

1 and the head, which weighs about 10 pounds, resists  
2 that so you get compression in the discs and the end  
3 plates.

4 Q. And what is the -- what is the increase --  
5 what does the literature say the increased risks for a  
6 rear impact is?

7 A. I don't remember the exact numbers but it's  
8 several times higher.

9 Q. So we'll just put a question mark.

10 A. I had it on the poster, but I can't remember  
11 the exact number.

12 Q. What are some other risk factors?

13 A. Immediate onset of symptoms. Most people  
14 have -- most people have pain typically within 24 to 48  
15 hours. Nobody understands really why there's that  
16 delay but there is. But, generally, the thinking is  
17 when there's an immediate onset of symptoms as  
18 Ms. Seastrand had, that protends for a worse outcome.

19 Q. Other than these three, what are some other  
20 ones that would apply to Ms. Seastrand?

21 Does her age have anything to do with it?

22 A. Having her head turned was important. She's  
23 told me that she had her head turned. I think there  
24 were a couple of other documents that alluded to that.

25 The advanced age is a risk factor. When I

1 say "advanced age," it doesn't have to be 60 or 70.

2 But once you get into your 40s, we consider that a risk  
3 factor.

4 Initial neurological symptoms is a known risk  
5 factor. She had initial neurological symptoms. And  
6 then a reversal of the cervical curvature which showed  
7 up on some of the radiographic reports.

8 And finally -- and here's one I do  
9 remember -- non-awareness of the impending impact  
10 increases the risk of poor outcome by a factor of 15.

11 Q. Why?

12 A. Why the number, I can't tell you. But the  
13 reason that it increases the risk is because if I know  
14 somebody is about to hit me and I can brace and I can  
15 stiffen myself up, I can help to protect myself. Most  
16 people that get rear-ended, they have no warning at  
17 all. They're just sitting there completely relaxed and  
18 that head restraint is going to be several inches  
19 behind their head so when that seat pushes them forward  
20 violently, you know, it's like getting hit in the back  
21 by a linebacker. And you get this...

22 Q. So that would be kind of like if you came  
23 down and you stood here and you were turned that way  
24 and you were blindfolded and I just came running right  
25 at you and tackled you?

1 A. Yeah. Something like that. Maybe worse.

2 Q. Versus you have an opportunity to tense up?

3 A. Exactly.

4 Q. Why does tensing up protect or not protect  
5 the spine?

6 A. Well, it protects you because it limits the  
7 amount of distraction you can have in the neck and  
8 back. It's just like being in sports. You know, if  
9 you're relaxed, I mean, a football player -- if a  
10 football player was blindsided out on the field, wasn't  
11 expecting to get tackled, he's much more likely to get  
12 hurt than if he was in play expecting that sort of  
13 thing to happen.

14 Q. Do you watch football at all?

15 A. Not really.

16 Q. Okay.

17 A. I'm not a big football fan.

18 Q. Not an NFL fan?

19 A. No.

20 Q. Now, Doctor, in light of your review of this  
21 matter, did you formulate some opinions?

22 A. Yes.

23 Q. Can you -- you authored a report, right?

24 A. I did.

25 Q. And can you walk us through the opinions and

1 conclusions that you've formulated after your review?

2 A. Yes. First of all, just without any --  
3 without discussing Dr. Smith because he later was  
4 critical of some things, I'm just talking about what my  
5 opinions are.

6 Q. Sure. I'll get to that in one moment. Let's  
7 just talk about what --

8 A. I know Ms. Seastrand had an injury in the  
9 early '80s, and she had another one in the mid-'80s.  
10 She had some treatment for that. She had some problems  
11 with that. And according to the records that I saw,  
12 those were resolved. And she had an x-ray taken of her  
13 neck after this recent motor vehicle crash. The one  
14 that we're here for today.

15 Q. Okay.

16 A. And some radiologists have read a little bit  
17 more into that film than others. I think I've looked  
18 at the films myself and I would agree that this shows  
19 age-related degenerative changes. Because as we get  
20 older, we all have these degenerative changes. These  
21 are not significant in her case.

22 Q. Kind of like when I was 14, I had hair and  
23 now I don't?

24 A. Kind of like that.

25 Q. Okay.



1       A.   Except -- and so there was some question  
2 that, and there always is, that this is related to  
3 people's problems. The fact of the matter is -- and  
4 we've known this for many, many years -- that by the  
5 time we get to the age of 50, 85 percent of us, if you  
6 take x-rays of our neck, you will have a little bit of  
7 degenerative changes. By the time you get to 65, it's  
8 virtually 90 percent or so. So at the age of 47 or  
9 whatever she was when she took that x-ray, these little  
10 degenerative changes are what I would consider  
11 age-related.

12               Now, the reason I'm saying that is because  
13 when you have an injury like, let's say, in the one in  
14 1981 or even the one in 1985, and you produce damage to  
15 the spine, ligament damage, so there's slack in the  
16 spine, there's damage to the spine, it will -- it will  
17 become arthritic. We call that spondylosis. Sometimes  
18 we just called it degeneration. Just like when a  
19 football player gets hit and his ligaments are damaged  
20 in his knee, his knee develops osteoarthritis. The  
21 same thing.

22               The only difference is in your spine you have  
23 a spinal cord going through there. It's kind of an  
24 important joint. So I didn't see any evidence that  
25 would suggest that she had anything back in the 1980s.

1 Do you see what I'm saying?

2 Q. Sure.

3 A. So because if she had, then those x-rays that  
4 were taken recently would have shown an exuberant or at  
5 least an obvious degenerative change and it didn't. So  
6 we can conclude from that that she didn't have any  
7 significant permanent injury to her neck from those  
8 first collisions.

9 Q. Dr. Croft, you said 85 percent of people who  
10 are 50 years old or above, 85 percent have some sort of  
11 age-related degenerative finding?

12 A. That's exactly correct, yes.

13 Q. Do 85 percent of people in their 50s have  
14 neck fusions?

15 MR. JAFFE: Objection, Your Honor. He's here  
16 as a biomechanical engineer, not as a surgeon.

17 MR. CLOWARD: I think it's a fair question.

18 THE COURT: I think I'm going to sustain the  
19 objection. Let's move on to biomechanical opinions.

20 MR. JAFFE: Thank you, sir.

21 BY MR. CLOWARD:

22 Q. Doctor, did you review her, Ms. Seastrand's,  
23 medical history as part of your evaluation?

24 A. Yes.

25 Q. Now, let's walk through your opinions

1 contained in your report there.

2 A. With regard to her prior medical record or?

3 Q. Well, we've gone over the susceptibility,  
4 increased risks, and so forth. So now let's go into  
5 some of the other opinions that you have.

6 A. Well, my opinion is that the injuries that  
7 she had or, in other words, the disc herniation in the  
8 cervical spine is a direct result of this motor vehicle  
9 crash.

10 And my opinion is also that at the level that  
11 she had that herniation, which is C5-6, there is  
12 ligamentous instability which would be totally  
13 consistent with this kind of collision. And we see  
14 that on the bending views or the flexion/extension  
15 views that were taken, I think, in the eighth month of  
16 2010, I believe.

17 Q. Okay.

18 A. But they were taken anyway. So that -- so  
19 cervical spine, yes, related to the motor vehicle  
20 crash.

21 Lumbar spine, based on the acceleration and  
22 based on her risk, again, because she'd had prior low  
23 back injuries, and notwithstanding the fact that she  
24 had some degenerative changes but, again, I would call  
25 those age-related degenerative changes so you don't

1 really make any big deal out of those. And I know that  
2 talking to her, she said that she's had occasional, you  
3 know, on and off problems with her back and neck and so  
4 forth, but nothing that had required treatment in the  
5 last several years.

6 So that tells me that this -- these injuries  
7 that we see in the low back are also related to the  
8 motor vehicle crash.

9 Q. And, Doctor, you can state that it's more  
10 likely than not that the cervical and lumbar injuries  
11 for which Ms. Seastrand had a cervical and a neck  
12 fusion were caused by the motor vehicle accident of  
13 March 13, 2009?

14 A. Yes.

15 Q. Okay.

16 A. Definitely.

17 Q. Now, any other opinions that you have in  
18 there that we haven't covered?

19 A. Well, I mean, I talked about more of some of  
20 the thinking that went into this. For example, there  
21 were modic changes in the cervical spine, which is an  
22 indication of acute trauma.

23 Q. What is that one more time? What is a modic  
24 change and why is it an indication of trauma?

25 A. Well, you know, we've got the bones of the

1 spine. We call them vertebrae. And then in between  
2 them, we have a disc which is a fibrocartilaginous  
3 material and that's the thing that herniates. And  
4 between the bone and the disc, we have a thing called  
5 an end plate. And it's a little thin strip of  
6 cartilage. This is what can be damaged.

7 In fact, I published a paper in the Cervical  
8 Spine Research Society on a research project that we  
9 did on this. This can be damaged. And when it's  
10 damaged, then inside that bone, which is basically bone  
11 marrow where you have blood supply, you get  
12 inflammatory tissue and that inflammatory tissue gives  
13 a different signal on an MRI so what we see on the MRI  
14 is little strips of white in there which indicate that  
15 you have granulation tissue and inflammatory change.

16 Q. So that's an indication of a traumatic  
17 effect?

18 A. Correct. That is one of the things that  
19 Dr. Smith disagreed with me on, but he was actually  
20 wrong. He got it backwards because he said, no, a type  
21 2 modic change -- no. He said a type 1 modic change is  
22 degenerative and he was wrong because a type 1 is acute  
23 and a type 2 is degenerative.

24 Q. So he criticized you for calling it what you  
25 called it but he was actually wrong?

1           A.    He was wrong.

2           Q.    I'm sure Mr. Jaffe will talk to you about  
3 that so I don't want to get into that too much. But,  
4 Dr. Croft, let's go through -- now that we're to  
5 Dr. Smith, let's talk about him for a moment.

6                   He offered some reports as well, right?

7           A.    Yes.

8           Q.    You had a chance to review those?

9           A.    Yes.

10          Q.    Now, we were told that Dr. Smith indicated  
11 that some of your opinions were flawed.

12          A.    That's correct.

13          Q.    You had an opportunity to write a report in  
14 response to what he said, right?

15          A.    I did definitely, yes.

16          Q.    Can you walk us through that? Let's go  
17 through those.

18          A.    Yeah. Quickly. First of all, Dr. Smith  
19 seemed to keep going back to this issue of genetics and  
20 activities of daily living. And basically drew the  
21 conclusion that all of the problems that Ms. Seastrand  
22 had occurred spontaneously around that time and it had  
23 nothing to do with the crash and it was just  
24 coincidence and it was related to what he called  
25 activities of daily living.

1           Now, he did make a blind citation to a paper  
2 that was published in *Spine* back in 1994. That was a  
3 very flawed study. In fact, my colleagues and I  
4 published a paper in the same journal criticizing that  
5 paper. But, anyway, there's no evidence that supports  
6 the activities of daily living produce the kinds of  
7 changes and, quite frankly, the likelihood that this  
8 just occurred spontaneously right about this time is  
9 absurd.

10           So, you know -- and the other thing is the  
11 genetics. The genetics issue is kind of an interesting  
12 one because we have what are called twin studies where  
13 they take monozygotic twins -- in other words,  
14 literally one ovum becomes two children -- and they  
15 look at them because they have the same DNA. And if  
16 they take like, let's say, one brother who is a heavy  
17 construction worker and one brother who is, let's say,  
18 an artist and they follow them through time, and they  
19 say do they have the same preponderance of disc  
20 degeneration. Because if they do, then that would  
21 suggest that genetics is more determinative than actual  
22 physical stress.

23           Q.     Sure.

24           A.     Now, there's only been a few of those papers  
25 published and I've read them. And what they show is

1 there's a very small association but it's very small.  
2 Which means that most of the difference is explained by  
3 other factors that we still don't understand. And  
4 secondly --

5 Q. Maybe a factor like getting hit from behind?

6 A. Well, the other thing is that, you know,  
7 there was no genetic testing of Ms. Seastrand anyway so  
8 that's purely speculative at best. So I think bringing  
9 out this genetic thing is kind of loony. And I think  
10 the activities of daily living doesn't hold any water  
11 at all, and he just kept going over that and over that  
12 and over that. And then all the things that were  
13 really important like human risk factors, he completely  
14 disregarded. He didn't take into account the fact that  
15 she was a female. He didn't take her age into account.  
16 He didn't take into account that she had her head  
17 turned.

18 Q. So all these things for which there's a  
19 poster that you prepared that we cannot seem to locate,  
20 all of these things he disregarded?

21 A. All of those things.

22 Q. Doctor, so if I understand you correctly, you  
23 said you should look at the whole picture, right?

24 A. Yeah.

25 Q. So when you determine causation like what is



1 more likely than not, you have a disagreement with  
2 Dr. Smith who thinks that it was just coincidental that  
3 she started to have these problems at the same time as  
4 the crash?

5 MR. JAFFE: Objection. This is argument,  
6 Your Honor.

7 MR. CLOWARD: I asked him if that was what  
8 the disagreement was.

9 MR. JAFFE: That's the whole point. He's  
10 arguing the point.

11 THE COURT: I'll allow it. Overruled.

12 THE WITNESS: Could you say it again?

13 THE COURT: So when you determine causation  
14 like what is more likely than not, you have a  
15 disagreement with Dr. Smith who thinks it was just  
16 coincidental that she started to have these problems at  
17 the same time as the crash?

18 THE WITNESS: Right. Here's a crash. The  
19 paramedics take her out of the car on a backboard to  
20 the hospital with C-spine precautions. I used to be a  
21 paramedic so I have kind of an insight on what drives  
22 that sort of a response. I also used to work in  
23 hospitals. So it -- clearly, she was in a lot of pain,  
24 not just trivial stuff. She was in pain at the  
25 hospital. Her medical record from that day on is

1 consistent. Now, to suggest that that was just a  
2 coincidence, I think is just more than far fetched.

3 BY MR. CLOWARD:

4 Q. Doctor, let me ask you one final question:  
5 Have your opinions been on a more likely than not  
6 standard?

7 A. Absolutely.

8 Q. And that's to a reasonable degree of  
9 probability in the fields of biomechanics, accident  
10 reconstruction, and epidemiology?

11 A. Yes, sir.

12 MR. CLOWARD: Okay. Thank you.

13 THE COURT: Everybody okay? Somebody need a  
14 break? Everyone is good. All right.

15 Cross.

16

17 CROSS-EXAMINATION

18 BY MR. JAFFE:

19 Q. Doctor, you would agree with me that when you  
20 testify in court, it is by and large on behalf of  
21 plaintiffs?

22 A. Most of the time I do, yes.

23 Q. Doctor, you would agree with me that you do  
24 not hold a medical degree?

25 A. I'm a chiropractor, not a medical doctor.

1 Q. And how many engineering degrees do you have?

2 A. I don't have an engineering degree.

3 Q. Doctor, you run a business known as the Spine  
4 Research Institute of San Diego?

5 A. That's correct.

6 Q. And you own it 100 percent?

7 A. Yes.

8 Q. And I notice that you sell a 4-DVD mock trial  
9 set on low impact trials for \$299?

10 A. Yes.

11 Q. And in there you discuss legal philosophy?

12 A. Did you buy it?

13 Q. No. I saw it online. You discuss legal  
14 philosophy?

15 A. I don't personally, no.

16 Q. Well, this set does.

17 A. Yes. Some of the people that made that, yes.

18 Q. But you sell it, correct?

19 A. Yeah. I'm not sure how much legal philosophy  
20 is in there really. It's not about legal philosophy.

21 Q. I'm just quoting what you put in it -- what  
22 is on your website on the thing. It discusses trial  
23 strategy.

24 A. Probably, yeah.

25 Q. The threat of procedural rules such as

1 California Court Rule 998; is that right?

2 A. I think that was mentioned in there, yes.

3 Q. How to deal with videos, correct?

4 A. That's correct.

5 Q. Ten ways plaintiffs sink their cases.

6 A. Yes. These are all subjects that were  
7 discussed by lawyers, not me.

8 Q. But this is on the DVD package that you sell  
9 on your website?

10 A. Yes.

11 Q. Why doctor's reports are crucial.

12 A. Yes.

13 Q. How to present a loss velocity case and prove  
14 damages.

15 A. That's on there too, I think, yes.

16 Q. And how to move to keep out photographs of  
17 bumpers, correct?

18 A. Yes.

19 Q. That's on this --

20 A. Which, in my opinion, is not a good thing to  
21 do but that was discussed.

22 Q. But it's on the package that you sell?

23 A. Yes.

24 Q. And you also give seminars talking about  
25 these types of issues as well, correct?

1       A.   Well, we give seminars that -- I give  
2 continuing education seminars to doctors and it's a  
3 four-weekend seminar series. It covers biomechanics,  
4 reconstruction, documentation, paperwork.

5           And the last seminar is co-taught by a  
6 lawyer. And that's called medical/legal and it  
7 basically teaches doctors what to expect in -- for  
8 example, like what we're doing right here,  
9 cross-examination, because doctors feel like they're  
10 fish out of water.

11       Q.   Sir, does it also -- do you also run that  
12 program -- are lawyers in attendance as well?

13       A.   We usually will have one or two maybe.  
14 Sometimes we don't have any.

15       Q.   In fact, your website lists that Mr. Cloward  
16 graduated it in 2009.

17       A.   He did.

18       Q.   As did two of the doctors who treated this  
19 plaintiff, Dr. Benjamin Lurie and Dr. Matthew Olmstead;  
20 is that correct?

21       A.   I couldn't verify that because I don't keep  
22 track of everybody who has been through the program.

23       Q.   And you created the two poster boards that,  
24 while I understand they're now -- Mr. Cloward can't  
25 find them, but you created them for this trial,

1 correct?

2 A. I did.

3 Q. Because it's even got your copyright on the  
4 side.

5 A. That's right.

6 Q. And in addition, the four -- the seminar that  
7 you give is called Whiplash Injury Mechanics and  
8 Traumatology and it comes --

9 A. Yes.

10 Q. There's four modules, right?

11 A. Yeah. That's what I was just describing.

12 Q. And in module four you teach people how to be  
13 an expert in litigation, right?

14 A. I don't think that's what I say.

15 Q. Well, that's -- you teach them how to  
16 testify, you teach them how to write reports, how to  
17 handle cross-examination, correct?

18 A. Well, again, it's co-taught by a lawyer, but  
19 I teach them what to expect in a trial and I teach them  
20 how to put evidence together so that they'll be able to  
21 show it to a jury. For example, so that somebody is  
22 not going to say, oh, no, you've violated some rule or  
23 you can't do that, et cetera.

24 The whole program is really about presenting  
25 honest evidence to a jury and it's not -- there's

1 nothing desultory about it.

2 Q. Well, sir, you teach them -- teach doctors  
3 how to write reports and handle themselves in  
4 depositions, correct?

5 A. I do.

6 Q. You teach them how to work on excluding  
7 adverse experts.

8 A. I do.

9 Q. You teach how to make your -- make sure your  
10 testimony is not excluded.

11 A. That's correct.

12 Q. And you instruct on the federal rules of  
13 evidence.

14 A. Well, I talk about like five of them.

15 Q. Okay. You're not a lawyer, though, right?

16 A. No, of course not.

17 Q. Okay. I just want to make sure that's not in  
18 your repertoire.

19 A. Doctors need to know --

20 Q. Sir, I have no question pending right now.

21 Sir, is it also true that in your website you  
22 talk about when to speak to the judge as a witness?

23 A. Do I say that on my website? I don't know.  
24 I say that in my teaching, though.

25 Q. And you instruct -- you also instruct on the

1 two main legal doctrines for admission of expert  
2 testimony in the United States, Daubert and Frye; isn't  
3 that correct?

4 A. That's absolutely correct.

5 Q. Is this kind of like a one-stop shop for low  
6 velocity impact in litigation expertise in trials?

7 A. It's what doctors need because, like I said,  
8 they feel like they're out of -- fish out of water.  
9 And doctors are important in testifying in these cases.

10 Q. Okay. Now, you just made a comment at the  
11 very tail end of your testimony that it is important  
12 for you to look at the whole picture; isn't that  
13 correct?

14 A. Well, actually, I was answering a question.

15 Q. Right. But as an expert do you teach the  
16 experts when you're teaching in class to look at the  
17 whole picture?

