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CIVIL DISTRICT COURT
PARISH OF ORLEANS
STATE OF LOUISIANA

CAJUN CONTI LLC, CAJUN
CUISINE 1 LLC, and CAJUN CASE NO. 2020-02558
CUISINE LLC d/b/a OCEANA
GRILL DIVISION M-13
VERSUS
CERTAIN UNDERWRITERS AT
LLOYD'S, LONDON

TRANSCRIPT OF THE VIDEOCONFERENCE DEPOSITION OF:
LEMUEL MOYE, M.D., PH.D.,
LOCATED AT 5671 SOUTH WAYNE DRIVE, CHANDLER,
ARIZONA 85249, TAKEN ON BEHALF OF DEFENDANT,
REPORTED IN THE ABOVE ENTITLED AND NUMBERED CAUSE
BY YOLANDA J. PENA, CERTIFIED COURT REPORTER FOR
THE STATE OF LOUISIANA.

REPORTED AT:
18487 BELLE GROVE ROAD
PRAIRIEVILLE, LOUISIANA 70769

COMMENCING AT 12:11 P.M., ON NOVEMBER 10, 2020.

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1 S T I P U L A T I O N
2
3 IT IS STIPULATED AND AGREED by and among
4 the parties that this deposition is hereby being
5 taken for discovery purposes and for any and all
6 purposes authorized under the Louisiana Code of
7 Civil Procedure.
8 All formalities, including the reading
9 and signing of the transcript by the witness, are
10 hereby waived.
11 Except as provided in Article 1455,
12 objections are considered reserved until trial or
13 other use of the deposition.
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1 THE REPORTER: Good afternoon. My
2 name is Yolanda Pena. I am a nationally
3 certified court reporter with Baton Rouge
4 Court Reporters.
5 At this time, I will ask counsel to
6 identify yourselves and whom you represent
7 and agree on the record that there is no
8 objection to this court reporter
9 administering a binding oath to the witness
10 via remote videoconference.
11 We'll start with the noticing
12 attorney.
13 MR. MILLER: Allen Miller and
14 Kevin Welsh on behalf of the defendants.
15 And we have no objection.
16 MR. ALVENDIA: Rico Alvendia,
17 Dan Davillier, Jennifer Kuechmann,
18 Jennifer Perez, Matt Sherman on behalf
19 of the plaintiff. And we have no
20 objection.
21 THE REPORTER: And, Dr. Moye, I'll
22 swear you in now.
23 ///
24 ///
25 ///

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1 LEMUEL MOYE, M.D., PH.D.,
2 5671 South Wayne Drive, Chandler, Arizona 85249,
3 having been first duly sworn, was examined and
4 testified as follows:
5 EXAMINATION
6 BY MR. MILLER:
7 Q. Good afternoon, Dr. -- is it Moye or
8 "Moye"?
9 A. Moye. Thank you.
10 Q. That's okay. Thank you. Good afternoon.
11 Nice to see you.
12 A. Good to see you, sir.
13 Q. I know you have given a deposition before,
14 right, Doctor?
15 A. Yes, sir.
16 Q. Okay. So I'm going to try to be quick on
17 all the preliminaries, but I'm going to ask you a
18 series of questions. You're going to give me
19 answers. The court reporter is taking everything
20 down. We ask that those answers be verbally so that
21 she can accurately take down your testimony. Is
22 that fair?
23 A. Yes, it is.
24 Q. Okay. Oftentimes, I think my questions are
25 articulate and well-phrased, and they are not. If

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1 in fact you do not understand what I'm asking,
2 please ask me to rephrase it, and I'll be happy to
3 do so within the best of my abilities.
4 However, if you answer, I'm going to assume
5 that you understood what I was asking. Is that
6 fair?
7 A. It is.
8 Q. Okay. If we ever need to take a break,
9 please allow me -- I imagine we might go a little
10 while because your report is so extensive. We can
11 take a break at any time. I only ask that if we do
12 take a break and there is a question pending, we
13 answer that question prior to the break.
14 A. I understand.
15 Q. Okay. Why don't you give me your full name
16 and address, please.
17 A. May I ask a question first, just a
18 technical question?
19 Q. Yes, sir.
20 A. My screen -- my screen has been reversed so
21 that the zoom component is over on the right, and
22 I'm seeing a -- looks like a screenshot of a
23 computer screen that is Phelps Dunbar LLP.
24 Q. Yes, sir. And we can change that right
25 now. The -- throughout the course of the

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1 deposition, that may happen because we'll be sharing
2 a screen with you to show you documents. We're not
3 at that point right now, so I'm going to ask that
4 Kevin remove that screen so you can then see all of
5 the other participants. Okay.
6 A. And I think --
7 **Q. Is that better?**
8 A. There was a question pending.
9 **Q. Sorry about that. Okay.**
10 The question was for you to state your name
11 and address for the record.
12 A. Sure. First name is Lemuel, L-e-m-u-e-l,
13 last name M-o-y-e.
14 **Q. Now, Doctor, one more preliminary question.**
15 **Are you on any prescription medication today?**
16 A. No, sir.
17 **Q. So there's nothing that would prevent you**
18 **from answering my questions truthfully?**
19 A. No, sir.
20 **Q. Okay, great. Why don't you, just**
21 **generally -- and we're going to get to your CV and**
22 **kind of walk through that in detail, Doctor. But**
23 **why don't you give me your educational background,**
24 **please.**
25 A. Sure. Where would you like to start?

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1 **Q. Your -- well, start with your undergrad and**
2 **work through your professional degrees.**
3 A. Sure. So very briefly, I graduated with a
4 BA in mathematical sciences from the Johns Hopkins
5 University in 1974. Graduated from Indiana
6 University School of Medicine in 1978. Then
7 internship in Methodist Hospital in 1978 to '79.
8 **Q. What was your internship in in '78 and '79?**
9 A. It's a rotating intern. Actually, the
10 technical term was flexible internship. It's a
11 rotating internship.
12 **Q. Which means that you participated in**
13 **various disciplines in medicine?**
14 A. Essentially, all of the major disciplines
15 in medicine. So general medicine, surgery,
16 endocrinology, cardiology, emergency room of course,
17 among others.
18 **Q. Okay.**
19 A. Then I went to Purdue University. Got a
20 master's degree at Purdue University, and I got the
21 master's degree I think in 1981. Not really sure
22 about that but approximately 1981. And then went to
23 University of Texas, where I attained a Ph.D. in
24 what was called then biometry. But it's really
25 biostatistics, and that was in 1987.

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1 **Q. And obtaining that -- the Ph.D. was your**
2 **last -- and I know there are multiple educational**
3 **components to your career. But that was your last**
4 **formal schooling?**
5 A. Yes, sir.
6 **Q. Okay. What was the master's degree? What**
7 **discipline was that in?**
8 A. Mathematical statistics.
9 **Q. Tell me what exactly is mathematical**
10 **statistics.**
11 A. Sure. It's mathematical science of the
12 theory underlying the analysis of data, so that
13 entails an understanding of probability, I would say
14 completely, but nobody understands probability
15 completely. So an understanding of probability and
16 an understanding of statistical inference.
17 **Q. All right. Now, so unfortunately for you,**
18 **Doctor, I was an English major, so...**
19 A. I appreciate -- I appreciate good diction
20 and articulation.
21 **Q. So we're going to spend quite a bit of time**
22 **having you educate me on some of these technical**
23 **terms, and I apologize in advance for that today.**
24 A. Of course.
25 **Q. I think I understand probability. But tell**

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1 **me statistical inference, what exactly that is.**
2 A. Of course. So statistical inference is the
3 process by which one can collect data from a sample
4 and attempt to attribute its findings to a larger
5 population from which the sample was obtained.
6 **Q. And I've gone through your CV. So the**
7 **import of that is seen heavily throughout all of**
8 **your clinical trials at work?**
9 A. Yes, sir.
10 **Q. Okay. And all of us, I think, are learning**
11 **about clinical trials, particularly with respect to**
12 **Pfizer's announcement on yesterday.**
13 **So when I say "clinical trials," that's the**
14 **practical application of the statistical inference**
15 **where you take a subset of individuals, you test**
16 **them so that you can then extrapolate that to the**
17 **greater population?**
18 A. Well, it's -- epidemiologist distinction.
19 I would describe it as the following: A clinical
20 trial is a research environment where --
21 **Q. I'm sorry.**
22 A. All of the Bradford Hill causality tenets
23 are incorporated in the design of the study with the
24 exception of strength of association. Strength of
25 association is obtained from the trials data. And

1 the combination of all of those tenets leads to a
2 conclusion as to whether the relationship between
3 the exposure or the treatment and the disease is
4 causal or not.

5 **Q. And that is what you would describe as a**
6 **clinical trial?**

7 A. Yes, sir.

8 **Q. Okay. And the Bradford Hill causality,**
9 **what -- tell me what that is.**

10 A. Sure. It's a collection of guidelines that
11 were established by Sir Austin Bradford Hill. I
12 think they were published in 1965. They essentially
13 describe the thought process a reasonable
14 epidemiologist goes through in determining whether
15 an exposure is -- causes a disease or whether an
16 exposure is merely associated with the disease.

17 **Q. Okay. Let's pull up your curriculum vitae.**

18 MR. MILLER: We're going to mark that
19 as Exhibit 1.

20 (Exhibit No. 1 was identified.)

21 MR. MILLER: Kevin? There we go.

22 BY MR. MILLER:

23 **Q. I'm going to walk you through, Doctor, some**
24 **of the -- your profession experience,**
25 **certifications, and licenses. And where I have**

1 A. Sure. So we talked about what mathematical
2 statistics was, and I won't repeat that.
3 Biostatistics is the application of mathematical
4 statistics to health science research.

5 **Q. And when you say "health science research,"**
6 **what areas does that include?**

7 A. Actually, that's very -- that's a very
8 broad swath. So health science research includes
9 research in any of the medical fields. So as
10 example, research in cardiology, research in
11 pulmonology, research in orthopedics. So all of the
12 clinical fields, and in addition it includes
13 research in nursing. It includes research in the
14 economics of healthcare delivery. It includes
15 research in quality of life. Any area that involves
16 healthcare delivery is also considered part of
17 healthcare research. So it's very broad.

18 **Q. Okay. What particular areas have you**
19 **specialized in within the application of**
20 **biostatistics?**

21 A. Well, I have -- to be fair, to answer your
22 question quickly, most of my research has been in
23 cardiology. However, I have worked in other fields
24 as well, including pediatrics, including alternative
25 medicine, as they are distributed through my

1 **questions, I'll just -- I'll pose those questions at**
2 **that time. Is that okay?**

3 A. Yes, sir.

4 **Q. Okay. Let's look at your professional**
5 **experience. And the first thing says you're a**
6 **professor of biostatistics with tenure at the**
7 **University of Texas. Now, you made a distinction**
8 **earlier when you said you had a biometry, but it's**
9 **really called -- it's biostatistics now?**

10 A. Yes. The language of biostatistics, for
11 better or for worse, evolves. So when I started the
12 school, its program in biostatistics as well as the
13 other programs in the nation were not called
14 biostatistics. They were called biometry.

15 **Q. Biometry.**

16 A. And without the -- without to -- diverge
17 too much, biometry and biometrics turned into the
18 use of body measurements to indicate something about
19 the person. So the rate of which -- the rate at
20 which irises dilate or -- or constrict,
21 fingerprints, that all became -- lip movements, that
22 all became the science of biometry. And so our
23 field took the name biostatistics.

24 **Q. All right. So tell me exactly what is**
25 **biostatistics.**

1 publications.

2 **Q. Okay. The next entry under your**
3 **professional experience is that you were director**
4 **of -- director in coordinating -- director at the**
5 **Coordinating Center For Clinical Trials at the**
6 **University of Texas?**

7 A. That's correct.

8 **Q. Okay. What exactly was that position?**

9 A. So the coordinating -- can I tell you first
10 what the Coordinating Center was?

11 **Q. Yes, sir.**

12 A. Okay. Sure. So the Coordinating Center
13 was a facility that included faculty members from
14 several different disciplines or departments in
15 public health. It included biostatisticians,
16 epidemiologists, sometimes healthcare specialists,
17 and sometimes, depending on the trial, diabetologist
18 or hypertension specialist or a specialist in a
19 retinal disease or prematurity. We all work
20 together to design, execute, and -- and analyze
21 clinical trial results.

22 **Q. Okay. And as -- you were the director**
23 **for -- from 2009 to 2010?**

24 A. Just a year, yes.

25 **Q. Okay. Did you participate in this group**

1 **beyond being the director?**
2 A. Sure. Thank you. So I was a member of the
3 Coordinating Center for Clinical Trials the entire
4 duration of my faculty life at the school of public
5 health. It's just this one year I was asked to step
6 in as director.
7 **Q. Okay. The next entry is secondary**
8 **appointment of epidemiology -- secondary appointment**
9 **in epidemiology.**
10 A. Yes, sir.
11 **Q. What exactly does that mean?**
12 A. Well, okay. Let me answer that in a
13 negative -- negative, if I may, first. It does not
14 mean I was a member of the department of
15 epidemiology. I want to be clear about that. I was
16 a member of the department of biostatistics. I have
17 never been and have never said I was a member of
18 department of epidemiology.
19 Having said that, I have been working
20 closely with epidemiologists since I started in --
21 at the school as a faculty member in 1987, and I was
22 not the only one. In fact, faculty members were
23 encouraged to work with other faculty members in
24 different disciplines than departments.
25 **Q. Okay. So let me go back to the prior entry**

1 **in your CV. As director of Coordinating Center For**
2 **Clinical Trials, I imagine there were**
3 **epidemiologists in the Coordinating Center For**
4 **Clinical Trials?**
5 A. Yes, sir.
6 **Q. Okay.**
7 A. Yes, sir, just as I served with
8 epidemiologists in their primary work as a
9 biostatistician and a fellow faculty member. There
10 was a lot of cross-pollination.
11 **Q. But you are not an epidemiologist?**
12 A. No, I wouldn't say that. I would say I am
13 an epidemiologist. I simply am saying to you I was
14 not a member of the epidemiology department, but I
15 am a practicing epidemiologist. I am an applied
16 epidemiologist.
17 **Q. Is there a certification for that?**
18 A. Is there a certification for applied -- no,
19 I don't believe there is.
20 **Q. Okay. Are there any specific requirements**
21 **that the Texas board would require you to have to**
22 **identify as an epidemiologist?**
23 A. I understand your question. There's no
24 Texas board that certifies biostatisticians or
25 certifies epidemiologists. There are simply --

1 there are simply degree programs.
2 **Q. Do you have a degree in epidemiology?**
3 A. No, sir.
4 **Q. Okay. There is such a degree as**
5 **epidemiology, correct?**
6 A. To be clear, there are masters' degrees and
7 Ph.D.s in epidemiology, but I have enough degrees.
8 I don't need another academic degree.
9 **Q. I won't disagree with you on the number of**
10 **degrees you have. You do have enough.**
11 **While you were actively working at the**
12 **University of Texas, did the -- were there any**
13 **members of the epidemiologist department that**
14 **considered you to be an epidemiologist?**
15 A. Oh, for sure, yes.
16 **Q. Okay. Who were they?**
17 A. I would say Milt Nickerman, Rick Shekelle.
18 These were senior members of epidemiology there.
19 Darwin Labarthe, also a senior member of
20 epidemiology there. Unfortunately, Rick just died,
21 I think, three or four months ago.
22 **Q. Okay.**
23 A. We worked on -- I'm sorry. I'll stop
24 there.
25 **Q. Yeah, I'll get to -- we'll come back to the**

1 **work that you did while there.**
2 **The next entry -- so again, let me go back**
3 **to secondary appointment in epidemiology. What does**
4 **the distinction "secondary appointment" mean?**
5 A. It means that I'm affiliated with and do
6 work in the -- with epidemiologists. However, I am
7 not involved in the administration and the -- well,
8 I'm not involved in the administration of the
9 department. So for example, things I did not do: I
10 did not attend meetings where they talked about what
11 their curriculum was going to be. I did not attend
12 meetings where they talked about when they were
13 going to give their qualifying examination. Those
14 were important matters. Those were administrative
15 matters.
16 What I was involved in was advising
17 students in epidemiology, helping to teach classes
18 in epidemiology, working with epidemiology students
19 who took my classes, including epidemiologists on my
20 grants and work and being part of the grant work of
21 other epidemiologists. And of course we publish
22 together in epidemiology journals.
23 **Q. Okay. If I went to the University of**
24 **Texas's description of its faculty members, would**
25 **they describe you as having a secondary appointment**

1 **in epidemiology?**
2 A. I -- I have not looked. I would be
3 surprised if they did because the school has become
4 quite siloed. And at this point, you are part of
5 one department or another. But that is a -- an
6 intellectual movement that flows one direction or
7 the other. Sometimes they move to be more siloed.
8 Sometimes they move to incorporate collaboration.
9 So at this point, I'm going to say I don't know what
10 they would say.

11 **Q. Okay. Well, then let me ask this: What**
12 **encouraged you to -- so this term "secondary**
13 **appointment," was that something you created on your**
14 **own?**

15 A. No. No, it was not. It was encouraged
16 that we all -- this is now in the 1980s. It was
17 encouraged that we all be part of other departments
18 and talk about it. And -- and since I took my work
19 in epidemiology seriously, it was appropriate for me
20 to put that on my CV.

21 **Q. Again, now, it was your decision to put the**
22 **secondary appointment epidemiology on your CV?**

23 A. Sure. If you want to say "epi," I
24 understand what you mean, rather than going through
25 "epidemiology."

1 But yes, it was. But a couple of things.
2 First, it's my decision to put anything on my CV,
3 and many faculty members would put this as well if
4 in fact they were involved with another department.

5 **Q. Okay. I'm going down further, and I'm**
6 **trying not to rehash.**

7 **If, for example, you were an associate**
8 **professor in one of the areas in which we've already**
9 **discussed, I'm going to skip over those things.**

10 A. Yes, sir.

11 **Q. Okay. It says that you were consulting**
12 **clinical biostatistician at Baylor. Is that any**
13 **different from what you were doing at University of**
14 **Texas?**

15 A. Of a kind, yes. And I'll try and keep this
16 short. University of Texas -- Baylor, University of
17 Texas, Methodist Hospital, they were all a part of
18 the Texas Medical Center. Just as I was encouraged
19 to collaborate with other departments within my
20 school, such as epidemiology, I was also to
21 encourage -- encouraged to work with other
22 institutions in the medical center. And one of them
23 I worked with was Baylor.

24 **Q. Are you current --**

25 A. All right. I'm sorry. Start, please.

1 **Q. It says 1986 to the present. So are you**
2 **still consulting with Baylor?**

3 A. All right. That's my fault. I should have
4 put retired there as well. So that -- that really
5 ended in 2019.

6 **Q. Okay. And what -- what's the distinction**
7 **there, consulting clinical biostatistician as it pairs**
8 **to what -- compared to what you were doing at the**
9 **University of Texas?**

10 A. Sure. So at the University of Texas I
11 worked with senior epidemiologists, senior
12 diabetologists, hypertension experts, both locally
13 and nationally, to design, execute, and analyze
14 large clinical trials. There is a senior level of
15 expertise in that work, and I was pleased to be part
16 of it. The consulting work with -- with -- where
17 are we? With...

18 **Q. Baylor.**

19 A. Baylor. Thank you. Baylor. So the work
20 with Baylor was local, and it was of a lower caliber
21 in that the investigators I worked with had no real
22 experience with epidemiology and no real experience
23 with biostatistics. They simply knew that they had
24 collected data, and they were interested in having
25 that data appear as an abstract or appear in a

1 publication and didn't really know how to organize
2 and analyze the data to move forward to a result
3 that might be publishable.

4 **Q. Understood.**

5 A. I do need to clarify something, if I may.
6 I realize you may want to ask questions about it.

7 I do not have -- as I have told you, I do
8 not have a formal degree in epidemiology, but I have
9 substantial training in epidemiology. In medical
10 school we get considerable training in epidemiology,
11 to the point where many physicians think they know
12 epidemiology. I'm not there yet, but you learn --
13 we learned -- my first exposure to epidemiology was
14 in medical school, and it was through the second,
15 third, and fourth years of medical school.

16 In addition, I took courses as a student at
17 the School of Public Health in epidemiology as I
18 took courses in biostatistics. So I have a good
19 deal of formal training in epidemiology. It -- it's
20 important to have experience, but without formal
21 training experience, can sometimes be making the
22 same mistake repeatedly.

23 **Q. Other than taking courses -- what year did**
24 **you attend medical school?**

25 A. 1974 to 1978.

1 **Q. Okay. Other than courses in 1974 to '78**
2 **and then the work during your, I guess, Ph.D. in the**
3 **School of Public Health?**

4 A. Yes, sir. As a student, yes.

5 **Q. Other than those two instances as a**
6 **student, do you have any formal training in**
7 **epidemiology?**

8 A. Beyond the -- attending seminars as faculty
9 member, no.

10 **Q. Okay.**

11 A. I have a lot of experience working with
12 epidemiologists but no additional formal training.

13 **Q. Okay. Let me see. It says also that you**
14 **were the owner of MediClinic Physicians'**
15 **Association?**

16 A. Yes, sir.

17 **Q. What is that?**

18 A. That was a collection of freestanding
19 clinics in Houston that I joined as a physician. I
20 was a licensed physician in Houston, and I joined
21 and worked with them, and then was asked to be the
22 owner of the physicians' association, which is the
23 collection of physicians who were involved in seeing
24 patients across -- I think it was seven clinics.

25 **Q. Now, those clinics, were they primary care**

1 **academic setting. This is the first that I'm**
2 **hearing of sort of, like, clinical work as an MD.**

3 **How -- tell me generally how much**
4 **experience you have in actually seeing and treating**
5 **patients.**

6 A. Sure. Be glad to. I started seeing -- I
7 have -- to answer your question tersely,
8 substantial. I had -- when I graduated in 1978, I
9 got and -- and completed my internship in '78, '79.
10 I was licensed, and I began seeing patients shortly
11 thereafter. I was seeing patients at a clinic. I'm
12 trying to see -- yes, Methodist Healthcare Center,
13 which was associated with Methodist Hospital.

14 I saw patients five days a week, and these
15 patients were -- primarily they were occupational
16 medicine at the time, primarily occupational
17 medicine. The notion of freestanding clinics really
18 didn't take off until the mid-1980s. So I saw many
19 patients there with occupational injuries.

20 I also worked at the US steel mills in
21 Gary, Indiana. That was for about a year, but it
22 wasn't very often. However, there I really -- I saw
23 the worst clinical situations I'd ever seen in my
24 life. It was really -- it was very educational and
25 sometimes very tragic.

1 **clinics?**

2 A. Yes, sir.

3 **Q. Did any of the, say, seven -- estimated**
4 **seven clinics have any particular type of specialty**
5 **that they rendered?**

6 A. No. Each of the clinics was open to the
7 public for any -- any healthcare situation or
8 problem patients in the community, subjects in the
9 community might have.

10 Now, it didn't stop some of our physicians
11 from having some special expertise that they would
12 share. For example, I had a lot of experience in
13 orthopedics. And so when it came to relatively
14 simple things, like bad sprains and simple
15 fractures, I had no problem diagnosing and treating
16 and following patients with these injuries. And I
17 let the other clinics know so that they could have
18 their patient -- if they were not so comfortable
19 seeing those patients, they could come to see me.

20 So we did have this expertise sharing, but
21 there was no -- there was no -- there was no policy
22 that excluded one type of patient from a clinic in
23 preference to another.

24 **Q. In your -- lots of the information that**
25 **we've talked about thus far is contained in the**

1 **Q. At -- this was at the steel mills?**

2 A. Yes, sir.

3 **Q. When you say you worked at -- were you a**
4 **physician on site at the mill, or --**

5 A. Yes.

6 **Q. -- did you work in a hospital?**

7 A. I took 16-hour shifts onsite at the Gary
8 steel mills.

9 **Q. So other than when you initially graduated**
10 **from medical school and became licensed in Indiana**
11 **and then the job at the steel mills, when was the**
12 **next job where you were actually seeing patients?**

13 A. Oh, then things really took off. Then the
14 urgent care concept became accepted, and I began to
15 work at urgent care clinics, first in Indiana and
16 then in Houston, when we were talking about the
17 MediClinic Physicians' Association.

18 There I commonly worked 30 to 40 hours a
19 week as a student -- 30 to 40 hours a week while I
20 was a student in the Ph.D. program, also seeing
21 patients.

22 **Q. When did your active medical practice**
23 **seeing patients end?**

24 A. For all intents and purposes, it ended in
25 1992. There was the Katrina event that I took --

1 took part in. That would have been, I think,
2 13 years later. But the practice of medicine for me
3 essentially ended 1992.

4 **Q. And why was that?**

5 A. Well, it was because up to that point in my
6 career, I had my cake and could eat it too. I was
7 doing research and also was seeing patients, but it
8 got to the point where I could not continue to do
9 both satisfactorily. So I had to choose, and I
10 chose to go into research.

11 **Q. Okay. In 1992 you were already employed
12 with the University of Texas?**

13 A. Yes. At that point in 1992, I was a
14 faculty member.

15 **Q. Okay. All right. I'm going to skip down
16 to page 2 and as -- as decorated as your honors are
17 and impressive as they are, I don't think that I
18 need to go through them, so I'll skip that section.**

19 A. Okay.

20 **Q. Let me ask you about the Journal of
21 Clinical Epidemiology. Well, let's back up. Before
22 we get there, you have a section on your CV that's
23 entitled "Journal Reviewer."**

24 A. Yes, sir.

25 **Q. So tell me exactly what that means.**

1 A. Of course. Of course. One of the
2 linchpins of medical research is the review process.
3 So a manuscript is submitted to a journal. As many
4 manuscripts are submitted to journals, journals
5 can't publish them all, so journals have to make a
6 determination as to which ones are worthy of
7 publication. So they rely on a collection of
8 authors who publish in their journals, who have
9 already published in their journals, to get their
10 assessment and impression of the article. So that's
11 called peer review.

12 We are -- as authors and as fellow
13 researchers, we're peers. We review the manuscripts
14 and give the editor of the journal an assessment of
15 whether this manuscript is worthy for consideration
16 for publication.

17 **Q. Okay. And so when you describe yourself as
18 a journal reviewer and then you list these various
19 -- these various journals underneath?**

20 A. Yes, sir.

21 **Q. Okay. And so you have acted as -- well,
22 let me back up.**

23 **You have submitted articles then to all of
24 the journals that are listed under your journal
25 reviewer title?**

1 A. I think that's fair. As I sit here,
2 I'm not sure which article I submitted to
3 PharmacoEconomics, but I -- but I was asked to be a
4 journal reviewer for that one.

5 **Q. Okay. To become a journal reviewer you
6 have to be invited?**

7 A. Yes, sir.

8 **Q. Okay.**

9 A. Well, at that time you did. At this point,
10 the need for reviewers is so great, perhaps the
11 invitation isn't necessary anymore. But when I
12 was active -- when I was active, you had to be
13 invited.

14 **Q. Now, are you currently a journal reviewer
15 for the list of journals that are on your CV?**

16 A. Now that I've retired, I have put journal
17 reviews behind me. So the -- the question -- the
18 answer to your question is no.

