -- that's a big one.

Emails, sent to my emails. That's another mechanism.

Phone calls to my office. That's a big one.

Showing up in my lectures, announced lectures, and stalking me at lectures, and trying to even come to the front of the stage or waiting for me, both entering or exiting.

And in one case, coming to my home.

And then, worst of all, they accosted my daughter, my youngest daughter, with autism and special needs and intellectual disabilities, at her place of work in Goodwill, and they've accosted her there.

Q And I know this gets a little personal, but how have these threats going on impacted you and your life, your daily routine?

A Well, there's both the practical and the other.

I mean, the practical is, when you see a -- when I see a -- and, of course, I don't have Federal protection. So when I see an increase, I have resources, so Baylor and Texas Children's security can arrange for me to have an HPD, Houston Police Department, officer park in front of my home, or a Harris County sheriff. That's great. Texas Children's security will take me back and forth to venues where I'm speaking in Houston.

The other organization that's helped a lot is the ADL, the Anti-Defamation League. They have a monitoring center that will pick up increases in chatter. Because, you know, the -- and I've even written a couple of articles that look at the partial overlap between anti-science and antisemitism. It's not a complete overlap, but there are links. And they're saying that I'm involved in a cabal with other Jewish scientists or other Jewish financiers. And they have a monitoring center, a pretty sophisticated monitoring center, in Chicago, and they'll pick that up as well. And I was even awarded the Popkin medal

from the Anti-Defamation League Southwest.

And something really nice that's going to happen at Villanova University, I'll receive the Mendel Medal for science and religion, because I write about, you know, how we can reconcile science and religion. And this was given previously to Lemaitre, the Belgian priest who was the first to discover the expanding universe. In 1934 he got the prize. And Teilhard de Chardin, the Jesuit priest paleontologist, he got it in 1937. So it's going to be really fun getting that --

Q Congratulations.

A -- on that work. Thank you.

So, I mean, on the one hand, getting recognition for it. On the other hand, it's taken a huge psychological toll.

And, again, not to beat a dead horse, but, you know, especially when Members of Congress publicly attack me or, you know, that subcommittee tweet, then that really revs up the death threats.

Q And it sounds like this has not just impacted you personally; it's impacted your employer. They've had to arrange special security escorts for you. It sounds like sometimes there's been incidents at your employer's events or on their property. How has that played out?

A Well, it's been more where if I'm speaking somewhere else in Houston. The security within the Texas Medical Center is pretty strong, between Baylor and Texas Children's Hospital security. The Texas Medical Center, which is really a medical city of 100,000 employees, actually has its own police force, which has been great. And so they've been fantastic.

And I try not to let it affect my daily routine. I still try to do my walks in the neighborhood. And, as you can tell, I'm a fairly open person, and I like interacting with

the students and the post-docs. And so I don't -- I don't want to stop that.

And in terms of my psychology, during the day, you know, when I'm talking to people like you, I'm good. At night, it starts to mess with your head though.

Q I'm sure.

You mentioned your daughter was impacted by this as well. Did that have any long-term effect on her?

A No. You know, it's -- you know, what she does is, she has a verbal IQ in the 80s but a functional IQ in the 40s. And she works at Goodwill Industries, which is a great place. But she'll report, "Oh, this man came up to me and was saying bad things about you, Dad."

Or, another time, she said that I secretly have millions of dollars. You know, this is one of the -- you know, one of the anti-vaccine assertions, that they say I'm a pharma shill, the reason I support vaccines is I'm secretly taking money from Pfizer and Moderna. And that -- you know, which, of course, the opposite, right? I'm making a lower-cost vaccine reach 100 million people to bypass the pharma companies, but -- so that's unfortunate.

Q We've spoken to other scientists and public health officials who have also received threats related to their work with COVID-19.

Are you also aware of others in your field who have received threats?

A I would say it's actually more likely than not, if you're a COVID scientist, you've received fair amounts of threats.

And I think, you know, this is -- we need to address this nationally. Because, increasingly, people like myself who, you know, worked nonstop, tirelessly, to do the best we could during the pandemic, in my case to make a lifesaving vaccine that reached 100 million people with a case fatality rate of .3 to .5 percent -- you know, the vaccine

developed in my lab saved 300,000 to 500,000 lives. That's pretty good. You know, the last thing I would want is to be vilified as a public enemy.