18 A. Yes.

19 Q. It's important, right?

20 A. Yes. Well, it depends on what the whole  
21 picture includes.

22 Q. That is exactly right. By the way, before I  
23 forget, I wanted to ask. I saw something in your  
24 resume about in 1991 getting an Emmy nomination for  
25 best performer.



1 A. That's correct.

2 Q. How did you do?

3 A. I didn't win it. That's why it says  
4 nomination.

5 Q. Okay.

6 A. You always get credit for a nomination.

7 Q. I wanted to make sure that we understand that  
8 you're a performer now.

9 A. That was a whiplash documentary, by the way.

10 Q. I saw that it was entitled *Whiplash*.

11 MR. JAFFE: Your Honor, can we have the  
12 screen?

13 THE COURT: Yes.

14 BY MR. JAFFE:

15 Q. Doctor, I've put together -- it's on the  
16 screen right in front of you as well so you don't have  
17 to strain to look up at the TV.

18 A. There's nothing on the screen.

19 Q. It will be in a moment.

20 A. Okay. It was there for a minute.

21 Q. I know. That wasn't -- it was just -- while  
22 we're -- while Greg's getting this ready, I just want  
23 to say what I did was put together a time line of  
24 various key dates relative to your retention and  
25 involvement in this case. Okay, sir?

1           So we know the examination was done of the  
2 vehicles prior to -- on June 18, 2012, so you were  
3 obviously retained before then, correct?

4           A.    That would have been, yes.

5           Q.    Do you know the exact date you were retained?

6           A.    No.

7           Q.    Well, so we can say certainly it was prior to  
8 June 18, 2012. And you issued your first report on  
9 August 28, 2012; is that correct? I just want --

10          A.    That sounds approximately right, yeah. Yes.

11          Q.    And you issued your second report on  
12 October 1, 2012, correct?

13          A.    Yes.

14          Q.    And then I took your deposition. We started  
15 it on November 28, 2012; is that right? You've got the  
16 volume right there in front of you.

17          A.    Okay. I take your word for it.

18          Q.    It's right on the front. Do you want to  
19 verify it?

20          A.    No. I'll take your word for it.

21          Q.    Then the third report was issued on  
22 January 29, 2013, correct, sir?

23          A.    I believe so, yes.

24          Q.    And then we finished your deposition on  
25 May 22, 2013, so about just two months ago today?

1 A. Okay.

2 Q. Now, in your first report you identify the  
3 medical records you review; isn't that correct, sir?

4 A. That's correct.

5 Q. And the records that you reflect having  
6 reviewed were from Summerlin Hospital in  
7 September 2012, correct?

8 A. In the first document?

9 Q. The first report. September 12, 2004,  
10 Summerlin Hospital, right, sir?

11 A. I've got one for 2004.

12 Q. Yes. September 12, 2004.

13 A. Okay. Yeah. Right.

14 Q. That's what you saw?

15 A. Yes.

16 Q. Now, how many more records did you see prior  
17 to the date of this accident?

18 A. That was it.

19 Q. That was it.

20 A. I did see other reports that discussed --

21 Q. Well, hold on. We're going to talk about  
22 that for a second. I want to talk about the records  
23 that you've seen.

24 When you wrote your second report, the only  
25 additional information you had seen by that time was

1 Dr. Smith's report so that you issued a rebuttal,  
2 correct, sir?

3 A. Correct.

4 Q. Then I took your deposition, pointed out to  
5 you that Dr. Smith had another report which you then  
6 received and wrote -- and that was the only additional  
7 information you received and then you wrote your third  
8 report, correct?

9 A. I believe that's true, yes.

10 Q. And then when I took your deposition two  
11 months ago, you had not received any further documents  
12 in the interim, correct?

13 A. I think that's true, yes.

14 Q. So what you've reviewed are Summerlin  
15 Hospital records from September 2004. You've reviewed  
16 Dr. Smith's three reports, photos, and you've inspected  
17 the vehicles, correct? And the post motor vehicle  
18 accident medical records.

19 A. Dr. Smith's three reports? I reviewed two of  
20 his reports, I think.

21 Q. Dr. Smith wrote three. I'll let you know  
22 that. Okay. So let's talk about now what you did not  
23 review.

24 You did not review any medical records other  
25 than the -- predating the accident other than the ones

1 from September 2004, correct?

2 A. That's correct.

3 Q. You did not review any depositions in this  
4 case, correct?

5 A. I don't think I did, no.

6 Q. So you didn't review the plaintiff's  
7 deposition, correct?

8 A. I don't think I did, no.

9 Q. You didn't review Dr. Smith's deposition?

10 A. No.

11 Q. You did not review Mr. Khoury's deposition?

12 A. No.

13 Q. The police --

14 A. I didn't see any depositions.

15 Q. The two police officers, all doctors, all  
16 experts, not one of those depositions did you see?

17 A. Correct.

18 Q. You did not see any other expert reports,  
19 other than Dr. Smith's and your own?

20 A. Well --

21 Q. Prior to May 22, 2013.

22 A. Are you talking about medical expert reports?  
23 I'm not sure because I would have to go through --

24 Q. Here's the thing. As of May 22, 2013, the  
25 last time that I've had any opportunity to have any

1 communication with you, you had not received or looked  
2 at any other expert reports and we can agree that you  
3 have not written any further supplemental reports  
4 identifying expert reports from other experts that  
5 you've seen with the exception of Dr. Smith?

6 A. Well, like I said, if it's not in my initial  
7 report, then the answer would be no.

8 Q. Okay. You have not received or reviewed any  
9 discovery responses in this case?

10 A. I can't say for sure whether I have because I  
11 usually don't include those in my report.

12 Q. And you agree with me that you would  
13 definitely have considered germane, and noted in your  
14 report, any records regarding preexisting spinal  
15 conditions especially if they discuss spinal or  
16 neurologic symptoms or symptoms of cervical etiology  
17 such as radicular symptoms into the arms and hands?

18 A. I didn't. I do agree with that, yes.

19 Q. We talked about that at your deposition.

20 A. Uh-huh.

21 Q. That's "yes?"

22 A. Yes.

23 Q. And, in fact, in module two of your class on  
24 Whiplash Injury Mechanics and Traumatology, you teach  
25 the importance of taking a complete and accurate

1 history to know the prior conditions so you can  
2 apportion the condition between pre and post accident,  
3 right?

4 A. That's correct. Of course, what I'm teaching  
5 is for doctors that are in practice.

6 Q. I understand, sir.

7 A. And I'm not -- I wasn't seeing Ms. Seastrand  
8 as a practitioner.

9 Q. I understand. But nonetheless, it's just as  
10 important for you as an expert walking into this  
11 courtroom testifying, giving opinions based upon  
12 epidemiology and causation, to have had a complete  
13 picture; isn't that right?

14 A. Well, obviously, we want to see as much as we  
15 can see. Whether or not it's relevant or important,  
16 that can be another thing, but.

17 Q. That's exactly right. But the only way  
18 you're going to know if it's relevant is if you have  
19 the opportunity to consider it, look at it, review it,  
20 analyze it, and then either agree that it's relevant or  
21 dismiss it?

22 A. And, like I said, I do have some information  
23 from other practitioners and what they've written about  
24 those previous records.

25 Q. Doctor --

1 A. I will agree with you.

2 Q. That's all I'm asking. It was a straight  
3 yes-or-no question.

4 A. I'm disagreeing with you that --

5 Q. Thanks.

6 A. Okay.

7 Q. So if the plaintiff had indicated that she  
8 had a prior chronic neck and back condition, would that  
9 have been important to know?

10 A. I did see a record that indicated that.

11 Q. And that was in the Summerlin Hospital  
12 records from September 2004, right?

13 A. Yes, but there was also a contradictory --

14 Q. It was a yes-or-no question, sir. I'm sure  
15 Mr. Cloward will be happy to ask you for clarifications  
16 and ask you to explain everything. Okay, sir.

17 Now, I want to make sure I understood this.  
18 You're aware that Dr. Smith is board-certified in  
19 radiology, right?

20 A. I've heard that, yes.

21 Q. Did you see his CV?

22 A. I may have seen his CV.

23 Q. Now, I understand that certainly that in the  
24 practice of chiropractic you do review films, correct?

25 A. Yes.



1 Q. But it's your position that Dr. Smith,  
2 board-certified in radiology, misread the film and not  
3 you?

4 A. I didn't say he misread it. I said he was  
5 incorrect about his statement.

6 Q. I think you said he was wrong about the MRI,  
7 but okay. We'll leave that for Dr. Smith to address.

8 Now, when discussing the risk factors, the  
9 one thing you said that was very important was that the  
10 plaintiff was leaning forward and had her head turned;  
11 is that correct?

12 A. I did not say she was leaning forward. I  
13 said she had her head turned.

14 Q. Head turned. Okay.

15 MR. JAFFE: May I publish Ms. Seastrand's  
16 deposition?

17 THE COURT: Yeah.

18 BY MR. JAFFE:

19 Q. Dr. Croft, I would like to show you some  
20 testimony that you did not have the opportunity to  
21 consider.

22 A. Okay.

23 MR. JAFFE: May I approach Dr. Croft, Your  
24 Honor?

25 THE COURT: Yes.

1 BY MR. JAFFE:

2 Q. Doctor, I'm going to provide you with  
3 Mr. Seastrand's deposition. And while I recognize this  
4 is now the first time that you're having an opportunity  
5 to see it, indulge me for a moment.

6 Would you be kind enough to turn to page 106.

7 A. Okay.

8 Q. And I am going to start reading at page 106,  
9 line 4, and I'm going to take it down to line 12.  
10 Okay.

11 Can you describe the intensity of the impact  
12 for me? That's the question I asked her.

13 And her response was: Can I describe the  
14 impact? For me it was intense because I wasn't  
15 expecting it and I began to hurt immediately and I was,  
16 like, what just happened to me because, of course, my  
17 mind was not on -- necessarily on because I was  
18 stopped. You know, I was just looking forward and  
19 getting ready to turn. So I wasn't really thinking of  
20 what was going on behind me and so I was surprised,  
21 really surprised and like that.

22 So she said she was looking forward and that  
23 was her testimony under oath. You would agree with me  
24 that in the quest for the big picture, that would have  
25 been an important piece of information for you to have

1 seen?

2 A. Well, it would have been. I mean, if she --

3 Q. Thank you. That was a yes-or-no question,  
4 sir.

5 A. It wasn't a yes-or-no response.

6 Q. Yes or no. Then Mr. Cloward I'm sure will  
7 ask you for the clarification. Just like he wanted to  
8 leave Dr. Smith to me. I'll let him ask you to  
9 clarify. Okay, sir.

10 Now, you would agree with me that especially  
11 as a doctor -- well, true or false: Is it important to  
12 have a good understanding of the past medical history  
13 predating the accident in order to properly assess the  
14 affect of the accident on her?

15 A. Yes, I would agree with you.

16 Q. You would agree with me that a disc can  
17 degenerate?

18 A. Discs can degenerate, yes.

19 Q. And it happens through the microtrauma of  
20 daily living?

21 A. Well, I think we've already discussed that.  
22 You're talking about activities of daily living and the  
23 answer is probably everything that we do contributes to  
24 that. To suggest that me just sitting here like this  
25 and turning my head around looking at things is causing

1 my discs to degenerate, no.

2 Q. Okay. I understand that, sir. Maybe just by  
3 normal motion here and there, but the point is we all  
4 degenerate and we don't have to have trauma to  
5 degenerate.

6 You said that we've all got degeneration in  
7 our spines as we're sitting here, right, sir?

8 A. Well, that's a good point and the answer is:  
9 Yes, we do, and most of us don't have neck pain or low  
10 back pain.

11 Q. But there are occasions where people do  
12 degenerate to the point that it becomes a symptomatic  
13 condition?

14 A. It's possible. Yes, it does happen.

15 Q. You saw that while you were practicing  
16 chiropractic 20 years ago, right?

17 A. Yes.

18 Q. And you've seen situations -- I mean, several  
19 other doctors have been in the courtroom, I'll tell you  
20 right now, and said the same thing. They've had  
21 situations where people even had degenerative  
22 conditions to the point that discs were torn, bulging,  
23 protruding, herniated. It happens.

24 A. It can happen, sure.

25 Q. Both in the low back and in the cervical

1 spine.

2 A. Yeah.

3 Q. Those degenerative conditions can even  
4 produce neurologic symptoms, radiating symptoms down  
5 our legs, down our arms, down our hands, right?

6 A. They can.

7 Q. It's certainly not a medically insignificant  
8 consequence, right?

9 A. Yeah. Again, when you're dealing with the  
10 more probable than not, I don't think it really applies  
11 in this case, but it's possible. Yes. I mean, I  
12 treated patients that had herniated discs from sleeping  
13 on the couch wrong.

14 Q. It happens. There's literature talking about  
15 people herniating discs stepping funny off a curb or  
16 getting out of a car or out of bed or sneezing, right?

17 A. It can happen.

18 Q. And there can be situations where people who  
19 have a previously compromised disc can have sprains and  
20 strains completely irrespective and completely  
21 distinctive of an abnormal disc condition?

22 A. I don't think I followed you on that one.

23 Q. Sure. Just because -- people with bad discs  
24 can still have sprains and strains and accidents  
25 without further compromise to the disc?

1       A.   Yeah.  Anything is possible.

2       Q.   It's certainly medically foreseeable, right?

3       A.   I mean, I'll agree with you.  Anything is  
4 possible in that realm.

5       Q.   Okay.  And just because somebody has a  
6 rear-end impact with spinal complaints does not  
7 necessarily mean they're going to have a disc injury or  
8 compromise to a further -- or further compromise to an  
9 already compromised disc.

10            You can agree with me on that?

11       A.   Yes.  It's possible, I guess.

12       Q.   Okay.  Now, you said that you have never --  
13 you have not done crash tests since 2006; is that  
14 right?

15       A.   That's correct.

16       Q.   You never tested the specific models at issue  
17 in this accident?

18       A.   That's what I said, yes.

19       Q.   You've never tested these particular seats or  
20 types of belt systems?

21       A.   Well, I have tested the seats that are very  
22 similar and belt systems that are almost -- probably  
23 are the same.  Belt systems tend to come from original  
24 equipment manufacturers.  They don't -- you know, Ford  
25 doesn't make their own seat belts and so...

1 Q. You've never done testing to determine human  
2 tolerances, of course, correct?

3 A. Well, indirectly I have because I've had some  
4 people that were injured so I could see their tolerance  
5 was exceeded.

6 Q. And you are aware that the IIHS conducted  
7 crash tests of the Honda Odyssey but did not consider  
8 them in this case; is that correct?

9 A. I did.

10 Q. It's yes or no.

11 A. I did consider them.

12 Q. You did consider them?

13 A. Yes.

14 Q. Okay. Bear with me for a moment.

15 A. As a matter of fact, I wrote about it.

16 MR. JAFFE: Your Honor, there's no question  
17 pending.

18 THE COURT: Let him ask a question first.

19 THE WITNESS: Sorry.

20 MR. JAFFE: I'm sorry, Your Honor. If I may  
21 just have a moment.

22 THE COURT: That's fine.

23 MR. JAFFE: I wanted to make a note of the  
24 page and line I wanted to check. Let me check one more  
25 thing, sir. If not, I will have to move on.

1 BY MR. JAFFE:

2 Q. Okay. You actually dismissed the IIHS test  
3 data; isn't that correct?

4 A. I dismissed it because it's not relevant in  
5 this case.

6 Q. Right. That's your opinion that it's not  
7 relevant in this case.

8 A. It's not relevant.

9 Q. Sir, and you have never conducted crash tests  
10 of the Honda Odyssey?

11 A. No, I have not.

12 Q. While you may not consider them directly  
13 relevant, certainly the IIHS has conducted crash tests  
14 of the Honda Odyssey, correct?

15 A. Not for injury risks.

16 Q. Okay. Is there -- and you don't even believe  
17 that there's any crossover benefit by way of analysis  
18 of those IIHS tests for the purposes of this case; is  
19 that true?

20 A. May I clarify something?

21 Q. True or false: You do not believe that  
22 there's any crossover benefit to the IIHS crash tests  
23 for the purposes of your analysis in this case?

24 A. Not those crash tests, no.

25 Q. Thank you. You are not offering opinions and



1 are not here offering opinions on the nature and extent  
2 of injuries, care, or future damages, correct?

3 A. I'm talking about really causation, but I'm  
4 not getting into the medical issues.

5 Q. By the way, the -- you said that bumper --  
6 rather that piece that's inside the bumper, that's  
7 actually Styrofoam, right?

8 A. It's a high-density foam.

9 Q. It's foam.

10 A. It's not like the stuff at 7-Eleven.

11 Q. Well, the -- we know that the hook, the tow  
12 hook, in the front of Mr. Khoury's car punctured the  
13 bumper, correct?

14 A. It punctured the bumper facia.

15 Q. Right. You don't know if it punctured that  
16 foam, do you, sir?

17 A. No, it didn't puncture that foam. It didn't  
18 cause that fracture.

19 Q. You never saw that actual piece, did you?

20 A. No. But I can see the photographs and I know  
21 where that tow hook was and there's no way that it  
22 could have caused that.

23 Q. Okay. Now, let's talk for a second about the  
24 MADYMO program and the crash pulse or the pulse --  
25 crash pulse. We can agree that -- actually, no.

1           Do you agree or disagree that the crash pulse  
2 represents, for the purposes of that program, the time  
3 that the vehicles are actually touching?

4           A.    No.  MADYMO doesn't deal with the vehicles at  
5 all.

6           Q.    But PC-Crash does?

7           A.    Yes, PC-Crash does.

8           Q.    Do you or do you not agree that the crash  
9 pulse represents, for the purposes of those programs or  
10 that program, the specific amount of time that the  
11 vehicles are in contact?

12          A.    No, it doesn't necessarily represent that.

13          Q.    That's your testimony.

14          A.    That is my testimony.

15          Q.    We can agree that you have not seen any of  
16 our disclosures of documents in this case; is that  
17 correct?

18          A.    I don't think so.

19          Q.    Including any documents that we have  
20 disclosed relative to PC-Crash or MADYMO?

21          A.    Not that I'm aware of, no.

22          Q.    Do you agree with me that the lower the crash  
23 pulse, the greater the amount of force is going to be?

24          A.    All right.  You better define crash pulse for  
25 me because I'm not sure.

1 Q. My definition of crash pulse is the amount of  
2 time that the vehicles are in contact.

3 A. Relative to?

4 Q. During the course of the collision.

5 A. See, usually crash pulse is usually defined  
6 in terms of impulse or change in velocity or  
7 acceleration, typically acceleration. It is the time  
8 that the occupant begins to accelerate and the time  
9 that they stop accelerating. That's the crash pulse.

10 Q. That is your definition, right?

11 A. You're defining it as simply a time duration  
12 that the two vehicles are in contact.

13 Q. Uh-huh.

14 A. And I didn't report anything on that. I know  
15 Dr. Smith had this misconception that I had reported a  
16 crash pulse of 13 milliseconds, but he was dead wrong  
17 on that.

18 Q. Well, your data shows 13 milliseconds as the  
19 crash pulse, doesn't it?

20 A. No, it does not. It shows 250 milliseconds.

21 Q. But that's for the amount of time not that  
22 the vehicles were in contact but for the amount of time  
23 from the contact through the contact of the plaintiff  
24 against the seat, correct?

25 A. Well, not just against the seat, but it's the

1 duration of the pulse of the plaintiff and that's the  
2 thing that we care about. I don't really care about  
3 how long the bumpers are touching. That doesn't matter  
4 to me. And PC-Crash takes care of that because it does  
5 that whole analysis.

6 Q. So it's your testimony that you do not input  
7 the crash pulse. PC-Crash does that for you?

8 A. That's correct.

9 Q. Okay. We'll discuss that also with  
10 Dr. Smith.

11 A. I put in the velocity, as I said.

12 Q. Sir, there is no question pending right now.  
13 Thank you.

14 Do you agree with me that the lower -- the  
15 less time that the vehicles are actually touching, it  
16 means that there's going to be a greater force  
17 determined by the computer programs?