19 **Q. When did you stop becoming a journal
20 reviewer?**

21 A. When I retired.

22 **Q. So in 2019?**

23 A. Yes, sir.

24 **Q. Okay. The Journal of Clinical
25 Epidemiology, which is the first entry there, did**

1 **you -- did you have occasion to publish a work in
2 the Journal of Clinical Epidemiology?**

3 A. Well, I certainly had occasion to review
4 it. I'd have to look at my CV to see if I actually
5 published in it. I don't think it will take very
6 long, but I can check.

7 **Q. We'll get to that. I guess, in order to
8 kind of short-circuit it, initially when I asked for
9 the definition of a journal reviewer, I think you
10 said the journals would ask a collection of
11 individuals that submitted articles or journals to
12 them to review others.**

13 A. Yes, sir.

14 **Q. And I just want to ensure that I have the
15 right definition. I don't want to assume that you
16 published in each of these journals.**

17 A. Right. So my definition may be too narrow.
18 While they may or they are -- of course they know
19 the work of the people who submitted to their
20 journal because somebody reviewed it. But I would
21 think that if somebody had articles published in the
22 Journal of the American Medical Association in
23 epidemiology, they might also be asked to be a
24 reviewer for the Journal of Clinical Epidemiology.
25 It's a relatively small universe of editors and

1 reviewers.

2 **Q. Okay. Is it fair to say that the journals**
3 **that you've listed are generally accepted as**
4 **professional and reliable sources of information in**
5 **the fields in which they publish?**

6 A. I would describe them as essentially
7 reliable and high quality. Now, there are -- there
8 are always exceptions. The good -- a good journal
9 of medicine will make a mistake and publish a bad
10 article sometimes, but by and large they are
11 reliable and high quality.

12 **Q. Okay. The second entry underneath "Journal**
13 **Reviewer" is Journal of the American Statistical**
14 **Association, Biometrics. Is that -- and then**
15 **there's Biometrics behind it. Is that one journal?**
16 **Or is Biometrics a journal in -- in and of itself?**

17 A. They are two separate journals.

18 **Q. Okay. So there's a journal entitled simply**
19 **Biometrics?**

20 A. Right.

21 **Q. And there is a journal entitled Controlled**
22 **Clinical Trials?**

23 A. Yes, sir. It's a political complexity that
24 now has turned into two different journals. One is
25 contemporary clinical trials. I'm not sure I follow

1 the politics of it, but when I was reviewing, it was
2 called Controlled Clinical Trials.

3 **Q. Okay. Then there on the other side, The**
4 **American Journal of Epidemiology, did you publish in**
5 **that journal?**

6 A. I'd have to look and see.

7 **Q. Okay. Do you know how long you acted as a**
8 **reviewer, or how often did you review things for the**
9 **American Journal --**

10 A. I'm sorry. I didn't mean to step on your
11 question. Go ahead, please.

12 **Q. How often you reviewed on behalf of the**
13 **American Journal of Epidemiology?**

14 A. I can't tell you how often I reviewed for
15 any of these, but I can tell you that it seemed like
16 every two or three weeks I was getting the
17 opportunity to review for one or the other.

18 **Q. Okay. And would that be the same for the**
19 **New England Journal of Medicine?**

20 A. Yes, sir.

21 **Q. The American Family Physician?**

22 A. I don't know so much about that.

23 **Q. Okay. What about -- was it -- how do you**
24 **pronounce that? Lancet?**

25 A. Lancet, yes.

1 **Q. (Indiscernible.)**

2 A. I'm sorry. Again, I stepped on your
3 question. Go ahead.

4 **Q. (Indiscernible.)**

5 A. I would get an occasional request to review
6 for Lancet.

7 **Q. And what -- some of these are**
8 **self-explanatory. But what's the subject matter of**
9 **Lancet?**

10 A. Lancet is the European version of the
11 American -- of the Journal of the American Medical
12 Association. It is their premier general medicine
13 journal.

14 **Q. Okay. The last one?**

15 A. Atherosclerosis?

16 **Q. Yes, sir. Was it that?**

17 A. That's a specialty journal in cardiology.
18 Cardiology is a broad field. Atherosclerosis is a
19 pathophysiological process, which has of course
20 garnered a great deal of an attention over the
21 decades, and they have a journal associated with
22 that.

23 **Q. Okay. Now, the next entry is a book.**
24 **You're -- you're a book reviewer just for that -- is**
25 **that one book, Springer?**

1 A. Unless you scroll down and I'm missing -- I
2 can't scroll with you, so I have to rely on you.

3 **Q. If we scroll to the next page, we get to**
4 **the current -- current funded research.**

5 A. Okay. So I -- I was just asked to
6 review -- book review for Springer.

7 **Q. And who is Springer? What do they publish?**

8 A. Oh, Springer is a publisher that focuses
9 on -- well, actually, Springer evolved -- has
10 expanded over the years. So it was primarily
11 mathematics, became statistics and probability,
12 biostatistics, and I presume they continued to
13 expand.

14 **Q. Okay. Now, there were no dates on any of**
15 **your journal reviewers, and nor is there a date on**
16 **this Springer. Is there a reason why you didn't**
17 **identify specific dates in articles that you**
18 **actually reviewed?**

19 A. Well, there's two reasons. Number one,
20 it's not the custom in my area to actually put that
21 kind of detail in; and number two, I didn't have the
22 time to log that. And if I would have -- yeah, I
23 just didn't have the time to do it. So nobody ever
24 asked me to do it, so I'd rather put my time
25 someplace else.

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1 **Q. When was the last time you updated your CV?**
2 A. This is dated October, I think, 2020. I
3 think it is.
4 **Q. The next section is "Current Funded**
5 **Research," and as I reviewed it, most of it -- well,**
6 **there are two areas in the field of cardiovascular**
7 **and then one in stroke. Would you -- so did you do**
8 **any funded research in the field of epidemiology?**
9 A. Yes. I would describe all of this --
10 cardiovascular stem cell network, the acute stroke
11 program for sure, Dr. McCormick's program for the
12 Hispanic health research, it's clinical and
13 translational science award, all of that is
14 epidemiology.
15 **Q. (Indiscernible.)**
16 A. Go ahead, please. Go ahead. I'm sorry.
17 **Q. I interrupted you. Go ahead.**
18 A. Okay. And I would say that this is really
19 just the most recent. Bio-funded research goes back
20 to 1987 when I was funded on hypertension programs
21 and the development of statins, and that was all
22 epidemiology and biostatistics.
23 **Q. Let me make sure -- and I'm going to ask**
24 **you one more time for my clarity, and I apologize if**
25 **I'm repeating myself.**

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1 **So cardiovascular, stroke, we'll get to**
2 **some -- you know what, let me use this.**
3 **So cardiovascular, stroke, hypertension**
4 **issues with respect to low birth rate, lactation,**
5 **sex bias, cholesterol, you would put all of the work**
6 **that you did in all of those areas under the**
7 **umbrella of epidemiology?**
8 A. Almost. It sounded like you were looking
9 at some of my publications.
10 **Q. I am.**
11 A. There are a few of my -- there are a few of
12 my publications where I function only and solely as
13 a number-cruncher, and that I can't -- I cannot say
14 is -- in all honesty, is epidemiology.
15 But when I am involved in the design and
16 the execution and the analysis of a program, then
17 that certainly must involve epidemiology.
18 **Q. So as -- and I just want to make sure I'm**
19 **clear. Putting the -- putting aside the underlying**
20 **healthcare issue that you are addressing, the work**
21 **that you've done throughout your career you consider**
22 **to be epidemiology?**
23 A. I'm not sure I understand what we put
24 aside. What did we put aside?
25 **Q. We're putting aside the physical ailment of**

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1 **the individuals that you are compiling data in**
2 **relation to. So for instance, I'm looking at some**
3 **of your publications, and there is a publication**
4 **No. 10.**
5 A. Okay.
6 **Q. "Amino acid composition of preterm and term**
7 **breast milk during lactation," that is a publication**
8 **that, as you described it, falls under the umbrella**
9 **of epidemiology?**
10 A. I would say that's one of the examples
11 where it did not because I know -- even -- let me
12 put it this way. There is the overall research, and
13 there is my role in the research.
14 The overall research, I would certainly
15 assert that if you look at the overall research,
16 design, and execution, it is all -- all has
17 epidemiology at its core. All of them do.
18 Regardless of my role, all of them do.
19 Having said that, I was not involved in the
20 overall design of several of my publications. And
21 one of them is the publication you pointed out,
22 No. 10, where I was asked to come in and actually --
23 essentially to analyze the data.
24 And when I come in and just -- and given a
25 dataset, told to analyze it, and to provide some

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1 result, I don't really consider that epidemiology.
2 It's much too narrow, but somebody must interpret
3 that data, and that interpretation is epidemiology.
4 Does that help?
5 **Q. Yes, very much so.**
6 **All right. Well, let's take a look at your**
7 **publication starting with number -- the first one.**
8 A. Right.
9 **Q. Tell me what you did there.**
10 A. Of course, yeah. This was a -- this is my
11 very first publication ever, and it involved
12 microbiology.
13 Essentially, I was asked to -- the
14 hypothesis was that we -- we knew that patients with
15 cancer -- this is primarily hematologic cancer,
16 leukemia -- commonly required anticancer
17 chemotherapeutic agents in addition to antibiotics.
18 They required the anticancer chemotherapeutic agents
19 because they had cancer. But the combination of the
20 cancer and the effect on the anticancer
21 chemotherapeutic agents on their bone marrow
22 depressed this immune response. These patients were
23 on the antibiotics. I'm just setting the stage.
24 So patients are on both types -- both
25 classes of medicine. There have been an observation

1 that patients who were on certain antibiotics seemed
2 to have a better response to the anticancer
3 chemotherapeutic agent, and I was asked, I guess, at
4 this point -- when was this? This was published in
5 '78. I did this research as an undergraduate back
6 at Johns Hopkins in Baltimore.

7 I was asked to design a study, an in vitro
8 study. I wasn't a physician yet, so I couldn't see
9 patients. But an in vitro chemistry study to see
10 whether if I expose -- whether the exposure of
11 common pathogens -- pseudomona aeruginosa would be
12 one example.

13 THE WITNESS: And I will spell that
14 for you, Ms. Reporter -- Ms. Pena. I will
15 spell that for you later.

16 A. Pseudomona aeruginosa was a very dangerous
17 pathogen. It caused a hemorrhagic pneumonia. It's
18 lethal. And I was asked to see whether the
19 bacterium that caused that pneumonia was more
20 sensitive to antibiotics, I think it was ticarcillin
21 and carbenicillin, when they were exposed to
22 cytosine arabinoside and daunorubin. Those are the
23 only two -- only two anticancer chemotherapeutic
24 agents that I remember.

25 But we were able to show that in fact some

1 of the antimicrobial agents had more killing power
2 when they were exposed in vitro to anticancer
3 chemotherapeutic agents, even though the anticancer
4 chemotherapeutic agents did not kill the microbes
5 themselves.

6 BY MR. MILLER:

7 **Q. So let me ask this. Because in 1978 you**
8 **were -- you were getting your undergraduate degrees**
9 **in mathematical science?**

10 A. In '78 I was -- I was graduating medical
11 school.

12 **Q. I'm sorry. Okay. I'm sorry. In '78 you**
13 **were graduating medical school.**

14 **But -- so you mentioned in this**
15 **publication, or this task that you were asked to do,**
16 **you did a chemistry study?**

17 A. Yes, sir.

18 **Q. So tell me -- you're not a chemist, though,**
19 **right?**

20 A. No, I'm not a chemist. But I have had lots
21 of chemistry.

22 **Q. Yeah, I understand. What about physics? I**
23 **mean, you're not a physicist or --**

24 A. I've had lots of physics. I would not
25 represent myself as a physicist, I would not.

1 Having said that, I will say I've had an awful lot
2 of physics.

3 **Q. Okay.**

4 A. I can -- I understand kinematics. I
5 understand Newton's laws of forces. I understand
6 free fall. I understand little about astrophysics,
7 but I would not hold myself out as a physicist.

8 **Q. Okay. So this particular publication was**
9 **again -- you were asked to perform a specific task**
10 **within the larger scheme of this trial, I guess, so**
11 **to speak?**

12 A. Well, I would put -- I'd put it this way.
13 I had a much broader role here. This is different
14 than the publication 10 where somebody just gave me
15 data. In publication 1 I was given the problem, and
16 I had to think through what data I need to collect,
17 what anticancer chemotherapeutic agents do I --
18 should I study, what antibiotics should I study,
19 what different types of bacteria should I study, and
20 to what degree should this all be replicated.

21 So I was really given a lot more leeway as
22 an undergraduate student. And even though this was
23 published in '78, this work all happened in '73,
24 '74.

25 **Q. Okay. That's -- that's what I thought I**

1 **was getting at when you said you were doing this as**
2 **an undergraduate. Although it was published in '78,**
3 **the work happened while you were an undergraduate in**
4 **'74 -- '70 to '74?**

5 A. I think -- I think it was 1973 to 1974.
6 It's over two years.

7 **Q. And the underlying -- this kind of goes**
8 **back to the point I was attempting not so well to**
9 **make a while ago. The underlying medical issue for**
10 **this publication was cancer?**

11 A. Yes, sir.

12 **Q. Do you consider the work done with respect**
13 **to this publication epidemiology?**

14 A. I do.

15 **Q. Okay. That's all I -- that's what -- I'm**
16 **trying to learn the definition of epidemiology.**
17 **Well, let me just ask that.**

18 A. Sure.

19 **Q. And I may have asked it previously, but**
20 **could you give me what your -- the formal definition**
21 **of epidemiology?**

22 A. Sure. I would say epidemiology is the
23 process by which the true nature of the exposure/
24 disease relationship is deduced.

25 **Q. And under that definition, epidemiology**

1 **could include any type of disease?**
2 A. Yes, sir, yes.
3 **Q. Okay.**
4 THE WITNESS: I'm going to ask to take
5 a break in five minutes, just to give you a
6 heads-up.
7 MR. MILLER: We can take one right
8 now, actually. I'm ready for a break, if
9 that's okay.
10 THE WITNESS: Okay. Five minutes
11 okay?
12 MR. MILLER: Five minutes will work.
13 (Recess taken.)
14 BY MR. MILLER:
15 **Q. All right. Doctor, we were -- when we**
16 **left, we were going through some of your**
17 **publications. Let's take a look at the second one,**
18 **which was published in 1979.**
19 A. Oh, okay.
20 **Q. The "Environmental contamination of**
21 **continuous drip feedings in pediatrics," was that --**
22 **when you say "drip feedings," was that in relation**
23 **to breast feeding?**
24 A. No. I -- I'm going to have to refresh my
25 own memory about this one.

1 **Q. Okay.**
2 A. No, it was not -- it was not about breast
3 feedings; it was about the -- it was supplemental
4 feeding divided -- provided to infants in the
5 hospitals.
6 **Q. Okay. And I only brought up breast**
7 **feedings because I noticed that there were a number**
8 **of breast feedings publications that you had --**
9 A. I see.
10 **Q. -- throughout your life.**
11 A. But this -- but this one where the concern
12 was that -- this was an antimicrobial study. The
13 concern was that there might be some contamination
14 of the drip feeding apparatus.
15 **Q. Was your contribution to this particular**
16 **publication task related?**
17 A. It was simply -- it was simply data
18 analysis.
19 **Q. So this was not -- would not have been**
20 **under your definition of epidemiology -- an exercise**
21 **in epidemiology?**
22 A. Correct. I learned some epidemiology from
23 speaking with the senior investigators, but my role
24 was really just as a data analyst.
25 **Q. Okay. And at that time, you were in**

1 **medical school -- correct --**
2 A. Yes, sir.
3 **Q. -- at the time of publication?**
4 A. Sorry. Yes, sir, correct.
5 **Q. And so at that time, your -- the most of**
6 **your experience would have been in mathematical**
7 **sciences?**
8 A. Well, I -- I can't disagree. Well, let me
9 say this. It's hard to know. I had a math science
10 background, but I'm in the -- I'm at the end of
11 medical school now. So medical school has tipped
12 the balance some, and I've had epidemiology exposure
13 in medical school, so I don't know what to say. But
14 most of my background is.
15 **Q. I got you. The next publication in 1981**
16 **involved linen in newborn intensive care units be**
17 **autoclaved. Again, in pediatrics --**
18 A. Autoclaved.
19 **Q. Autoclaved. And this particular**
20 **publication, what -- was your role task-oriented?**
21 A. I would think, again, it was not
22 epidemiology, though I learned epidemiology. It
23 was -- it was -- my contribution to the publication
24 was through data analysis.
25 **Q. Okay.**

1 A. Essentially, the research had already been
2 designed, already been executed, and I was asked to
3 analyze it. And this series of publications are all
4 the same genre. Because I was known in medical
5 school as someone who knew mathematics and
6 statistics, so I was commonly asked at the end of
7 the day to help analyze. I was not asked at the
8 inception of the project to design the project
9 because I had really no pediatric expertise.
10 **Q. Okay. So in order -- and I'm all about**
11 **efficiency, Doctor. So if in fact there's a**
12 **publication that you contributed to in the area of**
13 **pediatrics --**
14 A. Yes.
15 **Q. -- it would have been typically data**
16 **analysis?**
17 A. I guess I would have said this. By and
18 large, any publication that occurred before -- any
19 of the publications up through 12, most of those
20 publications are data analysis.
21 **Q. Okay.**
22 A. There are a couple of exceptions. Eight is
23 an exception, and 1 is an exception, but the other
24 ones through -- up through and including 12 are
25 pretty much my work as an advanced medical student

1 who knew some statistics.
2 **Q. Understood. And 8 was -- that entry says,**
3 **"Modeling of pharmacology treatment of hypertension,**
4 **math and science." Would that have -- would you**
5 **have considered that epidemiology?**
6 A. I would consider that epidemiology and
7 mathematics, yes.
8 **Q. A combination of the two?**
9 A. Yes, sir.
10 **Q. And you did the modeling for this**
11 **particular publication?**
12 A. Yes. This is my idea, my research, my
13 design, my analysis.
14 **Q. And you -- as evidenced by the title, you**
15 **did some type of modeling with respect to**
16 **hypertension?**
17 A. Yes, sir, with respect to the pharmacologic
18 treatment of hypertension, yes.
19 **Q. Meaning the types of medicines that would**
20 **be prescribed to individuals with hypertension?**
21 A. Meaning -- yes, meaning trying to optimize
22 the best sequence of drugs in treating hypertension.
23 You got a universe of drugs. How does one decide
24 what drug they use first, and if that drug fails and
25 the state of high blood pressure persists, what

1 drugs should follow?
2 I did the modeling to follow which drugs
3 would be the sequence, the best optimal sequence of
4 the drugs.
5 **Q. And under your definition of epidemiology**
6 **which you gave me a second ago, the process by which**
7 **the true nature of the exposed disease is deduced,**
8 **in this case the exposed disease is hypertension?**
9 A. The disease it hypertension, and the
10 exposure now is the treatment. Patients exposed to
11 treatments.
12 **Q. Right. Okay. I'm learning some stuff. I**
13 **appreciate this.**
14 A. Well, so am I.
15 **Q. All right. So, now, let's look at entry**
16 **No. 13, which is again another journal with respect**
17 **to the hypertension.**
18 A. Thirteen is clinical epidemiology, if I'm
19 reading right. Thirteen is the SHEP Cooperative
20 Research Program?
21 **Q. Yes. And if I -- it says "The SHEP**
22 **Cooperative Research Group rationale and design of a**
23 **randomized clinical trial on prevention of stroke in**
24 **isolated systolic hypertension"?**
25 A. Yes, that's right.

1 **Q. All right. So what we have in 13 is a**
2 **journal concerning stroke and hypertension.**
3 **And hypertension being the disease and clinical**
4 **trials -- or prevention of stroke and hypertension**
5 **being the exposure?**
6 A. I'm sorry. The last thing you said was
7 what?
8 **Q. Exposure.**
9 A. Oh, right. So let me be clear. This is a
10 study which provides our intent -- no, it provides
11 our design to determine whether the treatment of
12 isolated systolic hypertension could reduce -- could
13 prevent -- excuse me, could prevent the occurrence
14 of stroke, and it occurred -- this was published in
15 an epidemiology journal.
16 **Q. Journal -- I see it. Okay.**
17 **But, again, I want to go back to your**
18 **definition, so I can -- because it'll help us move**
19 **through these a lot quicker if I can, in my liberal**
20 **arts mind, put your definition in two prongs; the**
21 **first being the disease, and then the second being**
22 **some type of exposure, whether it be treatment or**
23 **something else.**
24 A. I understand.
25 **Q. And in this case, the disease or diseases**

1 **are hypertension and stroke?**
2 A. The disease -- the disease is -- in the
3 two-prong approach, the disease that we want to
4 impact is stroke.
5 **Q. Okay.**
6 A. And the exposure is the treatment of
7 isolated systolic hypertension.
8 **Q. My science teachers would be so proud of me**
9 **right now. All right.**
10 **And so that particular publication, or this**
11 **journal under your definition, is under the -- under**
12 **the science of epidemiology?**
13 A. Yes, sir.
14 **Q. All right. No. 14 -- and I am going to go**
15 **faster than this, but there are some I'm going to**
16 **spend more time on than others.**
17 **No. 14 is something in particular you were**
18 **in charge of. I take it that when I look at your**
19 **publications, if your name is in bold and first,**
20 **it's a work that you were primarily responsible for?**
21 A. Yes, sir.
22 **Q. Okay. The theory of runs with application**
23 **for drought predictions, tell me what that is.**
24 A. Well, one thing I can tell you, that that
25 is not epidemiology.

1 **Q. Okay.**
2 A. All right. This is based on -- I did -- my
3 dissertation was on the theory of runs, and runs
4 meaning a sequence of the same kind of event. And
5 I've applied that to several different fields. One
6 of them is hydrology. And so I -- myself, along
7 with Irina, Asha, and Bob, wrote -- wrote an article
8 about the application of my dissertation to
9 hydrology. But this is -- this is straight math and
10 probability. This is not epidemiology.

11 **Q. Okay.**
12 A. Same thing with 15, if I get ahead of
13 myself.

14 **Q. No, that's fine. I appreciate it. That is
15 math and probabilities in statistics?**

16 A. Well, actually no statistics. I think it's
17 just really probability and math. I have to look at
18 the paper, but I don't think it's statistics.

19 **Q. Theory of -- let me just go back because I
20 may have missed it. Theory of runs, what is that?**

21 A. Well, okay. You asked for it.

22 **Q. Well, I want the layperson version of it.**

23 A. Okay. All right. Okay. We understand --
24 let's make it very simple. Say we're flipping a
25 coin, okay, and the coin is fair. We expect that

1 over the next 100 flips, approximately 50 of them
2 are going to be heads. Fair enough? Fair coin.

3 **Q. Yes.**

4 A. Okay.

5 **Q. That's the theory of a run?**

6 A. Well, actually no, no. I wish. No, no,
7 no. The theory of runs talks about -- well, how
8 likely is it I'm going to get three runs of six
9 heads in a row? See the run is a successive -- a
10 successive occurrence of the same event.

11 **Q. Understood.**

12 A. Okay. And so my work was on solving that
13 probability. And then -- and then in my CV -- my CV
14 is punctuated with publications in that area.

15 **Q. Understood. Perhaps we can get more into
16 that after this case is over in a casino, but I
17 understand.**

18 A. Okay. If they let us in.

19 **Q. So 14 and 15 both are just mathematics and
20 probabilities?**

21 A. Yes.

22 **Q. As I perused through several of these,
23 17 -- well, not so much 17, but 19 involves stroke,
24 20 involves cardiac, 21 involves coronary artery
25 disease, 24 involving cholesterol. Do you consider**

1 **all of these to be epidemiology?**

2 A. Yes. I would say, to use our common
3 language -- could you scroll back up a little bit?
4 Okay. So right there. I would say beginning with
5 15, we have a long run of epidemiology articles.

6 **Q. Okay. And the disease varying from stroke,
7 sex bias, and management of coronary artery disease,
8 cholesterol, disease varying greatly?**

9 A. Yes. And --

10 **Q. But still epidemiology?**

11 A. Correct. And cardiac arrhythmias.

12 **Q. Repeat that for me and the court reporter.**

13 A. Sure. I'm sorry. Articles 16 and 17 are
14 cardiac arrhythmias.

15 **Q. Okay.**

16 A. Okay. So cardiac arrhythmias, stroke.
17 Heart function is measured by left ventricular
18 ejection fraction and cardiac volumes. Sex bias --
19 I'm sorry, selection bias, and SHEP and also CARE,
20 Cholesterol and Recurrent Event trials, begins a
21 long run of epidemiology-based work.

22 **Q. Okay. Now, I didn't see it anywhere in
23 your -- well, let me -- hold on one second before I
24 make that statement.**

25 **You have never been employed by a**

1 **government agency in the field of epidemiology, have
2 you?**

3 A. I have, sir.

4 **Q. You have?**

5 A. I have.

6 **Q. Okay. And we're going to get to what I --
7 I see you have community service government on your
8 CV. What -- when were you employed by the
9 government to act as an epidemiologist?**

10 A. If we could -- you have me at a little bit
11 of a disadvantage because I can't scroll my CV. But
12 if you go to -- I'm not -- I think it comes after
13 this section. I don't actually remember if it was
14 before or after. If you keep going...

15 **Q. After this section, you have submitted
16 editorials, published correspondence, books, book
17 chapters, teaching experience.**

18 A. All right. It would be before this. So
19 let me just tell you. I was a member of a food --
20 federal food and drug administration advisory --
21 advisory council.

22 **Q. Okay.**

23 A. And that was from 1996 to 2000 and then
24 from 2000 to 2002.

25 **Q. Now, where you -- you said you were a**

1 **member of an advisory board. Was that a paid**
2 **position?**

3 A. Yes and no. Yes, I got a check, but no, it
4 was, like, \$150 for three days' work or something
5 like that, so...

6 **Q. Okay. So tell me what you did for the FDA.**

7 A. Oh, sure. So companies in -- if I'm not
8 getting to the point, just let me know, and I'll
9 shorten it.

10 Drug companies and the FDA
11 bargain/negotiate/fight over new drug applications
12 should the drug company's new drug application be
13 approved. Most times those decisions are amicable.
14 Occasionally, they are contentious. And when they
15 are contentious, the FDA will take the question to
16 an advisory committee. It's called an advisory
17 committee, not an advisory panel. Let me correct
18 myself. The advisory committee. And the advisory
19 committee reviews the information provided by the
20 FDA and by the drug company and makes
21 determinations.

22 Now, I don't want to leave a bad taste on
23 this. Occasionally, a drug will be an entirely new
24 class that nobody has any experience with, and the
25 FDA by -- almost by definition will kick that to the

1 A. Primarily, yes. I don't remember any
2 kidney drug that we reviewed, so they were
3 primarily, if not exclusively, cardiovascular.

