

**In The Matter Of:**

*Pressgrove, et al v.*

*Byrd, et al*

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*Jonathan Eisenstat, MD*

*March 24, 2016*

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*D'Amico Gershwin, Inc.*

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This, the 15th day of April, 2016.



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STEPHANIE K. FEEN, CCR-2573  
Certified Court Reporter

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This, the 15th day of April, 2016.

KELLY D'AMICO, CEO  
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(VIDEO CAMERA ON.)

THE VIDEOGRAPHER: This is the beginning of tape number one in the deposition of Dr. Jonathan Eisenstat. We are now on the record, Thursday, March 24, 2016. The time is 12:08 p.m.

This is the case of Pressgrove, et al. versus Byrd, et al. This deposition is being held at 5855 Sandy Springs Circle, Atlanta, Georgia. Please proceed.

MR. SMITH: Swear in the witness.

JONATHAN EISENSTAT, M.D.,  
having been first duly sworn, was examined and testified as follows:

MR. BAKER: Okay. And we'll go around the room and everybody announce themselves. My name is Bryan Smith. I'm here on behalf of Holland Simms' family.

MR. BAKER: I'm Darrell Baker and I'm here on behalf of Dr. Tony Wright.

MR. SMITH: And we have a number of attorneys appearing by video, if you all would announce yourselves.

MR. GILMER: I'm Brad Gilmer, and I represent Saint Francis Hospital-Memphis.

1 MS. BENNETT: Samantha Bennett, and I  
2 represent Dr. Chris Gillespie.

3 MR. ALEXANDER: John Alexander, here on  
4 behalf of Dr. Byrd, Dr. Waldrup, and Tennessee  
5 EM-I Medical Services.

6 MS. MALKIN: Andrea Malkin, representing  
7 Dr. Shiva Natarajan.

8 MS. STEINBERG: Jill Steinberg,  
9 representing Methodist Healthcare-Memphis  
10 Hospitals.

11 MR. SMITH: If you could re-swear in the  
12 witness. Just do it again so we've got it on  
13 the record.

14 JONATHAN EISENSTAT, M.D.,  
15 having been first duly sworn, was examined and  
16 testified as follows:

17 MR. SMITH: And before we get started --

18 MR. GILMER: I think we had a couple of  
19 stipulations, yes.

20 MR. SMITH: I was getting ready to  
21 announce those.

22 MR. GILMER: Mr. Smith, will you put  
23 those stipulations on the record, please.

24 MR. SMITH: We've agreed to the standard  
25 caption, meaning that all objections except

1 to -- except as to the form are reserved.

2 This is a discovery deposition of an  
3 expert witness taken pursuant to the Tennessee  
4 Rules of Civil Procedure. We've agreed, to the  
5 extent that there are any informalities in the  
6 video introduction, that they will be waived.

7 We've also agreed that one objection is  
8 good for all defendants or good for all  
9 parties, and I'm assuming that Dr. Eisenstat --

10 THE WITNESS: Yes.

11 MR. SMITH: Is that correct?

12 THE WITNESS: That's correct.

13 MR. SMITH: -- is going to read and sign?

14 MR. BAKER: Yes.

15 MR. SMITH: Anything else?

16 MR. GILMER: That's all.

17 MR. BAKER: Everybody agree?

18 MS. BENNETT: We agree.

19 MR. GILMER: Yes.

20 MR. ALEXANDER: Yes.

21 MR. BAKER: All right.

22 EXAMINATION

23 BY MR. SMITH:

24 Q All right. Have you given a deposition

25 before?

1           A           I have.

2           Q           How many times?

3           A           Oh, probably around 20 to 30.

4           Q           So you know how the process works?

5           A           I do.

6           Q           You, I'm assuming, had an opportunity to  
7 meet with Mr. Baker to prepare for your deposition?

8           A           I did, yes.

9           Q           You understand how the process -- how  
10 we're going to do it here today? In other words,  
11 we're here today to talk to you about opinions that  
12 you have or that you've formed about Ms. Simms and  
13 some of her medical conditions.

14          A           Yes, I do.

15          Q           I'm going to be asking you questions and  
16 getting answers so that I can understand your  
17 opinions. I won't go through all the dos and don'ts  
18 of a deposition.

19                    I don't know -- sometimes with doctors  
20 that are actually -- that are treating patients, they  
21 get pages and things like that. I don't know if  
22 you're on call. If you do, just let us know and we  
23 can take a break if you get a page or a call or  
24 anything like that; okay?

25          A           Okay.

1 Q Likewise, it's not a -- if you need to  
2 take a break to go to the restroom or anything like  
3 that, just let me know and we'll be happy to take a  
4 break. I may want you to answer the question first,  
5 but we'll be happy to take a break if we need to.

6 A Sure.

7 Q The main thing is, is as I go through and  
8 ask you questions, I may ask you a question at some  
9 point in time that you don't understand and I don't  
10 want you to understand -- I don't want you to answer a  
11 question unless you understand it; okay?

12 A Yes.

13 Q So if I ask a question that you don't  
14 understand, I need you to tell me that you don't  
15 understand my question. Will you do that?

16 A I will.

17 Q And would it be, if you -- if I ask a  
18 question and you answer it without telling me you  
19 don't understand it, will it be fair for me to assume  
20 that you understood the question?

21 A That's fair.

22 Q Would it be fair for the judge and the  
23 jury to assume the same?

24 A Yes.

25 Q On the other side of it, if I do ask a

1 question that's confusing in some way and you tell me,  
2 I'll do my best to rephrase it so we're both on the  
3 same page before you give me an answer; okay?

4 A Sounds good.

5 Q You understand -- we're not in court  
6 today, but you do understand that you're under oath?

7 A Yes, sir.

8 Q You understand that when you raised your  
9 right hand and swore to tell the truth, that it was  
10 just like you were in court?

11 A Yes, sir.

12 Q And that you have an obligation to tell  
13 the truth today?

14 A Yes.

15 Q You have an obligation to tell not part  
16 of the truth or half the truth, but the whole truth?

17 A That's correct.

18 Q And that's what you intend to do?

19 A Yes, sir.

20 Q Again, you understand that you have been  
21 identified as a person or who has or is going to  
22 potentially give opinion testimony in the trial of  
23 this case?

24 A Yes.

25 Q You understand that my purpose here today<sub>14</sub>

1 is to make sure that we get all of your opinions out  
2 on the table and we discuss the reasons that you have  
3 those opinions so that I'm not surprised at trial?

4 A Yes, I understand that.

5 Q And you'll do your best to make sure that  
6 we go over all your opinions today?

7 A Yes.

8 Q And that we go over all the reasons that  
9 you have for those opinions so that there's nothing  
10 new, there's no surprises at trial; fair?

11 A Fair.

12 (Thereupon, marked for identification,  
13 Plaintiffs' Exhibit Number [P-1](#).)

14 BY MR. SMITH:

15 Q First thing I'm going to hand you is what  
16 we've marked an Exhibit Number 1 to your deposition,  
17 which is a notice to take your video deposition.

18 There was actually an amended notice  
19 filed yesterday. It's the same, but the times were  
20 off, but it's got the same list of items --

21 A Okay.

22 Q -- for you to bring.

23 You have brought your file with you  
24 today?

25 A Yes.

1 Q And all the things that we requested --  
2 there's a couple of things we'll go over that you  
3 didn't bring, but you did bring your entire file with  
4 you today?

5 A I did.

6 Q Let's go through and mark some of these  
7 things.

8 The first thing that you were asked to  
9 bring was a current copy of your CV or professional  
10 resume. You have brought that with you?

11 A Yes, I have.

12 (Thereupon, marked for identification,  
13 Plaintiffs' Exhibit Number [P-2](#).)

14 BY MR. SMITH:

15 Q I'm going to hand you what I've marked as  
16 Exhibit Number 2 to your deposition.

17 Is that a true and accurate copy of your  
18 professional resume?

19 A It is.

20 Q Is it up to date through today?

21 A It is.

22 Q Does it accurately reflect your medical  
23 education and training?

24 A Yes, it does.

25 Q We'll go over that in a little bit in

1 more detail in a minute.

2 A Okay.

3 Q I'm going to go through -- there's a  
4 bunch of bullet points, but I'll tell you that  
5 generally, they ask you to bring everything that you  
6 have reviewed in connection with this case.

7 We have a pile of stuff over here. I'm  
8 going to go through that and identify those things,  
9 but you did bring everything that you reviewed?

10 A I did.

11 I don't have the glass slides because I  
12 had to return those to Dr. Schwartz, but I have  
13 everything else that I've reviewed.

14 Q Some of these I may not mark because we  
15 don't -- we don't need more copies of all this stuff.

16 The materials that you've gone through  
17 and reviewed in connection with this case, you have  
18 not marked on or made notes on or highlighted in any  
19 way?

20 A That's correct.

21 Q That's something you said you don't do  
22 that as a matter of course?

23 A That's correct.

24 Q So the first thing that we have that you  
25 have reviewed is a copy of the Complaint for Wrongful

1 Death that was filed in September of 2008. You have  
2 reviewed that?

3 A I have.

4 Q There was an Amended Complaint that was  
5 filed or -- that was filed in January of 2009. Have  
6 you reviewed that as well?

7 A I did.

8 Q And if you need any of these things, I'm  
9 going to pile them over there, but if you need them,  
10 just let us know.

11 A Okay.

12 Q You also have reviewed some medical  
13 records?

14 A Yes.

15 Q Including some records from the CDC,  
16 which are Bates stamped CDC 1 through CDC 3?

17 A Correct.

18 Q You also have reviewed some information  
19 from the California Department of Health that are  
20 Bates stamped CDH 2-1 through CDH 2-16?

21 A That's correct.

22 Q Let me make sure all the pages are here.  
23 You also have some binders -- or not  
24 really binders, but folders that have some medical  
25 records in them. The front pages of -- you have three

1 different binders and the front pages of these binders  
2 have -- have a table of contents?

3 A Yes.

4 Q What I'd like to do is -- we can put  
5 these back in later on, but I'm going to pull out the  
6 table of contents. We'll mark those an exhibit and  
7 then we can make a copy of them at a break and put the  
8 originals back in your binders.

9 A Okay.

10 Q I'll take the staple out later, but if we  
11 don't, they'll get all mixed in.

12 A That's fine. No problem.

13 (Thereupon, marked for identification,  
14 Plaintiffs' Exhibit Number [P-3](#).)

15 BY MR. SMITH:

16 Q I'm going to hand you what I've marked as  
17 Exhibit Number 3, which is a -- the table of contents  
18 from the first volume of medical records that you  
19 received, and it says Office Records. Volume I,  
20 Office Records; is that correct?

21 A That's correct.

22 Q Part of what you have on here are records  
23 from the Vanderbilt University Medical Center, the  
24 Tennessee Unexplained Encephalitis Study?

25 A Yes.

1 Q And they are Bates stamped 44 through  
2 55 -- 50?

3 A Yes, that's correct.

4 Q Are those the only records that you  
5 received from the TUES program?

6 A I'd have to look at my page of notes, but  
7 as far as I can remember -- well, let me take a look  
8 first to confirm that.

9 Q I'm not going to mark those yet, but  
10 just --

11 A I believe that those are the only records  
12 from T-U-E-S that I -- that I received and reviewed.

13 Q Okay. And I don't know if we're right or  
14 not, but we're calling that the TUES program.

15 A Yeah, I wanted -- I was saying that so  
16 she knew what TUES was.

17 (Thereupon, marked for identification,  
18 Plaintiffs' Exhibit Number [P-4](#).)

19 BY MR. SMITH:

20 Q And just so -- just to clarify this, I'm  
21 going to hand you what we've marked as Exhibit  
22 Number 4.

23 Those would be all of the records that  
24 you have received and reviewed from the -- from  
25 Vanderbilt University Medical Center from the TUES or 20

1 T-U-E-S program?

2 A Yes.

3 (Thereupon, marked for identification,  
4 Plaintiffs' Exhibit Number [P-5](#).)

5 BY MR. SMITH:

6 Q Okay. I'm going to hand you what I've  
7 marked as Exhibit Number 5 to your deposition, which  
8 is an index from Volume II of the records that you've  
9 looked at which has the related ER visits?

10 A That's correct.

11 Q Again, you haven't made any notes,  
12 highlights, or marks on any of those records?

13 A No, I have not.

14 (Thereupon, marked for identification,  
15 Plaintiffs' Exhibit Number [P-6](#).)

16 BY MR. SMITH:

17 Q I'm going to hand you what I've marked as  
18 Exhibit Number 6 to your deposition, which is an index  
19 from the Volume -- it says IV, medical records, which  
20 has Baptist Hospitalizations, Collierville and  
21 transfer to Memphis; is that right?

22 A And then a few more records as well.

23 Q And Baptist Hospitalizations continued on  
24 to page two. Is that volume or that index were all  
25 the records that you've looked at in connection with

1 this case?

2 A Yes.

3 Q All right. We have Volume I, II, and IV.  
4 Do you know where Volume III is?

5 A I either didn't receive Volume III or it  
6 was also part of Volume II, if we can look at the  
7 front.

8 Q (Handing.)

9 A Right. Then I never received a Volume  
10 III.

11 Q Okay. You also have brought with you a  
12 copy of Dr. Schwartz's deposition?

13 A Yes.

14 Q Okay. And you have reviewed -- and his  
15 deposition was taken on November 9, 2012?

16 A Yes.

17 Q You've reviewed his deposition?

18 A I have.

19 Q You also have brought a copy of the  
20 deposition of Dr. Scheld that was taken on July 2,  
21 2014?

22 A Yes.

23 Q Have you reviewed that deposition as  
24 well?

25 A I have.

1 Q Other than the depositions of  
2 Dr. Schwartz and Dr. Scheld, have you reviewed any  
3 other depositions in this case?

4 A No, no other depositions.

5 Q Have we now gone through and identified  
6 all of the medical records and depositions that you've  
7 reviewed in connection with this case?

8 A I believe so.

9 (Thereupon, marked for identification,  
10 Plaintiffs' Exhibit Number [P-7](#).)

11 BY MR. SMITH:

12 Q All right. I'm going to hand you what I  
13 have marked as Exhibit Number 7 to your deposition.

14 A Okay.

15 Q And if you would, tell me what -- and  
16 it's collective Exhibit Number 7. If you would tell  
17 us what collective Exhibit Number 7 is.

18 A These are printouts that I printed of  
19 photographs that Dr. Schwartz submitted, I believe it  
20 was during his deposition.

21 (Thereupon, marked for identification,  
22 Plaintiffs' Exhibit Number [P-8](#).)