18 A. No.

19 Q. You don't?

20 A. No. Look, you can have a low-speed crash --

21 Q. Sir, I asked you a yes-or-no question. You  
22 answered my question. Thank you.

23 A. You just don't want to hear it.

24 Q. Sir, I'll tell you what, if you want to  
25 advocate for her, that's fine. She's got a lawyer.

1 He'll ask the questions.

2 A. I just want to tell the truth. That's what  
3 I'm sworn to do here.

4 MR. JAFFE: Your Honor.

5 THE COURT: You need to listen to the  
6 questions. Answer the questions. Mr. Cloward will  
7 have an opportunity to ask you to explain things. If  
8 you can't answer with a yes or no, just tell him that  
9 you can't answer that one.

10 BY MR. JAFFE:

11 Q. True or false: You did not alter any  
12 settings in PC-Crash or MADYMO from the original  
13 program settings?

14 A. I didn't author?

15 Q. Alter.

16 A. Alter. Which settings are you referring to?

17 Q. The crash pulse.

18 A. I think we've been through this. The crash  
19 pulse is not input by me. The crash pulse is  
20 determined by PC-Crash.

21 Q. You're aware that Dr. Smith is testifying  
22 tomorrow, is that correct, or do you know that?

23 A. I didn't know that.

24 Q. You're not planning on coming back and  
25 testifying again and rebut him further, are you?

1 A. I might.

2 Q. Have any plans been made to bring you back  
3 here to testify?

4 A. No.

5 Q. Well, thank you. Because I figured you're  
6 not coming out from San Diego just on a whim.

7 Now, you testified that the amount of forces  
8 to the plaintiff's head and neck were between 14 and 25  
9 g's; is that correct?

10 A. That's correct.

11 Q. And that the amount of forces to her low back  
12 were 18 to 95 g's, correct?

13 A. No. I didn't say 95.

14 Q. 19.5. I apologize. I apologize. You know  
15 what, I'm sorry. I was looking past that to my next  
16 note. Let me make sure we're clear.

17 Your testimony as to the low back, the amount  
18 of force was 18 to 19.5 g's; is that correct?

19 A. Correct.

20 Q. And your examples of 25 g's when I asked you  
21 in your deposition, included playing football, playing  
22 soccer, falling, or getting hit with a fist; does that  
23 sound accurate?

24 A. I would have to see the context of it. If  
25 you want to bring that up, I will take a look at it.

1 Q. Sure. Why don't you take a look at page 126  
2 of your deposition. It's the one you got there. It's  
3 actually 127, lines 17 to 13.

4 The question I asked you was: Can you give  
5 me an example of types of traumatic events other than  
6 this car accident that would produce a 25 g-force on  
7 the head?

8 You said, In sports you mean?

9 I said, Sure.

10 You said, Playing football, soccer, falling,  
11 and getting hit with a fist; is that correct?

12 A. That's correct, with the understanding  
13 that --

14 Q. Sir, did you put an understanding in there or  
15 was that your answer? Did I just read it accurately?  
16 Did I read your answer accurately?

17 A. Do you want to read the next line?

18 Q. You mean where I asked another question going  
19 into another area?

20 A. Well, you -- it looks like you were  
21 clarifying it so you allow me to clarify it.

22 Q. Actually, okay. Fine.

23 I asked if I was so -- to be so inclined to  
24 not wear a helmet, put my head down and run into a wall  
25 and hit my head on the wall, how fast would I have to

1 be running to produce 25 g-forces on my head.

2 And you said, Well, it depends on how soft  
3 your head is and how hard the wall is, I suppose.  
4 Okay.

5 A. Uh-huh.

6 Q. So then later on you even said that you can  
7 slap yourself in the cheek and get 12 to 15 g's; is  
8 that correct? Look down at the bottom of page 128.

9 A. That requires a -- this is being taken  
10 totally out of context.

11 Q. Okay. So then let's keep reading. The next  
12 question after the whole brick wall thing was: What  
13 about a brick wall? If I was going to run head first  
14 into a brick wall, how fast --

15 THE COURT: Slower. You have to read slower.  
16 If you want to read and you want it on the record here,  
17 you have to read slower.

18 BY MR. JAFFE:

19 Q. What about a brick wall? If I was going to  
20 run head first into a brick wall, how fast would I have  
21 to be running -- you know what, I'm going to drop it.  
22 I've got what I needed. I don't need to go any  
23 further. It's just a waste of time.

24 MR. JAFFE: May I have a moment, Your Honor?

25 THE COURT: Yes.



1 MR. JAFFE: Your Honor, I have nothing  
2 further.

3 THE COURT: Redirect.

4 MR. CLOWARD: Yes.

5

6 REDIRECT EXAMINATION

7 BY MR. CLOWARD:

8 Q. Doctor, have you ever seen the movie *A Few*  
9 *Good Men*?

10 A. Yes.

11 Q. I just wanted to know that.

12 I did take your course, didn't I?

13 A. Yes.

14 Q. How many sessions is that course anyway?

15 A. Four.

16 Q. It's four weeks but how many total sessions  
17 was it?

18 A. Well, it's 48 hours in total.

19 Q. I believe it was over two days.

20 A. Yes.

21 Q. Each time?

22 A. Each session.

23 Q. So eight sessions in total?

24 A. Yes.

25 Q. Let's talk about that CD that you --

1 Mr. Jaffe talked about.

2           Why do you offer the CDs and why do you offer  
3 to teach other chiropractors and attorneys?

4           A.   Because -- I don't really teach attorneys,  
5 first of all.

6           Q.   Sure.

7           A.   I mean, attorneys sometimes come. I do not  
8 advertise to them, but they sometimes come because one  
9 of the doctors will say, hey, I'm going to the seminar.  
10 Do you want to come with me? But I don't advertise to  
11 attorneys. But anyway, the reason --

12          Q.   I think I was the only attorney at that  
13 session, wasn't I?

14          A.   I think you were. Yeah. That was in  
15 San Francisco.

16          Q.   Yeah.

17          A.   But anyway, the reason that it is a problem  
18 is because doctors, particularly chiropractors, are so  
19 often treating these patients that have whiplash  
20 injuries and they're terrified of depositions and going  
21 to court and so forth. So it's a problem because some  
22 of them won't actually treat people because of that.

23                So what I try to do is just say here's what's  
24 expected of you, here's what the decorum is in the  
25 courtroom, here's what the rules are, here's what the

1 rules of evidence is, here's what you can say, here's  
2 what you can't say, and here's how to best present the  
3 evidence. And that's all we do.

4 Q. Doctor, do you get tired of defense lawyers  
5 like Mr. Jaffe coming to tell jurors that people cannot  
6 get hurt based on photographs?

7 MR. JAFFE: Objection, Your Honor.

8 THE COURT: Sustained.

9 MR. JAFFE: Thank you.

10 BY MR. CLOWARD:

11 Q. You get deposed all the time, don't you?

12 A. Yes.

13 Q. And you go to trial, right?

14 A. Yes.

15 Q. Do defense lawyers make statements that  
16 people cannot be hurt based on photographs?

17 MR. JAFFE: Objection, Your Honor,  
18 irrelevant. Beyond the scope of cross.

19 MR. CLOWARD: He opened the door.

20 THE COURT: I'm going to allow it.

21 THE WITNESS: All the time.

22 BY MR. CLOWARD:

23 Q. Let's level with everybody in the room. Is  
24 that an honest argument to make?

25 MR. JAFFE: Objection, Your Honor.

1 THE COURT: Sustained.

2 MR. JAFFE: Thank you.

3 BY MR. CLOWARD:

4 Q. Dr. Croft, have you taken your career  
5 personally in whiplash and talking about people who are  
6 injured?

7 A. Do I take it personally? Meaning, do I take  
8 it seriously?

9 Q. Yeah.

10 A. Yes, absolutely.

11 Q. How many papers have you written on this  
12 subject here?

13 A. Several hundred.

14 Q. Why?

15 A. Share information, share my knowledge,  
16 research that we do. Get the word out. Let other  
17 doctors read it.

18 Q. Do you think it's important to explain how  
19 you can't judge a book by a cover?

20 A. Right.

21 MR. JAFFE: Objection, Your Honor.  
22 Argumentative.

23 THE COURT: Overruled.

24 THE WITNESS: I had a paper that was on the  
25 poster that we published in *Medical Science Monitor*

1 where we did a meta-analysis where we looked at all the  
2 literature going all the way back to 1970 to see  
3 whether there was any studies that could actually show  
4 that there's a correlation between property damage or  
5 crash severity any way you measure it and risk for  
6 injury in this range of low-speed crashes, let's say,  
7 under 20 miles an hour. There was no studies.

8 BY MR. CLOWARD:

9 Q. So you cannot look at property damage alone  
10 and determine whether someone is hurt or not hurt.

11 Is that what you're saying?

12 A. That's -- yeah. Anybody who's a doctor knows  
13 that because they very often get two people that were  
14 in the same car, one of them is hurt, one of them is  
15 not or one of them recovers very quickly and the other  
16 one has long-term problems. So it's human factors,  
17 these risk factors that we talked about before that are  
18 more deterministic in terms of outcome than crash  
19 velocity or acceleration. We want to know that because  
20 it gets us information. It gives us a guide. But the  
21 absolute most important deterministic factor are the  
22 human risk factors.

23 Q. Doctor, you're an adjunct professor at some  
24 chiropractic -- or you have been at some chiropractic  
25 schools?

1. A. Yes.

2. Q. Let me just ask this: Have you ever one  
3 time, ever once in your -- when you're doing your  
4 chiropractic -- do they -- when you're treating  
5 patients, do you -- do your professors and do you teach  
6 the students, hey, you know what, before you evaluate  
7 the patient, let's go out and look at the property  
8 damage?

9. A. No. We don't ask for engineers either.

10. Q. So you don't -- do you want to cover the  
11 things that you weren't allowed to explain?

12. A. Sure.

13. Q. Let's talk about the g-forces at deposition  
14 out of context. Explain that.

15. A. What I said was if you put an accelerometer  
16 on your cheek right here and you go like this, you can  
17 get a spike of 15.

18. MR. JAFFE: Your Honor, objection. I  
19 withdrew that question. I didn't go there.

20. THE COURT: I think you -- it was raised  
21 enough that I'm going to allow him to explain it.  
22 Overruled.

23. THE WITNESS: We get a spike of acceleration.  
24 But the important thing about acceleration is the area  
25 under the curve because the area under the curve of the

1 acceleration represents a change in velocity.

2           And what that means is simply that when I hit  
3 myself, it's a slap, but my head isn't changing  
4 velocity because I don't have enough inertia behind the  
5 impact. So I will register a high acceleration but  
6 because there is no area under the curve because it's a  
7 very abrupt just a spike, it's really no more than a  
8 vibration, and that is what I was saying to Mr. Jaffe  
9 during the deposition. And Mr. Jaffe's question was  
10 worded in such a way that there was an implication that  
11 somehow those numbers related to the acceleration in  
12 this case which had a long duration.

13 BY MR. CLOWARD:

14           Q. Thank you. And now this II -- IIH -- what  
15 was it again?

16           A. IIHK or IIHS.

17           Q. IIHS. Regarding the minivan you said it was  
18 not relevant. Why?

19           A. Not relevant. Here's why. And the IIHS has  
20 a very good working relationship with my institute. In  
21 fact, the vice president will be speaking at our  
22 advanced seminar this November. But here's the thing.

23           Q. Your advanced seminar, is that in your garage  
24 or?

25           A. No.

1 Q. Okay. Just wondering.

2 A. What happens is this: The Insurance  
3 Institute for Highway Safety, that is what IIHS stands  
4 for, is an agency that is concerned with whiplash  
5 injuries, among other things. And they have developed  
6 a test where they put a seat out of a car on a sled and  
7 they accelerate that seat. They have a dummy -- and I  
8 was talking about these dummies before, the RID dummy,  
9 the rear-impact dummy -- and they measure the response  
10 of the dummy in those different seats. And they rate  
11 those seats and they put them on their website, which  
12 is IIHS.org. And you can look at different cars and  
13 see how their head restraints are rated.

14 They consider it so important that rating  
15 vis-a-vis whiplash, injury, risk that you cannot get  
16 their top safety pick without doing well in that  
17 category, so that's an important factor.

18 Now, the bumper tests are only there to  
19 inculcate the manufacturers to make their bumpers more  
20 crashworthy in terms of property damage. And so that  
21 test has nothing to do with human risk. That's why I  
22 said it's not relevant.

23 Q. Thank you.

24 A. Let me add, if I may, that the crash test --  
25 MR. JAFFE: Objection, Your Honor. He's



1 answered the question. This is now a narrative.

2 THE COURT: I'm going to allow it. It's a  
3 continuation of the answer, I think.

4 THE WITNESS: The crash test, if anything,  
5 supports the claim because of this: That bumper test  
6 that they do is not one test. It's four tests. They  
7 crash that car four times. The only test that was  
8 relevant to a rear-impact test that she had produced  
9 \$267, I think, in damage. Her damage was, I think,  
10 \$1,600. And so, here again, you have more evidence  
11 that her crash would have been well above the crash  
12 severity of the Odyssey test.

13 BY MR. CLOWARD:

14 Q. So it's like using a comparison of an apple  
15 and an orange. They're both fruits but it's not an  
16 accurate comparison.

17 A. That's right.

18 Q. And that's why you discarded it?

19 A. That's right. Besides they do more  
20 reasonable tests with the seats and the rear-impact  
21 dummies, and those are the things that really deal with  
22 risks.

23 Q. You were -- you were criticized for not  
24 having some of the records in your chart.

25 Do you need to see every single record to do

1 your calculations?

2 A. I don't need to see any records to do my  
3 calculations.

4 Q. Well, what about, you know --

5 A. I mean, medical records is what I'm referring  
6 to.

7 Q. Don't you think it would be important for you  
8 to have cardiac records? Maybe like a stress event?  
9 Isn't that something that is real significant?

10 A. No.

11 Q. What about maybe some visits to a podiatrist  
12 for some treatment there?

13 A. No.

14 Q. So, Doctor, I just have one more question.

15 Does anything that Mr. Jaffe -- does anything  
16 that he said changed your opinion that it's not a  
17 coincidence and that it's more likely than not that the  
18 automobile accident was the cause of her severe  
19 complaints for which she was transported to the  
20 emergency room via ambulance for which she received a  
21 morphine shot, did anything change your opinion?

22 A. No.

23 MR. CLOWARD: Nothing further, Judge.

24 THE COURT: Any more, Mr. Jaffe?

25 MR. JAFFE: Nothing.

1 THE COURT: Ladies and gentlemen, any  
2 questions for this witness?

3 I've got a question. You need to write it  
4 out. Put your juror number on there.

5 (Whereupon, a brief discussion was  
6 held at the bench.)

7 THE COURT: All right, Doctor. Here's our  
8 question from the jury.

9 Is the fuel level considered or is it a  
10 factor with PC Test? Fuel level is weight factor  
11 possibly.

12 THE WITNESS: That's a good question.  
13 Generally, we only consider fuel in terms of -- and any  
14 other baggage, by the way, like things in the trunk or  
15 the occupants in the vehicle -- we only consider them  
16 if they're locked to the vehicle.

17 For example, if you had a truck and you had a  
18 heavy load and you had it tied down and bound, it then  
19 technically becomes part of the mass of the vehicle for  
20 calculations.

21 But when things can move just like when you  
22 pull the tablecloth out from the flatware and it stays  
23 there, they're not attached, so they're not affected so  
24 much by this. And, likewise, when a car crashes, we're  
25 concerned with the car's mass, not the people inside

1 because the people inside move independently of the  
2 car. They don't actually contribute to the mass of the  
3 vehicle.

4 Now, gasoline is kind of halfway in between  
5 because it will slosh. And if it was a big truck and  
6 it had baffles in the truck which would prevent the  
7 fuel or something, then we would consider it.

8 THE COURT: Thank you. We'll mark that  
9 Court's next in order.

10 Does that raise any questions, Mr. Cloward,  
11 Mr. Jaffe?

12 MR. JAFFE: Nothing, sir.

13 THE COURT: Thank you, Doctor. Appreciate  
14 your time.

15 THE WITNESS: Thank you, Judge.

16 THE COURT: You're excused. All right,  
17 folks. Good stopping point, folks.

18 MR. JAFFE: Can we approach, Your Honor.

19 THE COURT: Yes. Come on up for a minute.

20 **(Whereupon, a brief discussion was**  
21 **held at the bench.)**

22 THE COURT: Ladies and gentlemen, does anyone  
23 have any problem staying a little bit late tomorrow?  
24 We're trying to schedule the rest of the week so we can  
25 get done on schedule. We may need to stay a little bit

1 late. Is that going to be a problem for anybody? I  
2 know it's not exciting, but nobody is raising their  
3 hand that it's a big problem. Okay. Appreciate that.

4 I have a morning calendar tomorrow but my law  
5 clerk is telling me that we're going to be able to be  
6 done by 10:30, so I'm going to ask you to be back  
7 tomorrow at 10:30 in the morning. We'll have an hour  
8 and a half probably in the morning, take our lunch, and  
9 then I don't know how late we're going to go. But  
10 we're going to try to get -- we have a couple of  
11 witnesses -- at least one from out of town, so we're  
12 going to try to get him on and off before the end of  
13 the day tomorrow. So just be prepared that we may go a  
14 little bit late. I don't want to shock anybody  
15 tomorrow if we keep you an extra hour or so.

16 During our break this evening, you're  
17 instructed not to talk with each other or with anyone  
18 else about any subject or issue connected with the  
19 trial. You're not to read, watch, or listen to any  
20 report of or commentary on the trial by any person  
21 connected with the case or by any medium of  
22 information, including, without limitation, newspaper,  
23 television, the Internet, or radio. You're not to  
24 conduct any research on your own, which means you  
25 cannot talk with others, tweet others, text others,

1 Google issues or conduct any other kind of book or  
2 computer research with regard to any issue, party,  
3 witness, or attorney involved in the case. You're not  
4 to form or express any opinion on any subject connected  
5 with the trial until the case is finally submitted to  
6 you.

7 We'll see you back at 10:30 tomorrow.

8 Thanks, folks.

9 THE BAILIFF: All rise.

10 (Whereupon, jury exits the courtroom.)

11 THE COURT: All right. We're outside the  
12 presence of the jury.

13 Anything we need to put on the record, guys?

14 MR. CLOWARD: No, Judge.

15 THE COURT: Do you need to make a record?  
16 Mr. Smith wants to make a record.

17 MR. SMITH: Yes, Your Honor. We wanted to  
18 mark as Court exhibits four items. One is the filed  
19 complaint. One is the filed summons.

20 MR. JAFFE: We can do this tomorrow.  
21 There's -- we're going to ask the Court to take  
22 judicial notice of certain filings, Your Honor.

23 THE COURT: Do you want to do it now? We  
24 have a couple minutes now.

25 MR. SMITH: We're asking the Court to take

1 judicial notice of the filed complaint in this matter,  
2 the filed summons. The third item is the filed answer  
3 to the complaint and then the fourth item is -- I  
4 believe there are 13 supplemental disclosures of  
5 records, documents, witnesses, just the pleadings only  
6 with no records attached to those.

7 THE COURT: Are we talking about plaintiff's  
8 disclosures or defendant's?

9 MR. SMITH: No. Defendant's.

10 THE COURT: Defendant's disclosures?

11 MR. SMITH: Correct.

12 THE COURT: And you want us to mark those as  
13 court exhibits for what reason?

14 MR. JAFFE: Your Honor, it references dates  
15 of disclosures of various documents.

16 THE COURT: Okay. And those are relevant  
17 because of objections?

18 MR. JAFFE: What's that?

19 THE COURT: Those are relevant because of  
20 certain objections that have been made during trial?

21 MR. JAFFE: Well, that and arguments.  
22 Actually, arguments. I mean, obviously, a 16.1  
23 disclosure document or a supplement is not admissible  
24 in evidence. So I'm simply going to ask the Court to  
25 take notice based upon these documents -- the dates

1 various documents were disclosed.

2 THE COURT: Okay.

3 MR. JAFFE: Thank you.

4 THE COURT: Do you have a problem with any of  
5 that?

6 MR. CLOWARD: Well, it's hard for me to tell  
7 whether I have an objection because I don't know why  
8 he's asking to do it. I would like to know the reason  
9 why.

10 The other thing, I guess, just for the sake  
11 of completeness, I would ask that the amended answer  
12 also be attached as -- with that same -- with that same  
13 pack of exhibits.