4 **Q. And then the second stint on the committee**
5 **you said were generics?**

6 A. Yes.

7 **Q. So were there any particular type of**
8 **diseases that you were focused on from 2000 to 2002?**

9 A. I don't remember.

10 **Q. Okay. But the drugs themselves were**
11 **generic drugs?**

12 A. Yes, sir.

13 **Q. Going back to -- I think it's page 5 of the**
14 **CV where we left off.**

15 **As I went through the publications, Doctor,**
16 **most dealt with hypertension, cholesterol,**
17 **cardiovascular, some smoking, stroke. In all of**
18 **your publications -- and I'm trying to do this for**
19 **your own benefit -- are there any publications**
20 **regarding viruses?**

21 A. There are no publications here focused on
22 viruses. That's correct.

23 **Q. Okay. Have you authored or been a**
24 **contributing author in any publication that focused**
25 **on viruses?**

1 advisory committee as well.

2 So it's not always about a fight.
3 Sometimes it's just very new -- a very new
4 assessment and a very new mechanism of action or
5 very new class of drugs, and that goes to the
6 advisory committee as well.

7 **Q. Okay. And you did that in two separate**
8 **intervals, in 1996 to 2000 and 2000 to 2002?**

9 A. Yes, sir.

10 **Q. So why do we have -- you said '96 to 2000**
11 **and then 2000 to 2002. Is it just '96 to 2002 or --**

12 A. Yes. But I wanted to be clear. It's two
13 different committees. So my first committee was the
14 cardio-renal advisory board, and that was from '96
15 to 2000. And then 2000, 2002 was -- essentially
16 it's the board that -- the committee that manages
17 generics, generic drugs.

18 **Q. Now, the first one, you said -- it sounded**
19 **like something to do with the heart, but I'm not**
20 **sure.**

21 A. I'm sorry. I spoke too fast.
22 Cardio-renal, c-a-r-d-i-o, hyphen, renal.

23 **Q. And would that -- I'm assuming that means**
24 **that the drugs that you were evaluating were in the**
25 **area of cardiovascular?**

1 A. Well, my publication -- my universe of
2 publications is right here.

3 **Q. Okay.**

4 A. So -- so I'm -- I'm just trying to think
5 about what was the first thing.

6 No, nothing published. I am working on a
7 book right now that will be published in March 2021
8 that talks about viruses, but nothing published on
9 my CV, nothing so far.

10 **Q. Now -- so with that I do not have to go**
11 **through the some 200 plus articles because, in**
12 **essence, we've talked about some of them.**

13 **I understand the scope of what you deem to**
14 **be the field of epidemiology. And we can agree that**
15 **none of the articles that you have published to date**
16 **involve the area of viruses, so we don't need to**
17 **look at the titles of each one.**

18 A. That is true. The -- the articles are not
19 the universe of my work, but focus only and solely
20 on articles. That is correct.

21 **Q. Okay. No, we'll get to the entire**
22 **universe, I promise. All right. Let's go to page**
23 **20 of 34, please.**

24 **Editorials -- the editorial listed here --**
25 **what's the difference between an editorial and the**

1 **journals that we've looked at?**
2 A. The articles -- so far we've looked at 1
3 through 22 -- are reflective of original research.
4 So one way, shape, or form, original data that
5 nobody had seen before had been published along with
6 the analysis and the interpretation.
7 An editorial is different. An editorial
8 responds to data that has been published. Commonly
9 these are invited, and sometimes they're
10 controversial. But editorials are of a different
11 dope. They are much shorter, and they are
12 responding to the data that has appeared in someone
13 else's work.
14 **Q. Do you recall whether you were invited for**
15 **this particular editorial?**
16 A. Oh, yes, yes.
17 **Q. Okay. And you were invited?**
18 A. Yes.
19 **Q. And it involved -- again, in the area of**
20 **the heart, cardiac?**
21 A. Cardiac -- cardiac arrhythmias, yes.
22 **Q. Okay. And we actually saw earlier a number**
23 **of articles that you published in the same area?**
24 A. Yes.
25 **Q. Okay. Published correspondence, give me**

1 **the distinction there.**
2 A. That's just a letter to the journal really.
3 That's all that is, is a letter.
4 **Q. Okay.**
5 A. One paragraph, two or three paragraphs,
6 really very short.
7 **Q. Got it. And none of your correspondence**
8 **dealt with viruses, correct?**
9 A. Could you go to the next page, please.
10 Oh, never mind. That -- that's books. So none of
11 my correspondence deals with viruses.
12 **Q. Okay. You have -- and let's go from the**
13 **bottom of page 20 to the top of page 21 under**
14 **"Books." You haven't published any books on**
15 **viruses, have you?**
16 A. I've published no textbooks on viruses, no.
17 **Q. Go to the next section, which is "Book**
18 **Chapters." You haven't written any chapters in any**
19 **books on viruses, have you?**
20 A. No.
21 **Q. Okay. Now, the next section is your**
22 **teaching experience, and you have quite an extensive**
23 **teaching experience dating back to 1987, which I**
24 **believe is the year before Mr. Davillier graduated**
25 **high school. Most -- and correct me -- lots of it**

1 **statistical analysis.**
2 **I want you to tell me about this**
3 **Experimental Methods in Epidemiology in fall of**
4 **2001.**
5 A. Yes.
6 **Q. Where were you teaching?**
7 A. University of Texas School of Public
8 Health.
9 **Q. Okay. Now, clearly with the statistical**
10 **analysis, the immediate biometry -- I prefer saying**
11 **biostatistics.**
12 A. Okay.
13 **Q. You had 100 percent responsibility. So**
14 **tell me the distinction between that and the**
15 **25 percent responsibility that you had in**
16 **experimental methods of epidemiology.**
17 A. Sure. So this is part of my -- what did we
18 say -- a secondary appointment. I was asked to help
19 co-teach a class in epidemiology.
20 Now, I'm in biostatistics. I as a
21 biostatistician can't be 100 percent responsible for
22 an epidemiology course. The epidemiologists have to
23 take -- have to be responsible for most of the
24 course, most of the -- most of the administrative
25 burden. So my responsibility was 25 percent. Does

1 that answer your question?
2 **Q. It does. And can you tell from -- and**
3 **let's just stick with the fall of 2001. Can you**
4 **tell from -- and I can't, that's why I'm asking --**
5 **from your CV, what the underlying disease was?**
6 A. Oh, sure. So here we are talking about the
7 design of epidemiologic studies, and I believe these
8 were principally clinical trials.
9 **Q. Okay.**
10 A. That -- from an epidemiologic point of
11 view. And did that answer your question, or do we
12 need to go further?
13 **Q. Well, let me do a follow-up question, and**
14 **that may help.**
15 **So you are in collaboration with the**
16 **epidemiologists at University of Texas. They ask**
17 **you to help or to collaborate in the teaching of a**
18 **class in which you are responsible at 25 percent,**
19 **correct?**
20 A. Yes, sir.
21 **Q. And your contribution to that 25 percent,**
22 **correct me if I'm wrong, is specifically related to**
23 **your experience in biostatistics and the management**
24 **and design of clinical trials?**
25 A. I think that's fair.

1 **Q. Okay. In all of these various courses**
2 **taught beginning in the fall of 2001, they go**
3 **through the fall of 2009, then -- yeah, and then it**
4 **drops down in the fall of 2010 to 15 percent.**

5 **But, nonetheless, is that an accurate**
6 **description of your role in all of these**
7 **experimental methods in epidemiology where you would**
8 **bring your clinical trial expertise and**
9 **biostatistics expertise to the classroom?**

10 A. That is correct. However, it wasn't -- the
11 subject matter was not all cardiology and
12 hypertension.

13 **Q. Okay. The subject matter varied?**

14 A. Right.

15 **Q. Okay. Can you tell from this what the**
16 **subject matters were?**

17 A. Well, from my memory, I could tell you that
18 it was -- there were behavioral trials, trials in
19 cost-effectiveness, vaccine trials that involved
20 viruses. That's all I remember.

21 **Q. Behavior trials, vaccine trials,**
22 **cost-effectiveness trials?**

23 A. Quality of life trials would be another.
24 Alternative medicine trials would be another.

25 **Q. And I'm going to try to do a simplified**

1 **version, just for my mind.**

2 **Subject matter notwithstanding, your**
3 **expertise would be the procedural side of a clinical**
4 **trial?**

5 A. As I understand procedural, I would
6 disagree with you. I would say that my contribution
7 had to do with the epidemiologic and biostatistical
8 component.

9 Let me try another way. I'm not in these
10 courses to be a -- to talk about the biostatistic
11 side. I'm there to talk about the epidemiology and
12 biostatistics and how they work together.

13 **Q. Okay.**

14 A. And I pointed out earlier that -- I won't
15 repeat this, that my definition of a clinical trial
16 involving the Bradford Hill causality --

17 **Q. Yep.**

18 A. Right. Well, the question is, well, how
19 do -- how does one do that? I mean, it sounds nice,
20 affluent, but how does one actually do that? I
21 would talk about that.

22 **Q. Okay. That's fair.**

23 **So let's look at student supervisions. Of**
24 **all of the instances where you served in a**
25 **supervisory role of students, many of which you have**

1 **identified as falling under epidemiology, and it's**
2 **clear there -- of any of those instances, did the**
3 **supervision involve epidemiology with the illness**
4 **being a virus?**

5 A. Oh, boy. I don't know that I can answer
6 that for you. I'll look at these.

7 **Q. Well, I'll just tell you. I went through**
8 **them. We have lung disease, coronary artery**
9 **disease, maternal weight status, relationship**
10 **between prenatal smoking and infant birth. None of**
11 **them that were -- that stood out to me as involving**
12 **a virus.**

13 A. Sure. I mean, some of these I don't have
14 anything. Like, Dillip, one, two -- fourth or fifth
15 one from the top.

16 **Q. Yes.**

17 A. I don't know what Dillip's was in. I don't
18 know what Wednesday Foster's was in.

19 **Q. Okay. I'm now looking through your guest**
20 **lectures. There are several in biostatistics,**
21 **several involving clinical trials, several involving**
22 **cardiovascular disease and other related cardio-type**
23 **issues. I did not see a single guest lecture**
24 **involving viruses.**

25 A. I got one for you.

1 **Q. All right.**

2 A. No. 17.

3 **Q. Seventeen. Let's look at No. 17. "'The**
4 **trouble with'" --**

5 A. Terfenadine.

6 **Q. -- "Terfenadine; Seldane, Safeguarding the**
7 **Population, and the Policy Maker's Dilemma,'**
8 **Opportunities in Biostatistics Workshop 1984."**

9 A. Right.

10 **Q. Tell me about that.**

11 A. Sure. So terfenadine, or the trade name
12 Seldane, is the treatment for rhinitis, and rhinitis
13 can appear from viral infections as well as seasonal
14 allergies. And the problem with terfenadine was
15 that it caused a very rare cardiac arrhythmia, rare
16 but lethal. And there were discussions about -- and
17 I lead discussions about what is the best thing to
18 do with a drug that is effective for most of the
19 population but lethal for a few.

20 **Q. All right. So this drug -- so this**
21 **particular guest lecture focused on a drug, that the**
22 **drug was intended to treat a virus?**

23 A. Yes. I mean --

24 **Q. That's virus being a viral infection? What**
25 **type of viral infection?**

1 A. A mere -- a common cold. So a rhinovirus,
2 adenovirus, picornavirus, coronavirus, these kind of
3 viruses that cause common cold. Now, it wasn't used
4 only for that. It was also used for hayfever.

5 **Q. Now, you just used a buzz word,**
6 **coronavirus.**

7 A. Yes.

8 **Q. And in the same context, the common cold.**

9 A. Yes.

10 **Q. You're not talking about COVID-19 when**
11 **you -- just now, when you used the phrase**
12 **"coronavirus"?**

13 A. I would say I am not talking about
14 SARS-CoV-2.

15 **Q. Right. Which causes COVID-19?**

16 A. Correct. The other coronaviruses that have
17 been around for many years that cause the common
18 cold.

19 **Q. But the actual lecture was not about the**
20 **virus; it was about the drug?**

21 A. Well, the actual lecture was about viruses
22 and what they do, as well as about the arrhythmia.
23 I mean, I have to lecture about the diseases the
24 drug treats and also the side effects of the
25 disease. So that was an important component of the

1 A. -- as being about viruses.

2 **Q. Okay. And so what about basic**
3 **biostatistics is -- what is NIH? What organization**
4 **is that?**

5 A. National Institute of Health.

6 **Q. Okay. K to R0 meeting in Bethesda?**

7 A. Oh, I'm sorry about the jargon. K to R01
8 is really a breadth of grants that grant -- that
9 grantees request. A K award is an award for junior
10 investigator. An R01 award used to be for junior;
11 now it's for more senior.

12 **Q. Both 90 and 91, is it fair to say that the**
13 **primary purpose of those lectures were**
14 **biostatistics?**

15 A. Oh, sure. I mean, we gave examples using
16 viruses, but yes, they're titled biostatistics.

17 **Q. Okay. Certainly, Doctor, I went through**
18 **all of your community service government and your**
19 **community service nongovernment. And although there**
20 **are a lot of biostatistics, there's a lot of**
21 **cardiovascular work, lung, blood institute. I did**
22 **not see anything that was specifically related to**
23 **viruses.**

24 A. Can we scroll through those, please? I
25 want to make sure we don't have any trojan horses

1 lecture. And then the question is, what advice do
2 you give the community about the use of the drug?

3 **Q. Okay. You can see how someone with a**
4 **layperson mind like me, when I read the -- this**
5 **title, it wasn't obvious to me that this involved**
6 **treatment of the common cold.**

7 **So are there any other guest lectures that**
8 **you would like to point out to me that involve**
9 **viruses?**

10 A. Can we move past -- I think we've done 1
11 through 25.

12 **Q. All right. Let's go to the next page, 26**
13 **through 58.**

14 A. So let's see. Yeah, I think some of these
15 do, but we don't talk about a particular virus.
16 For example, Sample Size Guidelines Invited
17 Lectures, No. 28. I think I gave examples involving
18 vaccine trials. Forty-one, I gave examples of
19 vaccine trials. But most of these are not about
20 viruses.

21 **Q. Okay. Let's go to the next page, 59**
22 **through 97.**

23 A. Okay. I think 90 and 91, we talked about
24 viruses, but those are the only ones --

25 **Q. (Indiscernible.)**

1 here.

2 **Q. Sure.**

3 A. Let's see. Well, the sickle cell
4 program -- let's look at 7. Is that right, 7? Let
5 me scroll down to -- where am I -- 21 and 22 and 24,
6 and if we go below that, 30, and below, 35, okay,
7 36, 41, 51, 61.

8 **Q. Let's stop at 61 for a second.**

9 A. All right.

10 **Q. Scroll back to the first page, page 27 of**
11 **34. So all of the ones that you've identified thus**
12 **far deal with the -- sickle cell?**

13 A. Correct, yes.

14 **Q. All right.**

15 A. Right.

16 **Q. And why don't you tell me your reasoning as**
17 **to why you identified these as involving viruses.**

18 A. Sure. These all are part of a program to
19 test the effect of a therapy in sickle cell disease
20 in children. And one of the measures that we had to
21 keep focused on were infections, including viral
22 infections. It wasn't exclusively viral infections.
23 These poor kids get pneumonias as well, bacterial
24 pneumonias, which are very bad.

25 But viral infections. And so my role was

1 to review the data, including the data on viruses,
2 to determine whether the study should be allowed --
3 allowed to proceed or not.

4 **Q. Okay. So let's just take them one by one.**
5 **The -- this entire program was designed to help**
6 **sickle cell patients with sickle cell anemia?**

7 A. Correct. Right, the hypothesis -- the
8 clinical hypothesis was that there was an
9 alternative therapy to the standard therapy for
10 these children with sickle cell disease. There is
11 now a therapy for their sickle cell disease --

12 **Q. Okay.**

13 A. -- that would help them. That was the
14 clinical hypothesis.

15 **Q. And your role was -- first of all, this was**
16 **community service, right? You didn't do this for**
17 **pay?**

18 A. I actually don't remember if it was pay.
19 It wasn't very much, but I think it was for nothing.
20 It might have been \$150 a year, but...

21 **Q. Okay. No. 7, National Heart, Lung, and**
22 **Blood Institute SCOR Site Visit. So what exactly**
23 **did you do in May of 1987 that warrants putting this**
24 **on your CV?**

25 A. Oh, we reviewed the applications of -- yes,

1 **Q. In 1987, what epidemiology background did**
2 **you have?**

3 A. Oh, in '87, again, I was -- I've been a
4 physician, and now I've been a physician for almost
5 ten years. So as a physician, I bring epidemiology
6 background because I have training in epidemiology
7 and also at -- in medical school. I also have
8 clinical acumen, and I also had training -- excuse
9 me, training in my Ph.D. program in epidemiology.
10 And that was all behind me as of May 1987.

11 **Q. Got it. And so the primary purpose of this**
12 **particular organization was to address alternative**
13 **therapies for sickle cell, right?**

14 A. Well, I put it this way. The purpose of
15 this group -- the specific purpose of this meeting
16 was to identify the candidate universities who had
17 sufficient research experience and expertise that
18 they could design a good program.

19 **Q. Okay. And your testimony to me today is,**
20 **within that, those applicants had to identify what**
21 **they had done or their research with respect to**
22 **viruses?**

23 A. Well, actually no, sir. It is that these
24 were-- these institutes had to show their ability to
25 manage and treat infections in sickle cell children

1 the applications of a host of different national --
2 a host of university research institutes that wanted
3 to conduct this program. And in that review they
4 had to provide data showing their research prowess
5 in general and their ability to successfully treat
6 children. And in that data included data about
7 bacterial and viral infections.

8 **Q. Okay. Were you on the board of the**
9 **National Heart, Lung, and Blood Institute?**

10 A. I don't know what a board is for the
11 National Heart, Lung, and Blood Institute. Did I
12 say that somewhere, board?

13 **Q. No, no, no. I'm -- so how did you come to**
14 **be one of, I assume, a number of physicians that**
15 **would review these applications?**

16 A. Oh, that's a fair question, especially
17 since I wouldn't get my Ph.D. for another month.
18 I didn't graduate until June of 1987. But they
19 were interested in people who had -- who were
20 physicians and had an epidemiology background, who
21 could provide some insight into whether these
22 candidates -- which of these candidate sites was
23 worthy for funding.

24 **Q. Okay. But you didn't --**

25 A. So I was invited to be part of it.

1 with diligence. So it wasn't their research prowess
2 with viruses. It was their clinical prowess.

3 **Q. Okay. Got it. So is it fair to say in**
4 **each of these that we have identified thus far**
5 **involving sickle cell, your role was the same?**

6 A. Yes.

7 **Q. Okay. Other than your work with this group**
8 **involving sickle cell, are there any other**
9 **governmental community service roles that you played**
10 **that would have involved viruses?**

11 A. I don't know. How many of these do we
12 have?

13 **Q. They stop at 112. I'm now on 61.**

14 A. Okay. I'll try to be quick. Let me look
15 at these real quickly. Okay. We can scroll to the
16 next page. 102, but that's the same genre we've
17 been talking about. I think No. 112, the Innovation
18 in Regenerative Medicine Symposium.

19 **Q. Okay. What makes you think that?**

20 A. Well, that was a collection of lectures
21 that were given by experts in the field of
22 regenerative medicine, and some of them discussed
23 the role of virology in regenerative medicine.

24 **Q. Would you have given a lecture on the role**
25 **of virology?**

1 A. No, I would not have.
2 **Q. Okay. So in December of 2017, you didn't**
3 **lecture anyone on the role of virology, did you?**
4 A. I did not.
5 **Q. What about your community service in**
6 **nongovernment? Do you have any recollection of**
7 **lecturing or participating in any type of seminars**
8 **or meetings involving viruses?**
9 A. I'm up to 26, and so far the answer is no.
10 Oh, 52, so far the answer is no. Oh, goodness.
11 Seventy-four and 75 definitely. All of the Berlex
12 Pharmaceutical meetings were virology. Also, the
13 sickle cell disease DSMB meetings were virology,
14 discussed viruses.
15 **Q. Let's talk about 74.**
16 A. Sure.
17 **Q. What is DSMB?**
18 A. DSMB is a data safety and monitoring board.
19 It -- I'll stop there and then...
20 **Q. Now, these are non -- you described them as**
21 **nongovernmental community service. So did you serve**
22 **on the data safety and monitoring board?**
23 A. Yes.
24 **Q. All right. What role?**
25 A. I was -- I was an epidemiology and

1 biostatistics member of the board.
2 **Q. So you were just a member of the board?**
3 A. Well, everybody was just a member of the
4 board. Yes, right.
5 **Q. I didn't mean that disparagingly. You were**
6 **a member of the board. You brought whatever skill**
7 **set you had, but you were a member of the board?**
8 A. Right. The clinical epi and biostat skill
9 set, I brought to the board.
10 **Q. Okay. And you were on that board for how**
11 **long?**
12 A. I guess, you know, this list will tell us,
13 but I think a couple of years at least.
14 **Q. Okay. And what is -- what was the primary**
15 **mission of that board?**
16 A. The board was to oversee the conduct of a
17 clinical trial. We would look at all of the data
18 and determine whether there was sufficient reason to
19 stop the study because of an early benefit or to
20 stop the study due to harm or to continue the study.
21 **Q. Now, this says nongovernmental. Is this**
22 **board, data safety monitoring board, a private**
23 **institution?**
24 A. Berlex Pharmaceuticals funded the study,
25 and they asked us to oversee the trials. So it was

1 all done within the -- the sphere of drugs.
2 **Q. Okay. So, now, I'm getting some clarity.**
3 **Berlex is a pharmaceutical company?**
4 A. Yes, sir.
5 **Q. And they are conducting clinical trials**
6 **with respect to one or more of the drugs that**
7 **they're creating?**
8 A. Yes, sir.
9 **Q. And they ask you to be a part of the data**
10 **safety and monitoring board for them?**
11 A. Yes, sir.
12 **Q. Okay. In 2003, do you recall the drugs**
13 **that you were asked to evaluate?**
14 A. I would say in general, yes. I don't
15 recall the specific species, but in general, yes.
16 **Q. Okay. But in essence -- and is it fair to**
17 **say that because of your experience in handling**
18 **clinical trials or being involved in clinical**
19 **trials, you received the invitation?**
20 A. I don't think so. I think it's the fact
21 that I was a physician as well and that I had
22 epidemiology skills.
23 **Q. Epidemiology, meaning the process by which**
24 **the true nature of the exposed disease is deducted?**
25 A. Yes, sir.

1 **Q. Okay. And do you have any recollection, in**
2 **either 2003 or 2004, what the underlying disease was**
3 **that Berlex was attempting to find a cure for, for**
4 **lack of a better phrase?**
5 A. I would only say it's a cardiovascular
6 disease. I don't remember the details of it.
7 **Q. Okay. Was that a paid position on that**
8 **board?**
9 A. I think it was.
10 **Q. So the viral or virology that you just**
11 **described would have been in the context of**
12 **cardiology?**
13 A. Yes, sir.
14 **Q. Okay. All right. We stopped at 74, 75.**
15 **Why don't you take a look --**
16 A. Well, I'm sorry. I do have to clarify one
17 thing.
18 **Q. Sure.**
19 A. The -- remember in the exposure/disease
20 relationship, the disease was a cardiovascular
21 disease. Here the exposure was the virus. The
22 exposure is the virus.
23 **Q. What virus?**
24 A. I would have to look it up. It was never
25 approved. I -- for all I know, it's still

1 proprietary. I don't remember. But I can tell you
2 that the -- the treatment was to deliver about a
3 trillion viruses to people to see if it had a
4 beneficial cardiovascular effect.

5 **Q. The treatment was to deliver viruses to see
6 if it had a cardiovascular effect?**

7 A. Right. A beneficial cardiovascular effect.

8 **Q. So what role in that analysis did the drug
9 play that you were evaluating?**

10 A. The drug was the virus.

11 **Q. Okay. So the drug, meaning the
12 pharmaceutical that Berlex was attempting to create,
13 was the virus?**

14 A. Yes, sir. That -- the exposure was the
15 virus.

16 **Q. Okay. So you defined -- you can then
17 define virus to include a drug that would actually
18 have a beneficial effect on a patient?**

19 A. Well, it -- the drug itself was the virus.
20 It was nothing else but the virus. So these
21 patients were deliberately infected with the virus.

22 **Q. Which was a pharmaceutical drug that Berlex
23 created?**

24 A. Right. If we define drug as something that
25 they created, yes, that's right. It was the drug

1 A. Well, it's not that I changed the
2 definition of a virus. I think what we've done is
3 expand the definition of a drug to include virus.

4 **Q. Got it. Okay.**

5 A. But, you know, it -- it was a very novel
6 program, and I will tell you, quite honestly, it was
7 very scary because now in most times in medicine,
8 you want to avoid exposure to viruses. We don't
9 think of exposure to viruses as being a good thing.
10 Maybe a hundred years from now, we'll know better,
11 but we don't think of it as a good thing.

12 Here, patients are exposed not to a handful
13 of viruses, but to a trillion viruses. And it's our
14 responsibility to see if these patients are being
15 managed well and that they are doing well and to
16 stop this if in fact it looked like they were not
17 doing well. So this was a very, very sensitive
18 research effort.

19 **Q. (Indiscernible.)**

20 A. Otherwise, we wouldn't know much about it.
21 Yes?

22 **Q. How many members would be on this data
23 safety monitoring board?**

24 A. It depends. I would say, in general,
25 between three and seven.

1 that they created.

2 **Q. And why then do you call the drug a virus?**

3 A. Because the drug was the virus. You know,
4 we think of drugs as molecules, statins for example,
5 ACE inhibitors, aspirin. Well, there was no such
6 molecule in this drug. It was only viral particles.

7 **Q. Okay. You said -- what drug was it?**

8 A. I don't -- for me to answer that question,
9 I would have to have remembered the exact genus and
10 species of virus they delivered, and I don't
11 remember that.

12 **Q. Okay. So the data safety monitoring board
13 hired by Berlex to monitor their application of a
14 particular drug that they created to patients that
15 had cardiovascular disease?**

16 A. I would say that we were to monitor the
17 effect of the virus they injected on its role in
18 producing or preventing cardiovascular disease.

19 **Q. Right. And the virus being what they hoped
20 would be something that would help cardiovascular
21 disease?**

22 A. Yes, sir.

23 **Q. Okay. I wonder how many other doctors
24 define virus in the manner in which you just defined
25 it, but it's very interesting to me.**

1 **Q. Okay. And of the three to seven
2 individuals, what disciplines do you recall -- let's
3 say just in 2003. When you served on the monitoring
4 board for Berlex Pharmaceuticals in 2003, how many
5 individuals were on that board?**

6 A. I don't remember, but I would say
7 approximately five or six. I just don't remember.

8 **Q. Okay. And of the disciplines of the five
9 and six, what backgrounds would the individuals
10 bring?**

11 A. Well, if the end point is cardiology, then
12 you'd have to -- you need a cardiologist. You would
13 also need to have a specialist in the exposure. So
14 in this case, there would be the physicians or
15 the -- or the scientists who governed the exposure,
16 who determined what right -- what the best dose was,
17 what the virus should be.

18 So what do we have? We have a cardiologist
19 so far; the scientist who developed the exposure --
20 that's two -- an epi biostat person. That's me.
21 That's three. You could have the chair of the
22 steering committee. And I don't want to make it --
23 get too complicated here.

24 **Q. Yeah.**

25 A. But clinical -- clinical centers that

1 conduct the research, they have their own group.
2 That group has a chair called the chair of the
3 steering committee. They can be on this -- on the
4 DSMB as well, so that's four, I think. And then
5 there would be anesthetists.