23 BY MR. SMITH:

24 Q Okay. I'm going to hand you what I've  
25 marked as Exhibit Number 8 to your deposition, if you 23

1 would tell us what that is.

2 A So when I asked to review the slides  
3 myself so I could make my own determination,  
4 Dr. Schwartz requested that we do it through an  
5 intermediary. And when we did that, he had had a  
6 photocopy of the slides that he was handing to me, so  
7 this is a printout of that photocopy of the slides he  
8 handed me.

9 Q I've got some additional photographs,  
10 four other photographs. We'll go through these in  
11 more detail, but if you would tell me what these four  
12 photographs are.

13 A So those are photographs that I took when  
14 I reviewed the slides, basically documenting my  
15 findings.

16 Q So I'm going to mark these -- I'm going  
17 to mark them individually so we can go through and  
18 talk about them specifically later on.

19 A Sure.

20 (Thereupon, marked for identification,  
21 Plaintiffs' Exhibits Number [P-9](#), [P-10](#), [P-11](#), &  
22 [P-12](#).)

23 BY MR. SMITH:

24 Q All right. I'm going to hand you what I  
25 have marked as Exhibits Number 9, 10, 11, and 12. And

1 as I understand that, those are copies of photographs  
2 that you took when you reviewed the slides that you  
3 received from Dr. Schwartz?

4 A That's correct.

5 Q All right. Are there any other materials  
6 that you have reviewed in order to form your opinions?

7 A No.

8 Q All the materials that we've gone  
9 through: The medical records in Volume I, the office  
10 records; the medical records in Volume II, the related  
11 ER visits; and the medical records in Volume IV, which  
12 is the Baptist hospitalizations; and the depositions  
13 of Dr. Schwartz and Dr. Scheld, are those all the  
14 materials that you relied on in order to form your  
15 opinions in this case?

16 A Yes. Of importance in the medical  
17 records is that there is the report of the  
18 neuropathology, the limited autopsy of the brain, and  
19 that's part of those medical records.

20 But yes, this is everything that I've  
21 reviewed and everything that I've relied on, other  
22 than my experience and training.

23 Q And when you talk about the -- I mean, I  
24 think I know, but I want to get you to tell me why.

25 When we talked about the medical records, '25

1 you specifically pointed out or pulled out the autopsy  
2 report.

3 A Correct.

4 Q Is there a reason for that?

5 A Well, I think there's -- there's a  
6 positive and a negative of that limited autopsy.

7 The positive is that I actually agree  
8 with the description and -- of what the  
9 neuropathologist saw of the perivascular inflammation,  
10 the lack of viral inclusions, the lack of hemorrhagic  
11 necrosis in any of the brain, but specifically in the  
12 temporal lobes, in the frontal lobes. So I think that  
13 is important, extremely important.

14 One possible issue is that it was a  
15 limited exam, just to the brain. I understand why  
16 they, you know, the family decided on that. I think  
17 it would have been nice to have a complete autopsy  
18 because I would have liked to see what else was in her  
19 body.

20 She did have a history of having an  
21 ovarian cyst. I really would have liked to have seen  
22 if that ovarian cyst may have possibly been something  
23 other than a simple cyst. Specifically, if there was  
24 any evidence of a teratoma. That would help me  
25 formulate or possibly become -- be more specific in

1 what my diagnosis is.

2 Q Okay. I know we're talking -- we're  
3 going through and marking everything that I asked you  
4 to bring, but I do want to ask you a few questions  
5 while we're talking about this because we're going to  
6 come back to it later on.

7 A Sure.

8 Q Is it fair to say that a large part of  
9 your opinions are based upon the autopsy findings?

10 A Well, a part of is on the autopsy  
11 findings, as well as the studies that followed the  
12 autopsy findings such as the immunohistochemistry, the  
13 PCR, as well as the CSF studies that were done as  
14 well.

15 So yes, the autopsy, of course, as a  
16 pathologist, that's extremely important to me but so  
17 are the other laboratory studies as well.

18 Q Let me ask it a different way.

19 A Sure.

20 Q And we'll get into your opinions in a  
21 little bit. But is it fair to say that your --  
22 although you've reviewed all this stuff and relied on  
23 all the things that we've discussed, that your  
24 opinions are primarily based upon the autopsy  
25 findings, as well as the -- the other studies that you

1 discussed, the immunohistochemistry stainings, the PCR  
2 testings of the cerebral spinal fluid, as well as the  
3 postmortem testing that was done at Vanderbilt  
4 University Medical Center?

5 A Yes. And if I may turn it around, I  
6 think what you're getting at is, I'm not a clinician,  
7 so the medical records are important to me because if  
8 I see something that makes my mind go down my  
9 differential diagnosis route, that's great.

10 I'm not going to be speaking to  
11 specifically what should or should not have been done  
12 from a clinician's standpoint, but the medical records  
13 do play a role. In this case, I would say they're not  
14 as important to me.

15 Much more important are the autopsy, my  
16 review of the slides, my revision -- revision, excuse  
17 me -- my review of the brain autopsy report, as well  
18 as those ancillary studies we talked about.

19 Q And just so we're clear about the  
20 ancillary studies that we're talking about, we're  
21 talking about the postmortem studies that would have  
22 been done, the immunohistochemistry staining, the  
23 other testing that would have been done as part of the  
24 autopsy, and also the other testing that would have  
25 been done at the direction of the TUES program at

1 Vanderbilt University Medical Center?

2 A Right. So the CSF studies that were  
3 done, as well as the postmortem brain studies that  
4 were done.

5 Q And you talked about you agreed with the  
6 description in the autopsy report that included, you  
7 said, the lack of inclusion bodies?

8 A Correct.

9 Q You said the lack of hemorrhaging in the  
10 frontal and temporal lobes?

11 A Correct.

12 Q And the -- the overall softening or  
13 swelling of the brain as a result of the encephalitis?

14 A Well --

15 Q I mean --

16 A No, that's fine.

17 Basically, I would need to look at the  
18 report again to tell you exactly what I agree or  
19 disagree.

20 But in essence, reviewing the gross  
21 description of the brain led me down a path that was  
22 separate from a herpes encephalitis. And that's what  
23 I mean. Not necessarily that I agree with it, but the  
24 way it's described and then my review of the  
25 microscopic slides correlate with his -- with that

1 pathologist's gross description. That led me down my  
2 route of diagnosis.

3 Q And that's what I want to clarify.

4 You have not -- you have not done a gross  
5 inspection of the brain itself?

6 A No. I don't know if it even exists  
7 anymore.

8 Q You haven't seen any pictures of the  
9 brain?

10 A No. Just one -- just the description by  
11 the pathologist.

12 Q So when we talk about the condition of  
13 the brain at the time of the autopsy, all you have to  
14 go on is the description that's in the autopsy report;  
15 is that fair?

16 A That's fair, after which, I looked at the  
17 slides. But from the gross description, that's fair.

18 Q In other words, just tell us what a gross  
19 observation or gross inspection would be.

20 A Sure. So in a case such as this, the  
21 first inspection is when the brain is removed from the  
22 head. You look for any natural process. You look for  
23 any traumatic injuries. You look for bleeding or  
24 necrosis, which is death of the tissue, and that  
25 should be pretty obvious to any trained pathologist.

1                   And then in this case, as many  
2 neuropathology tests, you fix the brain in  
3 formaldehyde. That makes it a little firmer and  
4 easier to examine as you cut.

5                   So then you look at that and you look at  
6 the description of, is -- again, is there hemorrhage?  
7 Is there necrosis? Is there any other lesion within  
8 the tissue of the brain itself or surrounding the  
9 brain that is obvious at the time?

10                   That's the gross description and that's  
11 the first part of the report or that's the first  
12 paragraph or maybe first two paragraphs of the report.

13           Q           Would it be fair to say that in an  
14 autopsy like this, that there would be two types of  
15 inspections; the first would be the gross inspection  
16 and the second would be the microscopic inspection?

17           A           Yes. That's in most autopsies, that's  
18 correct.

19           Q           And the gross inspection would be just  
20 basically eyeballing it?

21           A           Yes. But I would hope that the  
22 pathologist is trained at eyeballing it with specific  
23 disorders. You should be able to make a diagnosis or  
24 at least give your differential at that time.

25           Q           And I wasn't taking the doctor out of it,<sup>31</sup>

1 but my point is, just in lay terms, in other words,  
2 the gross inspection would be essentially the doctor  
3 eyeballing it?

4 A Yes, but --

5 Q Looking for specific things?

6 A Right. To use an example, I'm doing a  
7 gross inspection of you right now.

8 Q As am I, you.

9 A Yeah, as you are of me. So we're  
10 looking -- it's just what we see visually.

11 Q And then -- then the slides are made and  
12 then we do a microscopic evaluation later?

13 A That's correct.

14 Q All right. You talked about this one  
15 being a limited autopsy. This was limited to the  
16 brain?

17 A That's correct.

18 Q And you talked about the -- you wished --  
19 you said that it would have been helpful if there had  
20 been a full autopsy done because there was a history  
21 of ovarian cysts; correct?

22 A That's one reason. Being a pathologist,  
23 a forensic pathologist, I always err on the side of  
24 doing more than less. And to me, in general, a  
25 limited autopsy gives limited results.

1           We don't know what was going on in her  
2 heart. And the reason that I say that is, if we're  
3 thinking of maybe a different type of virus, like an  
4 echovirus, you may see inflammation in the heart and  
5 that can correlate.

6           We don't know what's going on in her  
7 ovaries, as we -- as I already mentioned. Is there  
8 something in the ovaries that make me think down a  
9 different route?

10           So the neuropathology was very adequate  
11 to document what was there and what was not there, but  
12 I think there may have been more information added if  
13 a complete autopsy was done.

14           Q           Any other things that you would like to  
15 have seen, other than the heart and the ovaries?

16           A           Well, I would have liked to have seen  
17 everything, but those were just two examples of organs  
18 that may help in your differential diagnosis.

19           Q           Since a full autopsy was not done --

20           A           Uh-huh (affirmative).

21           Q           -- since the heart and the other organs  
22 weren't examined -- well, let's focus on the heart in  
23 particular. Since the heart wasn't examined, you  
24 don't know what the autopsy would have found?

25           A           That's very true, yes.

1 Q And it would be speculative for you to  
2 now tell us what things may or would have been on --  
3 would have been seen if they had looked at the heart?

4 A Right. I can't tell you what would have  
5 been there, but if asked about if I found something,  
6 would it correlate with a different pathology in the  
7 brain, I could speak to that.

8 But no. I mean, without a full autopsy  
9 being done, I can't tell you what was or was not  
10 there.

11 Q And I guess that's my point. Without a  
12 full autopsy being done, you can't tell us -- you  
13 don't know what would have been found if they had done  
14 a full autopsy; is that fair?

15 A That's fair.

16 Q And for you now, after the fact, to give  
17 an opinion about what would have been found would be  
18 completely speculative?

19 A In those words, yes, absolutely.

20 Q And when you talked about the heart, for  
21 example, you talked about an echovirus. You can't say  
22 that the heart would have been consistent with an  
23 echovirus at this point in time?

24 A I cannot.

25 Q It would be speculative?

1           A           That's correct.

2           Q           The ovaries, you talked about that. The  
3 medical records indicated that she had a simple  
4 ovarian cyst.

5           A           I recall a cyst. I don't recall it being  
6 a simple cyst.

7           Q           I thought you said that. Okay, a cyst.

8           A           Right. What I said -- I said simple cyst  
9 afterwards -- is that it could have been a simple cyst  
10 or it could have been something more like a teratoma,  
11 but there's no way to know without having looked at  
12 the ovary.

13          Q           Is there any -- do you have any evidence  
14 to suggest that this was a teratoma?

15          A           I don't have any evidence to tell me what  
16 type of cystic structure it was, so no.

17          Q           It would be speculative at this point in  
18 time to say that it was a teratoma?

19          A           That's correct.

20          Q           Because there's no factual support to  
21 indicate it was a teratoma; is that fair?

22          A           That's fair.

23          Q           All right. Let's go back to our Notice  
24 of Deposition.

25          A           Sure.

1 Q We are now finished with our detour.

2 So we've gone over all the records that  
3 you have reviewed in connection with this case, either  
4 with forming your opinions or preparing for your  
5 deposition?

6 A Correct.

7 Q That would also include any documents  
8 that you have reviewed relating to the allegations in  
9 the plaintiffs' Complaint? We've covered all those as  
10 well?

11 A Yes.

12 Q It next had asked you to bring a copy of  
13 any articles that you have authored in any way related  
14 to the medical care referenced in the plaintiffs'  
15 Complaint.

16 I know you do have some articles and  
17 we'll go through those in a minute, but do you have  
18 any articles that are particularly relevant to the  
19 issues in this case that you've written?

20 A Right. No, I don't believe so.

21 Q Next -- and I know this is -- some of  
22 this is a little bit duplicative -- but complete  
23 copies of all records, articles, texts, or other  
24 documents or resources you have reviewed in order to  
25 form your opinions in this case. Have we gone over

1 all those?

2 A Yeah. I mean, I didn't really go back  
3 and specifically review anything. This is -- this is  
4 stuff that I've, over the years, studied and seen, so  
5 I didn't go back to anything specific.

6 Q Let's just make sure we're clear about  
7 what you're saying. I think I know what you're  
8 saying, but I want to make sure that I'm on the same  
9 page with you. You have not done any specific medical  
10 literature research to bolster your opinions in this  
11 case?

12 A No. I didn't think I needed to.

13 Q Next it asked for a complete copy of your  
14 file. And there's a couple of notes and things like  
15 that we're going to go over in just a minute, but you  
16 have brought everything today?

17 A Yes.

18 Q All written reports that you prepared,  
19 including notes that you've made. And I know that you  
20 did bring some notes.

21 A That's correct.

22 (Thereupon, marked for identification,  
23 Plaintiffs' Exhibit Number [P-13](#).)

24 BY MR. SMITH:

25 Q I'm going to hand you what I've marked as <sup>37</sup>

1 Exhibit Number 13 to your deposition. As I understand  
2 it, those are the notes -- those are notes that you  
3 made as you went through and reviewed the materials  
4 that we've already gone through and identified.

5 A That's correct.

6 Q Are those the only notes that you have?

7 A Yes.

8 Q Do you have any -- you don't have any  
9 handwritten notes?

10 A No.

11 Q They're all made on your computer?

12 A That's correct.

13 Q Do you -- have you prepared a report, a  
14 written report, summarizing your opinions?

15 A No. There's just the disclosure, but I  
16 have not written an actual report.

17 Q And we'll go through that in a minute.  
18 Typically, the disclosures are written by  
19 the attorneys?

20 A Right.

21 Q They talk to you about their opinions and  
22 they write their disclosure up?

23 A Right.

24 Q I'm not suggesting you weren't involved  
25 in that. But typically, although not always, some

1 doctors do actually write their own reports. You  
2 haven't done that in this case?