14 THE COURT: Well, the complaint and answer  
15 are already pleadings on file in the case. If it gets  
16 appealed, those are already going up. You can mark  
17 them as a Court exhibit if you want to, but it's --

18 MR. JAFFE: Okay.

19 THE COURT: -- it's not necessary.

20 MR. JAFFE: I understand. But the problem  
21 is -- well, like I said, we're going to ask the Court  
22 to take notice of certain different documents and dates  
23 which will become important relative to arguments in  
24 the case. It has to do with pleadings. Rather than  
25 having to sift through a court file or everything



1 online, we'll just have it right there so that if the  
2 Court needs.

3 THE COURT: That's fine.

4 MR. JAFFE: Thank you, sir.

5 THE COURT: Mr. Cloward, if you have a  
6 problem when they try to bring it up, you just have to  
7 voice objection at that point, I guess.

8 MR. CLOWARD: Fair enough. Your Honor, may I  
9 approach and move these out of -- kind of clean up the  
10 courtroom?

11 THE COURT: Yes. Is that all we have outside  
12 the presence of the jury today?

13 MR. CLOWARD: I think so. From me.

14 THE COURT: Mr. Jaffe, anything else?

15 MR. JAFFE: No, sir.

16 THE COURT: All right. Off the record.

17 (Thereupon, the proceedings  
18 adjourned at 4:50 p.m.)  
19  
20  
21  
22  
23  
24  
25

CERTIFICATE OF REPORTER

STATE OF NEVADA )  
 ) ss:  
COUNTY OF CLARK )

I, Jennifer O'Neill, a duly commissioned  
Notary Public, Clark County, State of Nevada, do hereby  
certify: That I reported the proceedings commencing on  
Monday, July 22, 2013, at 1:24 o'clock p.m.

That I thereafter transcribed my said  
shorthand notes into typewriting and that the  
typewritten transcript is a complete, true and accurate  
transcription of my said shorthand notes.

I further certify that I am not a relative or  
employee of counsel of any of the parties, nor a  
relative or employee of the parties involved in said  
action, nor a person financially interested in the  
action.

IN WITNESS WHEREOF, I have set my hand in my  
office in the County of Clark, State of Nevada, this  
15th day of March, 2014.

  
JENNIFER O'NEILL, RPR, CCR #763

<b>\$</b>	<b>2007 [1]</b> 59/9	<b>7425 [1]</b> 2/10
<b>\$1,600 [1]</b> 140/10	<b>2009 [4]</b> 45/5 45/7 95/13 104/16	<b>763 [2]</b> 1/25 149/22
<b>\$267 [1]</b> 140/9	<b>2010 [1]</b> 94/16	<b>8</b>
<b>\$267 [1]</b> 140/9	<b>2012 [7]</b> 46/17 109/2 109/8 109/9 109/12 109/15 110/7	<b>801 [1]</b> 2/4
<b>\$299 [1]</b> 102/9	<b>2012 [7]</b> 46/17 109/2 109/8 109/9 109/12 109/15 110/7	<b>801 [1]</b> 2/4
<b>\$4,000 [1]</b> 34/21	<b>2013 [8]</b> 1/22 4/1 15/20 109/22 109/25 112/21 112/24 149/7	<b>85 percent [4]</b> 92/5 93/9 93/10 93/13
<b>'80s [2]</b> 91/9 91/9	<b>2014 [1]</b> 149/19	<b>89101 [1]</b> 2/5
<b>1</b>	<b>215 [1]</b> 61/19	<b>89128 [1]</b> 2/10
<b>1 through 3 [1]</b> 46/19	<b>22 [8]</b> 1/22 3/5 4/1 60/3 109/25 112/21 112/24 149/7	<b>9</b>
<b>1/2 [1]</b> 83/3	<b>23 [3]</b> 54/22 58/21 58/25	<b>9-mile-per-hour [1]</b> 79/21
<b>10 [6]</b> 1/12 48/15 72/1 77/5 77/10 88/1	<b>24 [3]</b> 3/8 54/12 88/14	<b>90 percent [1]</b> 92/8
<b>10 feet [1]</b> 81/6	<b>25 [7]</b> 35/25 79/22 83/2 129/8 129/20 130/6 131/1	<b>95 [2]</b> 129/12 129/13
<b>10.3 [1]</b> 80/13	<b>25 percent [1]</b> 13/22	<b>998 [1]</b> 103/1
<b>100 [3]</b> 35/23 41/7 86/3	<b>250 [1]</b> 126/20	<b>A</b>
<b>100 percent [1]</b> 102/6	<b>28 [3]</b> 46/16 109/9 109/15	<b>A-11-636515-C [1]</b> 1/1
<b>101 [2]</b> 3/9 57/4	<b>29 [1]</b> 109/22	<b>abilities [2]</b> 6/24 6/25
<b>106 [2]</b> 117/6 117/8	<b>3</b>	<b>ability [4]</b> 56/18 58/11 69/12 71/17
<b>109 [1]</b> 56/25	<b>3 through 6 [1]</b> 11/14	<b>able [5]</b> 9/8 65/9 85/25 105/20 144/5
<b>10:30 [3]</b> 144/6 144/7 145/7	<b>30 [8]</b> 1/2 35/25 43/22 72/6 75/13 75/16 75/17 75/20	<b>abnormal [1]</b> 120/21
<b>11 [5]</b> 1/13 45/22 47/3 48/15 77/5	<b>300 [1]</b> 39/14	<b>about [105]</b> 7/1 8/17 11/11 12/10 13/21 13/23 16/20 16/22 17/8 18/21 19/23 20/18 21/4 22/10 23/20 25/10 25/24 27/11 27/15 28/21 29/7 29/10 29/25 30/2 30/19 32/8 32/22 35/18 35/24 36/2 36/22 38/4 39/6 39/9 41/9 43/22 47/9 47/9 52/6 52/20 53/6 53/8 54/18 55/13 55/16 55/20 59/6 62/8 63/1 63/8 67/10 73/7 73/21 73/22 74/14 76/15 78/2 80/4 81/2 83/9 83/24 88/1 89/14 91/4 91/7 95/19 97/2 97/5 98/8 102/20 103/24 105/24 106/1 106/14 106/22 107/24 109/25 110/21 110/22 111/22 112/22 113/19 114/23 116/5 116/6 118/22 120/14 122/15 124/3 124/23 127/2 127/2 131/13 131/19 132/25 133/1 135/5 136/17 137/13 137/24 139/8 141/4 141/11 144/18 146/7
<b>11.2 [1]</b> 80/13	<b>31 [4]</b> 75/13 75/16 75/17 75/22	<b>about what [1]</b> 91/7
<b>116 [1]</b> 57/10	<b>316-4111 [1]</b> 2/11	<b>above [2]</b> 93/10 140/11
<b>12 [14]</b> 27/17 28/9 54/25 72/9 73/11 77/7 79/18 79/19 80/9 80/12 110/9 110/12 117/9 131/7	<b>32 [2]</b> 11/9 11/10	<b>abrupt [1]</b> 138/7
<b>12 through 13 [1]</b> 55/1	<b>33 [1]</b> 11/13	<b>abruptly [1]</b> 71/15
<b>12-mile-per-hour [1]</b> 79/23	<b>34 [1]</b> 43/24	<b>absolute [3]</b> 28/9 80/11 136/21
<b>1229 [1]</b> 56/25	<b>35 [1]</b> 41/16	<b>absolutely [7]</b> 22/2 40/9 41/11 63/2 101/7 107/4 135/10
<b>1239 [1]</b> 56/25	<b>350 [1]</b> 39/17	<b>absorber [2]</b> 76/6 76/12
<b>126 [1]</b> 130/1	<b>37 [7]</b> 54/2 54/5 54/8 59/4 59/7 60/3 64/21	<b>absorbers [1]</b> 77/1
<b>127 [1]</b> 130/3	<b>38 [3]</b> 59/4 59/17 64/21	<b>absurd [1]</b> 98/9
<b>128 [2]</b> 57/4 131/8	<b>4</b>	<b>academically [2]</b> 64/19 65/3
<b>13 [6]</b> 55/1 95/13 126/16 126/18 130/3 146/4	<b>4-DVD [1]</b> 102/8	<b>accelerate [6]</b> 62/21 63/15 64/1 71/8 126/8 139/7
<b>132 [1]</b> 3/10	<b>40 [1]</b> 72/2	<b>accelerated [9]</b> 55/20 59/25 60/11 62/15 63/11 63/12 63/13 65/18 71/15
<b>14 [4]</b> 79/21 83/2 91/22 129/8	<b>40s [1]</b> 89/2	<b>accelerates [6]</b> 59/2 62/2 63/8 64/2 64/7 64/22
<b>15 [5]</b> 52/20 66/17 89/10 131/7 137/17	<b>4111 [1]</b> 2/11	<b>accelerating [6]</b> 55/13 55/15 55/23 62/7 62/20 126/9
<b>150 [1]</b> 81/11	<b>44 [1]</b> 3/8	<b>acceleration [23]</b> 63/9 64/4 64/12 70/15 77/23 79/20 79/22 81/1 81/3 83/9 83/16 83/19 83/22 87/23 94/21 126/7 126/7 136/19 137/23 137/24 138/1 138/5 138/11
<b>15th [1]</b> 149/19	<b>444-4444 [1]</b> 2/5	<b>accelerations [1]</b> 82/22
<b>16 [1]</b> 30/19	<b>4444 [1]</b> 2/5	<b>accelerometer [1]</b> 137/15
<b>16.1 [1]</b> 146/22	<b>45 percent [7]</b> 5/2 6/10 6/14 9/6 9/15 9/20 10/6	<b>accelerometers [1]</b> 42/10
<b>160 [1]</b> 5/12	<b>45-minute [2]</b> 50/12 50/15	<b>accept [1]</b> 9/11
<b>17 [2]</b> 3/4 130/3	<b>47 [1]</b> 92/8	<b>accident [35]</b> 5/3 5/14 17/11 17/12 29/11 33/19 33/22 35/14 36/3 36/7
<b>18 [6]</b> 83/3 83/4 109/2 109/8 129/12 129/18	<b>47-year-old [1]</b> 43/15	
<b>19 [2]</b> 83/3 83/4	<b>48 [2]</b> 88/14 132/18	
<b>19.5 [2]</b> 129/14 129/18	<b>49 [1]</b> 3/9	
<b>1970 [1]</b> 136/2	<b>4:50 [1]</b> 148/18	
<b>1980s [1]</b> 92/25	<b>5</b>	
<b>1981 [1]</b> 92/14	<b>5-cent [1]</b> 13/19	
<b>1985 [1]</b> 92/14	<b>50 [3]</b> 39/14 92/5 93/10	
<b>1991 [1]</b> 107/24	<b>50s [1]</b> 93/13	
<b>1993 [1]</b> 37/15	<b>527 [1]</b> 57/10	
<b>1994 [1]</b> 98/2	<b>6</b>	
<b>1995 [1]</b> 38/11	<b>6 miles [1]</b> 71/12	
<b>1998 [1]</b> 38/13	<b>6-mile-an-hour [1]</b> 74/8	
<b>1999 [1]</b> 57/11	<b>60 [1]</b> 89/1	
<b>1:24 [2]</b> 4/2 149/7	<b>636515 [2]</b> 4/11 66/18	
<b>2</b>	<b>65 [1]</b> 92/7	
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<b>2004 [6]</b> 110/9 110/11 110/12 111/15 112/1 115/12	<b>7-Eleven [1]</b> 124/10	
<b>2006 [3]</b> 39/10 42/22 121/13	<b>70 [1]</b> 89/1	
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1 CASE NO. A-11-636515-C

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DISTRICT COURT

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CLARK COUNTY, NEVADA

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\* \* \* \* \*

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9 MARGARET G. SEASTRAND, )

10 Plaintiff, )

11 vs. )

12 RAYMOND RIAD KHOURY, DOES 1 )

through 10; and ROE ENTITIES )

13 11 through 20, inclusive, )

14 Defendants. )

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16

17

REPORTER'S TRANSCRIPT

18

OF

19

JURY TRIAL

20

BEFORE THE HONORABLE JERRY A. WIESE, II

21

DEPARTMENT XXX

22

DATED MONDAY, JULY 22, 2013

23

24

25 REPORTED BY: JENNIFER O'NEILL, RPR, NV CCR #763

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1 LAS VEGAS, NEVADA, MONDAY, JULY 22, 2013;

2 1:24 P.M.

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4  
5 P R O C E E D I N G S

6 \* \* \* \* \*

7  
8 THE BAILIFF: All rise.

9 (Whereupon, jury entered the courtroom.)

10 THE COURT: Go ahead and be seated. Welcome  
11 back, folks. Back on the record in Case No. 636515.

12 Parties stipulate to the presence of the  
13 jury?

14 MR. JAFFE: Yes, Your Honor.

15 MR. CLOWARD: Yes, Judge.

16 THE COURT: All right. We've still got  
17 Mr. Dinneen on the stand.

18 Just be reminded, sir, you're still under  
19 oath. Okay?

20 THE WITNESS: Yes, Your Honor. Thank you.

21 THE COURT: Go ahead, Mr. Smith.

22 MR. SMITH: Thank you.

23 CROSS-EXAMINATION (CONT'D)

24 BY MR. SMITH:

25 Q. Now, Mr. Dinneen, you testified that you

1 determined that the plaintiff was -- or her functional  
2 household capacity was 45 percent lower than it was  
3 prior to the accident; is that correct?

4 A. Yes.

5 Q. And that figure is directly based on this  
6 functional capacity checklist that you discussed  
7 previously, correct?

8 A. Yes.

9 Q. And that's a checklist that's completed by  
10 the plaintiff herself, correct?

11 A. Yes.

12 Q. 160 some-odd answers. And she goes through  
13 and scores it from a zero to a 5 depending on how it  
14 has changed since the accident; is that correct?

15 A. Yes. She does the rating and I score it.

16 Q. So she does the rating and then you tabulate  
17 the score at the end, correct?

18 A. Correct.

19 Q. Now, when you do that, you're not going back  
20 and checking -- for example, if she were to give a 3  
21 instead of a 4 on one, you're not going back through  
22 her medical records and saying, well, that should be a  
23 3 or 4, correct?

24 A. No, I'm not.

25 Q. You're taking her at her word, excuse me, and

1 taking that at face value; is that correct?

2 A. Yes.

3 Q. So that's a purely subjective  
4 determinative -- or a purely speculative factor in  
5 determining her functional capacity, correct?

6 A. Yes, it is. Although, as I previously  
7 testified to, I also look at the medical records and  
8 other information. But on her part, in filling out the  
9 forms and selecting the 1 to 5, that's her decision.

10 Q. Correct. And no part of that 45 percent  
11 limitation is determined by the medical records  
12 themselves, correct?

13 A. No. That's --

14 Q. That 45 percent is the score that comes from  
15 scoring that functional capacity checklist, correct?

16 A. Yes. Although, not on this case, on some  
17 cases, you do see divergence between what's in the  
18 medical records and what the person fills out. On  
19 those instances, we'll try to go further and figure out  
20 why that is.

21 Q. That wasn't the case here?

22 A. No, it was not.

23 Q. When you're determining somebody's household  
24 abilities or any limitations on their household  
25 abilities, you're interested in what the physicians



1 have to say about their future medical care; is that  
2 fair?

3 A. It's one of the factors but not -- it's one  
4 of the factors that you look at over the person's life  
5 expectancy, but it's not a factor that you use at the  
6 time you do the calculation.

7 Q. It's something that would be helpful to you  
8 to give you a big picture; is that fair to say?

9 A. Yes.

10 Q. And you wouldn't necessarily care whether  
11 that was information that came from one of defendant's  
12 doctors or one of plaintiff's doctors. If there are  
13 opinions out there from doctors regarding her future  
14 treatment, that's something that you would like to see;  
15 is that fair?

16 A. Yes, in general, that is.

17 Q. And in this case, you actually looked at the  
18 life care plan and the medical records from Dr. Gross;  
19 is that correct?

20 A. I did.

21 Q. Were you aware that Dr. Siegler had issued a  
22 report addressing the plaintiff's future care needs?

23 A. No.

24 Q. So that's not something that you have seen?

25 A. I have not seen that.

1       Q.   Were you aware of that at the time of your  
2 deposition?

3       A.   I think in my deposition there were a couple  
4 of doctors that were mentioned to me whose reports I  
5 have not seen and I have not seen them yet.

6       Q.   All right. So at the time of your  
7 deposition, you hadn't seen those; is that correct?

8       A.   Correct. I wasn't -- I wasn't told the  
9 content of Siegler at my deposition or any of the other  
10 doctors for that matter. I was just told -- I wouldn't  
11 even say the existence of them. I was asked if I had  
12 seen Dr. Siegler's records to which I testified, no, I  
13 had not. And I still have not seen -- and I think  
14 there were two other doctors in that section of my  
15 deposition, and I still have not seen those records.

16       Q.   Correct. And, in fact, your testimony at the  
17 time was if they have any opinions about her future  
18 care, that would be something I would like to look at;  
19 isn't that fair?

20       A.   Yes. I would agree with that.

21       Q.   And you haven't looked at that since then;  
22 isn't that correct?

23       A.   No, I have not seen those.

24       Q.   And that's because those weren't provided to  
25 you by counsel; is that correct?

1       A.    Yes. Well, they haven't been provided to me,  
2 that's correct.

3       Q.    Fair enough. Is it safe to say that the  
4 functional capacity checklist that you referred to is  
5 the primary factor that you use in determining the  
6 45 percent functional loss?

7       A.    Is the primary factor? You know, I've never  
8 really been able to weight that well because you  
9 consider everything. In other words, I don't -- I  
10 don't just look at a functional capacity checklist and  
11 always accept that percentage. On the other hand, it  
12 is the driving factor between the selection of a  
13 percentage and that's certainly true.

14       Q.    Right. And that's my question is: It's the  
15 primary factor in reaching that 45 percent limitation,  
16 correct?

17       A.    Primary factor? Certainly, it's a factor.

18       Q.    Would you say it's a primary factor? You  
19 previously -- let me rephrase it this way.

20             You previously testified that that 45 percent  
21 number comes directly from the functional capacity  
22 checklist, correct?

23       A.    Yeah. In this case I would say it's primary.  
24 There are some times when I have discarded functional  
25 capacity checklists for a variety of reasons, but that

1 was not the case here, so I would say it's primary. I  
2 just wouldn't want my testimony in the future to say  
3 that it's always primary.

4 Q. Fair enough. In this case it was the primary  
5 factor?

6 A. Yeah. The 45 percent, yes, I would agree  
7 with that.

8 Q. You would agree with me that the functional  
9 capacity checklist is extremely limited in its  
10 usefulness in projecting into the future, wouldn't you?

11 A. There have been a couple of studies, although  
12 small sample sizes, where they've gone back a few years  
13 later to check whether or not those percentages were  
14 the same. And, generally, those studies have been  
15 positive. But other than those, those are the only  
16 ones that are out there that I could refer to as an  
17 expert and say there is some support for that.

18 Q. And you said those are just a few cases,  
19 correct?

20 A. Yeah. I remember looking at it and saying  
21 the sample size was small, but I don't remember what  
22 the sample size was. Sample size is just the number of  
23 people who were tested and then retested.

24 Q. So would you agree with me, then, that the  
25 functional capacity checklist is extremely limited in

1 its usefulness in projecting into the future?

2 A. If you use it in a vacuum, yes. In other  
3 words, if you're not looking at what the person tells  
4 you and what the medical records tell you and that's  
5 all you have, I would say that it's limited. You  
6 can't, in my opinion, use it just in a vacuum in and of  
7 itself.

8 Q. Okay. So if you would look at your  
9 deposition transcript on page 32. Okay. Actually,  
10 moving down to -- well, on page 32 you see that you  
11 were asked about reliance on the plaintiff's subjective  
12 reports, and then you give an answer. I'd like you to  
13 move to page 33, and right there read there lines  
14 3 through 6.

15 A. If I'm given a functional capacity  
16 evaluation -- now, a functional capacity evaluation is  
17 different from a functional capacity checklist.

18 Q. What's a functional capacity evaluation?

19 A. A functional capacity evaluation are most  
20 often done by physical and occupational therapists and  
21 they're usually done over one day, sometimes two days,  
22 where they bring the person in and they'll have them  
23 lift a certain amount of weight, do different types of  
24 activities, and record those activities. That's a  
25 different process from a functional capacity checklist

1 that we use.