6 **Q. And in 2003, when Berlex Pharmacy was**
7 **intentionally injecting viruses into individuals,**
8 **how many individuals participated in that trial?**

9 A. I don't remember. It certainly -- I would
10 say this, it certainly was not thousands. It was
11 smaller than that, but I just don't remember.

12 **Q. Would this have been a trial that would**
13 **have been FDA approved?**

14 A. Absolutely.

15 **Q. Okay. Where could I find literature on a**
16 **trial like this?**

17 A. I don't know how to answer that.

18 **Q. Okay.**

19 A. I mean, but -- but I don't mean to be
20 facetious. I would think something like therapeutic
21 virology.

22 **Q. When you served, you weren't serving in the**
23 **capacity as virologist, were you?**

24 A. I was not; just as a physician,
25 epidemiologist, and biostatistician. I'm expected

1 to know virology, but I wasn't serving as a formal
2 virologist.

3 **Q. Other than 74 and 75 --**

4 A. It would be everything. I'm sorry to cut
5 you off. Everything that had Berlex Pharmaceutical
6 at this point, would be the same thing. So 76, same
7 thing.

8 **Q. Okay.**

9 A. Of course 86.

10 **Q. 86?**

11 A. Yeah. Can we scroll down, please? Oh,
12 okay. Near the end here.

13 **Q. So tell me how your work during**
14 **Hurricane Katrina had all -- had anything to do with**
15 **viruses?**

16 A. Of course. So as a treating physician
17 there, many patients had viral diseases with
18 complications. They had viral diseases plus rampant
19 hypertension or viral diseases and the -- in the
20 presence of poorly treated diabetes or viral
21 diseases in cancer.

22 **Q. Give me an example of some of the viral**
23 **diseases you're describing.**

24 A. Sure. Upper respiratory tract viral
25 infections caused by rhinoviruses, adenoviruses,

1 picornaviruses.

2 **Q. Other than respiratory tract viral**
3 **infection, what about type of viral --**

4 A. Oh, I would include early flu as well. It
5 was September, so it wasn't really flu season, but
6 early flu.

7 **Q. Anything else?**

8 A. In terms of what we -- what patients came
9 to the facility with, I would say no. However, they
10 did develop viral diseases while they were there.

11 **Q. And the work that you're describing would**
12 **have been work -- volunteer work that you did as a**
13 **medical doctor to assist individuals that had**
14 **illnesses when they evacuated to Houston?**

15 A. Yes. But it turns out it was,
16 unfortunately, a little bit more than that.

17 **Q. Sure. Trust me --**

18 A. It was a --

19 **Q. Go ahead.**

20 A. I -- I simply mean to say that we had a new
21 epidemic that developed while we were there, that I
22 was involved in the identification of and treatment
23 of.

24 **Q. Why don't you describe that epidemic to me.**

25 A. Sure. It was a rotavirus epidemic that led

1 to --

2 **Q. A what virus?**

3 A. R-o -- r-o-t-o, rotavirus, or r-o-t-a
4 maybe, rotavirus, epidemic in children.

5 **Q. All right. Tell me about it.**

6 A. Sure. We noticed that the number of
7 children with new and persistent diarrhea were --
8 was increasing. And we had to put our heads
9 together to help identify the cause until we got
10 viral types back.

11 Now, this was really clinical epidemiology
12 thinking because we didn't have sophisticated
13 technology to help us in the first few days, and we
14 decided that this was a new -- new for the Katrina
15 evacuees, diarrheal viral infection, and began to
16 isolate these children. And at that point, we got
17 tires back which suggested that it was rotavirus.

18 **Q. You got what back?**

19 A. I'm sorry. We got viral -- viral chemical
20 results back by -- viral chemical essays back that
21 told us it was rotavirus.

22 **Q. How many individuals does it take to be**
23 **infected before something is determined to be an**
24 **epidemic?**

25 A. That's a good question. It really depends

1 on the infection. It depends on the -- the --
2 what's causing the disease.

3 For example, I'll give you tuberculosis.
4 It takes more than one or two if these people are
5 spaced far apart, for example. The bacteria -- the
6 tuberculosis bacteria spreads relatively slowly
7 unless people are really close together.

8 **Q. How many people -- oh, I'm sorry. Go**
9 **ahead.**

10 A. On the other hand, to go with the other
11 extreme, pneumonic plague spreads like wild fire
12 through a population, where it's plague -- plague
13 Yersinia pestis, plague bacteria that is spread not
14 from broken abscesses but through exhaled droplets.
15 That spreads very rapidly.

16 **Q. How many people does it take to be infected**
17 **for -- with a rotavirus for it to be determined to**
18 **be an epidemic?**

19 A. Okay. So I -- so I'm a physician so I'm
20 going to have to make a physician's distinction
21 here. It doesn't take much to get infected at all.
22 Infected simply means that -- in this case the virus
23 is on or in the other person. That's infection.
24 Illness is the impact of the infection on the
25 individual.

1 physician -- the only physician healthcare team were
2 volunteers, at least in the early phase.

3 **Q. Was the group organized with a particular**
4 **name or structure?**

5 A. No.

6 **Q. Okay.**

7 MR. MILLER: Why don't we -- we've
8 been going for a minute. Why don't we take
9 another five-minute break.

10 THE WITNESS: Fine with me.

11 MR. ALVENDIA: Yeah, it's fine.

12 (Recess taken.)

13 MR. MILLER: All right, Doctor.

14 Back on the record. Thank you.

15 BY MR. MILLER:

16 **Q. What -- who engaged you in this matter?**

17 A. Dave Matthews out of Houston.

18 **Q. Dave Matthews?**

19 A. Yes.

20 **Q. Who is Dave Matthews?**

21 A. Dave Matthews is an attorney in Houston.

22 **Q. And who does Mr. Matthews work with?**

23 A. I couldn't tell you. If you know, maybe --
24 maybe you can ask me a different way. I can be more
25 helpful.

1 **Q. Which one -- which one triggers an**
2 **epidemic, illness or infection?**

3 A. Actually both do.

4 **Q. All right. So --**

5 A. Virus leads to illness, leads to spreading
6 an epidemic.

7 **Q. How many individuals does it take to have**
8 **infection and illness in a rotavirus for it to be**
9 **determined to be an epidemic?**

10 A. I would -- I would have to look and see.
11 I can't remember -- don't remember that.

12 **Q. Okay. Who determined that the work that**
13 **you were doing in Houston with children, during**
14 **Hurricane Katrina, that contracted rotavirus that**
15 **became infected and ill, was an epidemic?**

16 A. It was our decision as physicians and
17 epidemiologists.

18 **Q. Who's "our"? You and who else?**

19 A. Oh, and the other physicians I was working
20 with.

21 **Q. Was there an organized group of physicians,**
22 **or was this just volunteer work?**

23 A. Well, it was all volunteer work.

24 **Q. Okay. But what --**

25 A. We were the only healthcare -- only

1 **Q. Is he with a law firm that you -- do you**
2 **know the law firm that he's with? I'm sorry.**

3 A. Oh, I -- I -- I think it's just Dave
4 Matthews LLC, but he does work with other lawyers
5 whose names I don't recall right now. I'll probably
6 get in trouble for that.

7 **Q. No, that's okay. And what did Mr. Matthews**
8 **engage you to do?**

9 A. Well, he put together a phone call with
10 Mr. Houghtaling. I think -- I think Rico was on
11 the -- yeah, it was a Zoom call. I think Rico was
12 on the phone. There might have been one or two
13 other people on the phone. And --

14 MR. ALVENDIA: Allen, just --

15 Hold on a second, Doc.

16 Just to clarify, this is not an
17 objection. Dave Matthews introduced the
18 doctor to John Houghtaling and our team.
19 We obviously have retained him, have paid
20 him, and so forth.

21 MR. MILLER: All right.

22 Go ahead, Doctor. You can finish.

23 MR. ALVENDIA: That's the
24 clarification.

25 THE WITNESS: Thank you for that. You

1 said that more eloquently than I did.

2 A. We had the first Zoom call where we talked
3 about the impact of coronavirus on businesses,
4 particularly restaurants and particularly the Oceana
5 restaurant, and just what does a virus do in a
6 restaurant.

7 BY MR. MILLER:

8 **Q. Now, prior to that call, had you worked**
9 **with Mr. Matthews before?**

10 A. Yeah. Dave and I have worked in the past,
11 a long time ago.

12 **Q. What type of work did you-all do together?**

13 A. It was a Big Pharma litigation.

14 **Q. Do -- are you working with Mr. Matthews on**
15 **any other coronavirus cases?**

16 A. No.

17 **Q. Okay. And so what -- you said you had a**
18 **Zoom call and you talked about the impact of**
19 **coronaviruses on restaurants?**

20 A. Yes.

21 **Q. Okay. Had you done any types of studies**
22 **with respect to coronavirus on restaurants prior to**
23 **the Zoom call with Mr. Matthews and Mr. Houghtaling?**

24 A. No, I had not.

25 **Q. Okay. When was that call?**

1 A. Oh, I would say -- well, this is the 10th
2 of November. Maybe three week -- three and a half
3 weeks ago.

4 **Q. So your first call with Mr. Houghtaling and**
5 **Mr. Matthews was in October?**

6 A. Yes, sir.

7 **Q. Had you spoken to -- I'm going to do it in**
8 **pieces. Had you spoken with Mr. Matthews about the**
9 **effect of coronaviruses on restaurants prior to**
10 **October of 2020?**

11 A. I had not.

12 **Q. Had you -- in your call of October 2020**
13 **where it was both Mr. Matthews and Mr. Houghtaling,**
14 **was that the first time you had spoken with**
15 **Mr. Houghtaling?**

16 A. Yes, sir, it was.

17 **Q. Was anyone else on that October 2020 call?**

18 A. Rico was on the call.

19 **Q. That's right. You did say him.**

20 A. And there might have been one or two
21 others, but I do not remember their names.

22 **Q. Okay. And what was -- were you given any**
23 **instructions during that call as to what your role**
24 **would be with respect to this litigation involving**
25 **Oceana?**

1 A. Actually, no. I was just asked some
2 questions about my opinion based on my background
3 and expertise about what would happen with viruses
4 in restaurants in general and specifically would
5 there -- would there not be physical damage.

6 **Q. So you were asked specifically would there**
7 **or would there not be physical damage?**

8 A. From the virus, from the SARS-CoV-2 virus,
9 yes.

10 **Q. And what was your response?**

11 A. My response was there would be damage.

12 **Q. And at the time you had this initial call**
13 **in 2020, and I think you just testified that you had**
14 **never done any studies with respect to SARS-CoV-2 in**
15 **restaurants, how did you come to the conclusion that**
16 **there would be damage?**

17 A. Because I understand viruses. I understand
18 physics. I understand chemistry.

19 **Q. Did someone give you a definition of what**
20 **damage was?**

21 A. No.

22 **Q. You used a general -- your general**
23 **understanding of what the word "damage" means?**

24 A. Yes, sir.

25 **Q. Okay. And what is that?**

1 A. Physical transformation that leads to loss
2 of use.

3 **Q. And where did you get that definition from?**

4 A. I don't know. I think it's just my
5 experience with the use of the English language.
6 I didn't look it up anywhere. It's just my
7 impression of what damage is and does.

8 **Q. All right. And so I just want to make sure**
9 **I'm right. The first call that you had regarding**
10 **being involved in this lawsuit for Oceana Grill was**
11 **about three weeks ago?**

12 A. Between three and four weeks ago, yes.

13 **Q. Okay. So that would have been -- I'll**
14 **give -- let's say four weeks. That would have been**
15 **October 10th?**

16 A. Fair enough.

17 **Q. Somewhere between October 10th and**
18 **October 17th was the very first call with**
19 **Mr. Matthews, Mr. Houghtaling, Mr. Alvendia, and**
20 **maybe a couple other individuals on the phone?**

21 A. Yes, sir.

22 **Q. All right. After they asked you the**
23 **questions about whether you believed SARS-COVID --**
24 **SARS-2, COVID-19 would result in damage, and you**
25 **said yes, did they then give you any other**

1 **instructions?**
2 A. Not yet, no.
3 **Q. All right. When were you given additional**
4 **instructions?**
5 A. I think after I told them why. Let me be
6 clear. After I told them the basis of my opinion
7 and we talked about that for a few minutes, they
8 asked me would I be willing to be involved in this
9 case as an expert. Let me back up for a second.
10 They then gave me some background on the
11 case about the -- about the restaurant, about the
12 insurance companies, the argument the insurance
13 companies were making, and then they asked me would
14 I be willing to be an expert, serve as an expert in
15 the case.
16 **Q. And then what?**
17 A. Then I said yes.
18 **Q. All right. Then what?**
19 A. Then they told me that I had to have a
20 report, and I said, well, that's fine. And so I
21 began to work on a report.
22 **Q. Okay. Have you ever been inside of Oceana**
23 **restaurant?**
24 A. I have not, sir.
25 **Q. So somewhere around October 10th,**

1 **October 17th -- was that one call where you**
2 **ultimately gave them your opinions, gave them your**
3 **rationale, discussed the contents of the lawsuit and**
4 **the insurance company's position, asked to be an**
5 **expert, agreed to be an expert, started working on a**
6 **report? Was that -- that sequence of events was all**
7 **one phone call?**
8 A. Well, I didn't work on the report on the
9 phone call. But up to that point, absolutely.
10 **Q. Fair enough. Okay.**
11 A. My recollection of the sequence.
12 **Q. And then you hung up, and then you started**
13 **working on the report, presumably, at some point?**
14 A. I ate my Wheaties first, and then I started
15 working.
16 **Q. Okay. All right. And at no time before**
17 **you started working on the report did you go inside**
18 **of Oceana Grill?**
19 A. No, sir.
20 **Q. And in fact as we sit here today, you still**
21 **have never gone inside of Oceana Grill?**
22 A. That is correct.
23 **Q. All right. What did your work -- to begin**
24 **to draft your report, mind you, after you had**
25 **already made a conclusion about damage, what did**

1 **your work consist of?**
2 A. Well, the work consisted of identifying the
3 information that I thought would be -- that was a --
4 my scientific foundation for my argument.
5 **Q. Let me make sure. The call that happened**
6 **on -- somewhere between October 10th and**
7 **October 17th, you gave the lawyers in this case a**
8 **conclusion about physical damage, correct?**
9 A. I gave the lawyers in this case my opinion
10 about the --
11 MR. ALVENDIA: Wait, wait, Doctor.
12 Objection to form.
13 Go ahead and you can finish your
14 answer.
15 THE WITNESS: Okay.
16 A. I gave the lawyers in this case my opinion
17 about what CoV -- SARS-CoV-2 -- essentially what
18 human viruses or viruses that infect humans in
19 general do. Yes, I did do that.
20 BY MR. MILLER:
21 **Q. Okay. And when you say "viruses that**
22 **infect humans," you don't just mean -- so let's**
23 **affectionally call SARS-CoV-2 and then the ultimate**
24 **sickness -- is it fair scientifically, for the**
25 **purposes of this argument, to call it all COVID-19?**

1 A. Actually, it's not fair.
2 **Q. All right. Well, then --**
3 A. I would be -- I would be willing to accept
4 if you said CoV-2 as the virus -- COVID-19. I think
5 that's shorthand. If it's helpful to you, it's
6 unambiguous to me.
7 **Q. So CoV-2 as SARS, can I say that -- or no.**
8 **So SARS and CoV-2?**
9 A. SARS -- we can call the virus either SARS
10 or CoV-2, and the infection is COVID-19.
11 **Q. All right. Let's call it CoV-2, because**
12 **then I think that would be more familiar to the**
13 **trier of fact that's going to ultimately see all of**
14 **this. So we're going to say the virus CoV-2.**
15 A. Yes.
16 **Q. Okay. So what you gave to the lawyers on**
17 **the -- somewhere between October 10th and**
18 **October 17th was your conclusion regarding what you**
19 **believe a virus similar to SARS or similar to CoV-2**
20 **would do to property?**
21 A. Yes, sir.
22 **Q. Okay. That it would cause a physical**
23 **transformation that would lead to loss of use and**
24 **also damage?**
25 A. Well, damage was the physical

1 transformation and loss of use, yes.

2 **Q. Okay. Now, you said viruses in general**
3 **separately, a second ago. So there are other**
4 **viruses that would also fall within the definition**
5 **of a transformation, physical loss of use, which is**
6 **ultimately damage?**

7 A. Yes, sir.

8 **Q. Would the flu be one of those?**

9 A. Yes, sir.

10 **Q. Okay. What other -- would the common cold**
11 **be one of those?**

12 A. It depends on the virus.

13 **Q. But we can just use the flu. The flu would**
14 **cause a physical transformation, loss of use, and**
15 **then therefore damage to property?**

16 A. Yes, sir.

17 **Q. Okay. So once you hang up the phone,**
18 **you've now had the opportunity to discuss the**
19 **chemical, physical, and epidemiological effect of a**
20 **virus on property with these lawyers, though then --**
21 **and they asked you then to write a report?**

22 A. I think we have to clarify a couple of
23 things.

24 **Q. Okay. That -- that's fair. I want to**
25 **be --**

1 A. Epidemiology -- I'm sorry. Go ahead.

2 **Q. No, I said I want to be accurate, so**
3 **please.**

4 A. Epidemiology has a role in this case, in my
5 understanding. Epidemiology is not, I say again,
6 not part of the determination of physical damage.

7 **Q. Okay.**

8 A. That is the realm of physics and chemistry,
9 not the realm epidemiology. So our conversation
10 about physical damage had nothing to do with
11 epidemiology. I want to be very clear about that.

12 **Q. Physics and chemistry only?**

13 A. Physics and chemistry, yes, sir.

14 **Q. Okay. So you begin to draft your report?**

15 A. Begin to do the research, getting the
16 literature I know that's there that supports my
17 opinion, yes.

18 **Q. Tell me specifically what you did.**

19 A. Sure. Well, it was an opportunity to
20 review physics, review chemistry, then learn about
21 what happened at Oceana, I mean, how -- I dare to
22 say the characteristics of Oceana -- how big it is,
23 how many people ingress and egress, then examine the
24 studies that talk about the -- let's call it the
25 durability of the virus, how long it exists outside

1 the body, understand something about the surfaces it
2 would impact, and then write my conclusion.

3 **Q. Okay.**

4 A. Now, I will say this, I had to -- I'm
5 sorry. Let me stop for a second.

6 **Q. Go ahead, please.**

7 A. I had to learn about things. I had to
8 learn what the mayor and the governor said in March.
9 I had to learn that. I had to learn where Oceana
10 was in New Orleans. I had to come to a conclusion
11 about the -- about the density of people with the
12 virus within a certain distance of the restaurant.
13 I had to do those things as well.

14 **Q. Why -- if we're going to go through all of**
15 **these, why was it important to learn what the mayor**
16 **and the governor said?**

17 A. Because the governor and the mayor's
18 statement led to the decision at Oceana as to what
19 level of customer support they should sustain,
20 number one; and number two, the -- now, this is the
21 epidemiologic part. This is not the physics and
22 chemistry; it's the epidemiologic part. The
23 governor and mayor gave their assessment based on
24 epidemiology as to what was going on in New Orleans
25 and what the best public safety measures should be

1 undertaken to protect people.

2 **Q. Why is that helpful to your report?**

3 A. Well, because I have to understand,
4 in fact, whether it is likely or not that people
5 with -- people infected with, what did we say,
6 CoV-2 -- people infected with SARS-CoV-2 would be in
7 the vicinity of the restaurant.

8 If they're not in the vicinity -- if the
9 probability they're -- if the probability they're in
10 the vicinity of the restaurant is zero, then I say
11 the probability is also zero, or close to zero, that
12 you'll get any kind of spread within the restaurant,
13 and therefore there won't be any damage. There has
14 to be virus to cause damage. So I have to assure
15 myself that, in fact, the virus is there.

16 **Q. So if -- in a hypothetical similar to the**
17 **one you just gave, if the mayor or the governor's**
18 **orders included a complete shutdown and none of the**
19 **individuals that went into the Oceana restaurant had**
20 **the virus, the virus would not be present?**

21 A. Well, I would say I would agree with you;
22 however, how one determines somebody walks into a
23 restaurant doesn't have a virus is an important
24 question for that hypothetical.

25 But accepting your hypothetical, if I can't

1 demonstrate that there's virus, then there's no
2 point in invoking laws of physics and chemistry to
3 understand what happens with viral interaction.

4 **Q. And I would get to this later on. You**
5 **know, generally, I would ask an expert like**
6 **yourself, tell me what assumptions you made to come**
7 **to your conclusion.**

8 **And so on October 10th through 17th, when**
9 **you had this phone call, and the scenario was**
10 **presented to you that COVID-19 is present in Oceana**
11 **restaurant -- I'm sorry, I take that back -- CoV-2**
12 **was present in Oceana's restaurant, what's the**
13 **effect? Your conclusion, that there would be a**
14 **transformation of property resulting in loss of use**
15 **and therefore damage, there's an assumption there**
16 **that the virus is actually in the restaurant.**

17 MR. ALVENDIA: Objection to form.
18 You can answer the question.

19 A. Correct, yes.

20 BY MR. MILLER:

21 **Q. The entirety of your analysis, which is a**
22 **chemistry/physics analysis, assumes that there is**
23 **CoV-2 inside of the actual facility at 739 Conti**
24 **Street?**

25 A. I would only disagree with that in saying

1 that my report is more than chemistry and physics.
2 But the chemistry and physics component is
3 predicated on the assumption that the virus is
4 present.

5 **Q. And the -- not to argue. I accept that**
6 **your report has more than chemistry and physics.**
7 **The portion of your report that is necessary for**
8 **there to -- well, one of the major portions of your**
9 **report that is necessary for there to be**
10 **transformation of property, loss of use, therefore**
11 **damage, is the chemistry, right, the chemistry and**
12 **physics? I mean, the transformation of the property**
13 **is the chemistry and physics?**

14 A. Correct.

15 **Q. Okay. And if you do not have CoV-2 in the**
16 **facility, you don't have the physics, correct?**

17 A. Correct. There's nothing -- right, there's
18 no agent of transformation.

19 **Q. And you have never been in 739 Conti Street**
20 **in New Orleans -- correct -- Oceana Grill's**
21 **restaurant?**

22 A. I have not.

23 **Q. You have never done an actual physical test**
24 **of the surfaces in Oceana's restaurant?**

25 A. That is correct.

1 **Q. You have never -- you have not seen a study**
2 **or a test done by some other third party that would**
3 **confirm to you that CoV-2 is actually physically**
4 **present in the restaurant?**

5 A. I have not seen such an activity.

6 **Q. Okay.**

7 MR. ALVENDIA: I'll object. So I'm
8 not continuing to interrupt you here -- I
9 was going to object a second ago.

10 The legal standard here is more likely
11 than not. The doctor has issued in his
12 report that the virus is present more
13 likely than not. I just want to make sure
14 that we're following those terms here;
15 we're not talking in absolutes.

16 MR. MILLER: I hear you. I think
17 that's your position, and I accept that.
18 We can argue the legal standard to the
19 judge. But yes, I understand that that's
20 what his report says, and I know that's
21 your position.

22 MR. ALVENDIA: Okay.

23 MR. MILLER: All right.

24 MR. ALVENDIA: Because you're using
25 words like "assumptions," "assume," and so

1 forth. I just want to make sure you're not
2 mischaracterizing his report, which
3 clearly -- I'm looking at the conclusions
4 right now -- all say "more likely than
5 not." I just want to make sure we stick to
6 that.

7 BY MR. MILLER:

8 **Q. Well, I'll use Mr. Alvendia's scenario for**
9 **you, Doctor, just so we can have some clarity.**

10 **In your report when you say "more likely**
11 **than not," that assumes that CoV-2 is present in the**
12 **facility, correct?**

13 A. Well, one of my -- actually, no.

14 MR. ALVENDIA: Wait, wait. Hold on.
15 Let me make an objection to form. You're
16 using the word "assumes" interchangeably
17 with his conclusion of more likely than
18 not, which is based on much more than
19 assumption. It's based --

20 MR. MILLER: We'll clarify, but go
21 ahead.

22 MR. ALVENDIA: Hold on. It's based on
23 statistics, science, he just said, his
24 medical experience and so forth. So
25 just -- I'm going to object that you're

1 mischaracterizing his conclusion. It's not
2 just an assumption.

3 But, Doctor, if you understand the
4 question, please answer it.

5 A. My -- the conclusions in my report are all
6 based on "more likely than not," so I don't assume
7 in my report. I don't take for granted, in my
8 report, that there's COVID-19 in the vicinity of the
9 restaurant. I actually think, go through a thought
10 process, that leads me to the conclusion that there
11 is. It's more likely than not it's there. That's
12 what I do. And the same -- and the same -- I follow
13 that cascade right on through.

14 BY MR. MILLER:

15 **Q. All right. And we were talking in**
16 **hypotheticals. So I accept that your report walks**
17 **through a list of scenarios that lead you to "more**
18 **likely than not." I don't argue about that at all.**
19 **And I understand that your conclusions are "more**
20 **likely than not."**

21 **What I'm asking of you, similar to the**
22 **scenarios that you have walked through, that -- if**
23 **there was another scenario, i.e., like the one we**
24 **talked about a minute ago where, if there was a**
25 **complete shutdown of the restaurant and no**

1 **individual that had CoV-2 and/or the ultimate**
2 **sickness, COVID-19, was present, the virus would not**
3 **be present. Is that --**

4 MR. ALVENDIA: Objection to form.
5 When you say the word "shutdown," you
6 mean shut down to the public or shut down
7 to the employees, the staff, the vendors,
8 and so forth? I just want clarification on
9 that.

10 MR. MILLER: Okay.

11 BY MR. MILLER:

12 **Q. No one is in the restaurant --**

13 MR. ALVENDIA: No human --

14 BY MR. MILLER:

15 **Q. -- that has -- no one is in the**
16 **restaurant --**

17 MR. MILLER: Let me ask the question
18 to the witness, Rico. You can put your
19 objection on the record, and then if the
20 witness doesn't understand, he can tell me.

21 MR. ALVENDIA: You understand the
22 question, Doctor?

23 THE WITNESS: I need to hear it again.

24 MR. MILLER: I'm happy to repeat it
25 for you.

1 BY MR. MILLER:

2 **Q. Let's assume the restaurant is locked.**
3 **No one, not the owners, no person comes into the**
4 **restaurant. Is it fair to say that CoV-2 would not**
5 **be present?**

6 A. If the scenario is -- this is outside the
7 bounds of my report, a hypothetical.

8 **Q. Yes.**

9 A. If the assumption is that there is
10 absolutely no organism that comes near or in this
11 restaurant with CoV-2 -- no humans, no bats, nothing
12 that has CoV-2 -- if CoV-2 is not in the restaurant,
13 then you can have no damage from CoV-2 because the
14 agent isn't there. But again, it's outside the
15 bounds of my report.