3 A I have not, no.

4 Q Next it asks you to bring all  
5 correspondence between yourself and Mr. Baker's  
6 office?

7 A Yes.

8 Q And you have brought that?

9 A Yes.

10 There's a cover sheet for the records  
11 when they were sent to me and then we had a phone  
12 call, I believe it was back in 2011, and that just  
13 states what my opinions were at the time.

14 And essentially, the only other stuff was  
15 e-mail that says, here's the date of your deposition,  
16 and I don't retain those. I don't have that.

17 Q You say you don't keep e-mails?

18 A Well, I don't have any e-mails that  
19 are -- have any substance or value to them. They're  
20 really, are you available on this day for a  
21 deposition; here's your date. Things of that sort.

22 (Thereupon, marked for identification,  
23 Plaintiffs' Exhibit Number [P-14](#).)

24 BY MR. SMITH:

25 Q I'm going to hand you what I've marked as <sup>39</sup>

1 Exhibit Number 14 to your deposition. Is that --  
2 collective Exhibit 14. Is that all the correspondence  
3 that you have between yourself and Mr. Baker's office?

4 A Yes.

5 Q Next it asks you to bring bills or  
6 invoices.

7 (Thereupon, marked for identification,  
8 Plaintiffs' Exhibit Number [P-15](#).)

9 BY MR. SMITH:

10 Q I'm going to hand you what I have marked  
11 as Exhibit Number 15 to your deposition and get you to  
12 identify that for us.

13 A So these are two different invoices, one  
14 from 2011 and the other from 2014.

15 Q Are those the only invoices that you've  
16 submitted?

17 A That I've submitted, yes. There's one  
18 more that I just realized that I hadn't submitted and  
19 just my preparation for the depo.

20 Q Do the two invoices that we've marked as  
21 Exhibit Number 15, do they include all the time that  
22 you have spent up until you started preparing for this  
23 deposition?

24 A Except for probably, I think another two  
25 hours or so that I just realized I hadn't submitted

1 yet, and that was from 2014.

2 Q And what were those two hours? What were  
3 you doing during that two-hour period of time?

4 A It was -- I'd have to look. I don't  
5 recall. If I looked at my notes, it would probably be  
6 the very last things. Oh, the deposition of  
7 Dr. Scheld.

8 Q And then how much time have you spent  
9 preparing for the deposition?

10 A A couple of hours, basically looking  
11 through what you have here.

12 Q A couple of hours means different things  
13 to different people.

14 A I think it was like two or three hours.

15 Q See, my wife would fight with you and say  
16 a couple means two.

17 A A couple to a few.

18 Q Okay. So somewhere between two and three  
19 hours preparing for the deposition today?

20 A Yes.

21 Q All right. Is that all the time that you  
22 spent on this case up through today until now?

23 A Yes, sir.

24 (Thereupon, marked for identification,

25 Plaintiffs' Exhibit Number [P-16](#).)

1 BY MR. SMITH:

2 Q I'm going to hand you what we've marked  
3 as Exhibit Number 16 and get you to tell me what that  
4 is.

5 A So this is a list of my trial testimony  
6 and civil depositions from 2012 until today.

7 Q Is it complete?

8 A Yes.

9 (Thereupon, marked for identification,  
10 Plaintiffs' Exhibit Number [P-17](#).)

11 BY MR. SMITH:

12 Q I'm going to hand you what we've marked  
13 as Exhibit Number 17 and tell us what that is.

14 A This is the disclosure, my expert  
15 disclosure, with my opinions.

16 Q I believe that is everything that you've  
17 brought you with today.

18 A Yes.

19 Q That we've gone through and either  
20 identified or marked as an exhibit?

21 A Correct.

22 Q All right. We've also asked you to bring  
23 copies of advertisements for your services in  
24 reviewing medical-legal matters for the years 2012  
25 through '15.

1           A           I don't advertise.

2           Q           How do you get cases?

3           A           Attorneys find me. I also am -- I work  
4 with a group called Rieback Medical-Legal Consultants.  
5 And so what happens is, they're the intermediary and  
6 then she'll call me and say, I have a case, would you  
7 be willing to review it?

8                        But other than that, I think it's word of  
9 mouth.

10          Q           So you do work with, you said Rieback?

11          A           Yes.

12          Q           Any other types of expert location  
13 services that you work with?

14          A           No.

15          Q           Any other services you're listed with?

16          A           Not to my knowledge.

17          Q           Your CV or your professional resume has a  
18 list of some publications that you've authored.

19                        Is that a complete list of all the  
20 articles that you -- let me see. There it is. So  
21 your CV or professional resume lists journals, book  
22 chapters and book chapters that you've submitted for  
23 publication, posters, and lectures that you've given.

24                        Are those parts of your resume complete  
25 and up to date?

1           A           Yes.

2           Q           Have you ever worked with Mr. Baker or  
3 his firm in the past?

4           A           I have.

5           Q           How many times?

6           A           I believe twice before.

7           Q           Do you know the other -- have you worked  
8 with any of the other defense firms involved in this  
9 case?

10          A           I hope they don't take it personally if I  
11 don't recall, but I don't think so.

12          Q           Okay. Let me go through and name them.

13          A           Okay.

14          Q           The Hardison Firm in Memphis?

15          A           No, I don't think so.

16          Q           Let's see. Lewis Thomason, used to be --  
17 I can't even remember their old name anymore.

18                   MR. BAKER: Thomason Hendrix.

19 BY MR. SMITH:

20          Q           Thomason Hendrix?

21          A           Not that I recall.

22          Q           Let's see. Rainey Kizer?

23          A           No, I don't think so.

24          Q           Baker Donelson?

25          A           The name sounds familiar. I don't know

1 if I was -- if I was on a case where they were also  
2 involved, but I don't think I was ever hired by them.

3 Q We also asked you to bring copies of your  
4 1099s, showing the amount of money that you've been  
5 paid for medical-legal work from 2012 to the present.

6 A Right. I did not bring those. If I'm  
7 required to, I will. You know, I don't like to give  
8 out all my financial -- personal financial  
9 information. I'm happy to tell you percentages and  
10 about how much I make, but --

11 Q And we will -- and we'll go through that  
12 in a little bit, but like I told you before, in this  
13 particular case, the judge is requiring that people  
14 turn those over.

15 A Okay.

16 Q So you do have access to the 1099s for  
17 your medical-legal work, at least for last year?

18 A Yes. In fact, I'm getting them together  
19 right now.

20 Q And then do you also have access to those  
21 from 2012 to the present?

22 A I should. You know, I'll have to check  
23 my files, but . . .

24 MR. SMITH: And so what we'll do is,  
25 we'll make that late filed Exhibit Number 18.

1 THE WITNESS: Okay.

2 MR. SMITH: And Mr. Baker will get back  
3 with you.

4 MR. BAKER: So we're doing that for all  
5 experts now, not just the ones the judge has  
6 specifically ordered?

7 MR. SMITH: In this case.

8 MR. BAKER: So we're going to get the  
9 same for -- what's his name? Dr. Schwartz? He  
10 hasn't so far. Whatever our stipulation wants  
11 to be, if you're willing to do that.

12 (Thereupon, marked for identification,  
13 Plaintiffs' late filed Exhibit Number [P-18](#).)

14 BY MR. SMITH:

15 Q All right. Let's see.

16 All right. Let's move on to a different  
17 topic. Some of these things we can probably clear  
18 out.

19 Tell us a little bit about your medical  
20 education and training.

21 A Okay. So after medical school, I  
22 initially started out in surgery.

23 Q All right. Let's talk about, where did  
24 you go to medical school?

25 A Oh, sure. So I went to undergraduate at 46

1 University of California at Davis. After that, I went  
2 to Sackler School of Medicine, which is a New York  
3 State medical school with the physical campus in Tel  
4 Aviv, Israel.

5 Then I came back and did a year and a  
6 half of general surgery residency at Staten Island  
7 University Hospital. And then I did three and a half  
8 years of anatomic pathology residency at State  
9 University of New York at Stony Brook.

10 Then I did a year of pediatric pathology  
11 fellowship at New York University, NYU. Then I did a  
12 year of forensic pathology fellowship at the Office of  
13 Chief Medical Examiner in the City of the New York.  
14 And then I did a year of forensic neuro and forensic  
15 cardiac pathology fellowship, also in the Medical  
16 Examiner's Office in New York City.

17 So that's the extent of my education.

18 Q And training?

19 A Well, training is, yeah, included in  
20 that, yes. Education and training.

21 Q So you talked about you started out doing  
22 general surgery?

23 A Yes.

24 Q You said for two years?

25 A A year and a half.

1           Q           A year and a half. And then why did you  
2 quit surgery?

3           A           I had no life outside of the hospital. I  
4 loved the profession. I think it's a beautiful  
5 profession, but it was not the right lifestyle for me.

6                       And so I was trying -- I was not asked to  
7 leave. In fact, I was asked to stay, but I made a  
8 decision I needed -- I wanted to leave the actual  
9 clinical world and go more into the laboratory world,  
10 and that's why I left.

11          Q           So you said anatomic pathology. What is  
12 anatomic pathology?

13          A           So anatomic is the basic pathology. And  
14 what I mean by basic is general pathology. Everybody  
15 who is a pathologist has to at least have done  
16 anatomic pathology.

17                       So what we do is, we do -- if you have a  
18 biopsy or you have surgery, that gets sent to the  
19 anatomic pathology lab. We will look at it. That's  
20 the gross exam. We will dissect it, put pieces into a  
21 cassette, look under the microscope, make the  
22 diagnosis. So that's anatomic pathology.

23                       Included in that training is autopsy  
24 pathology, and so it's at least three years. Since I  
25 came in the half year, I did three and a half years.

1 Q Okay. You said anatomic. What other --  
2 I guess what other types of pathology are there?

3 A There's a lot. There's clinical  
4 pathology, which is instrumentation work like blood  
5 drawn, lab work, things of that sort.

6 Then you have a slew of subspecialties  
7 from what I did, pediatrics and forensics. There's  
8 neuropathology. There's GI pathology. There's breast  
9 pathology. There's renal, which is kidney, pathology.  
10 I mean, there's pathology fellowships in  
11 almost any organ system.

12 Q Is there such a thing as an infectious  
13 disease pathology?

14 A I don't think there's an actual  
15 fellowship in infectious disease. You can focus and  
16 specialize in it, but I don't believe that there is an  
17 actual infectious disease fellowship, pathology  
18 fellowship.

19 Now, at the CDC, there's a branch -- but  
20 that's the CDC -- which is infectious disease  
21 pathology.

22 But in general pathology, I mean, that's  
23 part of what you do. You're looking for signs of  
24 infection in the tissues and you learn about Gram  
25 staining. You learn about studies to do to focus in

1 on different infectious diseases.

2 Q You said that you also did some training  
3 in pediatric pathology?

4 A Yes.

5 Q What -- tell me about that.

6 A So that was a year at NYU. It's  
7 basically like anatomic pathology residency, but now  
8 we're focusing in on childhood, and that's up to 21 or  
9 up to 20, childhood diseases, do all the fetal  
10 autopsies, any intrauterine fetal demises or  
11 stillborns.

12 In fact, I sit on the executive council  
13 for the Society for Pediatric Pathology and I'm the  
14 chair of the membership committee for them. So we  
15 look at trying to recruit people into pediatric  
16 pathology so we have pathologists that understand  
17 childhood diseases, because they're a little different  
18 than adulthood diseases.

19 Q Do you consider that training to be  
20 relevant in this particular case?

21 A Absolutely, yes.

22 Q Why?

23 A Because there are different etiologies  
24 for encephalitis between adults and children. And  
25 even within children, there's different etiologies

1 between newborns and older children, so I do think  
2 it's important.

3 In addition, while I was doing my  
4 fellowship in peds path, I had a couple of herpes  
5 encephalitis cases, which I didn't have when I was in  
6 my adult pathology because those patients really  
7 didn't come to autopsy.

8 Q Do you consider Holly a child?

9 A I consider her right at the top of the  
10 age of, quote, unquote, pediatric pathology. She's  
11 right at that border of pediatric pathology to adult  
12 pathology.

13 But the importance here from putting  
14 together what you're asking is that the etiology, I do  
15 believe my pediatric pathology experience during the  
16 fellowship helped me with my interpretation of what I  
17 saw.

18 Q Is that due to -- now, you said that when  
19 you were doing your pediatric pathology training, that  
20 you had a couple of cases of herpes?

21 A That's correct.

22 Q Encephalitis?

23 A That's correct.

24 Q How many?

25 A I believe it was two that we autopsied.

1 Q Since then, have you had any other cases  
2 of herpes encephalitis?

3 A I don't know if I've had more herpes  
4 encephalitis. I have had other meningoencephalitis  
5 cases, but I don't think I've had any more herpes.

6 Q You talked about forensic pathology.  
7 What is -- how does forensic pathology differ from  
8 anatomic pathology and pediatric pathology?

9 A So forensic pathology, now we take all of  
10 that knowledge base and we add in the interpretation  
11 of injuries, the evaluation of toxicology, and  
12 basically, we come -- the forensic pathologist  
13 determines the cause and manner of someone's death.

14 An anatomic pathologist, they may do that  
15 rarely, if they have an autopsy where they're not sure  
16 what happened. But within the code for forensic  
17 pathology, we examine all sudden unexplained deaths.  
18 So anybody who wasn't expected to die and dies, we  
19 will examine them, and so that's why I think it's  
20 relevant in this case.

21 Q And then you also went on to say that, I  
22 think as part of your forensic training, you also had  
23 some -- and I don't know if it was part of the  
24 forensic training or if it was separate, but you  
25 talked about neurologic or neuropathology and cardio

1 pathology?

2 A Right. So it's another year, so it's the  
3 year after the forensic pathology fellowship. And  
4 it's a very unique program to the New York City  
5 medical examiner's office.

6 And basically, during that year, we cut  
7 every brain that needs further evaluation, every  
8 spinal cord that needs further evaluation. And this  
9 is throughout all of New York City, all of the  
10 boroughs, as well as very difficult hearts that the  
11 forensic pathologist wants a better result, you know,  
12 someone who's more trained in it.

13 So during that year, I cut hundreds of  
14 brains, many spinal cords, many hearts and aortas, and  
15 gave presentations to the general forensic ME office.