2 Q. And a functional capacity evaluation was not  
3 performed in this case; is that correct?

4 A. I have not seen one.

5 Q. So if one was performed, it wasn't provided  
6 to you; is that correct?

7 A. Correct. I do not believe one has been done,  
8 but I have not seen one.

9 Q. Moving on to the life care plan and the  
10 testimony that you gave about your calculations  
11 regarding the present value of the life care plan.

12 Now, you testified that the future costs are  
13 for medical care but there's no guarantee that  
14 plaintiff will use that for medical care; isn't that  
15 correct?

16 A. Yeah. That's correct. I don't have any way  
17 of guarantying that money that's set aside is used for  
18 its intended purpose. That's true.

19 Q. Thank you. So if a jury were to award the  
20 plaintiff future costs for that, she could spend it on  
21 that. She could spend it on whatever else she wanted  
22 to; isn't that fair?

23 A. Yes, that is -- that is fair in most  
24 circumstances.

25

1 Q. One moment.

2 Now, in calculating the present value of the  
3 life care plan, you looked at the life care plan that  
4 was provided to you by Dr. Gross, correct?

5 A. Yes.

6 Q. And, essentially, what you're saying when you  
7 calculate the present life care value or, excuse me,  
8 the present value of that life care plan, you're  
9 basically saying assuming that these numbers that  
10 Dr. Gross gave are correct, then this is the amount of  
11 the value of that life care plan; is that correct?

12 A. Yes.

13 Q. You're not determining whether those were  
14 accurate or whether that care was necessary, correct?

15 A. Yes.

16 Q. But if Dr. Gross is wrong, how does that  
17 affect your testimony or your calculations?

18 A. It would depend upon where the error is that  
19 he made. A small error like there was a 5-cent  
20 difference in the cost of medication would not be  
21 something I would be horribly concerned about. A, say,  
22 25 percent error in the cost of medication would be  
23 something I could get concerned about.

24 The method of calculation, though, is the  
25 same. You're just starting with a lower figure instead

1 of the figure that would, say, be in Dr. Gross's report  
2 if the value were overstated. And the same thing if it  
3 were understated and actually cost more.

4 Q. And, similarly, then if there are elements  
5 included in Dr. Gross's life care plan that ultimately  
6 experts determine are not necessary, that would affect  
7 your testimony regarding the value of those; is that  
8 fair?

9 A. The value of those? If they were not  
10 necessary as opposed to an incorrect cost, certainly.  
11 If a value was not necessary -- if a value -- if an  
12 item in the life care plan was not necessary to future  
13 care, then that would affect the present value  
14 calculation because it shouldn't be in there.

15 Q. So, in short, in calculating that, you're  
16 assuming that all of those future medical necessities  
17 are, in fact, necessary; isn't that correct?

18 A. Well, I just testified that medical necessity  
19 of what's in the plan is not something I make a  
20 judgment on. But, clearly, if there were an item that  
21 for whatever the reason shouldn't have been in there,  
22 you know, or wasn't priced correctly, the present value  
23 total is going to be incorrect.

24 Q. So just to sum that up: You're not making a  
25 determination as to whether something is medically



1 necessary, but if it's included, then you're going to  
2 calculate the value for it; is that fair?

3 A. That's fair.

4 Q. And if somebody else who is qualified to  
5 determine whether it was necessary or not determines  
6 that it wasn't, then that would affect the value of  
7 your future life care plan; is that correct?

8 A. Yeah. If you determined it wasn't necessary,  
9 then that value would need to be subtracted.

10 Q. Mr. Dinneen, prior to writing your reports --  
11 at any time prior to writing your reports, what  
12 depositions had you reviewed?

13 A. I know I had the plaintiff's deposition. I  
14 have Dr. Gross's deposition. I'll have to go back  
15 through the file and seek what other depositions I may  
16 have, but those are the ones I know off the top of  
17 head. I'm willing to do that if you want to take the  
18 time.

19 Q. In fact, why don't we just turn to the report  
20 that you authored in May of 2013. At the back of that,  
21 there's a list of the documents that you reviewed in  
22 preparing that; isn't that correct?

23 A. There is.

24 Q. And that's all the documents that you  
25 reviewed to date in the case, correct?

1           A.    I believe -- what I would want to do is go  
2 back to the earlier report and make sure nothing is  
3 restated, but, yes, the file attachment content list in  
4 those two reports lists everything I had in my file.

5           Q.    Okay. And going through those two reports,  
6 then, what depositions had you reviewed in this case?

7           A.    Well, I do have the plaintiff's deposition  
8 listed in the first one and I know I have Dr. Gross's  
9 deposition, but I didn't see it on the content list.  
10 Maybe I missed it. I was just going back. And then I  
11 have my deposition. So those are the ones I believe  
12 I've reviewed.

13          Q.    So you reviewed the plaintiff's deposition  
14 and Dr. Gross's deposition, correct?

15          A.    Correct.

16          Q.    At any point did you review the deposition of  
17 Dr. Muir?

18          A.    I don't see it listed, and I don't believe  
19 that I have that.

20          Q.    What about Dr. Khavkin?

21          A.    No.

22          Q.    What about Dr. Belsky?

23          A.    Doctor who?

24          Q.    Belsky.

25          A.    I don't think so. But, again -- I don't

1 believe so.

2 Q. Same goes for Villablanca, Siegler, and  
3 Schifini?

4 A. Yes.

5 Q. Haven't reviewed any of those depositions; is  
6 that correct?

7 A. Correct.

8 Q. What about any of the before and after  
9 witnesses? There were several depositions taken of  
10 acquaintances, family members of Ms. Seastrand,  
11 discussing her condition before the accident and after  
12 the accident.

13 Did you review any of those?

14 A. No.

15 MR. SMITH: Nothing further.

16 THE COURT: Redirect.

17

18 REDIRECT EXAMINATION

19 BY MS. BRASIER:

20 Q. Counsel asked if you had seen Dr. Siegler's  
21 deposition at the -- or Dr. Siegler's report at the  
22 time of your deposition.

23 Do you recall that?

24 A. Yes.

25 Q. And Mr. Jaffe brought up the fact that

1 Dr. Siegler authored a report during the time of your  
2 deposition.

3 MR. SMITH: Objection, Your Honor. This goes  
4 beyond cross-examination. He can't discuss the report  
5 that he hasn't seen.

6 THE COURT: The question that she just asked  
7 is Mr. Jaffe brought up the fact that Dr. Siegler  
8 authored a report during the time of your deposition.  
9 I think that question is okay. Overruled.

10 THE WITNESS: Okay. I'm sorry. I lost the  
11 question.

12 THE COURT: I'll read it to you again.  
13 Counsel asked if you had seen Dr. Siegler's deposition  
14 and Mr. Jaffe brought up the fact that Dr. Siegler  
15 authored a report during the time of your deposition.

16 THE WITNESS: Yes.

17 BY MS. BRASIER:

18 Q. And did Mr. Jaffe show you that report during  
19 your deposition?

20 A. No.

21 Q. You were talking quite a bit about the  
22 functional capacity checklist.

23 Do you recall that?

24 A. Yes.

25 Q. And in the case that you or cases that you've

1 been retained by Jaffe's office, did you use a  
2 functional capacity checklist?

3 A. Yes.

4 Q. And you met Margie prior to preparing your  
5 reports; is that right?

6 A. I did.

7 Q. All right. And would it be fair to say that  
8 the loss of household services number that you  
9 calculated was based on her current state on the day  
10 that you met her in July of last year?

11 A. Yes.

12 Q. And why don't you take future surgery into  
13 account when you're calculating the loss for her?

14 A. Because you never know what the outcome of  
15 that surgery may be. So you take where the person is  
16 when you interview them because a future surgery can  
17 improve some function sometimes or make some functions  
18 worse. So it's important to know that it's out there.  
19 But there's no way that we have to predict what change  
20 in the functionability that a person has to do  
21 household services just because there's a planned  
22 surgery.

23 Q. And there was also some questions about how  
24 your present value of the life care plan would be  
25 affected if the costs were overestimated.

1 Do you recall that?

2 A. Yes, I do.

3 Q. How would the value of the present value of  
4 the life care plan be affected if those costs were  
5 underestimated?

6 A. There would not be enough funds to pay for  
7 the future medical treatment.

8 MS. BRASIER: Thank you. I don't have any  
9 further questions.

10 MR. SMITH: Just a couple questions, Your  
11 Honor.

12 THE COURT: Okay.

13

14 RECROSS-EXAMINATION

15 BY MR. SMITH:

16 Q. Mr. Dinneen, when you are retained are you --  
17 well, let me ask it this way. We talked a little bit  
18 about the Siegler report that was brought up in your  
19 deposition, correct?

20 A. Yes.

21 Q. Would you expect your -- the attorney that  
22 represented you to provide that to you, if that was  
23 something that you were going to see?

24 A. More often than not the material comes from  
25 my retaining attorney. I have occasionally been given

1 material at a deposition by the opposing attorney.

2 Sorry. I should have added that in.

3 Q. And counsel just asked a couple of questions  
4 about the functional capacity checklist, and you said  
5 that that is basically her status on the date when she  
6 filled that out; is that correct?

7 A. Yes. I would agree with that.

8 Q. So it's kind of a snapshot in time of how she  
9 is on that date; is that fair?

10 A. Yes.

11 Q. And, therefore, in making your opinions based  
12 on her representations -- sorry. You're making your  
13 opinions based then on her representations of her  
14 condition on that date; is that correct?

15 A. Yes. In conjunction with the other material  
16 I read. But, yes, that's correct.

17 Q. And so in performing that calculation, you  
18 are not factoring in how she got that condition; is  
19 that fair?

20 A. That's fair. Other than when you discuss how  
21 to fill out the functional capacity checklist, you ask  
22 the person to compare where they're filling it out  
23 today with where they were the day before they got  
24 hurt.

25 Q. And that then relies on their subjectivity,



1 correct?

2 A. It does. Absolutely.

3 MR. SMITH: That's all.

4 THE COURT: Any more?

5

6 FURTHER REDIRECT EXAMINATION

7 BY MS. BRASIER:

8 Q. I just want to make something clear,  
9 Mr. Dinneen. The functional capacity checklist that  
10 you've been kind of grilled about a little bit, that's  
11 the same checklist that you used when you were retained  
12 to work on one of Mr. -- a client for Mr. Jaffe's  
13 office; is that right?

14 A. Yes, I did.

15 MS. BRASIER: Okay. Thank you.

16 MR. SMITH: It goes beyond the scope of  
17 direct or cross.

18 THE COURT: Do you have any other questions?

19 MR. SMITH: No other questions.

20 THE COURT: Ladies and gentlemen, any  
21 questions for Mr. Dinneen? I don't see any hands.

22 Thank you, sir.

23 THE WITNESS: Thank you, Your Honor.

24 THE COURT: Appreciate your time. Have a  
25 good day.

1           THE WITNESS: Thank you, ladies and  
2 gentlemen. This is a copy of my deposition. I've had  
3 a horrible habit sometimes of picking those up and  
4 throwing it in with my things.

5           THE COURT: Thank you.

6           THE WITNESS: There's also this list over  
7 here, Your Honor, which was not mine. I don't want to  
8 have somebody calling me that I walked off with an  
9 exhibit.

10          THE COURT: Thank you.

11          THE WITNESS: Thank you.

12          THE COURT: Who is plaintiff's next witness?

13          MR. CLOWARD: Dr. Art Croft.

14          THE COURT: Come on up, Doctor. We're going  
15 to put you up here on the witness stand.

16                Do you want to come up and put your bag down.  
17 Remain standing by the chair, if you would, and raise  
18 your right hand.

19           **THE CLERK: You do solemnly swear the**  
20 **testimony you're about to give in this action shall be**  
21 **the truth, the whole truth, and nothing but the truth,**  
22 **so help you God.**

23           THE WITNESS: I do.

24           THE CLERK: Please state your name and spell  
25 it for the record, please.

1 THE WITNESS: Arthur C. Croft, C-R-O-F-T.

2 THE COURT: Thank you, sir. You can go ahead  
3 and be seated.

4

5 DIRECT EXAMINATION

6 BY MR. CLOWARD:

7 Q. How are you doing today, Dr. Croft?

8 A. I'm well. How are you?

9 Q. Good. Before we start, what I'm asking is  
10 that all of your opinions today be given on a more  
11 likely than not basis.

12 Fair enough?

13 A. Yes.

14 Q. Dr. Croft, during the opening statement, some  
15 comments were made so I would like you to -- the first  
16 thing you to do is walk us through your education,  
17 experience, your CV, and so forth.

18 A. Well, I have a -- my undergraduate education  
19 is -- I have an associate's in science degree in  
20 chemistry. I have a bachelor's of science degree in  
21 biology.

22 Graduate programs, I have a master's degree  
23 in biology. I also have a master's degree in public  
24 health. I'm right now in the dissertation stage of my  
25 Ph.D. in epidemiology.

1 I also have a four-year chiropractic degree,  
2 and I did a three-year residency in orthopedics. I'm  
3 board-certified in chiropractic orthopedics.

4 Q. Dr. Croft, did you get these degrees out of  
5 your garage?

6 A. I'm sorry?

7 Q. Did you study for these degrees out of your  
8 garage?

9 A. No.

10 Q. You know, tell us about this Ph.D. that you  
11 got. Mr. Jaffe says it's from Walden --

12 MR. JAFFE: Objection, Your Honor.

13 MR. CLOWARD: What's the basis of your  
14 objection?

15 MR. JAFFE: My comments are not evidence in  
16 the opening statement. It's leading and already  
17 argumentative before we've heard an answer.

18 THE COURT: I'm going to allow him to say  
19 what you said. If it's an incorrect recitation of what  
20 you said, it might be objectionable.

21 BY MR. CLOWARD:

22 Q. There was a little bit of a criticism for  
23 your education being from Walden University.

24 Can you tell us a little bit about that, the  
25 Ph.D.

1       A.    Yeah.  Walden University is a fully  
2 accredited university.  It's the first university that  
3 actually had full accreditation to give Ph.D. program,  
4 and it's not all Internet provided.  There are some  
5 residencies that go along with it.

6               It's interesting that nowadays most major  
7 universities are going to the same program, so Harvard,  
8 Johns Hopkins University, UCLA.  My old alma mater at  
9 Loma Linda University does this now, so it's kind of  
10 the new thing to do.

11       Q.    And you're familiar with Dr. Smith's degrees,  
12 correct?

13       A.    I understand he has a Ph.D.  I'm not quite  
14 sure what he studied.

15       Q.    Do you know the schools where those were  
16 obtained?

17       A.    I think I read the University of Michigan or  
18 Michigan State was one of them.

19       Q.    Are the universities where you got your  
20 education governed by any sort of, you know,  
21 accreditation society?

22       A.    Well, Walden is accredited by the North  
23 Central Accrediting Agency which also accredits  
24 University of Michigan or Michigan State, all the  
25 schools -- all the universities in that area.

1 Q. So it's the same accreditation organization?

2 A. Yes.

3 Q. So you didn't just write a letter to get this  
4 degree or anything. There's actually courses that you  
5 had to take?

6 A. There's a lot of courses.

7 MR. JAFFE: Objection. Misstates evidence.  
8 He has not received his degree.

9 MR. CLOWARD: That's correct.

10 BY MR. CLOWARD:

11 Q. Tell us about that, Doctor. How far are you  
12 in a Ph.D.?

13 A. Well, like I said, I'm in the dissertation  
14 stages so I've completed all my coursework, and I think  
15 I've been working on this for about eight years now.

16 Q. So it would be incorrect to say that you were  
17 in the program for 12 years?

18 A. That would be incorrect, yes.

19 Q. Doctor, can you tell us -- we hired you,  
20 correct?

21 A. Yes.

22 Q. What were you hired to do?

23 A. Well, I was hired to look at this case from a  
24 biomechanical standpoint. And, of course, when I do  
25 that in order to understand the biomechanics or the

1 mechanisms of injury, I need to know what kind of  
2 collision we have that we're dealing with in order to,  
3 you know, see that through the proper lens.

4           So I do a reconstruction of the crash and I  
5 started, of course, with the vehicle inspection and I  
6 have the police report and took it from there. We do  
7 the reconstruction. We come up with crash speeds or a  
8 range in my case of crash speeds because there's no  
9 absolute here, but I came up with 9 to 12 mile an hour  
10 impact speed.

11           Q. Did Dr. Smith agree or disagree with that  
12 calculation?

13           MR. JAFFE: Objection. Objection, Your  
14 Honor. I don't know if we're getting into his actual  
15 testimony yet without him having been admitted as an  
16 expert yet.

17           MR. CLOWARD: Judge, it's fine. I'll spend  
18 the time and go through the -- it's fine.

19           THE COURT: Go ahead.

20 BY MR. CLOWARD:

21           Q. Dr. Croft, let's talk about your education,  
22 your background, your CV, if you want to just pull it  
23 out. I know it's kind of boring to go through these  
24 things, but let's go ahead and do that.

25           MR. JAFFE: Your Honor, can we approach?



1 THE COURT: Come on up.

2 (Whereupon, a brief discussion was  
3 held at the bench.)

4 THE COURT: Sustained.

5 BY MR. CLOWARD:

6 Q. Dr. Croft, if we can go through your CV there  
7 and just tell us a little bit about your education.

8 Do you have any -- have you ever presented,  
9 have you written articles, and so forth?

10 A. Well, just briefly, in -- I talked about my  
11 education. I also have training as an accident  
12 reconstructionist at Northwestern University. I've  
13 taken basic and advanced courses there and a number of  
14 courses elsewhere on that subject.

15 I was in law enforcement for a while. I was  
16 with the San Diego Sheriff's Office where I was an  
17 underwater homicide investigator and worked with the  
18 underwater search and recovery team. And I did four  
19 years in the military. I'm a manuscript reviewer for a  
20 number of medical journals.

21 Q. What branch of the military?

22 A. U.S. Navy.

23 Q. What is it -- you say that you've reviewed  
24 manuscripts for journals.

25 Can you tell us a little bit about that

1 process. Number 1, what does that mean? And then I'll  
2 ask you a couple other questions about that.

3 A. Well, basically what happens is in most  
4 medical journals when an author sends a paper in to be  
5 published, hopefully to be published, it's  
6 peer-reviewed, which means that other experts in that  
7 area, whether it's surgery or neurology or whatever,  
8 will look at the paper and do what's called a blinded  
9 review which means they don't know who wrote it. But  
10 they'll look at the paper and they'll discuss its  
11 merits based on whether or not they made any kind of  
12 statistical errors or whether there's any design flaws  
13 in their methodology.

14 And in order to do that you really need to  
15 be -- you really should be a statistician or an  
16 epidemiologist and that's kind of where I come in. And  
17 I've been a reviewer for -- I have a list here on my  
18 CV -- I don't know how many journals there are but  
19 maybe about 16 or so.

20 Q. Would you just name a few of those off?

21 A. Well, *Spine*.

22 Q. What is *Spine*?

23 A. *Spine* is like the premier orthopedic journal  
24 for spine surgery. Others would be the *Journal of*  
25 *Neurological Disorder; Journal of Back and*

1 *Musculoskeletal Rehabilitation; Orthopedic and Muscular*  
2 *System; the Journal of Spine, which is different than*  
3 *Spine; Injury; Journal of Clinical Neurology and*  
4 *Neurosurgery; Journal of Forensic and Legal Medicine,*  
5 *Archives of Physical Medicine and Rehabilitation.*

6 Those kinds of journals.

7 Q. Okay.

8 A. Those are some of them.

9 Q. Can you tell us what is SAE?

10 A. SAE stands for Society of Automotive  
11 Engineers.

12 Q. Are you -- do you also review their  
13 manuscripts?

14 A. I am a manuscript reviewer for them, yes.

15 Q. So for all of those journals that you review  
16 the manuscripts -- so if I understand this correctly,  
17 when somebody wants to publish in, say, *Spine* or, you  
18 know, one of the other numerous journals, they write an  
19 article and then send it to someone like you to kind of  
20 fact check; is that accurate?

21 A. Yeah. Usually there's three of us. The way  
22 it works is that we either will say this is good to go  
23 right now or the author needs to change some things or  
24 needs to add some citation or needs to explain  
25 something. Or we may say this is so flawed that it

1 shouldn't be published, and then it's kind of a  
2 democratic thing. If two out of the three think that  
3 it's a good paper and the editor wants to go that way,  
4 then they'll publish it.