16 **Q. And I'm going to get to your report in just**
17 **a second. We're going to talk about well within the**
18 **bounds of your report, I promise you.**

19 **Similarly, when you wrote your report, you**
20 **and no one else had done any testing of the surfaces**
21 **inside of Oceana Grill, correct?**

22 A. Well, I know I didn't do any testing.

23 **Q. And you didn't rely upon any testing in**
24 **doing your report, correct?**

25 A. Correct.

1 **Q. Okay. What did you -- and, in fact, let's**
2 **go back. I want to make sure.**

3 **Following your telephone conference, when**
4 **you started with the lawyers and you started to do**
5 **your -- to draft the report, you learned about the**
6 **characteristics of Oceana Grill?**

7 A. Yes, sir.

8 **Q. You reviewed studies about the durability**
9 **of the virus?**

10 A. Yes, sir.

11 **Q. Are all of the studies regarding the**
12 **durability of the virus contained -- that you relied**
13 **upon, contained within your report?**

14 A. Are all of the studies -- all of the
15 studies that I have relied upon in writing the
16 report are in the report.

17 **Q. That was my question.**

18 A. Okay.

19 **Q. There aren't any studies outside of what**
20 **you have identified for us -- there are no studies**
21 **outside of this report that you're going to come**
22 **back later on and say, you know what, I also relied**
23 **upon this?**

24 A. Well, that's a little different, so let me
25 just be absolutely clear. Again, all of the -- my

1 report is based on, and only on, the studies that
2 are referenced.

3 **Q. Okay.**

4 A. Since then, I have read other studies that
5 I think buttress my findings, but those are not
6 referenced in my report and the report isn't based
7 on them.

8 **Q. Are any of the other studies that you've**
9 **read -- do any of those studies drive you to a**
10 **different conclusion that is in your report.**

11 A. They do not, sir.

12 **Q. So then all of the studies that you have**
13 **read since you authored your report lend you to the**
14 **same exact conclusion that we have from your report**
15 **that has been submitted in this case?**

16 A. That is correct.

17 **Q. Okay. And those studies generally dealt**
18 **with the durability of CoV-2?**

19 A. Actually, not.

20 **Q. Okay.**

21 A. Those studies provided information about
22 the interaction of this virus with other organic
23 compounds, so that's on the physics/organic
24 chemistry section.

25 **Q. All right.**

1 A. And other studies, one other study in
2 particular, informed me about the -- let's call
3 it -- well -- well informed me about the presence of
4 the virus in the vicinity of Oceana.

5 **Q. What study was that?**

6 A. That, I think, is -- I think that it's
7 Haverly. I can -- I can look to be sure, but I
8 think it's Haverly.

9 **Q. And that study is not referenced in your**
10 **report?**

11 A. Correct.

12 **Q. Okay. But it dealt primarily with**
13 **geographic location?**

14 A. It -- it dealt with the density of cases --

15 **Q. Okay.**

16 A. -- in New Orleans.

17 **Q. In the New Orleans area. All right.**

18 **And in preparing yourself to write your**
19 **report, you looked at these studies, you considered**
20 **surface impact, you learned what the mayor and the**
21 **governor said and how that would impact your**
22 **conclusion?**

23 A. Yes, sir.

24 **Q. Looked at Oceana's location?**

25 A. Yes, sir.

1 **Q. And that -- okay.**

2 A. And also, I assume we're not going over the
3 universe of -- the universe of what I reviewed was
4 in the -- is in the references, but I also read the
5 interrogatories where I learned that there were
6 actually individuals who were in Oceana who had
7 tested positive for CoV-2.

8 MR. MILLER: All right. Let's go
9 ahead and pull up Dr. Moye's report.
10 (Exhibit No. 2 was identified.)

11 BY MR. MILLER:

12 **Q. Before we get into the -- the nuts and**
13 **bolts of the report, Dr. Moye, did you speak with**
14 **any of the representatives from Oceana, not the**
15 **lawyers but the owners of the restaurant?**

16 A. This is -- I'm sorry. Ask me the -- the
17 first part of your question again.

18 **Q. Sure. Did you speak with any of the**
19 **owners -- have you ever spoken with any of the**
20 **owners from the restaurant?**

21 A. No, I have not. I did listen to the
22 deposition of one of them last week. I think it was
23 last Wednesday. I don't remember for sure, but I
24 haven't directly spoken with any of them.

25 **Q. And in preparing your report, which was**

1 **clearly before the deposition last week, you did not**
2 **speak with any of the -- any representative, other**
3 **than the lawyers, in preparing your report?**

4 A. No, sir, I did not.

5 **Q. Okay. I know you were provided with the**
6 **interrogatory responses. Was that before you**
7 **drafted your report or after?**

8 A. I would say early in the process of me
9 working on the report.

10 **Q. Okay. Were you provided with anything**
11 **else?**

12 A. Well, I was provided with the arguments for
13 summary motion made by all parties.

14 **Q. Summary judgment?**

15 A. I beg you pardon. I'm -- I'm not using the
16 right word. Thank you.

17 **Q. Did that --**

18 A. Go ahead.

19 **Q. How did that influence your report at all?**

20 A. Well, I don't think it influenced my
21 report. It just gave me a more complete
22 understanding of the issues before the Court.

23 **Q. Okay. Anything else?**

24 A. I was provided a map, which actually is in
25 the report, of the location of Oceana Grill in

1 New Orleans.

2 **Q. Anything else?**

3 A. I don't think so. They may have provided
4 an article or -- one or two articles for me, but
5 most of the articles I identified on my own.

6 **Q. Okay. Now you've never taught a chemistry
7 course before, have you?**

8 A. Have I ever taught a chemistry course?
9 I've never formally taught a chemistry course. I've
10 certainly tutored many, many students in chemistry,
11 but I've never formally taught a chemistry course,
12 no.

13 **Q. And -- and you've never taught a physics
14 course, have you?**

15 A. That would be the same answer. No, but I
16 have tutored many, many students in physics. So
17 I --

18 **Q. And I know I asked you --**

19 A. I just tutored a student in physics about
20 two months before I heard about this case.

21 **Q. I know I asked you earlier and you said you
22 didn't consider yourself a physicist. You also
23 wouldn't consider yourself a chemist -- do you?**

24 A. I would -- I would answer this way. I
25 certainly do not hold myself out as an expert in

1 physics or an expert in chemistry. I certainly
2 don't do that, however, I have studied physics and
3 chemistry for years, taken exams in physics and
4 chemistry, use physics and chemistry as the basis of
5 my understanding of the human body. So I would say
6 that, while I am not a -- I'm not an expert, I
7 understand it.

8 **Q. What specific discipline are you being
9 offered as an expert in in this case?**

10 A. Well, I can tell you what I think I'm being
11 offered as an expert in. And I'm being offered as
12 an expert in medicine, in epidemiology.
13 Biostatistics, I'm not -- I don't really see plays a
14 role here, but my -- and my background in chemistry
15 and physics.

16 **Q. Well, now if you're saying you're being
17 offered as an expert in epidemiology, when I asked
18 you about your report, you made clear to me that
19 your report had no basis in epidemiology.**

20 A. Actually --

21 MR. ALVENDIA: Objection --- objection
22 to form.

23 THE WITNESS: Actually --

24 MR. ALVENDIA: Mischaracterization of
25 his testimony.

1 You can answer doctor.

2 A. Actually, I think what I said was you can
3 divide my report into two components. The first
4 component is epidemiology, and that's how we get to
5 the number of cases around Oceana. Epidemiology
6 gets us to the number of cases. Epidemiology gets
7 COVID through the door into Oceana. Physics and
8 organic chemistry get the virus to the surfaces.
9 BY MR. MILLER:

10 **Q. Physics and organic chemistry get to
11 damage?**

12 A. Fair, yes.

13 **Q. Okay. Epidemiology -- okay. That --
14 that's fair.**

15 **Epidemiology gets CoV-2 into the
16 restaurant?**

17 A. Yes, sir.

18 **Q. Because of all of the reasons that we're
19 going to go through in your report?**

20 A. Yes, sir.

21 **Q. Physics and chemistry create the damage --
22 the loss of use -- the transformation, then loss of
23 use, and therefore damage?**

24 A. Yeah. Damage, which is transformation and
25 loss of use, yes.

1 **Q. Okay. I understand where we are.**

2 **Okay. Let's take a look down at No. 6 of
3 your report. It discusses research experience, and
4 two-thirds down in No. 6, you indicate that -- and
5 we've talked about this, quote, [As read]: "I
6 supervised a collection of adverse events that were
7 reported to both sponsor -- to the sponsor and to
8 the F -- the Federal Food and Drug Administration,
9 FDA."**

10 **Do you see that?**

11 A. Yes, sir.

12 **Q. That FDA work is what we discussed earlier
13 where you were -- and just refresh me. I don't want
14 to mischaracterize what you did.**

15 A. Okay. So this is when I was at -- in my
16 work as a member of the Data Coordinating Center.

17 **Q. Right.**

18 A. We collect safety information and per
19 regulations report that safety information to the
20 sponsor of the study, which may be private or it may
21 be NIH, and also the FDA.

22 **Q. All right. In a calendar year, when you
23 were doing that work, how much time did you spend
24 doing this work for the FDA?**

25 A. Okay. Just so I can be clear. I -- I am

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1 working at the Data Coordinating Center meeting my
2 responsibility to the FDA (inaudible).
3 **Q. Uh-huh.**
4 A. Okay. So now your question to me is what?
5 **Q. Well, how much of that work specifically**
6 **related to any reporting to the FDA?**
7 A. Oh. Maybe 15 percent of my time.
8 **Q. In a calendar year?**
9 A. Just an -- just an approximation, yes,
10 15 percent, 20 percent.
11 **Q. Were you given a per -- per diem for that**
12 **work?**
13 A. No.
14 **Q. That -- that was part of your salary with**
15 **what organization?**
16 A. Yeah. So that was part of my salary with
17 the University of Texas.
18 **Q. Okay.**
19 A. However, I -- however, when I receive a
20 large grant, the -- the organization paying for the
21 grant gives money to the University of Texas to pay
22 my salary. So it's all salary support, but the
23 University gets money from the paying --
24 **Q. Organization.**
25 A. Organization, correct.

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1 **Q. Okay. All right. Let's take a look at**
2 **paragraph 18. Fees. Does -- does paragraph 18**
3 **accurately reflect the fees that you are being**
4 **paid -- paid by the lawyers in this case?**
5 A. It does.
6 **Q. Okay. Is there any variation of fees? Is**
7 **there any bonus for outcome? Are any of your fees**
8 **outcome related?**
9 A. They are not, however, I do reduce my fees
10 in some circumstances. For example, if I'm
11 listening -- if I'm listening to a deposition, I
12 cannot in good conscience charge somebody \$400 an
13 hour to listen to it, so I discount my fees.
14 **Q. That's very nice of you.**
15 A. Well, I -- I -- I appreciate the value of
16 money.
17 **Q. In No. 19 you list a number of cases that**
18 **you have been involved in; one, two, three, four,**
19 **five -- six cases. Is that the universe of**
20 **litigation that you've served in an expert capacity?**
21 A. No. It's only the -- for the past four
22 years. That's all that I believe I've done in the
23 last four years.
24 **Q. In any of those cases that are listed in**
25 **No. 19, did you act on behalf of the defendants?**

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1 A. Well, let's see. No. There is a -- I
2 think the first one -- I actually can't recognize it
3 from this, from the abbreviations, but I think the
4 first one was a drug company on drug company issue.
5 I think it was a patent issue, so both were drug
6 companies.
7 **Q. Okay. So what --**
8 A. But the others were --
9 **Q. Let me ask you, what type of opinion were**
10 **you asked to render in the case entitled Eli Lilly**
11 **and Company versus ICOS Corporation?**
12 A. Well, if that's the -- the case I remember,
13 it was a case involving patents, and I was asked to
14 review the content and the data analysis of a
15 particular patent and render an opinion. I don't
16 remember the details about it.
17 **Q. All right. But it was a data analysis**
18 **engagement?**
19 A. Yes, sir.
20 **Q. Okay. And the -- the next case, Abbott**
21 **Laboratories case?**
22 A. Yes.
23 **Q. Do you recall the type of opinion you were**
24 **asked to give?**
25 A. I believe that's an Actos, the antidiabetic

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1 drug Actos and the relationship with bladder cancer.
2 **Q. And did you represent the plaintiff there?**
3 A. Yes.
4 **Q. And the next one is products liability**
5 **litigation?**
6 A. Yes. Oh, that was Mirena, a IUD, and
7 pseudo -- pseudotumor cerebri, which is a form of
8 intercranial hypertension.
9 **Q. What type of opinion were you asked to**
10 **render?**
11 A. Oh, I was -- both in Abbott and in Mirena,
12 I was asked the epidemiology question, is -- is
13 there a relationship between the exposure, in this
14 case the medicine, and the disease? One case it was
15 bladder cancer, the other court case it was a
16 pseudotumor cerebri. Was it an association or was
17 it causation? And I reasoned in each time it was
18 causation.
19 **Q. Got it. What about the next case,**
20 **Daniels-Feasel versus Forest Pharmaceuticals, Inc.?**
21 A. I have been trying so hard the past five
22 minutes to remember this one, and I don't. I'm
23 sorry.
24 **Q. Okay. That's fine.**
25 A. If my memory gets refreshed later on, I'll

1 let you know. But right now, I don't.
2 **Q. What's this Pradaxa, October 18, 2019?**
3 A. Oh, Pradaxa. That was a -- yeah, sorry --
4 that was a -- I'm sorry for the incomplete
5 descriptor.
6 But that was a case we were looking at the
7 anticoagulation effect of Pradaxa and its
8 relationship to cardiovascular (inaudible).
9 **Q. And you represented the plaintiff there?**
10 A. Yes.
11 **Q. And I apologize for butchering that word.**
12 **And lastly this -- the Johnson and Johnson**
13 **case?**
14 A. Yes, sir. That involves the relationship
15 between Motrin, ibuprofen, and Stevens-Johnson
16 Syndrome; and I concluded that there was a causal
17 association between Motrin and SJS.
18 **Q. Is there any specific reason why you only**
19 **listed -- list the last four years of cases?**
20 A. Well, that's what I thought -- well, okay.
21 I guess a couple of reasons. One is that's what I
22 thought the -- the custom and culture were, and also
23 I'm not sure I could remember all the cases prior to
24 the past four years.
25 **Q. Okay. All right. Have you worked**

1 **previously for any of the lawyers that are involved**
2 **in this case?**
3 A. The only lawyer I worked with before was
4 Dave Matthews, who I think I mentioned earlier. But
5 not with -- I have not worked with anybody from the
6 Houghtaling group or Rico.
7 **Q. Okay. In preparing your report, did you**
8 **ask for any information that was not provided to**
9 **you?**
10 A. Well, I did not -- I don't think I asked
11 the attorneys for any additional information. I
12 don't think I did. I used my own resources to find
13 what manuscripts I could. I may have asked the
14 attorneys one time to direct me to the location in
15 the interrogatories that discussed the number of
16 people who entered the Oceana facilities with CoV-2,
17 but I -- I -- as I sit here, that's all I remember.
18 **Q. Okay. Let's talk about paragraph 20. Now,**
19 **you used the word or the phrase "environmental**
20 **impact" a few times throughout the report, or the**
21 **word "environment."**
22 **Could you tell me within the context of**
23 **this report, what environment are you talking about?**
24 A. Sure. I'm talking about -- specifically,
25 I'm talking about air and surfaces. The atmosphere

1 and solid surfaces within Oceana.
2 **Q. Okay. And, again, in the next sentence you**
3 **referenced -- you referenced the things that you**
4 **relied upon in coming to your conclusion.**
5 A. Where are we in my report?
6 **Q. Second -- second sentence in paragraph 20.**
7 **It says, "To draw my conclusions, I relied upon my**
8 **training in medicine, my experience seeing and**
9 **treating physicians, my advanced training in**
10 **epidemiology and biostatistics, my public health**
11 **experience, and my clinical research experience as**
12 **applied to my review of the literature."**
13 A. Yes.
14 **Q. Do you see that?**
15 A. Yes.
16 **Q. Okay. And not to quibble with words, but**
17 **at the time you started drafting your report, you**
18 **hadn't reviewed any -- at the time you came to your**
19 **conclusion, you hadn't reviewed any literature,**
20 **right?**
21 A. At the time I came to my conclusion?
22 MR. ALVENDIA: Objection.
23 BY MR. MILLER:
24 **Q. Yeah. Yeah. December 10th to**
25 **December 17th, when you had your telephone**

1 **conference with Mr. Houghtaling and Mr. Alvendia,**
2 **you communicated to them your conclusion about**
3 **whether or not CoV-2 created a physical**
4 **transformation loss of use and therefore damage?**
5 A. Correct.
6 MR. ALVENDIA: Wait. Wait.
7 Objection to form; asked and answered.
8 Now, he's -- he's said what -- what he
9 relied upon in his conclusion was
10 everything he just said and his years of
11 experience, and I'm trying to understand --
12 objection to form.
13 MR. MILLER: Okay.
14 BY MR. MILLER:
15 **Q. So, Doctor, let me get back to paragraph 20**
16 **in the report. You relied upon all of your**
17 **experience "and my clinical research expertise as**
18 **applied to my review of the literature" to draw your**
19 **conclusion.**
20 **That last sentence, "as applied to my**
21 **review of the literature," you had yet to review the**
22 **literature when you came to your conclusion?**
23 A. I will -- I would say a couple of things
24 about that. I had not reviewed any of the
25 literature on -- on SARS-CoV-2, and it's -- in

1 relation to Oceana, I had not reviewed any of the
2 literature.

3 However, before they asked me the question,
4 I did understand SARS-CoV-2, because I had read a
5 lot of literature up to then. I also rely on my
6 experience in the physics and organic chemistry,
7 which I should have said here but I did not.

8 But all of that was in play, all of that
9 was my background --

10 **Q. And --**

11 A. -- when the question was posed to me about
12 damage.

13 **Q. And, in fact, you really did not need to**
14 **read literature specific to CoV -- CoV-2 to**
15 **formulate your conclusion. You could have read**
16 **literature related to generally any virus, even the**
17 **flu. I think we talked about that earlier.**

18 A. I would -- I would say that --

19 MR. ALVENDIA: Wait. Wait. Wait.

20 Let me object.

21 Objection to form.

22 And, Doctor -- you can answer the question,
23 Doctor.

24 A. I -- I would say this: To some extent,
25 viruses are viruses. They have common

1 some of the difference. There has certainly been a
2 lot more attention given, of course, to the pandemic
3 causing CoV-2 than there has been to the flu, but in
4 general it's a little longer.

5 **Q. Okay. But putting -- putting durability**
6 **aside, exposure to a physical substance, all things**
7 **created equal, meaning temperature, humidity, all**
8 **things created equal and the initial exposure by**
9 **both viruses creates physical change that results in**
10 **physical loss of use and then damage?**

11 A. We're talking about H1N -- I'm sorry.
12 We're talking about the flu virus and --

13 **Q. Versus --**

14 A. COVID-2.

15 **Q. Yes, sir.**

16 A. Right. Right. Essentially damage is both
17 in -- both make physical transformations -- how deep
18 the physical transformation is in the substance
19 depends on the size of virus. The virus is of
20 different sizes, then the extent of the damage will
21 be different.

22 **Q. Got it. Okay. All right. Let's get back**
23 **to your report. The last sentence of paragraph 20,**
24 **and the words are in quotes -- I'll just read the**
25 **entire sentence. "Determining whether SARS-CoV-2**

1 characteristics across the -- well, the billions of
2 different species, they have common characteristics,
3 so yes.

4 However, there are individual
5 characteristics that have to be taken into account,
6 and one of them is how long the virus survives
7 outside the body. Now, that answer may be different
8 for some viruses than other viruses. It turns out
9 it is, not by very much.

10 BY MR. MILLER:

11 **Q. Okay. So -- and just generally speaking,**
12 **unrelated to your report, and I know you've done**
13 **extensive research, so I'm asking for -- really for**
14 **my own edification.**

15 **What is -- is the durability of COVID-2 in**
16 **comparison to the durability of what we**
17 **affectionately call the flu?**

18 A. Okay. Well, the -- the durability of
19 COVID-2 is a little longer than the durability of
20 the flu -- a little longer.

21 **Q. Okay. A little by -- by what number?**

22 A. By days. By days. A little longer. It
23 depends on the -- the experiments that look at the
24 durability of the flu versus the experiments with
25 CoV-2 are different in design. That could explain

1 **impacts its surrounding environments, meaning air**
2 **and surface, is an exercise in critical thinking**
3 **using the weight of the evidence approach."**

4 **All right. And you have that in quotes, to**
5 **me, meaning it is a term of art?**

6 A. Fair.

7 **Q. All right. So tell me exactly what the**
8 **weight of the evidence approach is from your**
9 **perspective?**

10 A. Actually, I was just going to read
11 paragraph 21 back to you. That's what it is.

12 **Q. All right.**

13 A. Okay. You --

14 **Q. Go ahead and read it to me.**

15 A. Go ahead and read it to you or not?

16 **Q. Yes, sir.**

17 A. Okay. "The weight of the evidence approach
18 is the process by which a body of evidence is
19 examined piece by piece, each component being sifted
20 and assessed using a transparent and standard
21 methodology. In this case, the goal is to assess
22 the relationship between SARS-CoV-2 and its
23 environment."

24 **Q. All right. The body of evidence that we're**
25 **talking about here are the things that we kind of**

1 generally outlined earlier, but we're going to see
2 in more detail if all of the factors you considered
3 in your -- in your, quote, "weight of the evidence,"
4 which would include all of the -- the articles that
5 you reviewed and your experience and so forth?

6 A. Yes.

7 Q. Okay. Is there any evidence that was
8 weighed to come to your conclusion in formulating
9 this report that is not evident, other than the
10 articles we talked about earlier?

11 I know you said since you've drafted the
12 report you've reviewed a couple of articles. I'm
13 not talking about those.

14 A. All right. I understand.

15 Q. I just want to confirm that the weight of
16 the evidence to support your conclusions is within
17 the corners of this document?

18 MR. ALVENDIA: Now, objection to form.

19 Once again, he did testify earlier, Allen,
20 that there are several articles that's he's
21 done research on that he relies upon and
22 will rely upon at trial.

23 A. I would agree with you with the -- we need
24 to be sure that we include physics and organic
25 chemistry.

1 A. Yes. But I don't remember -- I just
2 remember I read them, saw they weren't peer reviewed
3 and then discarded them.

4 Q. Okay. Did any of those papers disagree
5 with your conclusions that are evidenced in this
6 report?

7 A. I -- I don't know. Once I saw they weren't
8 peer reviewed -- I mean, for some of them I maybe
9 didn't even finish the paper. Once I saw it wasn't
10 peer reviewed, I just rejected it out of hand. It
11 may have supported me, it may not have. I just
12 rejected it.

13 Q. The Lancet, that's a -- those papers in the
14 Lancet are peer reviewed. Is that correct or not?

15 A. My understanding, yes, that's right.

16 Q. Okay. Because, I mean, you actually were
17 one of the reviewers?

18 A. For Lancet papers, yes.

19 Q. Yes. All right. 23, "Following this
20 process, I identified the lines of evidence created
21 in each study assessing the methodology used by the
22 research effort. Since the value of a research
23 result is tightly circumscribed by the methodology
24 used to generate it, research methodology is
25 critical. Each manuscript is assessed on its

1 BY MR. MILLER:

2 Q. Of course. Yeah, because without those
3 there's no damage?

4 A. Right, correct. Correct, yes.

5 Q. All right. In paragraph 22 you indicate
6 that you identify -- you identify the collection --
7 a collection of peer reviewed published papers
8 reflecting the universe of useful information about
9 the state of the relationship between SARS-CoV-2 and
10 its environment.

11 When you say the universe of useful
12 information, you're not contending that the articles
13 that you have relied upon in your report are the
14 only articles related to SARS-CoV-2?

15 A. No, I'm not. But I am rejecting that, for
16 example, what's happened with CARS -- SARS-CoV-2
17 research is that main -- in the rush to get
18 information out there about this virus, there are
19 papers that are not peer reviewed that are now
20 appearing in literature, and I had to be careful to
21 make sure not to include those.

22 Q. Okay. Is there any specific papers that
23 you've read, because clearly this insinuates that
24 you read some papers that were not peer reviewed,
25 that you specifically excluded from your analysis?

1 merits. It is rare -- it is the rare manuscript
2 that provides contributions in all aspects of
3 SARS-CoV-2/environment relationship."

4 Tell me what you're telling me right there.

5 A. Oh, I wrote that so eloquently too.

6 Q. I don't disagree.

7 A. Here we go. Here we go. Okay. It is one
8 of the biggest mistakes in research in general,
9 medicine in particular, to be persuaded by the
10 results of a study without absorbing the
11 methodology, because results can be very misleading
12 and one has no idea whether they are being misled or
13 not, unless they understand the methodology.

14 The methodology is the prism to which we
15 under -- review results.

16 Q. Okay.

17 A. Some of the biggest embarrassments in
18 medicine have been findings that were not based on
19 solid methodology, but were attractive and the field
20 ran with them.

21 This paragraph right here actually is
22 the -- it is or should be or better be the creed of
23 epidemiology. You have to understand the
24 methodology before you can draw a conclusion.

25 Q. That makes sense.

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1 A. I'm glad, because some people want to throw
2 me out of the room when I say that.
3 **Q. And so in 23 the statements are less about**
4 **the methodology that you utilized in coming to your**
5 **conclusions, but in assessing the -- the works that**
6 **you consulted to determine how they affected your**
7 **conclusion?**
8 A. Yes. I asked myself -- it's -- it's my --
9 it is -- the metric I used to assess the
10 contribution of a manuscript to my point of view or
11 not.
12 **Q. Notwithstanding your own -- notwithstanding**
13 **your own methodology?**
14 A. Correct. Correct. I mean, I'm describing
15 my own methodology here. This is the metric I use.
16 So if people disagree with this metric, then they're
17 not going to accept my results.
18 **Q. But, Doctor, isn't it fair to say that**
19 **before you employed your methodology -- I'm sorry --**
20 **yes.**
21 **Before you employed your methodology of**
22 **meticulously evaluating the works that you would**
23 **consult, you had already made you conclusion in**
24 **October -- between October 10th and October 17th**
25 **about damage?**

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1 MR. ALVENDIA: Objection --
2 A. It is not fair --
3 MR. ALVENDIA: Wait. Wait, Doctor.
4 Objection --
5 THE WITNESS: Okay.
6 MR. ALVENDIA: Objection. He's
7 already gone through the entire process of
8 how he reached his final conclusion in his
9 report. The fact that he gave his initial
10 opinion in the initial meeting does not
11 mean he reached the final conclusions in
12 his report.
13 He's got several conclusions in this
14 report by the way, several opinions. So
15 objection to form.
16 A. The question that was asked of me was the
17 lawyers -- about lawyers, was not a question about
18 whether CoV-2 was in the vicinity, though I had to
19 ultimately address that. It wasn't a question about
20 whether Oceana [sic] was in the building. I had to
21 address that. The question I was asked was given
22 the assumption that CoV-2 is in Oceana or in the
23 building, will it cause damage.
24 Now, I already have a background in that.
25 I already have a background in that. I already

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1 understand kinematics. I already understand the
2 appropriate physics. I understand the organic
3 chemistry. I also understand viruses. So I can
4 certainly opine about that because I have already
5 assimilated the appropriate (inaudible).
6 BY MR. MILLER:
7 **Q. Okay. I understand. Okay. The works that**
8 **you rely upon then and that are contained within the**
9 **report, and we'll get to them in a second, each of**
10 **those had a methodology that you found to be sound**
11 **as it applied to Oceana Grill restaurant?**
12 A. Yes. I mean, some stronger than others,
13 but yes.
14 **Q. Okay. All right. We're going to skip 24,**
15 **because I think what 24 is saying is that in your**
16 **experience in epidemiology, the methodology in which**
17 **you gather evidence to support your conclusions is**
18 **sound.**
19 A. Yes.
20 **Q. All right. Virology, we'll skip that.**
21 **In 26, talking about viruses you state that**
22 **they're -- they're not self-propelled but travel**
23 **through the air or water, or access solid objects to**
24 **rest on the surface, waiting for and in order to be**
25 **absorbed into a cell?**

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1 A. Yes.
2 **Q. Why don't you, in lay -- in layman's terms,**
3 **tell me what that means?**
4 A. Oh, of course. Okay. So viruses are not
5 alive. They're on the verge of life, but -- and
6 therefore not being alive they don't swim, they
7 don't fly. They are -- they are the victims of
8 physics and chemistry, which means they land
9 someplace based on physics and chemistry.
10 Now, the only thing viruses do when they
11 land is attach and -- I don't want to use the word
12 "try," because try suggests intent -- but they open
13 up and their RNA is to pour out of them into a cell.
14 Now, most viruses aren't so lucky. Most
15 viruses -- as I'm sitting at a wooden table, there
16 are viruses landing on that table, opening up,
17 letting their RNA -- their DNA get in the table.
18 It's not going to infect anything, they're not going
19 to reproduce. They don't know better. That's all
20 they do.
21 So viruses are the -- their movement and
22 their attachment is not purposeful, and it's very
23 easy, of course, when people are dying to
24 anthropomorphize them. But they are simply
25 victim -- they are simply -- not taken advantage of,

1 but caught up in laws of physics and laws of
2 organic -- organic chemistry, and -- and air
3 movement -- and, of course, air movement.