16 The attendings for that were a  
17 cardiovascular pathologist who trained in Boston at, I  
18 believe it was Brigham and Women's, and a  
19 neuropathologist who had come from the AFIP, which is  
20 the Armed Forces Institute of Pathology.

21 They were our instructors and so it was  
22 an intensive year of brains, spinal cords, and hearts.  
23 At the same time, every four weekends or so, we would  
24 be doing general autopsies as well as an attending  
25 forensic pathologist.

1 Q Does that complete your medical education  
2 and training?

3 A Yes. My formal medical education and  
4 training, yes.

5 Q And then your experience is outlined in  
6 your resume?

7 A Correct.

8 Q Your training is in pathology?

9 A That's what I'm board certified in,  
10 anatomic and forensic pathology.

11 Q Do you hold yourself out as an expert in  
12 any area of medicine? And we talked about this. Let  
13 me kind of put this in context.

14 A Sure.

15 Q Because earlier, we talked about the fact  
16 that you're not a clinician.

17 A That's correct.

18 Q In other words, you don't -- you're not  
19 involved in evaluating, diagnosing, and treating live  
20 patients?

21 A There's only one instance where we do  
22 that and that is in injury pattern analysis. That has  
23 nothing to do with this case.

24 So we do have live consults on children  
25 who, unfortunately, have maybe been beaten versus

1 accidental injuries, so that's the live aspect of it.  
2 But no, I'm not in the hospital, treating live  
3 patients.

4 Q And so do you hold yourself out as an  
5 expert in any area of medicine other than pathology?

6 A I don't. But what I would like to add to  
7 that is that part of a forensic pathologist's training  
8 and expertise is taking all of the medical  
9 information, all of the circumstantial information,  
10 and including that into our causation of death. And  
11 that's a very important aspect of what we do.

12 We can't work in a vacuum. You know, if  
13 we have someone who dies of a gunshot, we know they  
14 died of a gunshot. But if you have someone who has a  
15 sudden death, we need to know what their past medical  
16 history is. If they have medical records, we always  
17 request those medical records and we'll review them to  
18 see if the death correlates with the clinical symptoms  
19 and signs.

20 Q All right. Anything else you want to add  
21 to that?

22 A I don't think so, no.

23 Q And I do understand what you said, but I  
24 just want to make sure that I got a clear answer.

25 So I know you take into account, I guess, 55

1 your general knowledge of -- or your general knowledge  
2 of medicine?

3 A Yes.

4 Q And disease processes?

5 A Correct.

6 Q But you don't hold yourself out as an  
7 expert in any area of medicine other than pathology;  
8 is that right?

9 A Correct. Anatomic and forensic and  
10 pediatric and cardiac and neuropathology.

11 Q Tell me how much you -- you didn't bring  
12 a fee schedule. Tell me how much you charge for  
13 working on a case like this.

14 A So -- and Mr. Baker will see that it's  
15 gone up a little bit since 2011 -- but currently, I  
16 charge \$500 an hour for review of materials, \$600 an  
17 hour for deposition, \$4,500 a day for trial. And I  
18 believe that's essentially the main things.

19 Q All right. Now, this trial obviously  
20 would be in Memphis.

21 A Yes.

22 Q So if you had to travel to Memphis, I'm  
23 assuming you would come over the night before --

24 A Right.

25 Q -- and testify. Would you charge one day<sup>56</sup>

1 or two days or a day and a half? How would you charge  
2 for that?

3 A If I just came up the night before, I  
4 would charge one day.

5 If I was asked to come up the morning and  
6 then if I sit for two days, then it would be two days.  
7 But if I come up the night before, just one day.

8 Q Okay. Do you advertise?

9 A No.

10 Q How many cases a year do you review?

11 A Well, in 2008 when I started, I reviewed  
12 one. And it has exponentially increased as the years  
13 have gone on.

14 We're in March. I would say I probably  
15 maybe reviewed about 12 to 15 cases so far this year.  
16 Like it's really -- my private work has increased  
17 quite a bit.

18 Q And I need to clarify that because you  
19 brought up a good point.

20 I'm not talking about, obviously, cases  
21 that you review for the medical examiner's office or  
22 part of your regular job. I'm talking about where  
23 you're involved in private consulting in medical-legal  
24 cases, where you are an opinion witness in a case in  
25 court.

1           A           Exactly.

2           Q           And you said so far this year, you  
3 reviewed between 12 and 15 cases?

4           A           Yeah. That's a -- that's a rough  
5 estimate. And when I say that, it could be, I'm sent  
6 an autopsy report, I look at it for an hour, I tell  
7 the attorney my opinion, and I'll never hear from that  
8 attorney again, you know.

9           Q           Sure.

10          A           So it varies. And I do all of that --  
11 other than today, where I took the day off of work, I  
12 do that at night or on weekends.

13          Q           Sure. So that would be -- I mean, if we  
14 extrapolated that out for the year, that would be  
15 roughly between 48 and 60 cases this year that you  
16 would review?

17          A           Yeah. Last year, I definitely did not do  
18 60 cases. I would say last year, I probably did --  
19 and again, this is an estimate -- but maybe 25 cases.  
20 So it's anybody's guess.

21          Q           That's fair. I'm just trying to get an  
22 idea. I mean, hopefully business continues to be good  
23 for you, but you're saying it could -- if we carry  
24 that out for the rest of the year, it would be between  
25 48 and 60 cases that you would potentially see this

1 year?

2 A Right. I would say that's probably on  
3 the high level, but --

4 Q Last year, you said it was maybe 25?

5 A Maybe, yeah. Again, I have to look. I  
6 don't recall.

7 Q What about the year before that?

8 A It was less, but I -- I don't remember  
9 the numbers. I would say in 2014 is probably when,  
10 all of a sudden, my name must have gotten out there  
11 and I started getting more and more cases.

12 Q Any reason why that sort of exploded in  
13 2014?

14 A I have no idea.

15 THE VIDEOGRAPHER: Counselor, we're at  
16 five minutes.

17 MR. SMITH: All right. Let's wrap this  
18 up.

19 BY MR. SMITH:

20 Q What percentage of your income do you  
21 derive from private consulting as opposed to your  
22 regular day job?

23 A So I would say last year, because I just  
24 moved into a new position in November of last year  
25 where my salary increased, but last year, I would say 59

1 it's probably about 50/50.

2 This year, it may be about the same but  
3 probably a little bit lower, and that's just because  
4 my current job, I got a salary bump.

5 Q Let's make sure we're clear about that.

6 Your percentage of private consulting  
7 work would drop a little bit due to the fact that you  
8 got a bump-up in your day job?

9 A Correct.

10 Q All right. What percentage of cases do  
11 you review for plaintiffs versus defendants?

12 A I would say probably about 80 to  
13 85 percent are plaintiff and 15 to 20 percent defense.

14 Q Has that changed over the years?

15 A It's become a little more on the defense  
16 over the last two years, but that's really maybe two  
17 cases or so added per year.

18 MR. SMITH: Let's go -- let's change out  
19 the tape.

20 THE VIDEOGRAPHER: End of tape number  
21 one. We're off the record at 1:08 p.m.

22 (VIDEO CAMERA OFF.)

23 (Thereupon, a recess was taken.)

24 (VIDEO CAMERA ON.)

25 THE VIDEOGRAPHER: This is the beginning 60

1 of tape number two. We're back on the record  
2 at 1:25 p.m.

3 BY MR. SMITH:

4 Q How do you -- how would you describe your  
5 role in this case?

6 A Well, I believe, as a pathologist, I --  
7 my role is to look at the records that I reviewed, the  
8 slides that I reviewed, and come up with a  
9 determination as to what I believe is the etiology of  
10 what went on in her brain and, essentially, like  
11 causation of why she died.

12 Q In other words, come up with, as best you  
13 can from reviewing the records, what you believe the  
14 cause of death to have been?

15 A Right. What I can rule in and what I can  
16 rule out.

17 Q And do you see yourself as an advocate  
18 for either side?

19 A No.

20 Q You were hired by, obviously, the  
21 attorney for Dr. Wright. Do you see yourself as an  
22 advocate for Dr. Wright?

23 A No.

24 Q Do you think that your role in this case  
25 requires you to be fair to both sides?

1           A           Absolutely.

2           Q           Which means if you're going to be fair to  
3 both sides, you have to take into account the entire  
4 picture of what happened.

5           A           Yes, absolutely.

6           Q           You have to consider all the information;  
7 you can't leave out bits and parts of it.

8           A           Well, I mean, that's a very general --  
9 that's a very big statement. So I mean, from a  
10 pathologist's standpoint, yes, I need to take --

11                   THE VIDEOGRAPHER: Hold on. We're off  
12 the record at 1:26 p.m.

13                           (VIDEO CAMERA OFF.)

14                   MR. SMITH: We had -- just for the  
15 written record, we had a technical difficulty  
16 with the video feed from Memphis.

17                           (Thereupon, a recess was taken.)

18                           (VIDEO CAMERA ON.)

19                   THE VIDEOGRAPHER: We are back on the  
20 record at 1:30 p.m.

21 BY MR. SMITH:

22           Q           All right. Before we had a technical  
23 difficulty with the video feed, we were talking about  
24 your role in this case. And you said that, correct me  
25 if I'm wrong, but you said you're not an advocate for

1 either side.

2 A That's correct.

3 Q And since you're not an advocate for  
4 either side, you have to be fair to both sides.

5 A Correct.

6 Q You have to look at all the evidence  
7 that's available --

8 A Yes.

9 Q -- before reaching your opinions.

10 A And my response to that is, it depends on  
11 what I'm -- what I'm asked to do. And what I mean by  
12 that is, in this case, the most important part,  
13 because we're looking to see what -- what pathology  
14 was in the brain and if that contributed to her death.

15 So yes, all of the information is  
16 important, but the most important for me in this case  
17 is the brain, both grossly, microscopically, and then  
18 the other studies that we spoke about earlier, the CSF  
19 and the PCR, and the immunohistochemistry. Those,  
20 from a pathologist's standpoint and what I believe my  
21 part is in this case, those are the most important.

22 Q I understand those are the most  
23 important, but you still need to take into account all  
24 the information that's available for it to be fair to  
25 both sides. You have to take into account all the

1 information before reaching a final opinion in the  
2 case.

3 A Well, it depends on what you mean by  
4 "all." Again, I can have absolutely no information on  
5 this case and look at the brain and I can tell you  
6 what I believe this brain shows me. So that's part A,  
7 and that's actually what I was asked to look at, is  
8 what went on in her brain and did it have any role in  
9 her death or not in her death.

10 All of the information, yes, that would  
11 be great. I don't know if I received all the  
12 information. I believe what I reviewed is more than  
13 adequate for me to opine as to what is in my  
14 disclosure.

15 Q So in your opinion, it would be okay to  
16 ignore certain facts and information in reaching your  
17 opinions?

18 A That's not what I said. I never said I  
19 would ignore facts. If more information became  
20 available, I am always open to looking at more  
21 information and then, if it changes my opinion, then I  
22 will tell you it changes my opinion. But I will never  
23 ignore any facts.

24 Q Okay. So that's what I was trying to get  
25 to. You would agree that it's important for you to

1 consider all the facts before rendering an opinion in  
2 the case if you're going to be fair to both sides?

3 A Well, and again, I want to answer that  
4 with the statement that it depends on what you're  
5 asking me to look at or somebody is asking me to look  
6 at or what my role in it -- in this is.

7 My -- my opinion as to what went on in  
8 her brain, because that's all I have to look at, I  
9 don't think I needed more information. If there's  
10 something out there that would change my opinion that  
11 I didn't receive, then I will look at it and if it  
12 changes my opinion, I will.

13 I don't think -- I don't think it's fair  
14 to say all the information because I don't know what  
15 all the information is. Maybe what I have is  
16 adequate, which is what I feel my opinions, as regards  
17 to her neurologic pathology, I believe I have all the  
18 information I need.

19 Now, if we're going to start talking  
20 about clinical and did, you know, did they do the  
21 clinical treatment right, well, that's not in my area  
22 of expertise so I'm not even speaking to that. So  
23 there may be more out there that I don't know, but  
24 that has no bearing on my opinion.

25 Q One of the things you said that you do as<sub>65</sub>

1 a forensic pathologist is that you consider,  
2 essentially, the history. You go through all the  
3 medical records to try to get the background about  
4 what happened to a particular patient.

5 A Correct.

6 Q So I'm not asking you necessarily what  
7 you would have to look at in order to give comments  
8 about the standard of care or what the clinicians were  
9 required to do, what their jobs required them to do.

10 But you would agree that it's important  
11 to get an accurate clinical picture about what  
12 happened to the patient before she died?

13 A Right, and I agree with that. And what I  
14 received has a lot to do -- a lot of her clinical  
15 history, absolutely.

16 Q And you wouldn't want to leave  
17 information about the clinical history out. You  
18 wouldn't want to ignore information about the clinical  
19 history in reaching your opinions; would you?

20 A Well, it depends on what the clinical --  
21 what other aspects of the clinical history is there,  
22 in all honesty.

23 If there's more out there that I don't  
24 have, would I like to look at it? Sure, I'd like to  
25 look at it. Will it have a bearing on my opinion? I

1 can't answer that because I don't know if there is  
2 anything more out there and if yes, what's in it.

3 Q Okay. Do you think it's okay to discount  
4 or ignore facts to reach an opinion?

5 A Well, again, that's a very general  
6 question. If the fact is that she, you know, stubbed  
7 her toe two days after she presented the first time, I  
8 don't care about that. Would it -- would I look at  
9 it? Of course I'd look at it, but I don't care about  
10 that.

11 If it's an important fact to the clinical  
12 history and to what my role in this is, well, then I  
13 think it would be wrong for me to ignore that. But  
14 again, that's such a general question, I don't know --  
15 I can't answer that as a yes or no.

16 Q Do you agree your opinions have to be  
17 based on facts?

18 MR. SMITH: Can some -- somebody is  
19 ruffling papers on the other end. Could y'all  
20 maybe turn off the -- there we go.

21 BY MR. SMITH:

22 Q All right.

23 A I'm sorry. I didn't hear the question.

24 Q Do you agree that your opinions have to  
25 be based on facts?

1 A Yes.

2 Q In other words, you can't just make up  
3 stuff?

4 A Absolutely not, no.

5 Q And you can't weigh the facts. In other  
6 words, you're not here to make a determination, for  
7 example, if there's conflicting testimony about  
8 certain facts, you're not here to weigh who's telling  
9 the truth or not telling the truth?