So I think we have to be really careful about how we present COVID scientists, be really careful with any attempt at public humiliation or that kind of thing. Because my worry now is that we're going to lose a generation of scientists who decide not to go into virology or infectious disease.

It's already happening. We already have seen a dramatic decline in the infectious disease fellowship match. People are not going into infectious diseases anymore or going into virology. I mean, I'm going to be a dinosaur as a pediatrician scientist who makes vaccines, and that's -- that's terrible.

Q Yeah, the research actually does support that. I will say, there was a GAO report titled "Pandemic Origins: Technologies and Challenges for Biological Investigations," which was issued in January of 2023, that said, quote, "Researchers may experience unwanted attention or pressure because of their involvement in pandemic-origin investigations and leave the field or refuse to participate." That supports the point you were just making.

But what impact will that have on the scientific field?

A If we don't stop the loss, we're going to lose our expertise for the next pandemic. That's the risk. We're going to have a depleted workforce. People aren't going to go into virology and get their doctoral degrees. Physicians are not going to go into the area of infectious diseases. And I believe that already has started to happen.

Q There was an article published in Nature in October of 2021 titled "I Hope You Die: How the COVID Pandemic Unleashed Attacks on Scientists." This article included dozens of researchers who shared their stories of death threats, threats of physical or sexual violence.

And there was an editorial that Nature did associated with that where they said, quote, "Institutions at all levels must do more to protect and defend scientists and to condemn intimidation."

They continued, with another quote: "Taking steps to support scientists who face harassment does not mean silencing robust, open criticism and discussion. The coronavirus pandemic has seen plenty of disagreement and changing views as new data has come in, as well as differing stances on what policies to adopt. Scientists and health officials should expect their research to be questioned and challenged and should welcome critical feedback that is given in good faith. But threats of violence and extreme online abuse do nothing to encourage debate and risk undermining science communication at a time when it has never mattered more."

Do you agree with that?

A Yes.

And I would say, you know, one of the big issues is there has been a pretty large group of, they call them -- some people call them "contrarians" -- many of them -- some of them are even at universities -- who hold views that are not supported by the mainstream scientific community. And that's fine; it's their right to do it. They tend to go on certain cable news channels and spread disinformation. That's not okay. And they also attack other scientists in a very heavy-handed, disgusting manner, and it puts our lives at risk.

So I think, you know, the problem with -- and then they say, "Well, we have academic freedom." And I think what we have to understand is, academic freedom, yes, of course it's important, but we also have something called "ethics" and we also have something called "professionalism." And that's where the academic centers need to take a bigger role, is regulating that and supporting mainstream scientists.

Q So, as I understand it, as a scientist, you would welcome critical feedback or questions about your work and about your analysis that are based on the facts and the data that is provided. Is that accurate?

A Yes. And it happens all the time, right? I submit a paper for peer -- I go to a journal, it goes out for peer review, and there's always reviewer two or three that always gives you a hard time about that. And that's fine. Or you review a grant and it goes to NIH study sections; there may be a dissenting view from one of the members of the study section. The point is, that's how the scientific process works.

What's new is that we have quite a large cohort of individuals who weaponize this, have views that, frankly, are not grounded in science, based on other factors. They have a larger -- they have a large voice because of the platforms they're given, whether it's on Twitter or some on the cable news channels. And they're very aggressive. And they not only directly insight violence against myself or my colleagues but they insight others as well. And that needs -- we have to figure out a way around that.

[1:38 p.m.]

BY [redacted]:

Q And do these types of threats -- you've mentioned, not only are they discouraging people from entering these fields, do they also discourage those who are in these fields from speaking out publicly to share information or combat misinformation?

A Oh, absolutely. I mean, you see large numbers of my colleagues have gotten off social media. I'm -- I always -- I wake up every morning and say, I'm going off social media, I'm done. And then I, you know, try to get back on it in certain ways. But absolutely.

And I worry it's going to happen in other fields. It's happening to the climate scientists now. It's happening to the virologists and the vaccine scientists. I worry this will continue to accelerate in other fields as well.