4 **Q. What is the difference between RNA and DNA?**

5 A. Sure. They are not nucleic acids. They
6 are essential for the reproduction of cells.
7 Classically, and this has changed the past couple of
8 years, but classically DNA is called
9 deoxyribonucleic acid. DNA contains the content of
10 all of our genetic information. Every cell has its
11 own copy of DNA. It is tightly coiled. It's in the
12 nucleus.

13 I'm going to try to do this from memory,
14 but I think if you took, Mr. Phelps, one of your
15 cells or one of my cells and took the DNA out and
16 unraveled it, it would be five feet long. That's
17 how tightly coiled it is. That reproduces itself as
18 the cell reproduces, and so that's -- that's what
19 DNA is.

20 **Q. Okay.**

21 A. And the information -- the information in
22 the DNA has to be turned into something, right?
23 It's got to be used. So we make -- you and I make
24 proteins. We make polysaccharides. We make
25 hormones, enzymes. That information is in the DNA.

1 It has to get out.

2 I'll trying to keep it short. RNA helps to
3 get the information out where that information can
4 be converted to the molecules you and I need to
5 live. That doesn't help, I'll try it another way.

6 **Q. No, that's fine.**

7 **Does a virus contain both RNA and DNA?**

8 A. To my knowledge, no. But I -- I will tell
9 you, viruses surprise us, so sure as -- and there
10 are, as I said, hundreds and thousands and millions
11 of species, so maybe there's one that does. But by
12 and large, they have only DNA or only RNA.

13 **Q. Okay. What does CoV-2 have?**

14 A. CoV-2 is RNA virus. Probably one of the
15 largest RNA viruses known.

16 MR. MILLER: Does anybody need to take
17 a break?

18 THE WITNESS: Let's see. We've been
19 going for 55 minutes --

20 MR. MILLER: About an hour.

21 THE WITNESS: -- or so. Yeah, I'll
22 take a break for five.

23 MR. MILLER: All right. Let's take
24 five minutes.

25 (Recess taken.)

1 BY MR. MILLER:

2 **Q. So, Doctor, do you have a hard copy of your**
3 **report in front of you?**

4 A. I can get an electronic copy in front of
5 me, yes.

6 **Q. The only reason I ask is because, as I go**
7 **through the remainder of the report, I'm going to**
8 **talk about some of your findings, and I'm also going**
9 **to reference the footnotes and the articles you use**
10 **as support. And so those are found at the end. It**
11 **would just be easier if you had a copy in front of**
12 **you.**

13 A. Okay. Just one second. It won't take
14 long.

15 **Q. And, Doctor, if you would just go to the**
16 **references at the end of your report, then we can**
17 **keep on the screen the actual paragraph that we're**
18 **talking about.**

19 A. So I have -- so I have an electronic
20 version of my report right here, and I am in the
21 references.

22 **Q. All right. So that's -- paragraph 33 of**
23 **the report says SARS-CoV-2 virus is 125 nanometers**
24 **in diameter.**

25 A. Yes.

1 **Q. Where does that -- where does that**
2 **information come from?**

3 A. Actually, there are multiple sources. I
4 kind of thought that was just common knowledge and
5 didn't need to provide that, but the -- it's a --
6 it's a virus that ranges in size from 60 to 120, 125
7 nanometers.

8 **Q. Okay. So it's not a virus is 125**
9 **nanometers; it varies in size?**

10 A. Yes, sir. Every species of virus has a
11 different size range.

12 **Q. Okay.**

13 A. The size range for SARS-CoV-2 is 60 to 125.

14 **Q. Take a look at paragraph 35. Paragraph 35**
15 **generally talks about the effect of COVID-19**
16 **infection. What are -- what is the purpose of this**
17 **with respect to your report?**

18 A. I'm just providing the signs -- for the --
19 for the Court, I'm providing the signs and symptoms
20 of COVID-19. Why is it a disease? Why are we so
21 concerned about it? So I'm just providing this
22 really as background.

23 **Q. Okay. Let's look at paragraph 37. Why is**
24 **this necessary for your report?**

25 A. Well, this is necessary because it

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1 demonstrates, number one, the seriousness -- how
2 serious the elected officials, the governor and --
3 of Louisiana, the mayor of New Orleans -- of
4 New Orleans took the problem, took the COVID-19
5 infection, number one; how they were beginning to
6 track the COVID-19 infection, the COVID-19 illness,
7 number two; and then with the driving force behind
8 the decision to close the bars and restaurants, to
9 go through this closure and period of
10 staged-to-phase openings.

11 **Q. Paragraph 39 references the March 16th,
12 2020, proclamation from the mayor. And you quoted
13 in your report, and it reads, "There's reason to
14 believe that COVID-19 may be spread amongst the
15 population by various means of exposure, including a
16 propensity to spread person to person and a
17 propensity to attach to surfaces for prolonged
18 periods of time, thereby spreading from surface to
19 person and causing property loss and damage in
20 certain circumstances."**

21 **How did this proclamation by Mayor Cantrell
22 affect your opinion?**

23 A. Well, this proclamation -- it affected my
24 opinion in the following way. Number one, that
25 COVID-19 was -- was a disease that was becoming

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1 increasingly prevalent given it's propensity to
2 spread. Secondly, she described to a T the
3 epidemiologic point of view about how it spread
4 person to person and also surface to person.

5 **Q. What about the -- the phrase "and causing
6 property loss and damage in certain circumstances"?**

7 A. Let me just find that. Oh, yeah, "causing
8 property loss and damage."
9 That really didn't affect my opinion. It's
10 for me to determine, based on science, whether
11 there's loss and damage. I respect her point of
12 view, but it really is -- I mean, my understanding
13 of my role in this case is not to be influenced by
14 what her perspective is, but to generate my own
15 perspective.

16 **Q. Turn to the very last person of -- last
17 page of his report, the conclusions.**

18 **Conclusion E -- and we'll come back to the
19 rest of it, but I just want to talk about this since
20 we're on this topic. "It is more likely than not
21 that the mayor and governor's reason that SARS-CoV-2
22 attach to surfaces, contaminate surfaces, and causes
23 property loss and damage was scientifically
24 supported."**

25 **Do you see that?**

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1 A. I do.

2 **Q. If the mayor's proclamation didn't affect
3 your conclusions at all, why was it necessary to put
4 it in this report at the end in your conclusions?**

5 A. It was necessary for me to reverse --
6 reverse the given here. What I'm doing is saying,
7 based on my understanding of contamination of
8 surfaces and based on my understanding of causing
9 property loss and damage, there was scientific
10 support.

11 **Q. Okay.**

12 A. I -- that -- that -- that was my reasoning,
13 and therefore since they came to the same conclusion
14 I did, then that's the basis for my consideration.

15 **Q. Do you know whether or not Mayor Cantrell's
16 proclamation on March 16, 2020, had any scientific
17 basis whatsoever?**

18 A. I don't know one way or the other.

19 **Q. Okay. Let's go back to paragraph 44.**

20 MR. MILLER: Allison, you're not on
21 mute. Allison, you're off -- you're not on
22 mute. Allison, you're not on mute.

23 DR. STOCK: I should be -- okay. I'm
24 trying to get back on. I thought I was.
25 Sorry.

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1 MR. MILLER: Okay.

2 MR. ALVENDIA: Allen, are we waiting
3 on something?

4 MR. MILLER: Yeah, my thought process.

5 MR. ALVENDIA: Okay. All right. I'm
6 sorry. I thought you were waiting for her
7 to get back on.

8 MR. MILLER: Let's look at
9 paragraph 44.

10 BY MR. MILLER:

11 **Q. And generally you talk about some of the
12 orders. The last sentence states, "The mayor stated
13 that restrictions were particularly aimed at Bourbon
14 Street and other areas of the city where
15 alcohol-fueled gatherings have," quote, "'gotten out
16 of control,'" closed quote.**

17 **We -- I think we established earlier that
18 Oceana Grill is on Conti, but it's close -- it's in
19 the French Quarter, right, and -- and relatively
20 close to Bourbon Street?**

21 A. Yes, sir.

22 **Q. You're aware of that?**

23 A. I am, sir.

24 **Q. Are you aware --**

25 MR. ALVENDIA: And actually, Allen,

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1 objection to form. Just -- just so we know
2 here, it's on the corner of Conti --
3 MR. MILLER: On the corner, yeah.
4 MR. ALVENDIA: Touches it, right.
5 It's on Bourbon. But go ahead.
6 MR. MILLER: I don't spend much time
7 on Bourbon, so I don't know. But I -- I'll
8 take your word for it.
9 MR. ALVENDIA: Oceana -- and I've been
10 to Oceana before, and I can tell you it's
11 on the corner.
12 MR. MILLER: All right.
13 BY MR. MILLER:
14 **Q. Do you know what -- whether or not Oceana**
15 **followed the mayor's orders?**
16 A. I believe I do.
17 **Q. All right.**
18 A. They followed the phase -- the shutdown and
19 the phased reopening.
20 **Q. Do you know if Oceana was ever in violation**
21 **of the mayor's orders and had to be reprimanded by**
22 **the city for failing to file -- failing to follow**
23 **her phased shutdown orders?**
24 A. I -- I don't know. I -- I imagine
25 initially, like in Phoenix where I am and other

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1 cities, there was confusion the first couple of days
2 about when do orders go into effect, who's involved
3 with that, and what should they do. Are they
4 shutting down completely? I imagine there was some
5 confusion about that. Other than that, I don't
6 know.
7 **Q. Okay. Let's look at paragraph 47.**
8 **Paragraph 47 reads, [As read]: "The Oceana Grill**
9 **had patrons who had SARS-COVID-2 infections,**
10 **specifically the owner tested positive for COVID-19.**
11 **In addition, there were four other instances where**
12 **individuals with property access reported a positive**
13 **SARS-COVID-2 positive test. These two were -- these**
14 **were two office employees, a maintenance worker, and**
15 **a prospective employee to be -- interviewing for a**
16 **position. Based on" -- I think that's -- you meant**
17 **to say, "Based on notices of the -- based notice of**
18 **the change in property condition from safe to**
19 **dangerous, portions of Oceana Grill were closed for**
20 **24 hours."**
21 **Tell me exactly what you meant there,**
22 **because it looks like a typo.**
23 A. Good point. Let me look at this. This is
24 not the best sentence I ever put together.
25 Oh, okay. I think it reads -- it should

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1 read this way, and my apologies because it's my
2 fault it doesn't -- "Based on notice of the change
3 in the property condition from safe to dangerous,
4 portions of Oceana Grill were closed for 24 hours."
5 **Q. Okay. "The dates of these actions on or**
6 **about April 3rd, April 10th, June 3rd, June 27th,**
7 **and August 1, 2020."**
8 A. Right. It should be "The dates of these
9 actions were on or about."
10 **Q. Okay.**
11 A. Sorry.
12 **Q. Now, the change in the property condition**
13 **from safe to dangerous is the fact that individuals**
14 **who contracted COVID-19 -- that you were informed**
15 **that individuals that contracted COVID-19 were in**
16 **the property?**
17 A. Yes.
18 **Q. The statement "change in property and**
19 **condition from safe to dangerous" is not the result**
20 **of testing of the property condition at Oceana**
21 **Grill?**
22 A. That is correct.
23 **Q. Now, these -- the areas of Oceana Grill**
24 **were closed for 24 hours. Do you know what Oceana**
25 **did for -- during those 24 hours to the property**

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1 **condition?**
2 A. I would have to check later in my report,
3 because I do talk about remediation. I mean --
4 excuse me -- cleaning and disinfecting later in my
5 report. But I don't remember right now whether they
6 were closed and they went through cleaning or not.
7 I just don't know.
8 MR. ALVENDIA: And, Allen, do me a
9 favor -- look, could we break this down
10 into time phases or time periods? Because
11 clearly, in the different phases -- I'm
12 just trying figure out a way here to --
13 to --
14 MR. MILLER: I'm just reading his
15 report.
16 MR. ALVENDIA: The problem with it --
17 the problem with it is it's a compound
18 question though. I mean, you're asking him
19 what they did in response to a dangerous
20 condition. I just want to be sure we're
21 talking about a time frame, because they
22 went through different restrictions at
23 different times.
24 MR. MILLER: Okay. Well, his report
25 says that "Based upon the change in

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1 property condition from safe to dangerous,
2 they closed for 24 hours."
3 MR. ALVENDIA: Right. Then it goes on
4 to say the dates of these actions, and then
5 he gives different dates, because it's in
6 different phases is what I'm saying, so...
7 MR. MILLER: Closing for 24 -- all
8 right. I'll -- I'll ask another question.
9 MR. ALVENDIA: Okay. Go to the next
10 sentence. It talks about the different
11 phases. I'm just trying to make sure we're
12 not conflating that they were closed for
13 24 hours all the time. They went to
14 different restrictions on those dates that
15 he says in the next sentence.
16 But go ahead. I just want to make sure
17 we're not mischaracterizing his testimony
18 to mean that's how they were the whole
19 time. But go ahead.
20 MR. MILLER: All right. Let me --
21 MR. ALVENDIA: Doctor, do you
22 understand his question?
23 MR. MILLER: Let me ask the question.
24 BY MR. MILLER:
25 **Q. So, Doctor, what I think you're saying in**

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1 **paragraph 47, and correct me if I'm wrong, that**
2 **someone -- you were informed that someone notified**
3 **Oceana on April 3rd that they had contracted**
4 **COVID-19 and had been in the facility, and on**
5 **April 3rd Oceana closed the area where that**
6 **individual was for 24 hours?**
7 A. Yeah. On or about April 3rd, yes.
8 **Q. Right. And on or about April 10th, Oceana**
9 **was notified that an individual that had been in the**
10 **facility was present, and they closed that area**
11 **where the individual was for a total of 24 hours?**
12 A. Yes.
13 **Q. On or about June 3rd, Oceana was notified**
14 **that an individual that had contracted COVID-19 had**
15 **been in the facility, and on June 3rd they closed**
16 **the facility for 24 hours?**
17 A. Yes.
18 **Q. And in each instance after the 24 hours,**
19 **it's your understanding that they reopened that area**
20 **of the building?**
21 A. The degree to which they reopened that
22 really depends on what phase the -- what phase of
23 reopening or what stage of reopening they were in.
24 But there was some resumption of activity after the
25 24 hours.

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1 **Q. Okay. That's fair, because they could have**
2 **had -- if it was in a complete shutdown --**
3 A. Right.
4 **Q. Right. Okay. June 3rd, we weren't in a**
5 **complete shutdown in June 3rd. We were at least in**
6 **Phase 1?**
7 A. Okay.
8 **Q. They would have closed -- the -- your**
9 **understanding from what -- what you were told and**
10 **thus transferred into your report was that they**
11 **closed a section of the restaurant for -- for**
12 **24 hours on June 3rd after being notified that**
13 **someone had contracted COVID-19?**
14 A. Yes.
15 **Q. Had been in the building?**
16 A. Yes.
17 **Q. Same for June 27th, and same for**
18 **August 1st?**
19 A. Yes.
20 **Q. Okay. And you would expect that on these**
21 **dates, June 3rd, April 10th, April 3rd, June 27th,**
22 **and August 1, that during the 24-hour period where**
23 **this area was closed, that Oceana Grill followed the**
24 **CDC guidelines and disinfected the area where this**
25 **person had been?**

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1 A. I mean, I would like to think that. But
2 sitting here now, I can't say that I know that
3 that's the fact.
4 **Q. Okay. But you -- you would hope that's the**
5 **case?**
6 A. I would hope, yes.
7 **Q. All right. And the next paragraph talks**
8 **about the number -- where did you get this**
9 **information that's contained in paragraph 49?**
10 A. Actually, I'm trying to remember. I don't
11 recall. I mean, it's not -- it's not in any
12 published literature. That may also have come from
13 the interrogatory.
14 **Q. All right. But you don't give any cite in**
15 **your report, so --**
16 A. Correct.
17 **Q. -- do you know? Do you know whether -- do**
18 **you know for sure where this information came from?**
19 A. I don't know for sure, but I -- I believe
20 it was from the interrogatory.
21 **Q. Okay. Let's look at paragraph 50.**
22 **[As read]: "Given the established infected --**
23 **infectivity of SARS-COVID-2 and the ongoing customer**
24 **and patronage level of Oceana Grill, the degree of**
25 **environment exposure, air and surface at the**

1 restaurant rose to dangerous levels."
2 **How do you know that?**
3 A. I know that because patients came to CO --
4 excuse me.

5 Infected patients came to -- patrons --
6 infected patrons came to Oceana Grill.

7 **Q. Okay.**

8 A. Infected patrons sneeze, infected patients
9 cough, infected patients speak and they spew out
10 viruses. They changes the environmental -- that
11 changes the environment to a dangerous level.

12 **Q. Was Oceana Grill, in your opinion, a**
13 **restaurant that had environmental exposure that rose**
14 **to a dangerous level on April 5th of 2020?**

15 A. Well, I'd have to look back to April --
16 well, I can't. But April 5th is one of the days?

17 **Q. April 3rd is one of the days where an**
18 **individual was infected.**

19 A. Okay.

20 **Q. That was in -- that had COVID-19 that came**
21 **into the building.**

22 A. Okay. I would -- I would say this. Okay.
23 I don't know where that individual was in the
24 building, but where he was, his presence changed the
25 environment to dangerous.

1 **Q. Even after -- let's assume for sake of this**
2 **conversation that Oceana Grill applied all CDC**
3 **recommended disinfectants on April 3rd once they**
4 **learned of this individual's presence in the**
5 **building. Okay?**

6 A. Okay. So -- so help me with the sequence
7 now. I can answer your question. I need to know --
8 make sure I know the sequence.

9 A patient -- I mean, the subject comes in,
10 they are infected. Okay. Now -- now, tell me what
11 happens.

12 **Q. Oceana Grill sections off the portion of**
13 **the building where that individual was present.**

14 A. Okay.

15 **Q. And performs all disinfectants recommended**
16 **by the Center for Disease Control for -- in that**
17 **area.**

18 A. Okay.

19 **Q. On that -- on the -- on that day and the**
20 **following day, April 3rd through April 4th. It is**
21 **now April 5th.**

22 A. Yes.

23 **Q. Does the restaurant still have a degree of**
24 **environmental exposure at the restaurant that is**
25 **considered a dangerous level?**

1 A. I believe it does, yes.

2 **Q. Okay. Despite the fact that Oceana**
3 **Grill -- despite the fact that they disinfected the**
4 **restaurant once they had knowledge in -- in**
5 **accordance with CDC guidelines?**

6 A. I --

7 MR. ALVENDIA: And you're asking --
8 again, your question -- your question,
9 Allen, for the legal standard for this
10 expert is within a medical degree of
11 certainty more likely than not, correct?
12 That's -- that's what you're asking him.

13 MR. MILLER: No, that is not what I'm
14 asking him.

15 MR. ALVENDIA: Well, then ask --

16 MR. MILLER: I asked him --

17 MR. ALVENDIA: If you ask --

18 MR. MILLER: You can -- you can argue
19 that to the judge about whether or not his
20 answers fit within the legal standard, but
21 I'm not worried about the legal standard.

22 MR. ALVENDIA: Objection --

23 MR. MILLER: I want to ask him
24 questions.

25 MR. ALVENDIA: Objection. If you're

1 -- objection to form. It's an improper
2 question.

3 MR. MILLER: All right. And then you
4 can -- you can have that question stricken
5 when we get to trial.

6 MR. ALVENDIA: You can move on.

7 MR. MILLER: All right. Can we go
8 back to my last question and the Doctor's
9 answer, Madam Court Reporter --

10 THE REPORTER: Yes, sir.

11 MR. MILLER: -- so that I can finish
12 this line of questioning?

13 (Record read back by reporter.)

14 A. So my answer is pending.

15 BY MR. MILLER:

16 **Q. Yes, sir.**

17 A. Okay. My answer is, yes. And it is no
18 disparagement of the cleaners. It's no
19 disparagement of the CDC. It's just that if their
20 guidelines are not sufficient to get rid of all of
21 the virus. So the area is still infected, so that's
22 why my answer is yes.

23 **Q. And your answer would be the same if I gave**
24 **you the same scenario for April 10th, June 3rd,**
25 **June 27th, and August 1st, which are all instances**

1 in your report that you became aware that
2 individuals with COVID-19 were present in the Oceana
3 Grill restaurant?

4 A. Yes.

5 Q. Okay. You go on to say, "The restaurant's
6 environment was transformed into a" --

7 A. Deleterious.

8 Q. -- "deleterious condition as the virus
9 physically transformed the air and the restaurant
10 contents from one of safety to one of infectivity
11 and illness."

12 Tell me what that means.

13 A. It means that the presence of the virus in
14 the air of the restaurant and on the surfaces of the
15 restaurant make this location unsafe, because people
16 can get infected and ill from it.

17 Q. Okay. "This transformation changes the
18 structure of the surface of the restaurant contents
19 by a process predicated by physical law."

20 What does that mean?

21 A. "By a process predicted."

22 Q. Predicted. I'm sorry, predicted.

23 A. Right. Right. I mean, the transformation
24 takes place in the restaurant contents by organic --
25 by chemical processes that are -- that are conducted

1 by well-established physical law.

2 Q. So that's chemistry and physics that we're
3 talking about?

4 A. Yes, sir. You have principally chemistry,
5 yes.

6 Q. Now, "The change in the structure is the
7 damage, so the transformation more likely than not
8 leads to physical damage."

9 Why more likely than not?

10 A. Well, because the transformation is
11 damaging. The transformation happens. That
12 transformation is the damage. So given the
13 transformation happens, there is damage.

14 Q. So then why more likely than not?

15 A. Well, because, I mean, more likely than not
16 is a weak -- it's a weak metric here. I'm saying
17 it's certain.

18 Q. Right. So why -- if you're certain and you
19 say it's certain that a transformation happens and
20 that's damage, why then in your report do you
21 indicate the transformation more likely than not
22 leads to physical damage?

23 A. Because --

24 MR. ALVENDIA: Objection -- wait.
25 Wait, wait.

1 Objection. He's already answered that
2 question. More likely than not is the
3 legal terminology requirement. "The
4 minimum" is what he said, and that's true.
5 Minimal standard -- the burden of proof in
6 a civil case is more likely than not. He's
7 saying it's much more beyond that. He's
8 already answered this question. Objection.

9 MR. MILLER: Thank you.

10 BY MR. MILLER:

11 Q. You can answer my question, Doctor.

12 A. Well, I mean, it's the same thing. It's
13 certain, therefore it most certainly is more likely
14 than not.

15 Q. So were you instructed to include more
16 likely than not into your report by the lawyers?

17 A. I was simply instructed to -- I -- I was
18 instructed a number of times to make sure I
19 understood what the legal standard was.

20 Now, I exceed -- so I exceeded the legal
21 standard, in my estimation, using science and facts
22 as I know how to use them. But I wanted to also be
23 sure that the language was consistent, as long -- as
24 long as it was consistent with my scientific
25 opinion, I wanted to also be sure that it was

1 consistent with a legal interpretation.

2 As long as there was no conflict, I have no
3 problem using more likely than not. But I think
4 we've exceeded that.

5 Q. All right. So I get it, the lawyers
6 authored this last statement to include the words
7 "more likely than not"?

8 A. Sir --

9 MR. ALVENDIA: Objection.

10 A. -- the only person who authored this is me.

11 MR. ALVENDIA: Objection to form.

12 A. They're the only -- I'm the only one.
13 Nobody touched a single letter on this report than
14 me.

15 BY MR. MILLER:

16 Q. Okay. Now --

17 A. They've asked me questions about it, we've
18 debated about it, but I am the author. I chose to
19 put in more likely than not, even though, in fact,
20 it weakens my argument. But I have no problem using
21 it, because it's consistent with my argument.

22 Q. Okay. Paragraph 51 talks about how the
23 virus is spread -- the virus is primarily spread
24 through the air. And the first sentence reads, "The
25 airborne dissemination of the virus was" -- yeah,

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1 by -- what's this gentleman's name, or person's
2 name?
3 A. Buonanno.
4 **Q. Buonanno. Were you familiar with Buonanno**
5 **before you did this research?**
6 A. No, sir.
7 **Q. Okay. If you look on -- at your**
8 **references, you utilize Buonanno for this scientific**
9 **data, right?**
10 A. For this study, yes.
11 **Q. Why?**
12 A. Because I believe that the methodology that
13 they used was sound, and I believed -- and I
14 understood what their conclusions were and that
15 therefore it's -- and -- and it provides data that
16 supports my hypothesis that this virus does spread.
17 **Q. Okay. In paragraph 50 -- you don't have a**
18 **reference for the analysis that you use in**
19 **paragraph 50.**
20 MR. MILLER: Could you scroll back up
21 a little bit, Kevin?
22 BY MR. MILLER:
23 **Q. Paragraph 51, you've got some data from**
24 **Buonanno.**
25 A. Yes, correct.