10 A No. I don't do that. I'm here to tell  
11 you what my findings are.

12 Q You -- you understand that your  
13 deposition is being taken part -- as part of an  
14 ongoing lawsuit in Memphis?

15 A Yes, sir.

16 Q Do you understand your deposition is an  
17 important part of that lawsuit?

18 A I believe so, yes.

19 Q Because it's an important part of the  
20 lawsuit, you took it seriously?

21 A Absolutely.

22 Q You -- now, this is a little bit  
23 different, but you did prepare for your deposition  
24 because you took the deposition seriously?

25 A Oh, I always prepare for a deposition in 68

1 the sense that I'll review my file.

2 Q Because you know that when you give a  
3 deposition, it's an important part of a lawsuit?

4 A Yes.

5 Q Did you have a full opportunity to  
6 prepare for the deposition?

7 A I felt I had enough time to prepare, yes.

8 Q In other words, you weren't rushed or  
9 nothing came up in your life that prevented you from  
10 spending all the time that you wanted and you had  
11 ample opportunity to spend as much time as you wanted  
12 to or thought you needed to in order to be prepared  
13 for today?

14 A I believe so, yes.

15 Q And you're fully prepared today?

16 A Yes.

17 Q What did you do to get ready for today?

18 A I just reviewed my notes. And then in my  
19 notes, there are some, like, pages from depositions or  
20 from the medical records that referred me to, like,  
21 discharge summary or laboratory values and so I looked  
22 at those pages. And that's essentially it.

23 Q So we ought to be able to figure out what  
24 those are by going through the notes?

25 A That's correct.

1           Q           Are you aware of anything that was  
2 missing, any information that you were missing that  
3 you felt like you needed to see in order to develop a  
4 full opinion in this case?

5           A           No. I think for me, again, going back to  
6 the brain and the other studies and my review of the  
7 slides, I think that was adequate for me to come to my  
8 opinion.

9           Q           Did you -- have you met with the lawyers  
10 in order to prepare for your deposition?

11          A           Well, I met with Mr. Baker last night.  
12 We had dinner and just talked.

13          Q           Where did y'all go?

14          A           A very good steakhouse. I'll let you  
15 know.

16          Q           How long did you spend with Mr. Baker?

17          A           We were there maybe an hour. Really,  
18 most of it revolved around just saying hi to each  
19 other and having dinner. And I told him I was ready  
20 for today.

21          Q           Did y'all discuss any particular aspects  
22 of the case?

23          A           No. I just told him my opinions hadn't  
24 changed at all.

25          Q           Did you discuss any opinions in

1 particular?

2 A No. Just my overall.

3 Q Any particular aspects of the case that  
4 Mr. Baker raised to kind of go over last minute?

5 A Not really.

6 Q Well, not really means maybe.

7 A Well, no. I'm sorry. I should have said  
8 no.

9 Q All right. Exhibit Number 17 is a copy  
10 of the disclosure of your opinions. You've been  
11 involved in enough of these cases that you know what a  
12 disclosure is?

13 A Yes.

14 Q You understand that the disclosure is put  
15 together by Mr. Baker or somebody in his office to  
16 give me notice of what opinions you intend to give at  
17 trial?

18 A Correct.

19 Q Were you involved in helping prepare the  
20 disclosure that we've marked as Exhibit Number 17?

21 A I'm sure that I was asked to look it over  
22 before it was sent out. It's been a while, I think,  
23 so I don't specifically recall, but I didn't write  
24 this myself.

25 Q And I understand that. I mean, I

1 understand you didn't write it.

2 A Right.

3 Q But typically, Mr. Baker or somebody from  
4 his office sits down and goes over it with you and  
5 discusses what opinions you have and then they come up  
6 with a draft.

7 You may review it to make sure it's  
8 accurate, make changes to it, whatever, and at some  
9 point in time, will approve it as being an accurate  
10 representation of what you intend to say at trial.

11 A Right. That's, in essence, that's what I  
12 was saying, is that I probably reviewed it, which I'm  
13 sure I did, and said it looks fine.

14 Q Have you reviewed it before the  
15 deposition today?

16 A I did.

17 Q Does it accurately reflect the opinions  
18 that you intend to give at trial?

19 A It does.

20 Q Does it fully describe the reasons that  
21 you have the opinions that you have in this case?

22 A I believe so.

23 Q I mean, in other words, what I'm asking  
24 is, is there anything that, when you went back through  
25 and looked at it to get ready for today, that you

1 thought was either missing or needed to be added for  
2 it to be a true, complete, and fair representation of  
3 what you're going to say at trial?

4 A No, I don't think so.

5 Q What is an autopsy -- and I may say this  
6 wrong. Correct me if I do. But what is an autopsy  
7 persector [sic].

8 A Prosector.

9 Q Prosector?

10 A That's the person who does the autopsy.  
11 That's the person who does the cutting of the body or  
12 basically opening up the scalp and the skull.

13 As an example, my office, we have medical  
14 residents, we have fellows that rotate through our  
15 office. They may be the person who does the physical  
16 cutting, but there's always an attending pathologist  
17 who oversees it.

18 Q What role does the attending have in  
19 overseeing the autopsy?

20 A The attending is the one who has to make  
21 the final determination. So they're the one who  
22 decides what, in my world, the cause of death was,  
23 what the pathology changes were, is there anything  
24 abnormal, not abnormal.

25 So the prosector will be doing the

1 physical work, but the attending will be watching and  
2 overseeing.

3 Q All right. Are you familiar with the  
4 difference between sensitivity and specificity of  
5 testing?

6 A I am.

7 Q Tell us what the difference is.

8 A So sensitivity is true positives, in a  
9 sense, and specificity is true negatives. So if you  
10 have a test that is -- you suspect or that you know,  
11 let's say you know that this is a disease and you test  
12 it and it comes positive. That's your sensitivity.

13 If you -- if you were to take my blood  
14 work and you know that I'm not HIV positive and the  
15 test comes back negative for HIV, that's specificity.

16 Q What are predictive values?

17 THE COURT REPORTER: I'm sorry?

18 MR. SMITH: Predictive values.

19 A So that's sort of a ratio of how good the  
20 test will be to predict the result, in a sense. You  
21 have positive predictive value is the main thing.

22 So, you know, if you were to do a CAT  
23 scan on somebody who you know fell and hit their head  
24 and had a subdural hemorrhage, what is the value of  
25 doing that CAT scan. How positive will it be.

1                   Wow, I feel like I'm taking my boards  
2 again.

3 BY MR. SMITH:

4           Q           All right. You're not a clinician?

5           A           I'm not a clinician, no.

6           Q           You don't diagnose herpes simplex  
7 encephalitis in live patients?

8           A           Not in -- I don't, no. Not in a live  
9 patient, no.

10          Q           You don't have any expertise in -- as a  
11 neurologist?

12          A           Right. I mean, I'm not a neurologist.

13          Q           You don't have any expertise as an ER  
14 doctor?

15          A           No.

16          Q           You don't have any expertise as an  
17 infectious disease specialist, treating live patients?

18          A           Treating live patients? No, I don't  
19 treat live patients.

20          Q           You don't -- in your practice, you don't  
21 clinically correlate laboratory testings to diagnose  
22 and treat live patients?

23          A           In my practice, no, I don't. I use them  
24 to diagnose dead patients, but not live patients.

25          Q           And you're not an epidemiologist?

1           A           Well, not certified in the sense of board  
2 certified epidemiologist. We are very involved with  
3 epidemiology at -- as forensic pathologists.

4           Q           Let's talk about some just general issues  
5 in this case. And I want to make sure because I've  
6 read through your report and I want to make sure that  
7 my understanding is correct and you need to correct me  
8 if I'm wrong.

9           A           Sure.

10          Q           And I want to -- I'm going to try to pull  
11 some things out and see if we can -- I think there are  
12 some areas we probably agree on.

13          A           Okay.

14          Q           And let's talk about that and then we'll  
15 move into some, maybe the harder issues.

16          A           Sure.

17          Q           So in this particular case, we agree that  
18 Holly died from an encephalitis?

19          A           I agree that she had an encephalitis.  
20 She had an inflammatory response in her brain and that  
21 resulted in swelling of the brain and her death.

22                    Again, my only issue is, I'd like to have  
23 seen the rest of the body. But from what I have, yes,  
24 I agree that she died of some form of encephalitis.

25          Q           All right. So I think I understand but

1 let's make sure we're clear on this.

2 A Sure.

3 Q Because we talked about this earlier.

4 This was a limited autopsy.

5 A Correct.

6 Q They did not do a full autopsy. All they  
7 looked at was the brain?

8 A Correct.

9 Q And some of the studies, testing that was  
10 done on either brain tissue or the cerebral spinal  
11 fluid?

12 A Correct.

13 Q They didn't do a full autopsy to examine  
14 the other organs of the body?

15 A Correct.

16 Q So based on -- and all we have now, after  
17 the fact, is that limited autopsy to look at?

18 A Right, which is still very good in this  
19 situation.

20 Q Based on the limited autopsy that was  
21 done, you would agree that Holly did die from an  
22 encephalitis?

23 A From what I have, yes.

24 Q And as I understand it, the encephalitis  
25 caused swelling in the brain which caused her brain to<sub>77</sub>

1 herniate?

2 A Correct.

3 Q In other words, the brain was pushed down  
4 into the brain stem which was, I guess, the immediate  
5 cause of death?

6 A Right. So you don't -- within the skull,  
7 you don't have room to go outwards and so it pushes  
8 down towards the spinal cord and then it impinges on  
9 your respiratory and cardiac centers and that's how  
10 you die.

11 Q Now, there are different types of  
12 encephalitis.

13 A That's correct.

14 Q Based on the information that we -- that  
15 you have available to you, are you able to be any more  
16 specific about whether the encephalitis was viral in  
17 nature or some other type of encephalitis?

18 A Unfortunately, no, I can't be more  
19 specific. But there are a number of viruses that have  
20 been ruled out. So in general, I don't -- I can't  
21 tell you specifically which type of encephalitis it  
22 is, but I can tell you which type it's not.

23 Q And we're going to talk about that in a  
24 minute.

25 A Sure.

1 Q Can you say or do you have an opinion  
2 about whether or not this was a viral encephalitis?

3 A I can't because it could have been -- the  
4 appearance under the microscope could be certain  
5 viral, but it could also be certain autoimmune  
6 disorders and some other very rare. But no, I can't  
7 tell you if it was or was not a viral infection.

8 Q The best you can do is to say that this  
9 was an encephalitis that caused her death?

10 A Well, I think the best I can do --

11 Q Let me -- I understand what you're going  
12 to say. Let's leave aside for this, because we're  
13 going to talk about that in a minute --

14 A Okay.

15 Q -- the things that you think you can rule  
16 out.

17 A Okay. Fair enough.

18 Q And we're going to talk about some of the  
19 things that you think the testing rules out.

20 A Okay.

21 Q Because I do know that you have that  
22 opinion.

23 A Yes.

24 Q But I'm talking about a 30,000-foot view  
25 right now.

1           A           Sure.

2           Q           High level, you would agree that this --  
3 her death was caused by an encephalitis?

4           A           Correct.

5           Q           And then to drill down into that further,  
6 you can't drill down on that further to say whether or  
7 not the encephalitis was viral or some other type of  
8 encephalitis?

9           A           Right. I cannot give you the specific  
10 etiology of the encephalitis.

11          Q           Would it be fair to say that because  
12 there's no testing that -- well, okay.

13                    The findings that you reviewed from the  
14 autopsy are consistent with a viral encephalitis?

15          A           That's one of the possibilities, yes.

16          Q           You also went back and you reviewed the  
17 medical records?

18          A           Yes. I reviewed those first, I believe.

19          Q           And I'm not just talking about the  
20 medical records from the autopsy report and the  
21 testing. I'm talking about the medical records from  
22 the ER visits that she went to, as well as the  
23 hospitalizations and so on and so forth?

24          A           Correct.

25          Q           And based on those medical records, her

1 history would be consistent with a viral encephalitis?

2 A Yes, it would be --

3 MS. MALKIN: Object to the form.

4 THE COURT REPORTER: Who was that,  
5 please?

6 MS. MALKIN: That was Andrea Malkin.

7 A I would say it's consistent with any type  
8 of encephalitis.

9 BY MR. SMITH:

10 Q Including a viral encephalitis?

11 A Including a viral encephalitis.

12 Q Going back and reviewing the history, her  
13 encephalitis would have begun sometime before  
14 September 17, 2007, which would have been the first  
15 time she went to the ER with seizures?

16 A I'm trying to remember. I think that she  
17 said her -- the symptoms had started, like she had  
18 fallen at school, I believe, and then that was like  
19 two days prior, I think. I'd have to look at my  
20 notes. But yes, her symptomatology appears to have  
21 started prior to that initial presentation.

22 Q So we know that -- we know that Holly  
23 died from an encephalitis.

24 A Yes.

25 Q And the history or her medical course was<sup>81</sup>

1 consistent with a viral encephalitis?

2 A That's right.

3 Q And that that encephalitis, the symptoms  
4 associated with that encephalitis, started sometime  
5 before September 17, 2007?

6 A I would say that her neurologic symptoms  
7 started before that date. I would leave the -- the  
8 clinical diagnosis at that time to a clinician.

9 Q That would be -- you're talking about the  
10 difference between a clinician and pathology. As far  
11 as looking at the clinical course of the disease,  
12 clinicians may be able to weigh in on the symptomology  
13 and try to help maybe differentiate between what types  
14 of encephalitis it was?

15 A Yeah, they would probably be a little  
16 better at that or be better at that.

17 Q Now, let me see. And I -- I want to take  
18 a shot at, because I've gone through all of your  
19 disclosure and I'm going to try to boil it down. And  
20 we'll go through the details on this, but I think  
21 really, your opinions can be boiled down to, I think  
22 you got really one opinion, for the most part.

23 A Okay.

24 Q I think your opinion is, if I read  
25 everything correctly, that based on the autopsy and

1 the testing that was done, that you can definitively  
2 rule out herpes simplex as a cause of Ms. Simms'  
3 death?

4 A That's correct.

5 Q And then we can go through all the  
6 different reasons that you come to that conclusion,  
7 but when we boil down the disclosure, that's what I  
8 came up with. Would you agree with that?

9 A I would say that's, yeah, the depth --  
10 the depths of it.

11 Q Okay.

12 A I believe there were other viruses that  
13 were ruled out as well, but herpes simplex seems to be  
14 the crux of the case from reading the Complaint.