5 Q. Doctor, have you written any books or  
6 anything like that?

7 A. Yes.

8 Q. Can you tell us about that?

9 A. Well, I wrote -- the first book I wrote was  
10 actually the first medical textbook that was ever  
11 published on whiplash. That was the first book, first  
12 textbook.

13 Q. Who was that published by?

14 A. That was published by a company named  
15 Williams & Wilkins, which at the time was probably the  
16 largest publisher of medical books and now they've  
17 merged now with Lippincott so they're Lippincott  
18 Williams & Wilkins.

19 Q. So that is not something you published out of  
20 your garage?

21 A. No. It's not self-published, no.

22 Q. Tell us a little bit more about that book.  
23 Did you bring a copy of that?

24 A. I did, yeah.

25 Q. Can you show us that?

1       A.    Sure.  This is actually the second edition.  
2  It went into three editions and it was in print for 20  
3  years, and it was published in Japanese, Korean,  
4  English, Spanish.  I can't remember all the different  
5  languages.  So this was mainly -- this was the first  
6  book that was ever published on the subject.

7       Q.    Wow.  So you have been addressing this issue  
8  for quite a while?

9       A.    Yeah.  This is pretty much what I specialize  
10 in.

11       Q.    Doctor, can you -- did you -- is there a  
12 current version of that?

13       A.    Well, my current version is this book here.  
14 It's called *Whiplash and Mild Traumatic Brain Injuries*.

15       Q.    Okay.  Thank you, Doctor.

16       A.    Uh-huh.

17       Q.    Now, is it -- what is the difference --  
18 you've received some training in biomechanics, you said  
19 epidemiological risk analysis, and then accident  
20 reconstruction.

21               What does all that mean?

22       A.    Well, accident reconstruction is essentially  
23 the physics of collisions.  And so we look at usually  
24 crashes that have already happened and we're trying to  
25 answer questions like, you know, who crossed over the

1 double yellow line or who was speeding or who should  
2 have yielded to the other driver, who was driving  
3 sometimes. You know, I do fatality cases sometimes and  
4 sometimes a question of who was actually driving or  
5 that sort of thing.

6 In low-speed crashes, you know, really the  
7 goal is just to come up with some crash numbers, some  
8 metrics that I can then use to go into the  
9 biomechanical assessment.

10 Q. I want to get through some of your other  
11 qualifications. But, first, Doctor, you charge for  
12 your consulting services, right?

13 A. Yes.

14 Q. And you flew in from California to be here  
15 today, right?

16 A. Yes.

17 Q. We're paying you thousands of dollars, right?

18 A. Yes.

19 Q. Can you tell the jurors the exact amount that  
20 we're paying you to be here?

21 A. \$4,000.

22 Q. And how much have we paid you in total?

23 A. I don't know the figure right off the top of  
24 my head, but it has been quite a bit of work because I  
25 did my initial analysis and then there was a couple of

1 rebuttal reports or commentary reports to Dr. Smith's  
2 commentaries, so. I put quite a few hours in it.

3 Q. You actually flew out here before today,  
4 right?

5 A. Yes. I came out here last year to do a  
6 vehicle inspection.

7 Q. Okay.

8 A. The two vehicles that were involved.

9 Q. It's my understanding at the same time  
10 Dr. Smith also flew out?

11 A. Right. He and I worked on those cars  
12 together.

13 Q. Now, Doctor, have you previously testified as  
14 an expert in the field of accident reconstruction?

15 A. Oh, yes.

16 Q. Can you give us an estimate of how many  
17 times?

18 A. Are you talking about testifying in trial or  
19 does that include depositions or...

20 Q. Well, let's maybe start with depositions  
21 first and then trial second.

22 A. Oh, I don't know. Depositions, I'd say over  
23 100.

24 Q. And what about a trial?

25 A. Trials, I would say maybe 20, 25, 30,



1 something like that.

2 Q. And, Doctor, what about as -- you know, when  
3 you take your accident reconstruction hat off and you  
4 put on your biomechanical hat, how many times have you  
5 testified in that capacity as an expert?

6 A. Well, I would say every time I testify as an  
7 accident reconstructionist, I testify as a biomechanist  
8 because it really -- the accident reconstruction is  
9 really just a transition to the biomechanics which is  
10 more important, I think.

11 Q. So it would be pretty much the same numbers?

12 A. Yes.

13 Q. All right. Doctor, do you hold any  
14 professional licenses?

15 A. Well, I have a license to practice  
16 chiropractic. I'm a chiropractic orthopedist. I  
17 haven't practiced in a while but I still have a  
18 license.

19 Q. I understand you developed something -- some  
20 sort of guidelines to deal with whiplash; is that true?

21 A. A grading system and guidelines.

22 Q. Tell us about that.

23 A. Well, the grading system is -- in medicine a  
24 lot of times when we have a condition that we sometimes  
25 discover on different levels of severity, we come up

1 with a grading system so that doctors when they talk to  
2 each other, they have a better sense of, you know, this  
3 is sort of a common language so we have grade one or  
4 grade two, grade three. We do that with broken bones,  
5 with certain types of fractures. We do that with  
6 tumors. So it made sense to me. I'm sorry.

7 Q. Just before -- I want you to finish this but  
8 just a real quick question. So it's kind of like a  
9 burn, third-degree burn, second-degree burn,  
10 first-degree burn?

11 A. Yes. Same kind of thing.

12 Q. Go ahead. It made sense to you.

13 A. So I developed a grading system for whiplash  
14 injuries. And the grading system, I published it in  
15 1993 and then the Quebec Task Force on  
16 Whiplash-Associated Disorders out of McGill University  
17 published a paper two years later and promulgated that  
18 same grading system. So I really developed the grading  
19 system first but those guys made it famous because they  
20 had more coverage than I did.

21 Q. And Dr. Smith cites to the Quebec Task Force.  
22 What is that anyway?

23 A. Well, the Quebec Task Force was a -- it was  
24 done out of McGill University and they got a number of  
25 experts together and the idea was that they were going

1 to go look at all the literature that's been published  
2 on the subject and do sort of an overview of the whole  
3 thing and decide what that composite literature really  
4 tells us about how these injuries happen, what type of  
5 injuries occur in this type of trauma, and that sort of  
6 thing.

7 But, unfortunately, they kind of missed the  
8 mark because they mostly threw out all the literature  
9 before they reviewed it. So the Quebec Task Force  
10 document itself actually is flawed, in my opinion, and,  
11 in fact, they published in *Spine* in 1995. My  
12 colleagues and I published another paper in *Spine* in  
13 1998 pointing out the flaws in their original paper.

14 Q. So you -- they published a paper and then you  
15 followed that up with your colleagues in the same  
16 journal and both of them were published?

17 A. Correct.

18 Q. Both of them were reviewed and so forth?

19 A. Yes.

20 Q. Are you a member of any professional  
21 societies or organizations related to biomechanics?

22 A. Well, I have been a member of the  
23 International Society of Biomechanics, the American  
24 Society of Biomechanics, and those are the only two  
25 biomechanic associations. I have other memberships but

1 those are the two.

2 Q. Have you published any articles in your -- in  
3 your field?

4 A. In biomechanics? Yes.

5 Q. Biomechanics. And can you tell the jurors  
6 about how many times? Give an estimate.

7 A. Well, I presented some of our crash test  
8 research at the World Congress of Biomechanics and they  
9 only do those about every four years. And I presented  
10 two papers back in 2006 when that was held in Munich.  
11 And, of course, when you -- when you present papers,  
12 they always publish them in the *Journal of*  
13 *Biomechanics*. And I published some other articles, but  
14 most of the 300, I don't know, 50 papers that I've  
15 published have something to do with biomechanics. I  
16 would say probably at least 200 of them do in some way.

17 Q. And of those 350 articles that you've  
18 published, some are peer-reviewed, others are not; is  
19 that accurate?

20 A. That's correct.

21 Q. How many of those articles are peer-reviewed  
22 would you say? Just an estimate.

23 A. I would say at least half of them. Probably  
24 more than half of them.

25 Q. So that's before it's published somebody else

1 is looking at it, checking it, making sure that it's  
2 not just the philosophy of Dr. Croft?

3 A. Correct.

4 Q. That there's actually a scientific basis for  
5 it?

6 A. Yes.

7 Q. Can you tell us a little bit -- science is  
8 important in these fields, is it not?

9 A. Absolutely.

10 Q. Can you tell us a little bit of the science  
11 involved in these three areas that we've discussed?

12 A. Yes. Accident reconstruction is pretty much  
13 just simple physics, Newtonian mechanics. If you  
14 studied physics in college, your freshman college  
15 physics book, the first three chapters would be  
16 mechanics and dynamics, Newton's three laws of motion.  
17 And that's pretty much all we deal with in accident  
18 reconstruction.

19 Now, in biomechanics most of what we do also  
20 involves only those first three chapters of a physics  
21 book as far as the mechanics part because a lot of  
22 times those early chapters of a physics book are  
23 referred to as mechanics, Newtonian laws of motion, and  
24 so forth. And so that's pretty much mostly what we do.  
25 I say mostly because, obviously, you can get a Ph.D. in

1 biomechanics and you can get out into the skinny  
2 branches of science and very, very in-depth  
3 mathematics, but in the everyday world we pretty much  
4 just use basic physics.

5 Q. And as part of your training, have you ever  
6 conducted any sort of crash test?

7 A. Yes. We've done -- I've done close to 100  
8 full-scale human subject crash tests.

9 Q. What is significant about the fact that human  
10 subjects were used, or is there any significance?

11 A. Yes. Oh, absolutely. Well, the thing is  
12 this: We have crash test dummies. Now, the crash test  
13 dummies that we've had were really designed for  
14 high-speed tests and everybody has probably seen those  
15 on the TV. This is where we crash the test [sic] and  
16 crash the car into the wall at 35 miles an hour,  
17 horrific damage, dummy is belted in, we measure the  
18 loads on the dummy. The dummy is fine for that.

19 The problem is if you're trying to see what  
20 happens to a human being who is sitting quietly in a  
21 car that gets rear-ended, the dummies are way too  
22 stiff. Whereas a human being will be doing this kind  
23 of a thing. The dummy will just kind of go like this.  
24 So the dummy lacks what we called biofidelity. In  
25 other words, it's not like a real human. So there has

1 been a move to create biofidelic dummies specifically  
2 for doing rear impact crash testing. We call them RID  
3 dummies. RID for rear-impact dummy.

4           So my institute has validated the two main  
5 dummies that are used today. And the way you validate  
6 them is very simple. You put the dummy on this side of  
7 the car and you put the human subject on this side of  
8 the car. You use high-speed film. You instrument all  
9 the participants, the dummy and the human subjects,  
10 with accelerometers and it's very high tech. It's all  
11 very well calibrated, and we do these low-speed tests.  
12 We do the low-speed tests because ethically we don't  
13 want to hurt anyone.

14           The idea is that if you can validate the  
15 dummy in the low-speed test against the human, then you  
16 can take the human out of the car and do higher speed  
17 tests and see what would happen. So we've done those  
18 kinds of tests.

19           Q. And as Mr. Jaffe pointed out in opening  
20 statement, you stopped doing crash tests seven years  
21 ago with a human body?

22           A. Yeah. 2006 was our last year because we  
23 were -- we were having injuries and so we kept lowering  
24 the crash speed thinking that we would be okay the next  
25 year, but when we followed up with people, there was



1 always one or two volunteers that would tell us, hey,  
2 you know, I've had headaches ever since then or my back  
3 has hurt ever since then. So eventually I was unable  
4 to get institutional review board approval. That's an  
5 outside agency that basically says it's okay to do the  
6 research, and I couldn't in good conscious apply to do  
7 any more tests.

8 Q. And they wouldn't oversee the tests because  
9 of the liability issues?

10 A. Well, I didn't even apply because we just got  
11 to the point where we said there's no safe lower limit  
12 where nobody at all could be hurt.

13 Q. I just have a question, Doctor. Did you --  
14 when you -- when you did those tests, did you have, you  
15 know, 47-year-old women?

16 A. No. No. That's another thing. When we do  
17 those tests, we strictly select people that are young,  
18 that are healthy. They don't have anything wrong with  
19 their spine. We do x-rays and MRIs of them before the  
20 tests. They have a full examination. And if anybody  
21 had told me, I had an injury years ago or I had back  
22 pain or, you know, if they were older than about 30 --  
23 I don't know the oldest age. I think we've had some  
24 people maybe 34, something like that. That's probably  
25 the oldest. And, you know, they're ideally placed in

1 the car. We don't have their head turned, for example.  
2 We wouldn't allow them to be out of position because  
3 that would increase the risk of injury, so they're  
4 ideally positioned.

5 So on the one hand, you could really say that  
6 they're not representative of all the people out there.  
7 But it would be unethical for us to take those risks  
8 and use older people or people that had been injured or  
9 had previous problems, et cetera.

10 Q. Okay.

11 MR. CLOWARD: Your Honor, at this time we  
12 would move to have the Court recognize Dr. Croft as an  
13 expert in the field of biomechanics, accident  
14 reconstruction, and epidemiology.

15 THE COURT: Any objection?

16 MR. JAFFE: I would like to do some limited  
17 voir dire on the epidemiology topic, Your Honor.

18 THE COURT: Sounds fair.

19 MR. JAFFE: Thank you.

20 THE COURT: Just on the qualification issue.

21 MR. JAFFE: Yes. That's all.

22

23 VOIR DIRE EXAMINATION

24 BY MR. JAFFE:

25 Q. By the way, Doctor, you mentioned that a

1 moment ago that the book that you just held up,  
2 *Whiplash and Mild Traumatic Brain Injuries* has replaced  
3 the *Whiplash Injuries* book; is that correct?

4 A. Well, it didn't exactly replace it. This  
5 actually came into print in 2009.

6 Q. Got it.

7 A. This one went out of print in 2009.

8 Q. Who published it?

9 A. This is not the same book.

10 Q. Who publishes that one?

11 A. I published this.

12 Q. That's self-published?

13 A. Yes.

14 Q. Now, with respect to the epidemiology issue,  
15 sir, I want to make sure I have this right.

16 Did you testify before that you're not still  
17 in the program?

18 A. No.

19 Q. You are still in the epidemiology program at  
20 Walden, correct?

21 A. Yes.

22 Q. And that's for now 11 years; is that correct?

23 A. I think it's eight years.

24 Q. Well, I'll tell you what. May I -- let's see  
25 if we can refresh your recollection, sir.

1           MR. JAFFE: This may be Volume I. There's  
2 two volumes, so I'm going to publish the first one.

3 BY MR. JAFFE:

4           Q. And, Dr. Croft, you were deposed over two  
5 different days, correct?

6           A. Correct.

7           Q. The first one was done in November of last  
8 year and then we finished it up this past May, correct,  
9 sir?

10          A. I don't recall.

11           MR. JAFFE: Your Honor, with the Court's  
12 permission, I would like to approach Dr. Croft.

13           THE COURT: That's fine.

14 BY MR. JAFFE:

15          Q. Doctor, here's the original of the transcript  
16 from your deposition that was taken on November 28,  
17 2012.

18           Would you please be kind enough to turn to  
19 page 68. I'm looking at lines 1 through 3.

20          A. Okay.

21          Q. The question I asked you was: And how long  
22 does this program take to complete? And your answer  
23 was, sir?

24          A. I said, Well, I've been at it ten years.

25          Q. Okay.

1 A. It could be much faster I'm sure.

2 Q. And that was last year so now we're actually  
3 in 11 years; is that correct?

4 A. Yeah, but I was just approximating at the  
5 time.

6 Q. It doesn't say approximately in that answer.  
7 We can agree with that?

8 A. It does not say approximately, no. I just  
9 said about ten years. That's what I was talking about.  
10 I didn't remember the exact date that I started.

11 Q. Your answer was: I've been in it ten years,  
12 right? That's what it said in there?

13 A. That is what it says, yes.

14 Q. Thank you. You do not presently hold a Ph.D.  
15 in epidemiology, correct?

16 A. I'm a candidate.

17 Q. You're a candidate. Is your Ph.D. actually  
18 going to be in epidemiology?

19 A. It's public health with a specialty in  
20 epidemiology.

21 Q. So your actual doctorate will be public  
22 health?

23 A. Epidemiology.

24 Q. But that's your specialty?

25 A. Well, it's a program under the public health

1 department so it actually is an epidemiology degree.

2 Q. But it's going to be a doctorate in public  
3 health?

4 A. It's called public health epidemiology.

5 Q. And the residencies that you said you did in  
6 epidemiology, those are not like year-long residency or  
7 six-month long residency?

8 A. No.

9 Q. Those are like two or three days or three or  
10 four days a piece; is that right?

11 A. Several days to a week, yes.

12 Q. And that is your educational background in  
13 epidemiology, correct, sir?

14 A. You mean the few days, no.

15 Q. No. No. Plus your 10 or 11 years in this  
16 program?

17 A. Plus I have a master's in public health which  
18 is also heavily influenced with, you know, very much  
19 statistics and epidemiology.

20 Q. Thank you.

21 MR. JAFFE: Your Honor, I have no objection  
22 to the -- to Dr. Croft testifying as an expert in  
23 accident reconstruction and biomechanics. I do have an  
24 objection as to epidemiology.

25 THE COURT: I think he's satisfied the Court

1 that he's an expert in all three, so the Court is going  
2 to recognize him in accident reconstruction,  
3 biomechanics, and epidemiology.

4 MR. JAFFE: Thank you, sir.

5

6 DIRECT EXAMINATION (CONT'D)

7 BY MR. CLOWARD:

8 Q. Now, Dr. Croft, you have how many -- you have  
9 two master's degrees or did I --

10 A. I have two master's degrees, yes.

11 Q. And you're also a chiropractor?

12 A. Yes.

13 Q. And you've also done this -- you know,  
14 you're, it sounds like, very close to getting this  
15 Ph.D.?

16 A. I am very close, yes.

17 Q. So, Doctor, let's move on.

18 Can you tell us what documents did you review  
19 in forming your opinions?

20 A. Well, I looked at the police report. I  
21 looked at the medical records. I don't know that I saw  
22 all the medical records, but I can certainly recite  
23 what I looked at, if that's necessary. I looked at the  
24 Las Vegas Fire and Rescue EMS report when she was taken  
25 to the hospital. I looked at the emergency room



1 records. I looked at a lot of the medical records,  
2 different practitioners that she saw, surgical records,  
3 those kinds of things.

4 Q. And in addition to the documents that are --  
5 that you reviewed, did you actually meet with  
6 Ms. Seastrand or talk to her?

7 A. Well, I met with her when we went out to  
8 inspect the vehicles. I met Mr. Khoury as well. And I  
9 didn't really talk to her that much on that day. But  
10 then after I reviewed the records, I did have some  
11 specific questions for her and I called her on the  
12 phone and we had maybe a 45-minute conversation or so.

13 Q. Thank you, Doctor. In addition to the  
14 information that's contained in your report and the  
15 45-minute discussion that you had with Ms. Seastrand,  
16 were there other documents that you reviewed in  
17 preparation for today?

18 A. You mean other than medical records and the  
19 police report? Well, I also looked at the repair  
20 records. Now, Mr. Khoury did not have his car  
21 repaired, but he had an estimate. And Ms. Seastrand  
22 had her car repaired so I had the repair records for  
23 that.

24 And, you know, most of what I looked at is  
25 medical records. I think I had photographs of the

1 vehicles after they were crashed. And, of course, we  
2 inspected the vehicles -- well, Mr. Khoury's vehicle  
3 was never repaired but Ms. Seastrand's vehicle was  
4 repaired, so I saw pictures of it before. And after it  
5 was repaired, I actually inspected the vehicle.

6 Q. And, Doctor, can you tell us what is your  
7 understanding of how the collision took place anyway?

8 A. Well, according to the police report and  
9 according to all the evidence that I saw, it was a  
10 pretty much a line rear impact. Meaning, that the cars  
11 were not at acute angles to each other and the -- you  
12 could tell actually how the bumpers lined up because  
13 Mr. Khoury's vehicle had a tow hook that penetrated the  
14 bumper of Ms. Seastrand's vehicle, so you could see  
15 exactly where they came together. It was a straight  
16 rear impact crash.