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1 **Q. Paragraph 50, you don't have any reference**
2 **for the number of statements where you talk about**
3 **the physical change in the restaurant condition.**
4 A. So let me say a couple of things about
5 that. The ref -- no. First of all, I agree. I
6 have got no reference number, no question about it.
7 **Q. Okay.**
8 A. Okay. However, a predicate for the first
9 sentence is the previous discussion, level of
10 environment -- "level of environmental exposure, air
11 and surface rose to dangerous levels." That's
12 previous discussion.
13 "The restaurant's environment was
14 transformed into a harmful condition as the virus
15 physically transformed the air and the restaurant
16 contents from one of safety to one of infectivity
17 and illness."
18 To me, at this point, that's self-evident.
19 **Q. Self-evident, so -- so do you have any**
20 **other peer-reviewed article that supports the**
21 **statement that "A restaurant was transformed into**
22 **deleterious condition as the virus physically**
23 **transformed the air and the restaurant's contents**
24 **from one of safety to one of infectious and**
25 **illness"?**

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1 A. Yes.
2 **Q. Do you have any other peer-reviewed article**
3 **that would say that?**
4 A. Yes. They -- they -- let's back up for a
5 second. Can we go up one?
6 Paragraph 49 talks about the number of
7 patrons entering the restaurant. It also describes
8 what happens when somebody sneezes. Now, if you
9 actually need a reference that says there are as
10 many as two billion viral particles that can fall on
11 an individual after a sneeze, I can get that.
12 But that is -- it is well understood that
13 when somebody sneezes, they don't just sneeze out
14 one or two. They sneeze out hundreds of millions
15 and billions. That --
16 **Q. Let's go back --**
17 A. That in and of -- that -- that -- that in
18 and of itself, if one understands what viruses do,
19 make the environment -- let -- let me just use my
20 own words here -- change the environment from one
21 of -- an environment from one of safety to one of
22 infectivity and illness.
23 **Q. Let's --**
24 A. -- (indiscernible) virus in the air leads
25 to that conclusion.

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1 **Q. Let's stay right there. This next sentence**
2 **in paragraph 50, [As read]: "This transformation**
3 **changes the structure of the surface of the**
4 **restaurant contents by a process predicated by**
5 **physical law."**
6 A. Right.
7 **Q. You don't have any citations there either.**
8 A. Oh, that's -- actually that's coming. I
9 just pre-stage what I was going to get to, but
10 that's coming.
11 **Q. Oh, it's coming from whom?**
12 A. I mean -- I beg your pardon. That
13 appears -- the justification appears later in the
14 report. That's what I mean.
15 **Q. Oh, your -- your physics -- your physics**
16 **versus -- your physics and chemistry analysis?**
17 A. Organic chemistry, yes.
18 **Q. Okay. But you don't have any peer-reviewed**
19 **article sources that would support that statement?**
20 A. Right. "By a process predicted by physical
21 law"? Is that the statement you're concerned about?
22 **Q. The transformation that you're describing.**
23 **That -- this trans -- the -- that "the virus**
24 **physically transformed the air and the restaurant**
25 **contents."**

1 **The virus physically transformed the**
2 **restaurant contents?**
3 A. Yes.
4 **Q. Point me in a direction of one person,**
5 **other than yourself, that says the virus physically**
6 **transforms the restaurant's contents.**
7 A. Well, I will point to you several places.
8 I will point you to text in virology. I will point
9 you to text in organic chemistry.
10 **Q. Okay. That are peer-reviewed -- why don't**
11 **you cite those in your -- why don't you cite those**
12 **in your report?**
13 A. I mean, I'm happy to, but those are very
14 basic chemistry books, very basic virology books. I
15 mean, I'm happy to do that, but it's -- perhaps not
16 self-evident to everybody, but this is what physical
17 law is.
18 **Q. Okay. The last sentence, "The change in**
19 **the structure is the damage, so the transformation**
20 **more likely than not leads to physical damage."**
21 **Point to me one individual, one article,**
22 **one report, one peer-reviewed article, even a paper,**
23 **where somebody says that the change in the structure**
24 **is the damage, so the transformation more likely**
25 **than not leads to physical damage --**

1 A. Well, first of all.
2 **Q. -- because COVID-19 is on a surface?**
3 A. They're my words and not anybody else's
4 words.
5 **Q. Okay.**
6 A. All right. So I defined -- clearly in this
7 report I define damage as change in the structure.
8 I defined it that way.
9 **Q. Anyone -- does anyone else --**
10 A. My definition --
11 **Q. I'm sorry. Go ahead.**
12 A. My definition -- my definition, and I stand
13 by that definition.
14 **Q. Okay.**
15 A. Now, if -- now -- okay. So the change in
16 the structure is produced by physical law, so
17 therefore the transformation is more -- it's -- the
18 transformation -- it's total logic.
19 The transformation leads to physical
20 damage. The transformation is the physical damage.
21 And the transformation occurs by physical law. And
22 that physical law is based in the fundamental tenet
23 of organic chemistry.
24 **Q. Can you point me to one article,**
25 **peer-reviewed or not, person, that defines damage**

1 **the way you do in the contents of this report?**
2 A. I have no idea.
3 **Q. Okay. You haven't seen that anywhere else?**
4 A. I don't know if I haven't seen it anywhere
5 else, but when I'm asked what damage is, this is my
6 definition.
7 **Q. Okay.**
8 A. Now -- now, over the years maybe I have
9 absorbed an understanding of damage from different
10 people, that's likely. That is -- forgive me --
11 more likely than not, but this is my definition of
12 damage.
13 **Q. Okay. Paragraph 53 talks about the risk of**
14 **infection in ventilated areas.**
15 A. Yes.
16 **Q. Can you describe to me the ventilation**
17 **system that's in Oceana?**
18 A. I cannot.
19 **Q. You have no idea what type of HVAC system**
20 **that they utilize when patrons are present?**
21 A. I don't know what that would be.
22 **Q. Do you have any idea of how they aerate the**
23 **building, whether they leave doors and windows open**
24 **during this COVID situation that we've been going**
25 **through?**

1 A. Well, having been in New Orleans, I hope
2 they don't open doors and windows. But I would say
3 beyond that, I don't know.
4 **Q. Okay. When determining whether or not the**
5 **restaurant's environment is transformed, would the**
6 **ventilation have any bearing upon your analysis as**
7 **to whether or not there's property damage?**
8 A. Ask me that question again, please.
9 **Q. Sure. In determining whether or not the**
10 **inside of Oceana Grill has been transformed into a**
11 **dangerous condition or a dangerous environment,**
12 **would the type of ventilation system affect your**
13 **opinion at all?**
14 A. I think it would.
15 **Q. Okay. But you don't know what the**
16 **ventilation system is at the restaurant?**
17 A. Right. And just to be clear, I'm not
18 saying I would reverse my conclusion. I think it
19 would be impacted by the kind of ventilation.
20 **Q. Okay. In paragraph 54 you talk about --**
21 **you say in the second sentence, [As read]: "So the**
22 **virus is spread by other means as well. And, for**
23 **example, highly sensitive laser light scattering**
24 **observations have revealed that loud speech can emit**
25 **thousands of oral fluids."**

1 A. Droplets.
2 **Q. "Oral fluid droplets per second." And then**
3 **you cite to number 25. What is that source?**

4 A. I have to see. Well, it's an article. I
5 can't pronounce the last name. Stadnytskyi, I would
6 say. The title, "The airborne lifetime of small
7 speech droplets and their potential importance in
8 SARS-CoV-2 transmission."

9 Does that answer your question?
10 **Q. And why -- why did you utilize that source?**

11 A. Well, I utilized that source because I
12 thought their methodology was sound, and it provided
13 yet one more vector of spread of the virus.

14 **Q. Okay. Let's look at paragraph 55. This is**
15 **your analysis with respect to the virus and**
16 **surfaces. And I'm just going to go down to the**
17 **surface portion of this paragraph where it says,**
18 **"The virus also alters the surface of solid**
19 **objects," you list a number, "through the process of**
20 **molecular cohesion and adhesion."**

21 **Tell me what that means.**

22 A. Of course. I'll try to say this in
23 English. Viruses, being very small, are affected by
24 movements of electrons, and movements of electrons
25 determine what -- whether a molecule cleaves to

1 something or does not.

2 Should I go on?

3 **Q. Yes, I'm listening.**

4 A. All right. All right. All right.
5 Therefore, the virus by it -- by its very size is
6 maneuvered into positions in the surface, and those
7 maneuvers lead to it being attached to other
8 molecules in the surface. In this particular
9 example, I'm talking about wood wax and virus -- not
10 amalgam, but the wood wax virus environment.

11 **Q. Does the --**

12 A. I should say -- excuse me. I'm sorry.

13 The use of the word "insinuation." I think
14 one of your experts objected to that. I certainly
15 don't mean to give the virus any intent. I mean it
16 just as I described it. It is maneuvered into this
17 position by forces it doesn't control, physical
18 forces it does not control.

19 **Q. So let's get to that. The next paragraph**
20 **said, "This insinuation of virus into and through**
21 **the surface of solid objects alters the surface to a**
22 **wood wax virus hybrid that cannot be disassembled,**
23 **separating the virus from the original source. This**
24 **is the physical damage to the surface."**

25 A. Okay. Yes.

1 **Q. Now, the scientific makeup of -- would the**
2 **scientific makeup of the wax that you reference in**
3 **here have any bearing on cohesion and adhesion?**

4 A. Well, my understanding, wax is essentially
5 paraffin, and there are different types of waxes.
6 They are by and large all alkane products, all
7 organic products, and organic compounds interact
8 with each other.

9 **Q. Do you know what type of wax Oceana Grill**
10 **uses on its furniture?**

11 A. I do not.

12 **Q. Okay. When we were talking about this**
13 **study in paragraph 51 -- I'm sorry. Go back to**
14 **paragraph 51 -- and you relied upon -- again, I will**
15 **butcher that name if I tried.**

16 A. Let's just say Buonanno.

17 **Q. Buonanno. And I asked you why, because you**
18 **said the data would seem to be reliable, for lack of**
19 **a better --**

20 A. The methodology was reliable.

21 **Q. Methodology was reliable. And he's talking**
22 **about -- so that study was done in China, correct?**

23 A. Yes.

24 **Q. Okay. And do you think it's fair to**
25 **compare a restaurant or building in China to a**

1 **restaurant in the United States?**

2 A. Well, I would say this to you -- and just
3 so we're very clear, because we didn't talk about
4 this when the Buonanno study --

5 Their study results were simulations. You
6 can't do an experiment like this on people. These
7 are simulations, and these are simulations based on
8 modeling. So do I think the Chinese modeling is
9 relevant to U.S. restaurant modeling? Yes, I think
10 so.

11 **Q. Earlier, we talked a little bit about, you**
12 **know, the RNA that's contained in the CoV-2 virus.**
13 **Does RNA on a surface necessarily mean that**
14 **there's a live virus that can infect someone?**

15 A. Probably not. To infect an individual, the
16 infective particle has to be moved from the
17 surface -- and I assume we're talking about an
18 inanimate surface here.

19 **Q. Yes.**

20 A. -- to basal epithelial; and if we just have
21 raw RNA, raw RNA doesn't get into -- I mean, at
22 least the state of the art virology tells us that
23 raw RNA doesn't get into the cell and cause
24 infection.

25 **Q. Okay. Can an individual contract COVID-19**

1 **from CoV-2 viral fragments?**
2 A. CoV-2 viral fragments, the best I can tell
3 you, it depends on what type of fragment we're
4 talking about.
5 If it's only the enveloping coat, if that's
6 being part of the enveloping coat and no RNA, then
7 no, they would not get -- they would not get
8 infected.
9 **Q. And so let me ask this. Does the existence**
10 **of CoV-2 RNA on the surface necessarily mean that**
11 **there's a live virus that can infect someone?**
12 A. That's a question I don't know how to
13 answer. I mean, the presence -- certainly, as you
14 pointed out, the raw RNA is not infected. I already
15 said that.
16 Now, does the presence of raw RNA not
17 indicate that if there's raw RNA that, in fact,
18 there are -- there might be a viable virus nearby?
19 Perhaps it does. Viable viruses, I should say.
20 Perhaps it does.
21 **Q. Okay. Let's go to 58. And the first two**
22 **sentences of 58 talk about human infection, and**
23 **we'll skip over that.**
24 **The third sentence, it says, [As read]:**
25 **"When the SARS-CoV-2 virus is driven down by gravity**

1 **and micro air currents to a bar surface, the S1S2**
2 **projections adhere to the surface molecules of the**
3 **bar, attempting the chemistry to infect the bar.**
4 **However, since infection fails, since there is no**
5 **membrane for the virus to break through, the virus**
6 **simply stays adhered to the bar surface."**
7 **Do you see that?**
8 A. Yes.
9 **Q. And that is true through and unless the**
10 **virus is killed on the surface, correct?**
11 A. Okay. If we are assuming that we're
12 working with an absolutely flat and smooth surface,
13 then you're right. In that circumstance, there's no
14 place for the virus -- for the virus to go, except
15 to stay on the surface, and at that point it can be
16 denatured.
17 You obviously don't kill it because it's
18 alive, right? We denature it. Okay. That is not
19 the reality of surfaces, which is what my report
20 goes into it. In fact -- I'm sorry, go ahead. I'm
21 sorry.
22 **Q. So this -- my scenario doesn't apply to a**
23 **restaurant table --**
24 A. Correct.
25 **Q. -- in your analysis.**

1 A. In my analysis --
2 **Q. In your analysis, it can't -- what was the**
3 **word you used? I'm sorry. I said killed; you**
4 **called it?**
5 A. Denatured, I hope.
6 **Q. Denatured?**
7 A. Right.
8 **Q. So your opinion is that a tabletop cannot**
9 **be denatured by disinfectants as the CDC says it can**
10 **be?**
11 A. What I am saying is this -- close.
12 What I'm saying is this. The tabletop is
13 so irregular that the virus can find itself in nooks
14 and crannies in that table surface, that the
15 cleaning and the disinfectant can't reach.
16 **Q. Okay. So when the CDC says the virus can**
17 **be killed by using appropriate disinfectant on**
18 **surfaces, they're wrong?**
19 A. It's making assumptions that are not true.
20 **Q. Okay.**
21 A. So it's misleading. However, it is simply
22 the best that they can do. I'm not here to
23 criticize the CDC. They have a tough job; they do
24 the best they can. But unfortunately, the size of
25 the particles mitigates against them.

1 **Q. All right. Let's go to -- let's go to**
2 **paragraph 65. All right.**
3 **What does it take to restore the unhealthy**
4 **environment? And you rely upon the van Doremalen?**
5 A. Yes, sir.
6 **Q. How do you pronounce that?**
7 A. Yes, sir. Just like you did, van
8 Doremalen.
9 **Q. Why did you rely upon this van Doremalen**
10 **report?**
11 A. I believe that the van Doremalen report
12 used very good methodology.
13 **Q. Okay. And the methodology used in -- all**
14 **right. Well, let's just -- let's talk about -- you**
15 **say van Doremalen evaluated the stability of**
16 **SARS-COVID-2 and SARS-COVID-1 in aerosols and on**
17 **various surfaces, estimating their decay rates. The**
18 **research consisted of ten experimental conditions**
19 **involving two viruses, SARS-CoV-2 and SARS-CoV-1, in**
20 **five environmental conditions: aerosol, plastic,**
21 **stainless steel, copper, and cardboard. In fact,**
22 **the SARS-CoV-2 remained viable in aerosols**
23 **throughout the duration of our experiment, three**
24 **hours. And this reduction was similar to that**
25 **observed with SARS-COVID-1.**

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1 **And you agreed with the methodology used**
2 **in -- by van Doremalen --**
3 A. Yes.
4 **Q. -- to support these principles?**
5 A. Yes.
6 **Q. And you thought that these principles are**
7 **applicable to your analysis with respect to Oceana**
8 **Grill?**
9 A. I thought they were applicable, yes.
10 **Q. Okay. In this report, one portion of**
11 **methodology was that it was -- I'm sorry, in this**
12 **study was that it was under lab conditions, correct?**
13 A. Yes.
14 **Q. All right. And so they utilized controlled**
15 **temperatures?**
16 A. Yes.
17 **Q. 23 degrees Celsius or 73.4 degrees**
18 **Fahrenheit, correct?**
19 A. Yes. Yes, sir.
20 **Q. They used controlled humidity, correct?**
21 A. Yes.
22 **Q. And I think the humidity was 40 percent,**
23 **right?**
24 A. I don't remember. But, yes, they
25 controlled humidity.

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1 **Q. And they also used a distinct concentration**
2 **of the virus in the report to do the test in the**
3 **labs, right?**
4 A. Yes.
5 **Q. And that concentration would be much higher**
6 **than, say, if an individual sneezed, right?**
7 A. I actually don't know. I'd have to look.
8 **Q. Okay. But taking that prong out, or if you**
9 **just indulge me for a second that concentration was**
10 **in, fact, higher than what you would expect from**
11 **either an individual speaking or a sneeze --**
12 A. Right.
13 **Q. -- there were lab conditions, controlled**
14 **temperatures at 73.4 degrees Farenheit, controlled**
15 **humidity at 40 percent, and then a concentration of**
16 **the virus.**
17 **None of those factors are present ever at**
18 **Oceana Grill, correct?**
19 A. Actually, I can't say that.
20 **Q. You can't say --**
21 A. The one thing I could say is that while I
22 agree that the concentration of virus might be high,
23 I'm not so sure I agree with you that it would be
24 higher than the concentration seen in Oceana when
25 you've got -- let's not say hundreds -- say tens of

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1 people who are in the restaurant and infected and
2 sneezing.
3 You're talking about billions of viruses
4 here. So I think the concentration is perhaps not
5 so irrelevant, and I don't know what the temperature
6 at Oceana is. I don't know what the humidity is. I
7 assume that it's there to make the people
8 comfortable, right?
9 Were they that different than the
10 environmental conditions here? I'm not sure.
11 **Q. So your testimony is that lab conditions**
12 **for this study you think are comparable to -- let's**
13 **just pick a month. Let's pick the height of the**
14 **pandemic. Let's say the summer, right?**
15 **Is there a chance that there's 40 percent**
16 **humidity in New Orleans during the summer months?**
17 A. Well, I would say this. If you leave the
18 doors and windows open and it's 40 percent humidity,
19 I'm coming. I'm going there.
20 My experience, the humidity is a lot
21 higher, but as you pointed out or reminded us, I am
22 not a specialist in HVAC. I don't know what the
23 humidity HVAC produces at Oceana. Maybe it produces
24 40 percent. I just don't know.
25 **Q. Right. And the fact that you don't know**

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1 **would render your reliance upon this study under lab**
2 **conditions irrelevant to the conditions at Oceana?**
3 MR. ALVENDIA: Objection to form.
4 He's already answered this question.
5 But, Doctor, you can go ahead and answer it
6 again.
7 A. I would just say this. I mean, I do debate
8 and continue to debate with you the notion about how
9 much virus is there because I think it's easy to
10 underestimate virus in an environment where there
11 are multiple people spewing it out.
12 Having said that, having said that, the
13 conclusion that it remained viable in aerosols I
14 think is relevant.
15 Now, we can debate minutiae in terms of how
16 long it's viable in aerosols, in Oceana versus this
17 experimental condition. But the point is, it's
18 viable in aerosols.
19 BY MR. MILLER:
20 **Q. Okay. Let's look at paragraph 67.**
21 A. Okay.
22 **Q. There you're relied upon Chin report,**
23 **right?**
24 A. Yes.
25 **Q. And similar to the Doremalen report, the**

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1 **Chin report was done under lab conditions, correct?**
2 A. Yeah. I do have to -- I do have a
3 criticism of the Chin report in that it is very
4 brief. If I remember right, it was a
5 correspondence. It wasn't a full paper. I'm trying
6 to go by memory here. It wasn't a full paper. So
7 it's hard to know exactly what was going on in all
8 the detail we would like.
9 **Q. But it too had controlled temperatures and**
10 **controlled humidity, right?**
11 A. Yes.
12 **Q. And it was also done in lab conditions,**
13 **correct?**
14 A. Yes.
15 **Q. Do you know what the concentration of the**
16 **viruses that was used in the Chin report --**
17 A. I don't recall.
18 **Q. Okay. Let's go to paragraph 70. This,**
19 **again, is another source you rely upon, the Riddle**
20 **report?**
21 A. Yes, sir.
22 **Q. And similar to others, this was under lab**
23 **conditions, right?**
24 A. Yes. This is quite a bit more detailed
25 than Chin was.

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1 **Q. And, in fact, in Riddle, they actually**
2 **maintained the virus in the dark, right?**
3 A. Yes, to avoid the effects of UV light.
4 Yes.
5 **Q. Which would do what?**
6 A. UV light is high frequency radiation. It
7 can ionize, which means it can break, break
8 electrons off from atoms, destabilize molecules, and
9 denature the virus. That was the short version.
10 **Q. And so it's fair to say that Oceana Grill**
11 **has much more UV light with its doors, windows, and**
12 **openings than keeping a virus in the dark in this**
13 **Riddle report, correct?**
14 A. I would say there was more UV light.
15 However, if it's much more, I don't know. But there
16 was more UV light.
17 Now, of course, UV light is only present
18 during the day, not present at night. It's present
19 on cloudy days, but not present at night. So there
20 is a difference; but how much the difference is, I
21 don't know.
22 **Q. And part of the reason is because you don't**
23 **know how much UV light comes into Oceana Grill**
24 **because you've never been there?**
25 A. No. Part of the reason is that I know

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1 there's no UV light in the dark; and I know that it
2 gets dark in New Orleans. I don't have to go there
3 to know that. And I, therefore, know that the
4 difference is how much gets in during the day.
5 And I'm now conceding that there's more UV
6 light getting in during the day, but I really don't
7 know how much more is getting in.
8 **Q. Okay. Do you know what the current state**
9 **of literature with respect to the survivability of**
10 **CoV-2 in non-lab conditions is?**
11 **What's the current scientific hypothesis**
12 **about the survivability of CoV-2 today in non-lab**
13 **conditions?**
14 A. Yeah. So my focus -- thank you for
15 clarifying that.
16 My focus has been lab conditions, so I
17 don't know that -- I'm trying to understand what the
18 value would be of studies that don't look at it in
19 unstandardized condition. I don't know what -- what
20 does that really mean?
21 **Q. Well, perhaps because Oceana Grill is not**
22 **in a lab, there may be some utility to them to know**
23 **what the survivability is of CoV-2 outside of a lab**
24 **condition.**
25 A. Fair enough. Fair enough. However, when

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1 you're outside of -- when you're outside of
2 standardized conditions, lab or not, there's
3 variability day to day; UV light changes day to day;
4 temperature changes day to day; and so viability
5 changes day to day.
6 So it's hard to know what the -- what the
7 real measurement actually means since the conditions
8 continue to change. Put another way, the mean may
9 be different, but the variability confuses the
10 issue.
11 **Q. Let's look at 73.**
12 A. Okay. Can I suggest we take a break for a
13 few minutes before we go on?
14 MR. MILLER: Well, assuming your --
15 MR. ALVENDIA: Yeah, let's do that.
16 But, again, let's do a time check here
17 Allen. We're now at 5:30. We've been
18 going for five-and-a-half hours. What are
19 we looking at here?
20 MR. MILLER: I mean, hopefully close
21 to 6:00. If it's past 6:00, it won't be
22 much past 6:00.
23 MR. ALVENDIA: All right. Let's take
24 a five-minute break.
25 (Recess taken.)

1 BY MR. MILLER:

2 Q. Doctor, take a look at paragraph 73.

3 A. Okay.

4 Q. And it is a discussion of Oceana Grill's
5 remediation efforts, and the last sentence basically
6 says -- oh, let's go with the first sentence.

7 [As read]: "Oceana has attempted to
8 restore the pre-COVID-19 environment by maneuvers,
9 e.g., arising out of -- arising out the property,
10 generally -- airing out the property, generally
11 cleaning the surfaces with bleach-based cleaners,
12 and closing off rooms where individuals who reported
13 COVID-19 were located for 24 hours.

14 "While this effort is understandable, it's
15 inadequate because, one, the effort was undone by
16 the continued arrival of SARS-COVID-2 positive
17 patrons and employees; and two, the recent research
18 of Riddle" -- or "Riddle" -- I don't know --
19 "reveals the virus is viable for up to 28 days and
20 perhaps longer, invalidating the process of
21 cordoning off a room for 24 hours."

22 The 28-day number that you cite there is
23 the -- where the virus was kept in a dark area --
24 darkness in a laboratory under controlled
25 temperatures and humidity, correct?

1 A. Yes.

2 Q. So that condition doesn't normally exist at
3 Oceana Grill, does it?

4 A. That is true. It does not ordinarily
5 exist.

6 Q. Okay. Are you familiar with --

7 A. I'm sorry. I do need to also tell you
8 that -- so I've given you two reasons that I think
9 it was inadequate.

10 But the third reason that I didn't say here
11 but I want to say on the record so that you
12 understand and you can examine me on it, is that, in
13 fact, the bleach-based cleaners simply can't reach
14 the virus when it is embedded in the surface.
15 That's a third reason bleach can't reach the virus.

16 Q. So again, the recommendations that are
17 given by the Centers for Disease Control are simply
18 not accurate?

19 A. They -- I don't want to say -- I
20 wouldn't say it that way. Again, I'm not going
21 (indiscernible) their effort. They do the very best
22 they can. But the size of virus mitigates against
23 their belief.

24 Q. So they are wrong when they say that if you
25 take CDC-approved cleaners and wipe the surface, it

1 kills the virus. And I can show you exactly from
2 their website where they say it kill the virus.
3 They're wrong when they say that?

4 MR. ALVENDIA: Objection. You're
5 mischaracterizing his testimony. He's not
6 saying -- he's not saying if the cleaner
7 doesn't touch the virus itself, it kills
8 it. What he's saying is if it can't touch
9 it, it doesn't kill it. He said that about
10 three times now. He's not saying they're
11 wrong.

12 MR. MILLER: We could be here until
13 7:00 o'clock, if you want, because I'm
14 going to ask the questions. So let me ask
15 the questions. You can make your objection
16 and then let me ask the question.

17 MR. ALVENDIA: My objection is you're
18 mischaracterizing his testimony. Please
19 reask it.

20 Doctor, you can answer, if you
21 understand his question.

22 A. In order for the virus to be denatured, not
23 killed, but denatured, it has to be touched by the
24 cleaning agent. If it can be touched by the
25 cleaning agent, then it will be denatured.

1 I don't disagree with them. I'm simply
2 saying that many virus are embedded so deeply that
3 the cleaning agents can't reach them.

4 BY MR. MILLER:

5 Q. And let's talk about Oceana Grill, because
6 that's really the only reason we're here, and the
7 surfaces that are in a restaurant.

8 In your conclusion, your opinion, is that
9 the guidance given by the Centers For Disease
10 Control, that restaurants can denature the virus to
11 the point where it is safe for patrons to eat in a
12 restaurant, is inaccurate because the surfaces in
13 Oceana Grill will not allow you to denature the
14 virus?

15 A. I am simply saying that the CDC is correct
16 in that the sequence of cleaning and disinfectants
17 can denature viruses when they reach them, and they
18 reach many viruses.

19 But they do not reach all viruses because
20 these viruses are embedded, as I've said; and so
21 those viruses continue to be a threat. That's what
22 I'm saying.