15 Q And I'm going to jump around to some of  
16 the different reasons that you came up with your  
17 opinion; okay?

18 A Okay.

19 Q Let's start with, there's a sentence in  
20 here that says -- it's on page 17.

21 A I don't have page numbers.

22 Q Look at page three --

23 A Okay.

24 Q -- of Exhibit Number 17.

25 A Okay.

1 Q All right. At the top, it says, most  
2 cases of -- in most vases of viral encephalitis, the  
3 etiology is unknown.

4 A That's correct, but I'm trying to find  
5 the sentence. I think I might be on the wrong page.

6 Q It could be. Yours may have shifted a  
7 little bit.

8 Look at the bottom of page two.

9 A Okay.

10 Q Do you see that paragraph?

11 A I do.

12 Q It says that, (reading): In most cases  
13 of viral encephalitis, the etiology is unknown. As in  
14 this case, there are no distinguishing features to  
15 identify the source of the inflammation.

16 So explain to me what that means.

17 A Okay. So I'll give you -- I'll give you  
18 an example of how I approached this case and I think  
19 that will answer what -- a lot of questions and what  
20 you're asking here.

21 So when I look under the microscope --  
22 excuse me -- when I look under the microscope, there's  
23 obvious chronic inflammation around vessels, a little  
24 bit in the other meninges overlying the brain, so I  
25 know I'm dealing possibly with an encephalitis. So I

1 need to go closer, or at least a meningitis at that  
2 point.

3 So I need to go higher power and look in  
4 closer to see if I see any distinguishing features  
5 that can tell me that this is CMV, this is herpes, is  
6 it bacterial, which would be a different type of  
7 inflammation, but to get the picture of what may be  
8 the underlying cause of it.

9 So as I got closer and I started looking  
10 around, with viral infections, especially herpes and  
11 CMV, you look for what are called inclusions,  
12 intranuclear inclusions. And so looking around  
13 through all the sections, there was absolutely no  
14 inclusions that I found.

15 Another example being rabies. You look  
16 at specific cells in the cerebellum and you look for  
17 what are called Negri, N-E-R -- N-E-G-R-I-I. Let me  
18 say that again. N-E-G-R-I bodies. Those weren't  
19 there as well.

20 So I'm going and looking around to see if  
21 there's anything that can say, this is what it is or  
22 this is not what it is. So I didn't see any of that.  
23 All I saw was the inflammation around the vessels, in  
24 the meninges, and then some changes just from lack of  
25 oxygen to the brain and the swelling.

1           So the sentence saying that, (reading):  
2   As in this case, there are no distinguishing features  
3   to identify the source of inflammation, that's true.  
4   I don't have evidence of intranuclear inclusions. And  
5   then I take the other studies in conjunction with  
6   that.

7           The first sentence, that most cases of  
8   viral encephalitis, the etiology is unknown, well,  
9   that's very -- that's a very well-known conclusion.  
10   That's in all the textbooks and literature.

11          Q           So let me back up and ask you a couple of  
12   specific questions to sort of drill down on that.

13          A           Uh-huh (affirmative.)

14          Q           When you looked under the slides at  
15   the -- you did see evidence of inflammation associated  
16   with an encephalitis?

17          A           Yes, what we call meningo. So that's the  
18   lining over the brain and the vessels come down from  
19   that lining and there was some inflammation around  
20   that. So that's like meningitis, but meningo. And  
21   then encephalitis is some inflammation going into the  
22   brain tissue itself, so she had both.

23          Q           Okay. And you, based on your review of  
24   those slides, you could not rule out a viral  
25   encephalitis in a general sense?

1           A           That's correct.

2           Q           Now, the sentence that says, in most  
3 cases of viral encephalitis, the etiology is unknown,  
4 that means in most cases of viral encephalitis, the  
5 specific cause of the encephalitis is not known; is  
6 that fair?

7           A           Right. So those are -- those are studies  
8 in the textbooks and things where they've done the  
9 workup, they've done a lumbar puncture, and they've  
10 sent it off for the most common, herpes being one that  
11 you're always going to send off for. The Western  
12 equine, Eastern equine. There's a whole litany, which  
13 I'm sure you know.

14                   And after you've tested for all those,  
15 those coming back negative and then only seeing the  
16 evidence of the inflammation under the microscope,  
17 you're left with an encephalitis of unknown etiology.

18           Q           Okay. In this particular case, there's  
19 no evidence of an epidemic outbreak of encephalitis in  
20 Memphis that you're aware of?

21           A           Not that I'm aware of, but I would assume  
22 no, but I don't know. I mean, I'm guessing it's no.

23           Q           It would be speculative to say that there  
24 was an epidemic outbreak of encephalitis in Memphis at  
25 this particular time?

1 A Probably, yes.

2 Q So the assumption is, is that this was a  
3 sporadic case of encephalitis?

4 A Yes.

5 Q Sporadic, meaning it just happened to --

6 A It just happened to this individual,  
7 that's correct.

8 Q Now, herpes simplex is the most common  
9 cause of sporadic viral encephalitis that results in  
10 death?

11 A That results in death, yes.

12 Q Let me ask you a couple of questions, and  
13 I told you I'm going to jump around.

14 A That's okay.

15 Q The autopsy.

16 A Yes.

17 Q You were not present for the autopsy?

18 A No.

19 Q To your knowledge, there were no pictures  
20 taken of the autopsy?

21 A Not that I know of, no.

22 Q So we don't have any pictures of the  
23 brain after it was taken out of Holly's body?

24 A That's correct. Just the description.

25 Q All we have is the description that's in 88

1 the report?

2 A Right, and then the slides which are  
3 taken from a whole bunch of different areas.

4 Q Do you -- now, I think it was Thomas  
5 Chesney that was the pathologist who signed the  
6 report?

7 A I would have to look. I don't remember.

8 Q Why don't we do this, because I'm sure  
9 you're going to want to look at it.

10 (Thereupon, marked for identification,  
11 Plaintiff's Exhibit Number [P-19](#).)

12 BY MR. SMITH:

13 Q I'm going to hand you what I've marked as  
14 Exhibit Number 19 to your deposition.

15 A Okay.

16 Q Is that a true and accurate copy of the  
17 autopsy report that you reviewed in connection with  
18 this case?

19 A This is what I reviewed, yes.

20 Q And you will see on the front page, it  
21 says the attending pathologist was Thomas Chesney?

22 A That's correct.

23 Q Do you know Dr. Thomas -- Dr. Chesney?

24 A I do not.

25 Q Have you spoken with Dr. Chesney?

1 A No.

2 Q Do you know what type of qualifications  
3 or training Dr. Chesney has?

4 A I do not.

5 Q Do you know anything about Dr. Chesney?

6 A No.

7 Q There were two residents that were  
8 involved in the autopsy?

9 A Yes.

10 Q There was one, an Amanda Mullins?

11 A I see that.

12 Q Do you know Amanda Mullins?

13 A I do not.

14 Q Do you know anything about Amanda  
15 Mullins?

16 A I do not.

17 Q Have you spoken with Amanda Mullins?

18 A I have not.

19 Q Do you know what kind of training or  
20 background Amanda Mullins has?

21 A I don't.

22 Q And the other one was Heather Baldwin.

23 A I -- I'm sorry. Go ahead.

24 Q Do you know Heather Baldwin?

25 A I do not.

1 Q Have you spoken with Heather Baldwin?

2 A No.

3 Q Do you know anything about Heather  
4 Baldwin's background?

5 A I do not.

6 Q Now, obviously, when they did -- when  
7 they did the autopsy, they took the brain out and they  
8 did what we've already discussed, a gross examination  
9 of the brain?

10 A Correct.

11 Q You haven't been able to do your own  
12 gross examination of the brain?

13 A No, not of this brain.

14 Q Now, Dr. Chesney, Dr. Mullins, and  
15 Dr. Baldwin would have been in a better position than  
16 you to do -- to comment on the gross description of  
17 the brain?

18 A That's correct.

19 Q And they would have been -- they would  
20 actually have, from the standpoint of, they actually  
21 saw the brain and did a gross examination, they would  
22 actually be in a better position to comment on the  
23 cause of death in this particular case?

24 A Well, they can -- they can probably be in  
25 a better position to comment on what they saw and I

1 have my own conclusions.

2 I don't know if I would say that they're  
3 in a better position to talk about the cause of death,  
4 but they're definitely the ones who had their hands on  
5 the brain. So they can talk about the feeling of the  
6 brain, how soft or firm it was, what their findings  
7 were better than I could.

8 Q Would it be fair to say, in a sense, they  
9 had more information than you had because they had  
10 that personal first-hand observation that you don't  
11 have the benefit of?

12 A Well, if they put everything that they  
13 saw in their report, then I would hope that we would  
14 be at the same level of knowledge of what they saw.

15 If there's more that they didn't state in  
16 their report -- and we'll get to the slides later, but  
17 the slides support what my opinion is -- then if  
18 there's more that they didn't put in here, well then,  
19 yes, they would be more privy to determining the  
20 cause.

21 Q All right. Let's talk about -- let's  
22 talk about hemorrhagic necrosis that was discussed in  
23 your -- not your -- well, the disclosure that you  
24 reviewed and you say you have adopted and does  
25 summarize your opinions.

1           A           Yes, sir.

2           Q           So what is hemorrhagic necrosis in this  
3 particular setting?

4           A           In this setting? Well, first of all,  
5 hemorrhagic means bleeding. Necrosis is death of the  
6 tissue.

7                        So in a case of herpes simplex  
8 encephalitis where there is death associated with it,  
9 it's very common and it's in all the literature and  
10 textbooks, that the virus affects -- because of the  
11 way it gets into the brain, the virus affects the  
12 temporal lobes and can affect the base of the frontal  
13 lobes. And what happens is it kills off that tissue  
14 there and you get, basically, bloody dead tissue in  
15 that area.

16                      And so that, when you see that, if you  
17 have an autopsy where you pulled the brain out and you  
18 see that, your very first thought is this is going to  
19 be a herpes simplex encephalitis.

20          Q           How is -- what causes hemorrhagic  
21 necrosis?

22          A           In this case?

23          Q           In this particular case.

24          A           Okay. So --

25          Q           And I guess, let me clarify it. What

1 causes hemocratic [sic] -- hemorrhagic -- back up.

2 Hemocratic?

3 A That's why we spend so many years and so  
4 much money, to learn how to speak another language.

5 Q All right. Let me back up.

6 What causes hemorrhagic necrosis  
7 associated with herpes encephalitis?

8 A So currently, there's two theories or two  
9 ideas postulated about that. One is the virus itself.  
10 The other is the inflammatory response to the virus.  
11 And what happens is, it comes in and it starts killing  
12 off the tissue itself. You have mediators that come  
13 in with the inflammation and that basically kills the  
14 surrounding tissue.

15 Q How is it diagnosed?

16 A Well, do you mean clinically or  
17 pathologically? Because it can be diagnosed on MRI.  
18 It can be diagnosed on CT. It can be diagnosed by a  
19 CSF. And then from a pathology standpoint, it's  
20 diagnosed when you're looking at the brain.

21 Q That's what I was getting at.

22 From a pathology standpoint, it's that  
23 gross examination? It's when the pathologist eyeballs  
24 the brain that they see the hemorrhagic necrosis?

25 A Well, that's the initial vision of it.

1 You'll see, when you take a -- when you take a brain  
2 out, at first you're looking at the top of the brain,  
3 and so you won't see it there. And then you pull the  
4 brain backwards and then you're looking at the base  
5 and that's where you see it.

6 So as you're taking it out, you'll see  
7 it, but that's also why we take slides to look under  
8 the microscope, because if you have true hemorrhagic  
9 necrosis, under the microscope, you are going to have  
10 hemorrhagic necrosis.

11 You'll see death of the tissue. You'll  
12 see bleeding. If it's been long enough, you'll see  
13 cavitation, which is forming of a cavity, with what  
14 are called macrophages. Those are the cells that come  
15 in and eat up all the dead tissue.

16 So you have a microscopic correlate to  
17 the gross finding.

18 Q Do you always have both?

19 A Both what? I'm sorry.

20 Q You've described to me what hemorrhagic  
21 necrosis -- two different ways to see it. One is  
22 eyeballing it when you do the gross evaluation of the  
23 brain. The other is when you look at slides under the  
24 microscope.

25 Do you always have both forms of

1 hemorrhagic necrosis when you have herpes  
2 encephalitis?

3 A I'm trying to put that more into --  
4 because again, that's a very general question in the  
5 sense that you can have a herpes encephalitis where  
6 the person may not get to that point, but that's not  
7 in death cases. And if you have it grossly, you're  
8 always going to have it under the microscope.

9 If you have it microscopically, you  
10 should be able to -- any trained pathologist should be  
11 able to see it grossly. So if you have one, you  
12 should have the other.

13 Q In every case?

14 A Well, I mean, every case I've seen, yes.

15 Q You brought a picture with you. You  
16 actually -- and by the way, we're going to make this  
17 Exhibit Number -- late filed Exhibit Number 20,  
18 because you didn't bring it. It's on your computer.

19 A Right.

20 Q But on your computer, you have a picture  
21 of hemorrhagic necrosis of a brain?

22 A Yes, in a herpes simplex case.

23 Q And you've e-mailed --

24 MR. SMITH: And just for the record, he's  
25 e-mailed a copy of it to me, Darrell, that I

1 will print and send to the court reporter  
2 because they can't print it here in color.

3 MR. BAKER: And you can e-mail it to us,  
4 too.

5 MR. SMITH: Okay.

6 THE COURT REPORTER: I'm sorry?

7 MR. BAKER: I said he could e-mail it all  
8 the defense counsel too. That would be nice.

9 MR. SMITH: All right.

10 (Thereupon, marked for identification,  
11 Plaintiffs' late filed Exhibit Number [P-20](#).)

12 THE WITNESS: Do you want to use this as  
13 an opportunity to use the restroom?

14 MR. SMITH: Sure, let's do that. And why  
15 don't we do this. Go to the restroom and when  
16 you come back, before we get started again,  
17 pull it up on your computer --

18 THE WITNESS: Sure.

19 MR. SMITH: -- so we can look at it.

20 THE WITNESS: Sounds good.

21 THE VIDEOGRAPHER: We're off the record  
22 at 2:10 p.m. This is the end of tape number  
23 two.

24 (VIDEO CAMERA OFF.)

25 (Thereupon, a recess was taken.)

1 (VIDEO CAMERA ON.)

2 THE VIDEOGRAPHER: This is the beginning  
3 of tape number three. We're back on the record  
4 at 2:21 p.m.

5 BY MR. SMITH:

6 Q All right. When we went off the record,  
7 we were talking about a picture that you had from the  
8 Internet that showed a -- grossly, what hemorrhage  
9 necrosis looks like with herpes simplex?