Q I know you're not an expert in public policy of this regard, but do you have any thoughts on what the United States Government could do to properly ensure that we are staffed and have a qualified workforce for scientific research and future pandemic preparedness?

A I think one is, part of institutions accepting Federal grant support is that they should have mechanisms in place to protect their scientists from external threats and to have mechanisms for how to help those individuals.

I mean, Baylor and Texas Children's have been great, but that's been a process, too, of, you know, years of my being -- over the last 14 years, being attacked by anti-vaccine activists. We've kind of worked out, you know, a system of how and when I contact Texas Medical Center, when it needs law enforcement, or if there are other mechanisms.

But that should be in place now, because this is a new normal for scientists across

universities.

And part of the problem is -- and, again, this has not been a problem at Baylor or Texas Children's, but I've seen it at other universities -- universities are very risk-averse and don't want any attention called to anything happening. And so the problem is, universities respond by basically telling a scientist, well, keep your head down, just write your grants and papers, or get off social media now, or don't go on TV. And that, too, has a chilling effect.

And I think there needs to be a mechanism in place particularly for academic scientists to feel comfortable still speaking out. And maybe this could be done as a requirement for receiving Federal grants, to put those things in place.

Q And what would you say to those in your field who are fearful or those who -- younger generations who are coming up and want to work in sciences or medical fields but fear the negative impact it might have on their personal lives? Do you have advice or anything you'd want to say to them?

A Yeah. I think -- and a lot of young people -- and, first of all, there are scientists who don't want to do public engagement, and that's fine too. But I think for those who want to do it, we should give them training in how -- I mean, I had to learn it by trial and error. Sometimes I say more error than trial, I think, sometimes.

But there are ways to provide training for doctoral students, for medical students, for residents, for postdoctoral fellows, even junior faculty, in how to do public engagement and to explain what the anti-science ecosystem looks like and all the moving parts about it so they understand it and know who they can go to for that purpose.

Because, as I mentioned earlier, 75 percent of Americans cannot name a living scientist. And that's partly the fault of our professions and our universities and our academic health centers, that we don't encourage that.

Q And what is the importance for our future pandemic preparedness in having a well-qualified workforce of scientists and medical professionals working on these issues?

A Well, let's think what happens now if another pandemic were to strike. First of all, the disinformation machine would get into high gear right away, and it's much more sophisticated than the actual information system.

And the first thing that would happen is, the vaccination rates would resemble something along the lines of the last two boosters, the bivalent booster in 2022 and the annual immunization in 2023, about 20 percent. So that's going to be a problem, and we're not going to be able to persuade the American people to take vaccines.

We're also -- we're not going to have the workforce, because people have walked away from certain professions like virology or infectious diseases. And so, as a result of this disinformation ecosystem, we're in much worse shape now as a consequence.

And so, when we talk about pandemic preparedness, we have to be able to have a frank discussion of what it is and describe it, like I have in my book, "The Deadly Rise of Anti-Science," and start figuring out a way to begin chipping away at it. Because, right now, no one -- no one has the appetite, at least at the government level, to take it on.

And I've said the same thing to Tedros at WHO, Dr. Tedros, that, you know, the World Health Organization is not going to solve this problem globally, because now it's expanding and it's being exported from the U.S. We need to bring in other U.N. agencies to get some advice on how to do this.

And the same with the Federal Government. The health sector doesn't know what to do, but there are a lot of smart people in government who can help us figure it out.

Q But it is --

A And, finally, remember, we have foreign actors doing this as well, right? We know a lot of this is coming from the Putin government and the Russians. It's not the only country; Iran does it, North Korea does it, but Russia especially. And this means bringing in State Department, too, to get some help and advice on it.

Q But it is a vital piece of our pandemic preparedness to have a well-qualified scientific community and medical professionals who are willing to work in these areas, right?

A And feel safe doing it.

Q Thank you.

A Thank you. Thanks for the question.

[redacted]. We have no further questions at this time. We can go off the record.

Mr. Benzine. Neither do we. You're going to be early for your flight.

Dr. Hotez. Thank you.

[Whereupon, at 1:46 p.m., the interview was concluded.]

Certificate of Deponent/Interviewee

I have read the foregoing ____ pages, which contain the correct transcript of the answers made by me to the questions therein recorded.

_____

Witness Name

_____

Date