17 Q. Now, were there any differences in the  
18 versions that you reviewed?

19 A. Well, yes. According to the police report,  
20 Mr. Khoury --

21 MR. JAFFE: Objection, Your Honor. The  
22 police report is not evidence and while an expert may  
23 consider it, I believe it's inappropriate.

24 THE COURT: Come on up for a minute.

25 **(Whereupon, a brief discussion was**

1                   **held at the bench.)**

2                   THE COURT: All right, folks. I'm going to  
3 give you a little break. I have to look at a document  
4 before we go forward.

5                   During our break, you're instructed not to talk  
6 with each other or with anyone else about any subject  
7 or issue connected with the trial. You're not to read,  
8 watch, or listen to any report of or commentary on the  
9 trial by any person connected with the case or by any  
10 medium of information, including, without limitation,  
11 newspaper, television, the Internet, or radio. You're  
12 not to conduct any research on your own, which means  
13 you cannot talk with others, tweet others, text others,  
14 Google issues or conduct any other kind of book or  
15 computer research with regard to any issue, party,  
16 witness, or attorney involved in the case. You're not  
17 to form or express any opinion on any subject connected  
18 with the trial until the case is finally submitted to  
19 you.

20                   Why don't you plan on about 15 minutes.

21                   THE BAILIFF: All rise.

22                   **(Whereupon, jury exits the courtroom.)**

23                   THE COURT: Dr. Croft, I will excuse you too  
24 while we take care of this issue.

25                   MR. JAFFE: Judge, here is the original

1 transcript if you want to see it.

2 THE COURT: Let's publish it.

3 We're outside the presence of the jury.

4 We're excusing the witness. There's been an issue  
5 presented at the bench. There's an objection to  
6 Dr. Croft talking about the party admission because of  
7 the fact that apparently the investigating officer  
8 arguably recanted his testimony about the inconsistent  
9 statement by Mr. Khoury, right? Is that right? That's  
10 the argument that he recanted that statement so there's  
11 really no inconsistent statement.

12 MR. SMITH: That's correct.

13 MR. JAFFE: Yes, sir.

14 THE COURT: I want to look at the deposition  
15 before I rule on it, so.

16 MR. CLOWARD: Judge, our position for the  
17 record is that he didn't recant. He just indicated  
18 that he never said, no, he never told me that. He just  
19 said, yeah, the report is what it is and the report is  
20 probably more accurate than -- than, you know, I stand  
21 by my report. He never affirmatively denied that  
22 Mr. Khoury made that statement to him.

23 MR. SMITH: Here's what he did say, Your  
24 Honor. He said, I take his statement as it is.

25 MR. JAFFE: What page?

1           MR. SMITH: It is on page -- starting on page  
2 37 at line 9. I'm going through -- walking through the  
3 police report with him. The statements that are  
4 contained in the narrative section of the police  
5 report. So on page 37.

6           THE COURT: Why don't you just point me to  
7 the pages you want me look at.

8           MR. SMITH: I want you to look at page 37,  
9 starting at line 9. Well, line 8, which is I'm asking  
10 him to walk through the narrative statement with me.

11          THE COURT: Okay.

12          MR. SMITH: His response on line 24 of that  
13 page says, I take his statement as it is and then if  
14 there's anything that contradicts it, I'll put that in  
15 later but in this case there wasn't so I leave it as it  
16 is.

17          THE COURT: Okay. Where is the first comment  
18 about foot on the gas? I would prefer not to have to  
19 read the whole deposition transcript.

20          MR. JAFFE: We're going to check the page  
21 number.

22          MR. SMITH: I believe it's on page 23, Your  
23 Honor.

24          That's what you're referring to, Mr. Cloward?

25          MR. CLOWARD: Yes. Line 12, Your Honor.

1 12 through 13.

2 MR. SMITH: Okay. The question asked was:  
3 Did you estimate speed of travel.

4 THE COURT: Let me look at this for a minute  
5 and then we'll go back on the record. Okay.

6 Off the record.

7 (Whereupon, a recess was taken.)

8 THE COURT: Let's go back on the record.  
9 We're outside the presence of the jury.

10 Just so I understand correctly, I think the  
11 issue that we're addressing right now is an  
12 inconsistent statement between the officer's report  
13 where he says something about Mr. Khoury accelerating  
14 and somewhere else where Mr. Khoury says he wasn't  
15 accelerating.

16 Is that the issue that we're talking about  
17 right now?

18 MR. JAFFE: It's the officer's testimony in  
19 his deposition versus the police report which does not  
20 make any comment about him having accelerated.

21 THE COURT: I understand that, but I think  
22 the inconsistency that he wants to bring out through  
23 the expert is the accelerating versus something where  
24 Mr. Khoury probably said in his deposition that his  
25 foot was on the brake, right?

1           MR. JAFFE: That's it. No. Not that his  
2 foot was on the brake. His foot was off the brake and  
3 that he was rolling forward when he hit her as opposed  
4 to actually having his foot on the gas. And apparently  
5 counsel wants to use that to impeach my client's  
6 credibility as a prior inconsistent statement.

7           My problem with it is this, Your Honor: As I  
8 indicated last week, we had subpoenaed the police  
9 officer. The police officer is not available this  
10 week. So if he was going to be needed, he would have  
11 had to have testified last week.

12           Now, if they're going to bring this in --  
13 which by the way, is not even an opinion or mentioned  
14 in Dr. Croft's three reports, this whole supposed  
15 inconsistency -- and what he's looking to do is now  
16 bring in this inconsistency of the police officer's  
17 testimony through Dr. Croft without the police officer  
18 testifying, what he's done is prejudice our ability to  
19 properly rebut that statement. Because the only way we  
20 can do it now is to introduce the police report itself  
21 which is out since we cannot use that as an item simply  
22 to refresh the officer's recollection on the stand and  
23 have him correct any misconceptions.

24           The problem with that, Your Honor, is that in  
25 Franco versus State, 109 Nev. 1229 at page 1239, the

1 Nevada Supreme Court indicated that for this type of  
2 hearsay to be admitted there must be a particularized  
3 guarantee of trustworthiness.

4 Further, in Woods versus State, 101 Nev. 128,  
5 the Supreme Court also said that there must be  
6 corroborating circumstance to clearly indicate the  
7 trustworthiness of the statement.

8 Finally, in Lilly versus Virginia -- I  
9 misspoke at the bench. I thought it was U.S. versus  
10 Lilly. Lilly versus Virginia, 527 U.S. 116. It's a  
11 1999 U.S. Supreme Court opinion. The Supreme Court  
12 said when a court can be confident as in the context of  
13 hearsay falling within a firmly rooted exception, the  
14 declarant's trustworthiness is so clear from the  
15 surrounding circumstances that the test of  
16 cross-examination would be of marginal utility, the  
17 Sixth Amendment's residual trustworthiness test allows  
18 the admission of the declarant's statements.

19 Given the fact that there can be no  
20 trustworthiness given the surrounding circumstances not  
21 being so clear as the U.S. Supreme Court says, the lack  
22 of the corroborating circumstance to clearly indicate  
23 the trustworthiness of the statement as the Nevada  
24 Supreme Court wants, and the inability to -- of a  
25 particularized guarantee of trustworthiness, as the



1 Nevada Supreme Court said in the Franco case, we would  
2 submit that it would be improper to allow Dr. Croft to  
3 now offer the police officer's testimony in his -- in  
4 his testimony as if he is telling the jury this is the  
5 fact, this is the testimony, this is what was said. It  
6 would be highly improper.

7           He's allowed to use, obviously, as an expert  
8 inadmissible testimony in reaching his opinions, but to  
9 tell it to the jury and admit it in a way to put an  
10 imprimatur on it as if this is what came from the  
11 police officer without our ability to now contradict  
12 the officer, unless we were to admit the police report,  
13 which is clearly inadmissible, it puts us in an  
14 impossible situation, Your Honor.

15           And in light of the Nevada Supreme Court case  
16 law as well as the U.S. Supreme Court case law, we  
17 believe it would be improper to admit that testimony as  
18 impeachment of Mr. Khoury at this time.

19           THE COURT: Here's the thing. In looking at  
20 the deposition of Officer Todd Conn, C-O-N-N, on page  
21 23, he's asked basically to explain what his  
22 investigation revealed. He says, he had slowed down,  
23 knew that Ms. Seastrand was in front of him, and was  
24 looking left to make a right-hand turn. I started on  
25 page 23, line 8. And just as he had slowed down, he

1 assumes that she's going to make the right-hand turn,  
2 he accelerates, and that's when he ended up striking  
3 her.

4           Now, if we go to pages 37 and 38, which is  
5 the pages that you suggested that I look at where you  
6 asked him about whether or not the accident report  
7 itself was more accurate, he says -- page 37, the  
8 answer starting on line 9 -- I then made contact with  
9 Khoury who is the sole occupant of a white 2007  
10 Infiniti SUV. Khoury states that he was traveling in  
11 the far right eastbound lane of Craig approaching  
12 Rancho Drive. Khoury states that he observed the Honda  
13 in front of him and anticipated that it was going to  
14 make a southbound right turn at the intersection. The  
15 Infiniti then moved forward and struck the front of its  
16 bumper against the rear bumper of the Honda.

17           So then if you go to the next page, page 38,  
18 line 9, picking up again, it says, let's see here. The  
19 Infiniti, that's it, let's see, moved forward, struck  
20 the front of its bumper against the rear of the bumper  
21 of the Honda. That's where we ended.

22           So it seems to me that you're just having him  
23 read from the police report. I mean, I don't see  
24 anywhere where he was asked is the police report or  
25 your prior statement that he accelerated more accurate.

1 I don't see anything where that discussion occurs.

2 MR. SMITH: Here's what I would point you to,  
3 Your Honor. The question on page 37, line 22. Was  
4 there any other information relied upon in drafting  
5 that? And that's referring to that statement. And his  
6 answer is: I take his statement as it is. And then if  
7 there's anything that contradicts it, I'll put that in  
8 later on.

9 THE COURT: But I guess the way I'm reading  
10 this is you're trying to say that when he says  
11 accelerated, that that's inconsistent with moving  
12 forward and striking the vehicle and that seems to me  
13 to mean the same thing.

14 MR. JAFFE: But the point is this:  
15 Mr. Cloward made a comment in his opening statement  
16 that my client put his foot on the gas. My client's  
17 testimony throughout has been that all he did was  
18 release his foot off the brake and allowed the vehicle  
19 to roll forward, move forward, while he was looking for  
20 cross traffic and then without realizing the plaintiff  
21 hadn't gone, couldn't stop in time and hit her.

22 THE COURT: I get it.

23 MR. JAFFE: Right. But the whole point is to  
24 now create that impression to the jury that that's what  
25 happened is that he actually put his foot on the gas to

1 try to establish some sort of prior inconsistent  
2 statement versus his testimony, I think is unfair and  
3 it puts us in an inability of completely being unable  
4 to contradict it because while the officer is at least  
5 an impartial person, Mr. Khoury -- any attempt to say  
6 to Mr. Khoury, well, is that what you said, he's going  
7 to say no.

8           Well, he's a party and the jury is always  
9 going to give more weight to a police officer who has  
10 no dog in the fight especially when it comes presented  
11 to them in a way where we can't possibly cross-examine  
12 the police officer on it. So there being an  
13 inconsistency and certainly a lack of, you know, clear  
14 corroborating circumstances and the trustworthiness  
15 cannot be so clear from the surrounding  
16 circumstances -- meaning, taking everything into  
17 account -- I think it would be improper to allow this  
18 expert, again, who has never even addressed it in any  
19 of his three reports or 215 pages of deposition  
20 testimony. To now tell this jury that's what  
21 Mr. Khoury said and told the police officer because  
22 that's what the police officer said, it would be highly  
23 improper, sir.

24           THE COURT: I think the police officer's  
25 statement is pretty clear. He was asked how did the

1 accident happen, and he said this is what Mr. Khoury  
2 told me and he used the word he accelerates. Later on  
3 he is asked to read through the accident report and it  
4 says move forward. I don't think that the cop saw that  
5 as inconsistent. I don't see that as inconsistent. I  
6 see it potentially being inconsistent with Mr. Khoury's  
7 statement that he wasn't accelerating. I'm going to  
8 let him talk about that. It's a prior inconsistent  
9 statement by a party.

10 MR. JAFFE: Okay. But is he going to be  
11 allowed to say that my client put his foot on the gas  
12 because that's not in there?

13 THE COURT: It's not. He's going to be  
14 allowed to say that maybe there's an inconsistency  
15 between the cop that said he accelerated and I don't  
16 know what Mr. Khoury said.

17 MR. JAFFE: Moving from zero and taking your  
18 foot off the gas pedal -- off the brake allowing the  
19 vehicle to move forward is in and of itself  
20 accelerating. You don't have to put the gas on to  
21 accelerate.

22 THE COURT: Okay.

23 MR. JAFFE: And that's my whole point.

24 THE COURT: That sounds like cross.

25 MR. JAFFE: It's what may have to be if he

1 says something about putting the gas on. But given the  
2 fact that there is absolutely no foundation to say that  
3 my client applied the gas pedal or put his foot on the  
4 gas pedal or put his foot on the gas or anything to  
5 that effect, I would hope that he will not be allowed  
6 to go that far.

7 THE COURT: Well, I mean, the word is  
8 accelerates. I think he can talk about what  
9 acceleration means.

10 MR. JAFFE: Why can't he just say my client  
11 accelerated? I have no problem with that then. If  
12 he's just going to say my client accelerated, that's  
13 fine. Applying the gas is different from accelerated.  
14 That's creating a contradiction that doesn't exist.

15 THE COURT: I think you can only accelerate  
16 without pushing on the gas if you're moving downhill,  
17 right?

18 MR. JAFFE: No. I think if you -- we all  
19 take our foot off the gas if we're going to inch  
20 forward. Sometimes at a light, somebody moves up or  
21 makes a right turn on red, we take our foot off the  
22 gas -- off the brake, rather not the gas, we take our  
23 foot off the brake and the car moves forward so that we  
24 can get in line to make another right turn on red. You  
25 don't have to put your foot on the gas to actually

1 accelerate. I have no problem if he's going to say  
2 accelerates.

3 THE COURT: I'm going to let you address that  
4 on cross. Acceleration means what it means. If he's  
5 asked what it means --

6 MR. JAFFE: That's fine if he says  
7 accelerates. Putting his foot on the gas, applying the  
8 gas is something entirely different.

9 THE COURT: Maybe.

10 MR. JAFFE: And that's true. The police  
11 officer is not here to explain what he meant by  
12 acceleration then.

13 THE COURT: If you feel the need to read in  
14 part of this deposition, we can.

15 MR. JAFFE: Well --

16 THE COURT: It's a prior inconsistent  
17 statement. I'm going to allow that. I mean, you're  
18 saying that you think that you --

19 MR. JAFFE: I think it's academically --

20 THE COURT: -- fixed this with the police  
21 officer on pages 37 and 38. I don't think you did. I  
22 don't think the word accelerates was addressed by  
23 whoever took the deposition. I don't think it was  
24 appreciated at that point that that was an issue that  
25 was going to come up and that's why the follow-up

1 questions on that weren't asked.

2 MR. JAFFE: But if this guy gets on the stand  
3 and says that he put the gas on, that is academically  
4 dishonest. And, Your Honor, how do we deal with the  
5 fact that he never even bothered discussing that in  
6 either his deposition or three reports? Why is he  
7 going to be allowed to say that now when all that is is  
8 a means to try to get around the police officer not  
9 being able to clarify it when Mr. Cloward knows full  
10 well that the officer can't come in now to fix it.  
11 Because we've told him since last week that the officer  
12 is unavailable this week. I've told him since Monday  
13 of last week.

14 I think that it would be highly improper for  
15 him to take advantage of this situation, create an  
16 inconsistency that doesn't exist, by allowing him to  
17 say that he put his foot on the gas as opposed to  
18 simply saying he accelerated.

19 THE COURT: That's why you have the depo.

20 MR. JAFFE: But, Your Honor, you know what,  
21 we subpoenaed the officer. We would have had the  
22 officer come in and testify if this is the game that --  
23 if we knew this was the game that was going to be  
24 played. I think it's highly improper.

25 THE COURT: I'm going to let him testify to



1 it, but I'm going to take a quick little break before  
2 we get going again.

3 Off the record.

4 (Whereupon, a recess was taken.)

5 THE COURT: Let's go on the record. We're  
6 outside the presence of the jury.

7 Is there a stipulation as to liability?

8 MR. JAFFE: I said it in my opening  
9 statement. We argued this last Monday. We admit  
10 liability, Your Honor.

11 THE COURT: Okay.

12 MR. CLOWARD: Thank you.

13 THE BAILIFF: All rise.

14 (Whereupon, jury enters the courtroom.)

15 THE COURT: Go ahead and be seated. Welcome  
16 back, folks. Sorry for the delay. I know that was a  
17 little more than 15 minutes. I apologize. Back on the  
18 record in Case No. 636515.

19 Will the parties stipulate to the presence of  
20 the jury?

21 MR. CLOWARD: Yes.

22 THE COURT: Stipulate to the presence of the  
23 jury?

24 MR. JAFFE: Sorry. Yes, sir.

25 THE COURT: Dr. Croft, just be reminded

1 you're still under oath. The objection was overruled.

2 You may proceed. I don't know if you can ask  
3 the same question. It was a long time ago.

4 Try it again.

5 BY MR. CLOWARD:

6 Q. Dr. Croft, is it your understanding there was  
7 a discrepancy in Mr. Khoury's version of how this event  
8 took place?

9 A. Yes.

10 Q. Can you tell us about that?

11 A. Well, the original description by Mr. Khoury  
12 was that he told the police officer that he thought  
13 that Ms. Seastrand was going to make a turn. Now, his  
14 specific, you know, thinking wasn't expressed beyond  
15 that, but presumably it means that he was --

16 MR. JAFFE: Objection.

17 THE WITNESS: -- anticipating her moving out  
18 of the way.

19 MR. JAFFE: Objection. Speculation, Your  
20 Honor. Presumably.

21 THE COURT: Sustained.

22 MR. JAFFE: Thank you.

23 BY MR. CLOWARD:

24 Q. Dr. Croft, did -- do you have an  
25 understanding of what Mr. Khoury told the police

1 officer regarding what he was doing the moments before  
2 the crash?

3 A. I think he said he was looking at traffic or  
4 something. His eyes were diverted.

5 Q. And do you know whether he gave any sort of  
6 estimate regarding the speed he was traveling or how he  
7 made contact with Ms. Seastrand's vehicle?

8 A. Well, the -- I mean, he made contact with  
9 her. I'm not quite sure what you mean how he made  
10 contact with her, but he did make contact with her.

11 Q. Have you had a chance to review the police  
12 report?

13 A. Yes, I have.

14 Q. Not the police report but the officer's  
15 testimony?

16 A. No, I did not see the officer's testimony.

17 Q. Have you had an opportunity to review  
18 Mr. Khoury's testimony?

19 A. No, I did not see Mr. Khoury's testimony.

20 Q. Can you explain after the impact what -- walk  
21 us through the calculations that you made and how you  
22 formed your --

23 A. Well, the calculations that I made were done  
24 with a very sophisticated computer software program  
25 that does reconstruction. And it's called PC-Crash and

1 it comes out of Austria, and I've been using it for a  
2 number of years. What the software does is it allows  
3 you to plug in a huge amount of information --

4 Q. Okay.

5 A. -- in doing the calculation.

6 For example, as a car is moving, if it's  
7 braking, it's pitching forward so it's loading the  
8 front wheels more and the rear wheels less. If it's  
9 going around a turn, it's rolling somewhat on one side.  
10 And in a crash, it's changing momentum. It's changing  
11 direction. It's sustaining crush. And all these  
12 things require a huge amount of calculating ability or  
13 skill or really just, you know, the sheer magnitude of  
14 the calculation, it's impossible for somebody to do  
15 with a pocket calculator. It would take me literally a  
16 year.

17 What the computer does is allows us -- the  
18 computer keeps track of the actual physical bodies of  
19 the vehicles. In other words, it knows what their  
20 center of gravity is. It knows what their center of  
21 mass is. It knows what their wheel base is and their  
22 tire width and the coefficient of friction of the  
23 roadway and all of that stuff and so it uses basic  
24 Newtonian physics to keep track of everything during  
25 the crash so that it tells us what would have happened

1 in that crash given the information that we put into  
2 it.