10 A That's correct.

11 Q You've got it on your computer. You've  
12 e-mailed it to me. I have e-mailed it to all the  
13 defense lawyers at the deposition, as well as the  
14 court reporter, and she's going to mark it as -- a  
15 color copy of that as Exhibit Number 20 later on.

16 But if you could, and this will be --  
17 this probably won't -- this won't show up on the  
18 written record but -- you know what you could do is,  
19 you could turn your computer around and the court  
20 reporter -- or the videographer can kind of focus in  
21 on it and you can show us what we're talking about.

22 A That's fine. And what I'll say is that  
23 this photograph -- I apologize. I did not bring the  
24 photograph with me. But this is from a textbook. The  
25 editors are Ellison, E-L-L-I-S-O-N, and Love, L-O-V-E,'98

1 and it's a standard neuropathology textbook. And so  
2 this is the photograph from the herpes simplex  
3 chapter.

4 MR. SMITH: And if you -- and can you --  
5 are you in on it?

6 BY MR. SMITH:

7 Q And you can kind of lean over maybe and  
8 point to the specific parts of the brain that, I  
9 guess, are indicative of hemorrhagic necrosis.

10 A Okay. I see myself, so I don't know if  
11 this is --

12 MR. BAKER: They're different cameras.

13 THE WITNESS: Oh, okay. Yeah, on top of  
14 the screen. Okay. So let me actually --

15 UNIDENTIFIED FEMALE ATTORNEY: The camera  
16 is not on the computer, it's on his head.

17 THE WITNESS: Yeah.

18 MR. SMITH: You'll see it on the video  
19 because the videographer is focused in on it.

20 UNIDENTIFIED FEMALE ATTORNEY: Okay.

21 MR. SMITH: I don't know how else to do  
22 it.

23 THE WITNESS: Do you want to bring that  
24 down?

25 MR. SMITH: Just do it.

1 THE WITNESS: Okay. We can also bring it  
2 up and so they can both see.

3 A Okay. So if we look at the top of the  
4 screen, that's going to be the front of the brain.  
5 And if we look at the bottom of the screen, that's the  
6 brain stem coming out between the cerebellum, and so  
7 that'll be the back of the brain.

8 And since we're looking at the inferior  
9 aspect, so we're looking at the undersurface of the  
10 brain itself, what we see is --

11 BY MR. SMITH:

12 Q So if I'm correct, then, we're looking at  
13 the bottom of the brain?

14 A That's correct. So that's as if we're  
15 looking from the neck up.

16 Q Right.

17 A These are the frontal lobes, which  
18 actually go all the way back here. This is the  
19 temporal and then the occipital is in the back.

20 If you notice here, you can see nice,  
21 sort of convolutions. These are the normal gyri,  
22 G-Y-R-I, and sulci, S-U-L-C-I. Those are the normal  
23 convolutions of a brain. And you can see how it's  
24 sort of a reddish, pinkish color.

25 But when we come back here, this whole 100

1 area, you don't see any of those convolutions anymore  
2 and it's red. That's the hemorrhagic necrosis. All  
3 of this tissue is dead and this is classic with the  
4 location of being at the anterior aspect of the  
5 temporal lobes, the posterior aspect of the frontal  
6 lobes, that whole area. Because again, the way the  
7 virus comes in, that whole area is dead and  
8 hemorrhagic.

9 Q Okay. And I know you said in your -- the  
10 disclosure that you were going to use a photograph,  
11 potentially, at trial to describe hemorrhagic necrosis  
12 or show hemorrhagic necrosis. Is that the picture  
13 you're going to use?

14 A Yes, I will use this picture.

15 Q And what you've described to us would be  
16 essentially what you would tell the jury?

17 A Absolutely.

18 Q Anything else?

19 A No, sir.

20 Q All right. We can put -- you can put  
21 that aside.

22 A Okay.

23 Q I think we're done with that. I'm going  
24 to ask you about another.

25 Now, on page one of Exhibit Number 17, it  
101

1 says, (reading): The absence of hemorrhagic necrosis  
2 of the temporal and frontal lobes is undeniable proof  
3 that HSE was not the cause of this patient's death.

4 A Right. So she, from the -- as you  
5 stated, from the time of her initial symptomatology to  
6 the time of her death, in that period of time, there  
7 would have been hemorrhagic necrosis.

8 Q And you say undeniable, meaning that  
9 nobody should be able to disagree with you?

10 A Well, I mean, I don't feel that somebody  
11 could disagree with me on this.

12 Q In other words, let me -- if I understand  
13 your opinion, let me see if I can -- your opinion is  
14 that the absence of hemorrhagic necrosis in the  
15 autopsy report that you relied -- that you reviewed  
16 rules out herpes simplex encephalitis as a cause of  
17 Holly's death?

18 A Well, I think that what it should really  
19 say is that it's very unlikely that it would have been  
20 her cause of death. But then, in conjunction with the  
21 other studies, it's undeniable that it was not her  
22 cause of death.

23 So I know that's a little different than  
24 the wording in here. This, just being alone, would  
25 make it that maybe undeniable shouldn't be the word. 102

1 It should be that extremely unlikely, and then to make  
2 it undeniable is the -- are the additional studies.

3 Q All right. Let's just focus in on the  
4 hemorrhagic necrosis. And I understand what you're  
5 saying.

6 Would you say -- so you're saying that,  
7 stated another way, the absence of hemorrhagic  
8 necrosis of the temporal and frontal lobes in the  
9 pathology report makes it highly unlikely that Holly's  
10 death was due to herpes simplex encephalitis?

11 A Correct. By taking just that alone,  
12 that's correct.

13 Q And would it be fair to say that you  
14 would expect every reasonably-trained pathologist to  
15 agree with you?

16 A Yes.

17 Q And it would be unreasonable for a  
18 pathologist to disagree with you based on that  
19 evidence alone?

20 A I think that you may be able to find  
21 someone who would, but I don't think that that's --  
22 let me go back.

23 No, I don't think -- I think that the --  
24 a well-trained pathologist, looking at this brain with  
25 the time frame of the onset of symptomatology to

1 death, I don't think that they can say that this is a  
2 herpes encephalitis death.

3 Q Based on that alone?

4 A Correct.

5 Q Now, do you have any literature that  
6 supports your opinion that the absence of hemorrhagic  
7 necrosis of the temporal and frontal lobes excludes  
8 the diagnosis of herpes simplex encephalitis?

9 A Well, no. That's why I changed that  
10 undeniable to highly unlikely.

11 So when you look at the differential  
12 diagnosis, if you see the hemorrhagic necrosis, herpes  
13 is number one. If you don't see the hemorrhagic  
14 necrosis, especially in the time frame, it drops all  
15 the way down to almost the bottom.

16 Q So again, let me ask my question again.

17 Is there any literature that supports  
18 your opinion that the absence of hemorrhagic necrosis  
19 of the temporal and frontal lobes excludes the  
20 diagnosis of herpes simplex encephalitis?

21 A I don't know if there's anything that  
22 says it 100 percent excludes it.

23 Q Now, what's the basis for your opinion  
24 that there was no hemorrhagic necrosis?

25 A Well, the autopsy report or the

1 neuropathology autopsy report doesn't give any  
2 evidence of it. And under the microscope, there's  
3 absolutely no evidence of it.

4 Q Let me go back. You keep saying  
5 neuropathology report. You're not -- you don't know  
6 what Dr. Chesney's training was?

7 A Well, no. But again, he's a pathologist  
8 and in your training as a pathologist, you do  
9 autopsies and you look at brains. And so any -- I  
10 don't know what his training is, but any pathologist  
11 can look at a brain and see that there's hemorrhage  
12 there. The whole structure changes.

13 So again, the neuropathology report  
14 doesn't state that it's there. In fact, it only  
15 states an area of hemorrhage that he's not even sure  
16 if it's a Duret, which is D-U-R-E-T, hemorrhage, and  
17 that's in a different area of the brain.

18 And then my review of under the  
19 microscope, there's no hemorrhagic necrosis anywhere.

20 Q When you say neuropathology report,  
21 you're not implying that Dr. Chesney has some special  
22 training in neuropathology?

23 A Oh, I see. No. I'm sorry. I'll say  
24 brain autopsy from now on.

25 Q Okay. That was -- that was my confusion.

1           A           Understood.

2           Q           All right. So the basis for your  
3 assumption that there's no hemorrhagic necrosis is  
4 because it's not in the report dictated by  
5 Dr. Chesney, as well as your review of the slides?

6           A           That's correct.

7           Q           We've gone over this, but you haven't  
8 grossly examined the brain?

9           A           I have not.

10          Q           And you haven't seen any pictures of the  
11 brain after it was taken out of the body at all at the  
12 time of autopsy?

13          A           That's correct.

14          Q           You haven't spoken with Amanda Mullins,  
15 Heather Baldwin, or Thomas Chesney?

16          A           I don't know them and I have not spoken  
17 to them.

18          Q           And so this is -- other than the slides,  
19 this is based on your interpretation of Dr. Chesney's  
20 report?

21          A           Yes, those two.

22          Q           Anything else that we need to talk about  
23 with regard to hemorrhagic necrosis in order for me to  
24 fully understand the -- your opinions as it pertains  
25 to that particular issue?

1           A           No, I don't think there's anything  
2 further.

3           Q           Let's talk about PCR of the spinal fluid.

4           A           Okay.

5           Q           All right. What is a PCR?

6           A           That stands for polymerase chain  
7 reaction, and it's a molecular type study where what  
8 you're doing is, you're taking a sample of some sort,  
9 you're amplifying the organism, if you're looking for  
10 organisms, that you're trying to identify to make it  
11 easier to identify.

12                       And then you get a result of if it's  
13 present, if it's not present, at what ratio, or at  
14 what level, and then it's reported out as a positive  
15 or a negative.

16          Q           Do you perform PCR testing?

17          A           No.

18          Q           Are you trained to perform PCR testing?

19          A           No. That's a clinical lab.

20          Q           Do you ever order PCR testing of the  
21 spinal fluid?

22          A           You know, in the last number of years, I  
23 haven't. Not of the spinal fluid. I don't recall if  
24 I did when I was in New York.

25                       I have requested PCR on heart tissue

1 before and that's to try to determine the type of  
2 myocarditis that we have. But on spinal fluid, I  
3 don't believe I have. And even if I have, it's been a  
4 while.

5 Q It would have been back in your residency  
6 training?

7 A My fellowship training, yes.

8 Q When you said you were in New York, we  
9 talked about the times that you had treated herpes  
10 simplex, you had --

11 A Well, not treated, but diagnosed.

12 Q Fair enough.

13 The times that you were involved in an  
14 autopsy of a patient suspected of dying of herpes  
15 encephalitis?

16 A Well, at the same time, yes, but not  
17 necessarily those cases.

18 Q You don't use PCR testing of spinal --  
19 you don't use the results of PCR testing of spinal  
20 fluid in your practice?

21 A Well, again, we do -- I don't recall if  
22 I've done it in spinal fluid, but we absolutely do  
23 send specimens to the CDC.

24 It's, in all honesty, it's rare that we  
25 have to do that, but when we do, we're trained to look

1 at the PCR results, which they're pretty  
2 straightforward.

3 Q All right. We talked about sensitivity  
4 and specificity?

5 A Yes.

6 Q What is the sensitivity of PCR testing of  
7 the spinal fluid?

8 A Well, it's changed over the years.  
9 Actually, it's very sensitive nowadays.

10 Q All right.

11 A It's gone up into the 90 percentile.

12 Q All right. Why has it changed over the  
13 years?

14 A Because of methodology.

15 Q So the tests have gotten better over the  
16 years?

17 A That's correct.

18 Q What was the sensitivity back in 2007?

19 A I don't recall. Actually, I don't know  
20 what it was in 2007.

21 Q What was the specificity in 2007?

22 A I don't know the specific numbers.

23 Q What was the predictive value of PCR  
24 testing of spinal fluid back in 2007?

25 A In 2007? I don't recall.

1 Q Again, if we're talking about the PCR  
2 testing of the spinal fluid, if I -- and I don't want  
3 to put words in your mouth, so you tell me if I'm  
4 wrong about this.

5 A All right.

6 Q But if I distill what I've read in the  
7 disclosure, again, we've got the big opinion that,  
8 based on the information you reviewed in this case,  
9 you believe that herpes simplex is -- has been ruled  
10 out or can be ruled out as a cause of Holly's  
11 encephalitis. Fair?

12 A That's fair.

13 Q And we've talked about hemorrhagic  
14 necrosis being one part of that?

15 A Correct.

16 Q And now we're talking about the PCR of  
17 the spinal fluid. And you would say that would, in  
18 your opinion, be another piece of the puzzle that  
19 would help rule out the herpes encephalitis?

20 A That's correct.

21 Q Do you have any literature that you have  
22 reviewed or relied on or can you point me to any  
23 literature that says that PCR testing of the spinal  
24 fluid -- a negative PCR result for testing of the  
25 spinal fluid back in 2007 rules out herpes enceph --

1 herpes as a cause of encephalitis?

2 A I mean, I haven't specifically reviewed  
3 anything like that. We're taking things -- we're  
4 taking in a vacuum here. We're taking individual  
5 tests and not putting them all together, which is --

6 Q We're going to do that at the end.

7 A Oh, we'll do that at the end. Okay.

8 So can I point you to literature that  
9 says that in 2007, no, not that I know of. I may be  
10 able to find it, but I don't know it off the top of my  
11 head.

12 Q Have you made any attempt to find it?

13 A No.

14 Q And we also covered this, but you also --  
15 you don't know what the sensitivity and specificity of  
16 PCR testing on spinal fluid was back in 2007?

17 A I can't recall, no.

18 Q So what is the basis for your opinion  
19 that the PCR testing of spinal fluid excludes the  
20 diagnosis of herpes simplex as a cause of encephalitis  
21 in this case?

22 A Well, again, it's an additive thing. We  
23 have lack of gross findings that suggest herpes. We  
24 have lack of microscopic findings --

25 Q We're going to get to that in a minute. 111

1           A           Right, but the thing is is that, again,  
2 you can't take things in a vacuum and we're starting  
3 to put them in their individual wheel well or in their  
4 individual tests, and a negative PCR is suggestive  
5 of -- is highly suggestive of that virus not being  
6 there.

7                       The lack of hemorrhagic necrosis is  
8 highly suggestive of the lack of herpes simplex. And  
9 then we haven't gotten to the other testing, but . . .

10           Q           Okay. And I understand we're going to  
11 get to the overall picture, but I'm talking about  
12 right now PCR testing of the spinal fluid.