23 Q. Let's talk about Oceana Grill, because you
24 have authored a report that says, "The viruses have
25 reached the surface at Oceana Grill, and it creates

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1 a dangerous environment."
2 Am I incorrect about that?
3 A. Correct.
4 Q. Okay. The Center For Disease Control has
5 said that establishments like Oceana Grill can
6 create an environment safe for its patrons and, in
7 their words, kill the virus -- but we're going to
8 use denature -- if you use the cleaning agents that
9 they suggest to wipe down the surfaces.
10 And because you're here as an expert and
11 authored a report with respect to Oceana Grill, my
12 question to you is, the surfaces that are at Oceana
13 Grill, the viruses that you say are at Oceana Grill,
14 your opinion is they cannot be denatured?
15 MR. ALVENDIA: His opinion is more
16 likely than not. Is that what you're
17 asking, Allen? Once again, it's important
18 to use --
19 MR. MILLER: I'm asking him what his
20 opinion is. I don't want to ask -- I'm not
21 interested in what the lawyers' opinions
22 are. I just want to know what the
23 witness's opinion is.
24 MR. ALVENDIA: I'm asking you what
25 level are you asking him. Are you asking

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1 more likely than not? beyond a reasonable
2 doubt? It's an improper question.
3 BY MR. MILLER:
4 Q. You can answer my question, assuming you
5 understand it, Doctor.
6 A. That level of cleaning is insufficient.
7 It's more likely than not insufficient.
8 Q. To denature the virus?
9 A. Correct.
10 Q. Okay. Despite the recommendations of the
11 Centers for Disease Control?
12 A. Centers for Disease Control does the very
13 best they can using the cleaning agents. But
14 unfortunately, as I said before, the virus mitigates
15 against that. The virus's size mitigates against
16 that.
17 Q. Are you familiar with a Clinical
18 Microbiology in Infection publication?
19 A. I'm not sure what -- you're talking about a
20 book? a journal? an article?
21 I'm not sure what we're talking about.
22 Q. CMI, it's a -- articles in press.
23 What about a gentleman by the name of
24 Ben-Shmuel?
25 A. No. The article, does that appear

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1 publicly?
2 Q. Yes.
3 A. I'm sorry. You said it was in press. That
4 means it hasn't appeared publicly.
5 Q. Okay. I'll tell you what, what about
6 the -- what I'm going to refer to is the Goldman
7 report from the Lancet, which is one of your
8 reviewed articles.
9 Are you familiar with Goldman's report in
10 the Lancet?
11 A. Is it one of my reviewed articles?
12 Q. No, it's not one of your reviewed -- well,
13 Lancet is one of your reviewed articles, yes?
14 A. The Lancet is a journal I did peer reviews
15 for.
16 Q. Okay. This is a report by Goldman in the
17 Lancet, which is the publication you did peer
18 reviews for.
19 A. Just to be clear, the Lancet publishes
20 thousands of articles.
21 Q. Sure.
22 A. This sounds like an article I have not
23 read.
24 Q. Okay.
25 A. Okay. All right.

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1 Q. Tell me what fomites are.
2 A. Fomites are the vehicles that spread
3 infection.
4 Q. All right. And how do fomites apply in
5 this case?
6 A. Well, I think -- the way I think about
7 fomites is that they are the droplets that spread
8 the virus.
9 MR. MILLER: Okay. Can you pull up
10 the Lancet report concerning exaggerated
11 risk of transmission of COVID by fomites?
12 A. I don't know. If it's not --
13 BY MR. MILLER:
14 Q. Not you. I'm talking -- I'm talking to my
15 colleague.
16 A. I apologize. Okay.
17 Q. This is an article out of the Lancet that,
18 which again, is the publication where you've done
19 peer-review articles.
20 Have you ever seen this article before?
21 A. I have not.
22 Q. Okay. In your work on this case -- I know
23 we talked about a number of articles and a number of
24 things that you did use, all of which were, I would
25 say, in the spring of 2020, correct? Early on in

1 **the COVID analysis.**

2 A. I'm sorry. What was your question again?
3 I was just trying to read this.

4 **Q. Yeah. Sure. Take your time. Why don't**
5 **you go ahead and --**

6 A. Can we go to the next page?

7 MR. ALVENDIA: Yeah, I was going to
8 say -- I was going to say, Allen, if you're
9 going to question him on the articles --

10 MR. MILLER: Yeah, I'll let him look
11 at it first.

12 MR. ALVENDIA: Let him look at the
13 whole article, please.

14 A. Can we go back to the previous page,
15 please? Okay. Thank you.

16 BY MR. MILLER:

17 **Q. Do you have any reason to disagree with**
18 **this article?**

19 A. I have a reason to question its results.

20 **Q. Why?**

21 A. First of all, I don't know if its results
22 are correct or not. By that I mean I don't know if
23 they reflect the true state of nature or not because
24 there's not very much information about methodology
25 here. This is really a brief. This is not a

1 **events we just talked about, individual comes in,**
2 **droplets go onto the table, immediately after**
3 **droplets are on the table -- we're talking about**
4 **just inanimate surfaces right now, not in the air or**
5 **person to person.**

6 **The virus is on the inanimate surface,**
7 **person then has to touch the inanimate surface,**
8 **likely with a hand, then that hand has -- prior**
9 **being -- the virus being compromised, go, then, to**
10 **that person's either face or eyes. The**
11 **concentration on your hand has to be sufficient**
12 **enough to get through your individual membranes and**
13 **into your cell to then infect the cells and you then**
14 **become infected.**

15 **Because of that, this gentleman says**
16 **that -- let's see. "Although periodic" -- "I**
17 **believe that fomites that have not been in contact**
18 **with an infected carrier for many hours do not pose**
19 **a measurable risk of transmission." And in this**
20 **case, he did it in non-hospital settings.**

21 **Do you agree or disagree with that?**

22 A. I would say, based on what I have read here
23 and what I know, I would disagree. And what is
24 missing here is the methodology he used to come to
25 his conclusion.

1 full-length manuscript. This is really a very brief
2 report.

3 If this is pre-staging a full-length
4 manuscript, then I'd be happy to read that. But I
5 don't get much of anything from this.

6 **Q. Okay. Go to the second page. Let me --**
7 **okay.**

8 **So in this, this gentleman opines -- and**
9 **this is Mr. Goldman -- that in his opinion the**
10 **chance of transmission through inanimate surfaces is**
11 **very small, and only in instances where an infected**
12 **person coughs or sneezes on the surfaces, and**
13 **someone else touches that surface soon after the**
14 **cough or sneeze.**

15 **And then I will go a step further and say,**
16 **then that individual touches their nose with a**
17 **sufficient concentration of the virus on their hand**
18 **that can then penetrate your personal membranes into**
19 **your cells and then you catch -- then you would be**
20 **infected.**

21 **So although he doesn't go that far, I'll**
22 **take it two steps further, and you would probably**
23 **agree with me on those last two steps.**

24 A. The pathophysiology is sound.

25 **Q. Okay. So as a result of the sequence of**

1 **Q. And let me ask you one question, then, as a**
2 **follow up.**

3 **In all of your studies, in all of your**
4 **readings, and in preparation of your report, can you**
5 **identify one instance anywhere in the world where an**
6 **individual has been confirmed to have contracted**
7 **COVID-19 from an inanimate object?**

8 MR. ALVENDIA: Once again, using the
9 standard of more likely than not?

10 MR. MILLER: No. I'm not asking about
11 an opinion. I'm asking about a fact. I'm
12 asking for him to identify to me one fact,
13 that being a confirmed case of an
14 individual somewhere on this globe that
15 contracted COVID-19 from a inanimate
16 object.

17 A. My answer to you is that I have not done
18 anywhere near a sufficient survey to be able to
19 answer that question with a surety.

20 To answer you directly, no. But I haven't
21 done a study of it. The fact that I can't think of
22 an example doesn't mean an example doesn't exist.
23 It just means that I haven't contacted the right or
24 wrong people, depending on your point of view.
25 BY MR. MILLER:

1 **Q. Okay.**
2 A. I don't have an informative answer.
3 **Q. So the answer is, no, you do not have one**
4 **fact, meaning one person worldwide that has ever**
5 **confirmed contracting COVID-19 from an inanimate**
6 **object?**
7 A. My answer is, no, I do not have an
8 informative answer.
9 **Q. Okay. Despite not having that fact, not**
10 **having researched whether or not a person has**
11 **contracted COVID-19 from an inanimate object, not**
12 **person to person, but on the surface; despite not**
13 **having surveyed, not having looked for articles, you**
14 **have opined that the restaurant, because of, in your**
15 **assertion, CoV-2 is present on the surface, is a**
16 **dangerous -- creates a dangerous condition?**
17 MR. ALVENDIA: Objection to form.
18 MR. MILLER: That was really poorly
19 phrased.
20 MR. ALVENDIA: So objection to form.
21 MR. MILLER: But I'll say it again.
22 BY MR. MILLER:
23 **Q. Doctor, did you understand my question?**
24 A. The first 40 percent.
25 **Q. Fair enough. All right.**

1 **You have just told me that you have not**
2 **taken any steps to determine whether or not an**
3 **individual has ever contracted COVID-19 from an**
4 **inanimate object. Is that fair?**
5 A. That's fair.
6 **Q. And so you do not have an informed answer**
7 **about whether or not there is one person worldwide**
8 **that has, in fact, contracted COVID-19 from an**
9 **inanimate object.**
10 MR. ALVENDIA: Objection to form.
11 You can answer.
12 A. That's fair.
13 BY MR. MILLER:
14 **Q. Okay. Established -- now that we've**
15 **established that, that you have not done that**
16 **research, you still in this case opine that the**
17 **inanimate objects in Oceana Grill create a dangerous**
18 **environment, correct?**
19 A. I do, yes.
20 **Q. Okay. That's it. I think we labored**
21 **through that series of questions.**
22 MR. MILLER: Can you pull up the
23 Mondelli Lancet article, September 29th?
24 For the court reporter, I'm going to
25 make the "Exaggerated Risk of Transmission

1 of COVID-19 by Fomites" as Exhibit 3, I
2 think.
3 (Exhibit No. 3 was identified.)
4 THE WITNESS: If you're waiting for
5 me, I've read this.
6 BY MR. MILLER:
7 **Q. Okay. You've read this.**
8 **And do you disagree with this article?**
9 A. I will say that there is a -- yes. And I
10 would say there's a substantial body of literature
11 that -- that is much more detailed than this that
12 contradicts the finding.
13 **Q. Okay.**
14 A. I'm sorry. And maybe -- this is in Italy.
15 And actually, they refer to studies 4 and 5, which
16 are Colaneri -- actually, they're both by Colaneri,
17 and I haven't read those. So I would need to read
18 those to fully opine on this.
19 But I would say that I disagree with this,
20 based on its face, what they presented.
21 **Q. All right. Their findings -- one of their**
22 **finding -- and I'll just read a sentence.**
23 **It says, "Our findings suggest that**
24 **environmental contamination leading to SARS-CoV-2**
25 **transmission is unlikely to occur in real life**

1 **conditions, provided that standard cleaning**
2 **procedures and precautions are enforced."**
3 **Do you see that?**
4 A. I do. Now, I would use -- I'm sorry. Go
5 ahead.
6 **Q. That's also the same guidance that's given**
7 **by the Center for Disease Control, isn't it? That**
8 **standard cleaning procedures or precautions would**
9 **create an environment that prevents contamination**
10 **from SARS-CoV-2 transmission?**
11 A. This is Italy. I don't know that Italy
12 follows CDC, I just don't.
13 **Q. I'm not asking if they follow CDC. I'm**
14 **asking whether or not this finding is consistent**
15 **with the guidance that the CDC gives us.**
16 A. Standard cleaning procedures, I can't tell
17 from this.
18 **Q. Okay. Does the CDC not recommend to us**
19 **that in order to denature the virus -- they use the**
20 **word "kill" -- standard cleaning is what a**
21 **restaurant like Oceana would need to do?**
22 A. Actually, it's standard cleaning and
23 disinfectants, right?
24 **Q. Standard cleaning and disinfectants, yes,**
25 **sir.**

1 A. I think there's a difference here. I think
2 there may be a difference in what they do and what
3 Oceana did.

4 MR. MILLER: Okay. I'll mark this as
5 Exhibit 4.

6 (Exhibit No. 4 was identified.)

7 BY MR. MILLER:

8 **Q. All right. I'm going to try to be quick
9 with these questions, Doctor, if you can.**

10 **Ionic bonding, could you describe that to
11 me?**

12 A. Ionic bonding is a process by which two
13 atoms interact with one atom, taking the electron of
14 another.

15 **Q. Okay. And covalent bonding?**

16 A. Covalent bonding is a process by which two
17 atoms share electrons.

18 **Q. Can you have molecular adhesion covalent
19 bonding with a particle ion character?**

20 A. I will say, yes, you can. Nature is not
21 black and white, even though we make -- we make
22 definitions of black and white.

23 Covalent bonds are not always exclusively
24 covalent. The electron does not always share the
25 ionic bonding. The theft of the electron is not

1 A. Van der Waals forces and London forces.

2 **Q. Are different from ionic and covalent
3 bonds, right?**

4 A. Correct. Yes.

5 **Q. Okay. So what is a reaction mechanism?**

6 A. I don't know what you mean. I mean, I
7 remember old definitions where reaction mechanisms
8 were defined at SN1 mechanisms and SN2 mechanisms
9 based on the availability of -- based on the
10 availability of electrons, whether there are lone
11 pairs of electrons available or not. That's my
12 understanding of reaction mechanism. That may be a
13 little dated.

14 **Q. Now, let's go to -- all right. Let's go
15 back to paragraph 55 in the report. So -- and we
16 talked about this paragraph for quite some time, but
17 I'm just going to focus on one particular phrase
18 where you indicate that -- and what sentence is it
19 in?**

20 **It's really the second-to-last sentence.
21 "This insinuation of the virus into and through the
22 surface of solid objects alters the surface to a
23 wood wax surface hybrid that cannot be
24 disassembled" --**

25 A. Right.

1 always complete, so there is overlap.

2 **Q. Can you give me an example, something that
3 I could recognize?**

4 A. I don't know. Let me think. Hydrogen
5 atoms are -- maybe something like carbon
6 tetrachloride.

7 **Q. And how would that manifest itself in the
8 real world, carbon tetrachloride? What --**

9 A. Oh, what is it used for?

10 **Q. Yeah.**

11 A. The chemistry reagent I want to say is also
12 a cleaning solution. I'm not really sure about
13 that. It's been a long time.

14 **Q. Could you spell it?**

15 A. Oh, of course. Carbon tetra, t-e-t-r-a,
16 chloride, c-h-l-o-r-i-d-e.

17 **Q. Okay. And that is an example of molecular
18 adhesion covalent bonding with a partial ionic
19 character?**

20 A. I believe so, yes.

21 **Q. Okay. Now, you -- you mentioned this in
22 your report, and I'm not trying to get into all the
23 science of it, but I just want to ask you to make
24 sure I have clarity. Van der W-a-a-l-s forces and
25 London forces are different?**

1 **Q. -- "separating the virus from the
2 original" -- "separating the virus from the original
3 surface."**

4 **So the hybrid that cannot be disassembled,
5 how then -- explain to me how then if it -- if the
6 virus hybrid can't be disassembled, how then can an
7 individual contract it?**

8 A. Sure. So really I should say cannot be
9 disassembled easily. I should really say that. I
10 mean, I don't want to say it could never be
11 disassembled. It cannot be disassembled easily.

12 **Q. Okay. So...**

13 A. So, but the answer -- go ahead. Go ahead,
14 please.

15 **Q. No, you talk. I -- go ahead.**

16 A. So this is the insinuation sentence. So
17 let me -- so if the virus inserts itself into this
18 wood and wax and it bonds, now these bonds are
19 typically weak bonds. They are weak covalent bonds.
20 There maybe be some Van der Waals and London forces,
21 but these are essentially weak bonds. Okay?

22 Can they be dislodged? Yes, of course they
23 can be dislodged. They can be dislodged by wind,
24 they can be dislodged by -- remember the surface is
25 not smooth. So if the surface is not smooth, if

1 it's rough, that rough surface can change. And that
2 change in the rough surface by somebody -- by
3 molecules running across it can expose viruses that
4 otherwise were not available to be exposed. So
5 these changes in the surface top would allow it to
6 be released in a microcurrent of air.

7 **Q. So -- and look, it's getting late. I'm**
8 **trying to wrap up. My brain is probably not working**
9 **as good as it was six hours ago, but if you're**
10 **telling me that the virus hybrid cannot easily be**
11 **disassembled, in order for an individual to contract**
12 **it from the inanimate object, they have to**
13 **disassemble it, correct?**

14 A. Correct. Yes.

15 **Q. All right. So just hear -- hear me out for**
16 **a second.**

17 A. Sure. Of course.

18 **Q. If the individual's hand can disassemble**
19 **the -- disassemble the virus hybrid that ultimately**
20 **would through a series of events cause that person**
21 **to contract COVID-19 from touching the surface --**

22 A. Yes.

23 **Q. -- in the same veracity that the individual**
24 **could disassemble the virus and contract COVID-19,**
25 **the cleaning of the surface in the same percentage**

1 **would allow for the virus to be --**

2 A. Denatured.

3 **Q. -- your word -- denatured.**

4 A. Denatured.

5 **Q. Correct?**

6 A. I understand. Let me explain this to you,
7 okay.

8 **Q. Please.**

9 A. When the -- viruses settle on the surface
10 many -- viruses settling on the surface of a table
11 is essentially like -- for -- to help you with
12 scale, is like dropping a million marbles into the
13 Grand Canyon. Many of them stay on the surface,
14 many of them can be cleaned, many of them fall
15 deeper and cleaning can't get to them. Okay?

16 So the viruses that remain behind are the
17 viruses that either are loose but can't get cleaned
18 because they are so far embedded or they are
19 covalently bonded. So the cleaning stops, the
20 viruses that the cleaning could not get to can be
21 rereleased, and the viruses that are bonded can
22 be -- and they don't all have to be -- but they can
23 be -- have that bond broken, because the bond is
24 fairly loose. So cleaning will kill many viruses,
25 but it doesn't mean the table is not infected.

1 **Q. Got it. But it also -- but it would mean**
2 **that the same viruses that are embedded could not**
3 **contract the person's hand, because if you couldn't**
4 **get them with -- with cleaning, how are you going to**
5 **get them by just sitting at a table?**

6 A. Oh, okay. So I -- I -- I understand your
7 point, and I would say this. There are some viruses
8 that will not -- will never be released from the
9 table, right? They are too deeply embedded in the
10 table, they are too tightly bonded with the table.
11 So they're not going to infect anybody. They're not
12 going to be cleaned out. They're not going to
13 infect anybody.

14 So there are three conditions here, three
15 classes. Class 1, viruses get on the table. They
16 can be cleaned. No question. They're not going to
17 infect anybody. They can be denatured. All right.

18 Class 3, viruses that are so far deep they
19 don't get cleaned, but they don't get exposed to
20 anybody.

21 It's the Class 2 that is of concern. Too
22 deep to be cleaned out, but not really bonded too
23 tight and ultimately they do get out.

24 **Q. Okay.**

25 A. Okay. Three mutually exclusive conditions.

1 **Q. And in your work in this case or your work,**
2 **period, have you, in any scenario, created those**
3 **three conditions to see how the virus reacted with**
4 **respect to the infection of individuals?**

5 A. If your question to me is, have I ever
6 demonstrated that viruses in Class 2 infect people,
7 I've never done that experiment. Nobody has ever
8 done that experiment.

9 **Q. Okay. Let's talk about Class 2. The ones**
10 **that can't be cleaned --**

11 A. Right.

12 **Q. -- the ones that -- those are the -- for**
13 **purposes of your analysis for physical loss of use**
14 **resulting in damage, correct me if I'm wrong, are**
15 **we -- is it fair to say that it's those Class 2**
16 **viruses that are at issue?**

17 A. I think those are the major ones.
18 Ultimately Class 3 can become Class 2, but that's
19 more complicated and way down the line. So we can
20 focus on Class 2.

21 **Q. All right. Will a Class 2 virus corrode a**
22 **bar or a table top?**

23 A. What do you mean --

24 **Q. Corrode it?**

25 A. What do you mean by "corrode"?

1 **Q. I mean cause rust.**
2 A. They don't have iron. No, they wouldn't
3 cause rust.
4 **Q. Okay. Would they cause any physical change**
5 **to the naked eye?**
6 A. To the naked eye?
7 **Q. Yes.**
8 A. No. I don't see how that's relevant but,
9 no, they're too small.
10 **Q. Okay. Would any -- let's see. I want**
11 **to -- I want to be clear so we can go through it**
12 **quickly.**
13 **Would any measurable amount of CoV-2 or any**
14 **amount of concentrated CoV-2 evidence to the naked**
15 **eye any type of physical change on any inanimate**
16 **object?**
17 A. Ask me that again, please. I think it
18 makes sense. I just need to hear it again.
19 **Q. Okay. Would any -- any level of**
20 **concentration of CoV-2 placed on an inanimate object**
21 **evidence a physical change to the naked eye?**
22 A. I -- I guess I don't know how to answer
23 that. I mean, if somebody -- if you're asking me
24 whether you could put down a heptillion viruses on a
25 surface --

1 **Q. Fair enough. Fair enough. Fair enough.**
2 **All right. Would any amount of CoV-2 that**
3 **would cause an individual to become ill, so the**
4 **smallest amount of CoV-2 that would cause an**
5 **individual to become ill, on an inanimate object**
6 **evidence a physical change in the object to the**
7 **naked eye?**
8 A. I don't think so. And that, sir, is the
9 problem. That's the problem. You don't see it with
10 the naked eye, but nevertheless it causes illness.
11 **Q. And I'm looking at the conclusions in your**
12 **report, and you can go to B. And I'm -- I'm merely**
13 **focused on the term "property loss." I know we've**
14 **talked about damage.**
15 A. Yes, sir.
16 **Q. Do you have a specific definition of**
17 **property loss that you're using when you use that**
18 **phrase throughout your report?**
19 A. The -- the definition I'm using is the loss
20 of property due to damage. Does that help?
21 There's damage and --
22 **Q. Which I know how -- I know how you define**
23 **damage.**
24 A. Right. And then the damages -- the
25 damages -- I mean, then it comes down to can the

1 damage be repaired or will there be property loss?
2 Will the -- the item in question be unusable?
3 **Q. And when you say "unusable," do you mean --**
4 **let's just use a table for instance.**
5 A. Right.
6 **Q. Unusable meaning the table cannot be used**
7 **in the manner in which the manufacturer intended or**
8 **it cannot be used because it should not be used?**
9 MR. ALVENDIA: Let me -- let me just
10 lodge an objection here. You're asking him
11 for legal conclusion, definition of
12 physical loss. I think he's already given
13 that answer from his perspective, but
14 objection to form of the question.
15 BY MR. MILLER:
16 **Q. I only want you to tell me how you, in**
17 **drafting your report, are using the phrase "property**
18 **loss"?**
19 A. And I'm using the phrase "property loss" as
20 meaning the damaged entity really cannot be used
21 safely anymore.
22 **Q. Okay. Give me about two minutes to look at**
23 **my notes and then I'll wrap up.**
24 **(Recess taken.)**
25 BY MR. MILLER:

1 **Q. All right. Doctor, just a few more**
2 **questions. Are you a member of the American College**
3 **of Epidemiology?**
4 A. No. I am not, no.
5 **Q. Are you a member of the Public Health**
6 **Association -- American Public Health Association?**
7 A. I think I was at one point, but no.
8 **Q. All right. In formulating your**
9 **conclusions, did you take any consideration into the**
10 **mandate in the city of New Orleans that required --**
11 **requires individuals in a restaurant like Oceana to**
12 **wear masks?**
13 A. No, I did not.
14 **Q. But you are aware that since the initial --**
15 **since the opening -- the reopening after the**
16 **shutdown in the city of New Orleans, that there was**
17 **a mandate by the mayor and her staff that**
18 **individuals inside of a building were required to**
19 **wear masks?**
20 A. I under --
21 MR. ALVENDIA: Objection -- wait.
22 Objection to form. That's
23 mischaracterizing it. If they're -- if
24 they're sitting at the table eating and
25 drinking, they don't have to wear a mask,

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1 Allen. We know this.
2 Given the full -- given the full
3 restriction, given the full mandate.
4 MR. MILLER: Yes.
5 MR. ALVENDIA: It's not constantly
6 wearing a mask inside a building.
7 MR. MILLER: All right. That's fair.
8 MR. ALVENDIA: That's it. That was my
9 objection.
10 MR. MILLER: Yeah.
11 BY MR. MILLER:
12 **Q. So let me just ask you, Doctor. So I think**
13 **you answered the question that the analysis that you**
14 **came up with did not take into consideration whether**
15 **or not individuals were wearing masks inside of**
16 **Oceana restaurant?**
17 A. Correct. Correct, because when you're in
18 an environment where there's eating and drinking, if
19 you're eating and drinking, you don't wear masks.
20 **Q. Okay. Or did -- did your analysis take**
21 **into consideration whether the staff members inside**
22 **the restaurant were wearing masks?**
23 A. It did not, no.
24 **Q. Did your analysis take into consideration**
25 **whether or not Oceana Grill used temperature checks**

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1 **for individuals before they allowed them into the**
2 **restaurant?**
3 MR. ALVENDIA: Objection to form.
4 MR. MILLER: What's wrong with that
5 question?
6 MR. ALVENDIA: Assumes facts not in --
7 not in the record. Are you telling him
8 that's what they do to every person --
9 MR. MILLER: No. I'm asking him if he
10 took that into consideration.
11 MR. ALVENDIA: I know, but you're
12 asking --
13 MR. MILLER: That was a fact --
14 MR. ALVENDIA: Are you saying that's
15 what happens at Oceana? Because that's --
16 MR. MILLER: I don't know what Oceana
17 does. That's not the question.
18 MR. ALVENDIA: Okay. Well, so
19 you're --
20 MR. MILLER: My question is whether or
21 not that fact --
22 MR. ALVENDIA: Right.
23 MR. MILLER: -- whether or not --
24 MR. ALVENDIA: Then it's a -- it's
25 objection to form, because you -- he's an

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1 expert. You have to say for the purposes
2 of this deposition, if you assumed this,
3 would it -- would you have taken that into
4 consideration. You're -- anyway. Look,
5 it's getting late. Objection to form.
6 MR. MILLER: All right.
7 BY MR. MILLER:
8 **Q. Dr. Moye, did your analysis consider**
9 **whether or not temperature checks were made at the**
10 **restaurant?**
11 A. It did not. It didn't -- it really didn't
12 need that.
13 MR. MILLER: Okay. All right. I
14 think that is all I have.
15 MR. ALVENDIA: All right. Thank you,
16 Dr. Moye.
17 (This proceeding was concluded at 6:25 p.m. on
18 November 10, 2020.)
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1 REPORTER'S CERTIFICATE
2 I, YOLANDA J. PENA, Certified Court Reporter in
3 and for the State of Louisiana, Registered
4 Professional Reporter, and as the officer before
5 whom this testimony was taken, do hereby certify
6 that LEMUEL MOYE, M.D., PH.D., after having been
7 duly sworn by me upon authority of R.S. 37:2554,
8 did testify as set forth in the foregoing 219
9 pages.
10 I further certify that said testimony was
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Baton Rouge, Louisiana, this 11th day of
November, 2020.
YOLANDA J. PENA, CCR, RPR
CCR NO. 2017002, RPR NO. 907346

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