3 Q. Doctor, is there any significance to the  
4 level of the bumpers prior to impact or at the time of  
5 impact?

6 A. Yes. Because, again, because of the tow hook  
7 making an imprint or actually indentation or a  
8 perforation really of the bumper of Ms. Seastrand's  
9 vehicle, when we put the cars together, we could see  
10 that they line up perfectly. What does that mean? It  
11 means that the car was not braking at the time that it  
12 struck Ms. Seastrand because if it was, it would have  
13 been lower. Most cars would dive down several inches  
14 under heavy braking. Likewise, the cars will lift up a  
15 couple of inches under acceleration.

16 So that means it was at a constant velocity  
17 when it hit, and it couldn't have been a situation  
18 where Mr. Khoury was stopped initially behind her and  
19 his foot slipped off the brake and the car just rolled  
20 forward under its own idle and hit her because you  
21 couldn't possibly have done that much damage.

22 Q. So what does that tell you as to how the  
23 mechanism of the collision took place?

24 A. Well, the way that it took place is that he  
25 went into her with a constant velocity. He was not

1 braking.

2 Q. Doctor, can you tell us briefly what is this  
3 term delta-V that sometimes folks in your specialty  
4 use?

5 A. Delta-V means change in velocity. And in  
6 simple terms, if you've got one car that is stopped and  
7 another car that runs into the back of it, the car  
8 that's hit will initially accelerate forward and it  
9 will achieve some speed, some measurable speed. And  
10 the difference between its initial state, which in this  
11 case, this scenario, would be zero miles an hour and  
12 whatever it gets up to, let's say, 6 miles an hour,  
13 that is the delta-V or the change in velocity.

14 Why that is important is because it helps us  
15 understand how abruptly you're accelerated and  
16 therefore, what kinds of stresses and loads would be  
17 applied to the spine and it gives us an ability to make  
18 a determination as to what kind of tissues would be  
19 injured and how they would be stretched and torn and so  
20 forth.

21 Q. Doctor, can you tell us -- just briefly give  
22 us an example, an everyday example, of maybe the  
23 approaching speed or is there something called a  
24 closing speed?

25 A. Well, the closing speed is the impact speed.

1 But if one car is moving forward at, say, 10 miles an  
2 hour, and the other car comes up behind it at, say, 40  
3 miles an hour, the difference between those two is the  
4 closing speed. So in this case we would subtract the  
5 first car's speed from the second car. So it would be  
6 30 miles per hour.

7 Q. I see. So what was the speed estimate that  
8 Mr. Khoury's vehicle was traveling at the time?

9 A. My estimate was 9 to 12 miles per hour.

10 Q. Do you have an understanding as to what  
11 Dr. Smith based his opinion or what Dr. Smith's opinion  
12 was as to the speed?

13 A. Dr. Smith never stated what his opinion was  
14 based on. So he didn't provide any calculations or any  
15 explanation for anything that he did calculation-wise.

16 Q. Do you recall any estimate made by Mr. Khoury  
17 as to the speed?

18 A. As to his speed in the police report?

19 Q. Let me ask you this, Doctor: Do you have the  
20 speed of Ms. Seastrand's vehicle? Was she stopped or  
21 was she moving?

22 A. She was stopped.

23 Q. So if she's stopped, then there doesn't need  
24 to be a calculation made for the closing velocity.  
25 That would only be if she's moving forward as well?

1 A. Well, that's correct.

2 Q. Okay.

3 A. The closing velocity would be the speed of  
4 Mr. Khoury's vehicle in this case.

5 Q. Now, can you tell us after the -- the speed  
6 of Mr. Khoury's vehicle, how does that -- how does that  
7 convert into delta-V? I'm not sure about that.

8 A. Well, what happens essentially is he's moving  
9 and when he strikes her, then he slows down. So his  
10 delta-V has a minus sign on it. So let's say he's  
11 going 12 miles an hour. When he hits her, he's going  
12 to slow down to say -- well, I can tell you what it is  
13 because I did the calculation. I did the assessment  
14 here.

15 Q. And how did you -- how did you make this  
16 calculation anyway?

17 A. This is done by the computer.

18 Q. This is not you're --

19 A. Essentially, what's necessary for me is to  
20 input the initial speed of the collision and all the  
21 information about the vehicles so the computer knows  
22 all there is to know or that it needs to know about  
23 those two vehicles. It knows how much they weigh. It  
24 knows what their weight distribution is, their wheel  
25 base, center of gravity, all that sort of stuff.



1           So what it needs me to do is approximate the  
2 collision speed, which is what I did based on the  
3 property damage, the photographs that we have, the  
4 teardown photographs of the damaged bumper in her car  
5 when it was repaired, and my experience, which is -- I  
6 have very extensive experience in crash testing. And I  
7 know that that kind of damage doesn't happen in 5- or  
8 6-mile-an-hour crashes because we crash cars all day  
9 long and don't produce that kind of damage.

10           MR. CLOWARD: Let me -- Your Honor, may I  
11 approach the exhibits over there?

12           THE COURT: Yes.

13 BY MR. CLOWARD:

14           Q. Let me ask you a question about the property  
15 damage, Dr. Croft.

16           Dr. Croft, why would -- why would you want to  
17 look at the teardown photographs versus just this  
18 photograph right here?

19           A. Because the parts --

20           MR. JAFFE: Your Honor, may we have -- for  
21 the record identify what photograph that is?

22           MR. CLOWARD: It's the photograph that  
23 Mr. Khoury took at the scene.

24           MR. JAFFE: I don't know which one it is. If  
25 it's been admitted into evidence, I think you need to

1 reference for the record exactly what exhibit is being  
2 shown.

3 THE COURT: Can you figure out what exhibit  
4 it is?

5 MR. CLOWARD: It's Exhibit H. It's H-3.

6 MR. JAFFE: Thank you, Your Honor.

7 Has H been admitted in evidence? Yes, all  
8 the photographs are. That's right. We admitted them  
9 all. I apologize, Your Honor.

10 THE WITNESS: Shall I finish?

11 THE COURT: Hold on. What's the citation for  
12 the second one?

13 MR. SMITH: Is it I-30 and 31?

14 MS. BRASIER: Yes.

15 MR. CLOWARD: Okay. So it's which ones?

16 MR. SMITH: I-30 and 31.

17 MR. CLOWARD: I-30 and 31, Judge.

18 BY MR. CLOWARD:

19 Q. So H-3, H-3. Dr. Croft, why would you not  
20 just look at H-3? Why would you want to look at I-30  
21 and whatever the other one was that we just said?

22 MS. BRASIER: 31.

23 THE WITNESS: Because the way bumpers are  
24 made nowadays, they have an outer shell that's called  
25 the bumper fascia. And the outer shell of the bumper

1 is not a structurally important part of the bumper. In  
2 other words, you can push them in and they'll come back  
3 out. They're just made out of plastic. They're just  
4 designed for aesthetics and wind resistance.

5 The important part of the bumper is called  
6 the energy absorber which is that black broken piece on  
7 the top.

8 BY MR. CLOWARD:

9 Q. Am I pointing to that correctly?

10 A. Yes.

11 Q. That's the top photograph?

12 A. That's the energy absorber. On the lower  
13 part, we actually have the structural bumper itself and  
14 you can see that it's damaged. And both of those were  
15 replaced in the repair. And that tells you more about  
16 what kinds of forces would have been required to  
17 produce that kind of damage. And, again, I say we do  
18 crash tests in the 5, 6, 7, 8 mile an hour range all  
19 day long and don't produce that kind of damage. So we  
20 know that that was much more -- a much higher speed.

21 Q. So based on your experience in performing  
22 crash tests yourself?

23 A. That's correct. Now, I've never crash test  
24 that specific model, but the thing is those bumpers are  
25 all pretty standardized. The high density foam energy

1 absorbers and the reinforcing bars, they're all pretty  
2 much the same across vehicles. And I've tested lots  
3 and lots of vehicles with those kinds of bumpers and,  
4 you know, you don't break them until you get upwards of  
5 10, 11 miles an hour collision speed.

6 Q. And that would fall within your calculation  
7 of 9 to 12?

8 A. Yes.

9 Q. And if Mr. Khoury represented that he thought  
10 it was 5 to 10 miles an hour, would that be kind of  
11 within that same range?

12 A. Well, it is. But, you know, obviously,  
13 someone who actually collided with somebody wasn't  
14 paying a lot of attention I would have to say.

15 Q. Doctor, did you also perform -- in addition  
16 to the accident reconstruction, did you perform a  
17 biomechanical analysis?

18 A. Yes, I did.

19 Q. And briefly tell me again what is the  
20 difference between the accident reconstruction versus  
21 the biomechanical analysis?

22 A. Well, again, the accident reconstruction  
23 gives us the numbers, the values, the acceleration of  
24 the vehicle and then that information is put into the  
25 computer.

1           In other words, there's two different  
2 programs that we use. I told you about the PC-Crash.  
3 Once PC-Crash has done its work, then that information  
4 goes into a second program which is called MADYMO.  
5 MADYMO stands for mathematical dynamic model and it is  
6 a very sophisticated program that models the human  
7 behavior in a collision or in a crash. It's been very  
8 well validated in scientific studies.

9           Q. When you say "validated," what do you mean by  
10 that?

11          A. In other words, it's been tested against  
12 either cadavers in tests or living human subjects in  
13 lower-speed tests.

14          Q. So you're not pulling out your pocket  
15 calculator and making a couple --

16          A. No. There's literally millions of  
17 calculations that go into that every second.

18          Q. Biomechanical analysis, is that just kind of  
19 a fancy way of saying what the body does at the time of  
20 the impact?

21          A. Pretty much.

22          Q. So it's kind of like the accident  
23 reconstruction is, hey, what happens from the vehicle  
24 right up to the point and then when it makes contact,  
25 after it makes contact, that's when the biomechanical

1 analysis comes in and --

2 MR. JAFFE: Objection. Leading, Your Honor.

3 MR. CLOWARD: I'm seeing if I understand it.  
4 I mean, he's established both of them. I just want to  
5 see if I understand it.

6 THE COURT: It was leading. Sustained.

7 MR. JAFFE: Thank you.

8 BY MR. CLOWARD:

9 Q. So the biomechanical analysis is what happens  
10 to the body after the impact?

11 A. Correct.

12 Q. Dr. Croft, can you tell us what you do to  
13 determine what the biomechanical analysis or what the  
14 body -- what calculations you made to determine what  
15 Ms. Seastrand's body went through at the time?

16 A. Well, again, I ran the simulation at the 9  
17 mile per hour extreme, which I think is the low  
18 extreme, and then at the high extreme which is 12 miles  
19 an hour. I tend to think it's closer to the 12, but I  
20 ran it at both. And the acceleration to the head is in  
21 the 9-mile-per-hour range was 14 g's -- and that's an  
22 expression of acceleration -- and 25 g's in the  
23 12-mile-per-hour collision.

24 Now, those numbers have meaning for a  
25 biomechanic such as myself who is intimately familiar

1 with the crash test literature and the clinical  
2 literature because that gives me an understanding of  
3 what the probability of the neck injury such as  
4 Ms. Seastrand was complaining about or claiming and, of  
5 course, her back injury as well with regard to the low  
6 back. So these give me -- that gives me information  
7 that way.

8 Q. And, Doctor, why do you have a range? Why is  
9 it 9 versus 12? I don't understand that.

10 A. Well, because there's no -- there's no  
11 absolute certainty in this. I said that I estimate it  
12 to be 9 to 12 miles per hour. Now, I can't say it's  
13 exactly 10.3 or 11.2, you know. So I can say based on  
14 my experience, based on doing a lot of crash tests --  
15 and I have done probably more than most people in this  
16 country -- that to produce that much damage, you've got  
17 to be at least upwards of 9 miles per hour and usually  
18 higher. Because we've done some tests at 9 and we've  
19 never done that kind of damage. So that takes a lot of  
20 force to do that.

21 Q. Doctor, is it important to consider the time  
22 over which these forces occur?

23 A. Yes.

24 Q. Why?

25 A. Well, we call that the crash pulse. And the

1 thing that's really important is really acceleration.  
2 But delta-V, as we talked about before, is important  
3 because acceleration is equal to the change in velocity  
4 divided by the time that it happens.

5           This is why, for example, if you -- if you  
6 dropped an egg from 10 feet, a raw egg, and it landed  
7 on a blanket, it would hit that blanket and it would be  
8 sort of cushioned and probably wouldn't break because  
9 the amount of time that it's changing velocity from its  
10 initial fall velocity until the time that it stops in  
11 the blanket is going to be, you know, 150 milliseconds.  
12 And so that is the denominator in this equation.  
13 You're dividing this speed by that time.

14           Now, if that falls on the sidewalk, it's  
15 going to break just like that because the sidewalk has  
16 really no give to it so the change in velocity occurs  
17 in 5 milliseconds.

18           Q.    So --

19           A.    So the time of the crash pulse is very  
20 important.

21           Q.    So if Mr. Khoury, let's say hypothetically  
22 speaking, he pulled up to her bumper and so that they  
23 were touching and then he pressed the gas and pushed  
24 her forward, at 9 miles an hour -- you're shaking your  
25 head. What?



1       A.   Well, first of all, it wouldn't do that  
2 damage because it would just push her car forward.  
3 See, that damage is an impact. It's not -- you can't  
4 do that with a push. The only way you can do that with  
5 a push would be, for example, if she was up against a  
6 non-yielding wall and you had a very large vehicle and  
7 you pushed really hard, but even then it wouldn't  
8 happen because if you did that, her vehicle would  
9 crush.

10       Q.   I see.

11       A.   That's just the physics of it.

12       Q.   So it's the -- when things are shortened to a  
13 very narrow time, that's a critical factor?

14       A.   It is a very critical factor, yeah.

15       Q.   Doctor, did you make any determinations  
16 regarding the brief time or the time over which the  
17 accident took place, the crash took place?

18       A.   Well, again, the computer does all of that.  
19 And so I put those graphs and charts in my report, my  
20 initial report. So, yes, I did, although, like I said,  
21 it's done by MADYMO.

22       Q.   And what were the accelerations to  
23 Ms. Seastrand's spine during that short period of --  
24 let me back up.

25               What was the calculation that MADYMO came out

1 with?

2 A. For the head it was 14 to 25 g's and for the  
3 lumbar spine, low back, it was 18 to 19 1/2 g's. So  
4 that's 18 to 19 times the force of gravity.

5 Q. And it's over a very short period of time.

6 A. Over a very short period of time. The blink  
7 of an eye approximately.

8 Q. Now, are you aware of any -- any studies that  
9 talk about the range of acceleration over which injury  
10 can take place?

11 A. Yes. There are a lot of studies. There's a  
12 lot of studies that looked at it in different ways.  
13 There are studies that looked at it -- most of the  
14 studies have looked at it in terms of delta-V. But,  
15 again, because we know what the delta-V does in terms  
16 of acceleration and what the usual crash pulse is in  
17 these crashes, we can make those determinations.

18 So, in other words, if somebody gives me  
19 acceleration, I can give you a pretty close  
20 approximation what the delta-V is. And if somebody  
21 gives me delta-V, I can give you a pretty close  
22 approximation what the acceleration is.

23 Q. Doctor, let's shift the focus now and talk  
24 about the epidemiological aspect of it.

25 What, again -- what, again, is that study?

1 What is an epidemiologist? What do they do?

2 A. Epidemiology is the basic foundation of  
3 medicine. It is the study of any kind of disease,  
4 whether it's degenerative or rheumatological or cancer  
5 or diabetes, infectious disease. Epidemiology deals  
6 with all those things. My particular specialty is  
7 trauma epidemiology.

8 Q. And when you study the epidemiology of a  
9 traumatic event like this, are there certain risk  
10 factors that increase the probability of injury?

11 A. There are. And that is exactly what my  
12 epidemiology risk analysis looks at. Because there's  
13 hundreds, literally hundreds, of published papers in  
14 the medical literature that have specifically asked  
15 that question, what are the risk factors? We know that  
16 being a female alone doubles your risk of whiplash  
17 injury.

18 MR. CLOWARD: Hold on one second. Judge, may  
19 I approach the exhibits again?

20 THE COURT: You may.

21 BY MR. CLOWARD:

22 Q. Doctor, you prepared a poster for me,  
23 correct?

24 A. Yes, I did.  
25

1 MR. CLOWARD: Mr. Jaffe, did you take that?

2 MR. JAFFE: Did I what?

3 MR. CLOWARD: Take a poster.

4 MR. JAFFE: I don't think I want it.

5 MR. CLOWARD: Your Honor, may we approach?

6 THE COURT: Sure.

7 (Whereupon, a brief discussion was  
8 held at the bench.)

9 BY MR. CLOWARD:

10 Q. Dr. Croft, you prepared a poster for me,  
11 correct?

12 A. Yes.

13 Q. And there's some risk factors. Let's just go  
14 through the risk factors. Number 1, being female.

15 A. Female. Rear impact. You're much more  
16 likely to be injured in a rear impact than in a frontal  
17 impact.

18 Q. Dr. Croft, first off, why does being female  
19 increase the risk -- why does that make someone more  
20 susceptible?

21 A. Well, mainly because women have thinner necks  
22 and yet a woman's head is very close to the same size  
23 as a man's, so basically the ratio of musculature to  
24 the mass of the head is proportionally worse in a  
25 female in terms of her being able to protect herself.

1 Q. Now, is there literature that you're basing  
2 that on? That's not the opinion of Dr. Croft, is it?

3 A. No. There's -- there's probably 100  
4 published papers and they almost always find exactly 2  
5 to 1.

6 Q. And those weren't papers that you published  
7 in your garage, right?

8 A. No.

9 Q. Those were in medical journals?

10 A. Those are peer-reviewed, scientific papers.

11 Q. What does it increase the risk, again, for  
12 females?

13 A. What is the increase? 2 to 1. So it's two  
14 times.

15 Q. Two times.

16 MR. CLOWARD: Judge, is this thing on? Just  
17 turn it on or can I get this turned on?

18 THE COURT: We can see it. You can make it  
19 brighter. There's a button on the top.

20 MR. CLOWARD: It's not on.

21 THE COURT: It's not on the TV?

22 THE WITNESS: It's not up there.

23 MR. CLOWARD: I guess if they can see that.

24 THE COURT: Is the TV plugged in?

25 MR. CLOWARD: I think it's not plugged in the

1 wall. It's okay, though.

2 THE COURT: We can plug it in. I'm seeing  
3 it. It's working.

4 BY MR. CLOWARD:

5 Q. Dr. Croft, what was the other risk factor you  
6 mentioned after --

7 A. Rear impact factor. In other words, being  
8 hit from the rear. A high level of initial symptoms.

9 Q. Dr. Croft, why does a rear impact have a  
10 different risk factor than a frontal impact or, you  
11 know, maybe like a T-bone impact?

12 A. Because in a frontal impact, first of all,  
13 usually you have some warning. You see it coming.  
14 Secondly, you have the steering wheel to brace against,  
15 and you've got the floor pan to put your feet against,  
16 and those are the most important factors.

17 Now, in a rear impact, what will happen  
18 typically is the car is pushed suddenly away from you  
19 or against you so that your head goes back this way and  
20 you have this sheer effect through the neck, and that's  
21 one of the main problems.

22 We've seen other things as well. Because  
23 when we measure the acceleration on a living person in  
24 these kinds of crashes, we also see a vertical  
25 compression because they want to ride up the seat back

**IN THE SUPREME COURT OF THE STATE OF NEVADA**

RAYMOND RIAD KHOURY,

Appellant,

vs.

MARGARET SEASTRAND,

Respondent.

Supreme Court Case No. 64702

Supreme Court Case No. 65007  
Electronically Filed  
Nov 13 2014 08:23 a.m.

Supreme Court Case No. 65172  
Tracie K. Lindeman  
Clerk of Supreme Court

**APPEAL**

from the Eighth Judicial District Court, Clark County

The HONORABLE JERRY WEISE, District Court Judge

District Court Case No. A-11-636515-C

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**APPELLANT'S APPENDIX**

**VOLUME XIII**

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**VOLUME XIII**

Exhibit 36 July 22, 2013, Reporter's Transcript of Jury Trial, JA 2390-2562  
(Day 6)