13                       What is the basis for your opinion that  
14 the PCR testing of the spinal fluid rules out herpes  
15 simplex as being a cause of the encephalitis in this  
16 particular case?

17           A           Again, it's a piece of the puzzle. So  
18 the fact that it's negative, in addition to the  
19 others, tells me that it's not herpes.

20                       So by itself, it being negative, moves it  
21 into the more likely than not category, that it was  
22 not herpes, and then we'll get to what we're going to  
23 get to later.

24           Q           Let's talk about PCR testing of the brain  
25 tissue. What is PCR testing of brain tissue?

1           A           It's the same thing but you're now using  
2 brain tissue instead of fluid.

3           Q           How is it different from -- well, is that  
4 how it's different from testing the cerebral spinal  
5 fluid?

6           A           Pretty much. I mean, there's -- there  
7 are processes. The way they go about getting it  
8 prepared is probably different because you're going  
9 from a fluid to a tissue, but the actual study is the  
10 same.

11          Q           And today -- today and back in 2007, they  
12 don't do or take tissue samples from live patients?

13          A           Not brain -- they really prefer not to  
14 take live -- excuse me. They really prefer not to  
15 take tissue of the brain in live patients in a  
16 situation like this.

17          Q           So PCR testing of brain tissue  
18 generally -- probably even more than generally, but  
19 PCR testing -- let me ask it a different way.

20                    PCR testing of brain tissue is not done  
21 in live patients today?

22          A           I can't speak to what the clinicians  
23 actually do, but I know that with the invention or the  
24 advent, I should say, of PCR, biopsies of the brain  
25 for situations like this are at least extremely rare,<sup>113</sup>

1 but I can't tell you if they do or do not at all.

2 Q And that would be true back in 2007, as  
3 well?

4 A Again, you would much rather just stick a  
5 needle in the spinal fluid than stick a big bore  
6 needle into the brain, so yes.

7 Q And beyond that, what they do on the  
8 clinical side, you don't really know?

9 A I prefer to leave that to a clinician.

10 Q What experience do you have with  
11 testing -- doing PCR testing on brain tissue?

12 A Well, I don't do the testing. I review  
13 the results.

14 Have I done that? I've done it a few  
15 times maybe over the years, mostly when I was in New  
16 York. I don't -- I don't believe I've done PCR  
17 testing on the brain.

18 Ah, there may have been one case that  
19 I've done since I've been here in Georgia, but it's  
20 not a common test.

21 Q All right. We talked about the two cases  
22 where you were involved in autopsies of patients with  
23 herpes encephalitis when you did your pediatric  
24 training.

25 A When I -- yes.

1 Q And then you said since then, you hadn't  
2 been involved in any other cases.

3 Was the case you're talking about now, is  
4 that more experience that you've had with the herpes  
5 or is that a different cause?

6 A I'm going to be honest. I can't  
7 remember.

8 Q Is there any -- any records you could  
9 look at that would help you remember?

10 A Oh, no. That's way in my past and I  
11 don't have any record of that.

12 Q Anybody you could talk to that would help  
13 you remember about that particular case?

14 A I highly doubt it.

15 Q So as we sit here today, the only -- the  
16 experience that you -- you've already told us about  
17 the experience that you've had with herpes  
18 encephalitis?

19 A Correct.

20 Q Do you order PCR testing of brain tissue?

21 A We can. I don't -- I don't think I have  
22 in many years.

23 Q Can you think of -- since you finished  
24 your residency and fellowship training, your formal  
25 training, can you think of a time when you have used

1 the results of PCR testing on brain tissue in your  
2 practice?

3 A On brain tissue? Not that I can think  
4 of.

5 Q What is the sensitivity for PCR testing  
6 of brain tissue?

7 A The sensitivity? It's less than in the  
8 CSF, but I -- I believe it's in the mid 80s to upper  
9 80s, but I honestly can't remember the specific  
10 percentage.

11 Q What about back in 2007?

12 A I can't tell you about 2007. I don't  
13 recall.

14 Q What is the specificity of PCR testing on  
15 brain tissue back in 2007?

16 A I would -- I would be speculating. I'm  
17 not sure but, you know, if you have a piece of brain  
18 tissue -- well, no, I'd be speculating, so I don't  
19 recall the exact percentage.

20 Q What about the predictive value of PCR  
21 testing on brain tissue back in 2007?

22 A Well, those go hand in hand so I can't  
23 give you exact number.

24 Q In your disclosure, you said that,  
25 obviously, there was a positive PCR, and I think

1 there's a typo?

2 A There is a typo, yes.

3 Q It says blood tissue, but I think that  
4 should be brain tissue?

5 A That's correct. I noticed that last  
6 night.

7 Q All right. So you said you're aware that  
8 there was one test involving a positive PCR of brain  
9 tissue that you said was a false negative?

10 A Correct -- no, no, not a false negative.

11 Q I'm sorry. A false positive.

12 A Yes.

13 Q All right. Let me back up and ask the  
14 question again so it's clear on the record.

15 A Sure.

16 Q There was one -- you're aware of the fact  
17 that there was at least one positive PCR of brain  
18 tissue that was reported?

19 A That's correct.

20 Q And it's your opinion that was a false  
21 positive?

22 A That's correct.

23 Q What's the basis for that?

24 A If you actually -- if we pull out the  
25 report, at the bottom, it even states -- so this is

1 Exhibit 4, which is the Vanderbilt Medical Center  
2 Encephalitis Project. And Bates stamp 47 on that, at  
3 the bottom, there's a comment and it says, (reading):  
4 Positive HSV PCR on brain tissue not confirmed by PCR  
5 testing in second laboratory or by  
6 immunohistochemistry on fixed tissue at CDC.

7 I won't read the rest, but basically,  
8 what we're talking about here is, it's well known that  
9 in laboratories that do PCR, you can have  
10 cross-contamination. That's what brings the  
11 specificity -- let me get the right one down.

12 Right. That the specificity is -- it's  
13 well known that there's cross-contamination, that it  
14 can happen. And so that brings the specificity down  
15 in the sense that, as you're doing the studies, you  
16 can have the viral capsid or the part of the virus  
17 itself move from one specimen to the other.

18 And that's what they're essentially  
19 saying here is that, okay, we've got this positive,  
20 but then we look at the entirety of the case and we  
21 see that the CDC was negative for their  
22 immunohistochemistry, that the other PCR was negative,  
23 so we can't tell you that this is a true positive.

24 Q Let me back up.

25 So we're talking about, there was the

1 positive PCR on the brain tissue?

2 A Yes.

3 Q So where was that positive -- which  
4 laboratory did that positive result come out of?

5 A I believe that came out of the TUES  
6 laboratory in Memphis.

7 Q Or Vanderbilt?

8 A Or Vanderbilt. Yeah, Vanderbilt.

9 Q Nashville.

10 A And I'm sorry. I don't know Tennessee  
11 that well. I apologize to everybody.

12 Q I'll help you out on that one.

13 A Okay.

14 Q So the positive PCR testing on the brain  
15 tissue, as far as you know, came out of the laboratory  
16 at Vanderbilt University Medical Center?

17 A Well, I have to look because the notes on  
18 the side say California Department of Health. Oh,  
19 that's the CSF. I'm sorry.

20 It's within the -- within the Vanderbilt  
21 Medical Center grouping of papers and it says the  
22 Encephalitis Project Test Report Form. I believe  
23 that's where the test was done.

24 There's notes about the California  
25 Department of Health next to it, but if I recall

1 correctly, that's where it was not confirmed at, but  
2 I'd have to look at my notes. I honestly don't  
3 remember.

4 Q (Handing.)

5 A That's correct. So the California  
6 Department of Public Health was negative for HSV-1 and  
7 2, as well as a number of other viruses. So I believe  
8 that it came out of the Vanderbilt study.

9 Q So let me ask you a couple of other  
10 questions.

11 Going back to my initial question was,  
12 what's the basis for your opinion --

13 A Uh-huh (affirmative).

14 Q -- that the positive result on the brain  
15 tissue was a false positive. And you read me a  
16 sentence out of part of what we've marked as Exhibit  
17 Number 4, in particular, the page Bates stamped 47.

18 A Right.

19 Q Is that the basis for your opinion?

20 A No, that's only part of it. I mean, they  
21 have that there. They also say that PCR tests  
22 reported here are investigational assays, so they're  
23 not CLIA, which is C-L-I-A, certified.

24 We also have all the other evidence or  
25 lack of evidence in the sense of, we're going to go

1 back through it, but the no hemorrhagic necrosis, the  
2 immunohistochemistry being negative, the other PCR  
3 being negative.

4 So when you have such -- and under the  
5 microscope, no viral inclusions. When you have such  
6 overwhelming evidence from multiple etiologies and  
7 multiple -- or I shouldn't say etiologies -- multiple  
8 specimens, you can't pull out that one and say the one  
9 that is reported as positive, where they even have a  
10 note saying they don't believe that it's true or that  
11 they're not sure that it's positive because of all the  
12 other negatives, I mean that's --

13 Q Where does it say they're not sure?

14 A Well, that's why I changed my words.  
15 They say they're not confirmed by PCR testing at a  
16 second laboratory or by immunohistochemistry on fixed  
17 tissue at CDC.

18 So they're not confirming that. That's  
19 terminology that's saying, okay, we got a positive  
20 result in our HSV-1 brain PC -- excuse me. Yeah,  
21 brain DNA PCR, but then they say California Department  
22 of Health was negative. CDC, which is a pretty good  
23 lab, was negative for their immunohistochemistry.

24 I add on my review of the slides, my  
25 review of the autopsy, the brain autopsy report,

1 there's no way this is a true positive. It's got to  
2 be a false positive. Even the laboratory that did it  
3 has that disclaimer there, so that's how I'm basing  
4 it, is on all of that.

5 Q Anything else?

6 A No.

7 Q All right. Let's move on to -- well, let  
8 me -- now, in part of the disclosure it talks about  
9 the -- and it's the very last paragraph -- talks about  
10 the PCR testing on the brain tissue.

11 A Yes.

12 Q Is there anything else we need to talk  
13 about in order for me to fully understand how the PCR  
14 testing of the brain tissue fits into this -- your  
15 review of this case?

16 A No, sir.

17 Q All right. So let's talk about  
18 immunohistochemical staining.

19 A Okay.

20 Q What is immunohistochemical staining?

21 A Okay. So that's when you take a block  
22 that you've taken of the tissue and you make a slide  
23 of that block and you stain it with a specific marker  
24 that will go to whatever you're looking for.

25 So in this case, it's a marker that is 122

1 looking for herpes simplex. And it's different --  
2 like you'll see with the photographs that I have,  
3 they're pink and blue and red, the photograph -- the  
4 slides in the normal studies.

5 In these studies, they're brown. And the  
6 brown part is where that immunohistochemical stain is  
7 going around and if it finds what it's looking for, in  
8 this case, herpes, it will connect and it will turn  
9 brown.

10 And so we look under the microscope to  
11 see if we see evidence that the stain we used has lit  
12 up, meaning it was attracted by a virus or the herpes  
13 virus, and that will tell us, hey, it's here.

14 And if we don't see the brown in the  
15 right place, it can be a little dirty in the  
16 background, but that's okay. From training, we know  
17 how to look at it. If we don't see it, then we say  
18 the herpes virus is not here.

19 Q Okay. Where was the immunohistochemical  
20 staining done?

21 A At the Center for Disease Control.

22 Q And how was it done?

23 A I don't know if I can tell you the  
24 specific methodology they used, but it's pretty much  
25 what I just told you. It's standard for -- we'll make

1 it easier -- IHC. It's a standard procedure.

2 Q All right. Do you do IHC staining  
3 yourself?

4 A We don't -- I don't physically do it  
5 myself. I've reviewed plenty of IHC stains.

6 Q Do you know how it's done?

7 A The actual physical hands on? No. I  
8 don't do them. It has been many years since I've been  
9 in a laboratory.

10 Q What is the sensitivity of IHC staining  
11 for herpes?

12 A So the exact numbers, the sensitivity is  
13 not that high, and I can't -- I don't recall what the  
14 exact number is. But the issue for that is because  
15 herpes simplex has a number of different ones and  
16 focusing here on HSV-1 versus HSV-2, the  
17 immunohistochemical stain, and I'll be honest, I don't  
18 know if at this time it was separated into 1 and 2.

19 It used to be you're just looking for  
20 herpes so that's why the sensitivity was lower,  
21 because it will just stain herpes, but it won't tell  
22 you if it's 1 or 2. So that brings down the  
23 sensitivity of, if you're looking for HSV-1, you may  
24 actually be seeing HSV-2.

25 Q When did that change?

1           A           I don't know.

2           Q           All right. So let's talk about, what is  
3 the sensitivity or what was the sensitivity for IHC  
4 staining of brain tissue for herpes simplex back in  
5 2007?

6           A           I would be speculating. I don't remember  
7 what the sensitivity was.

8           Q           Let me ask the same question about  
9 specificity.

10          A           Sure.

11          Q           What was the specificity for IHC staining  
12 of brain tissue for herpes back in 2007?

13          A           Well, the specificity is different. The  
14 specificity is high. And if I recall, it's up in the  
15 high 80s to low 90 percentile because if it's not  
16 there, it's not going to light up, as opposed to what  
17 I was mentioning about the sensitivity. So the  
18 specificity, actually, IHC specificity is higher than  
19 PCR sensitivity [sic] -- specificity.

20          Q           All right. So can you give me a number  
21 for what the specificity was for IHC staining of brain  
22 tissue back in 2007?

23          A           Oh, I don't recall. I'd have to look to  
24 see if I can find a percentage. But it's -- the  
25 specificity in IHC has always been fairly high, but I<sub>125</sub>

1 can't give you a specific number.

2 Q Without speculating?

3 A Without speculating.

4 Q And I know we're going to go back and  
5 we're going to tie all this in at the end, but what is  
6 the basis for your opinion that the diagnosis of HSE,  
7 herpes simplex encephalitis, can be ruled out based on  
8 the absence of herpes antigen on the IHC staining?

9 A Right. So first of all, the CDC is the  
10 foremost laboratory that does this. They have the  
11 infectious disease pathology lab.

12 And looking at that report, it's exactly  
13 what -- they look at the normal slide, the normal  
14 stain first, and then they do the IHC.

15 Their description in the normal stain is  
16 exactly what my findings were. And then you add onto  
17 that the IHC, which was negative, the virus is not  
18 there. It's just not there.

19 Q But my question was, what is the basis  
20 for your opinion that the diagnosis of HSE, herpes  
21 simplex encephalitis, can be ruled out based on the  
22 absence of herpes antigen on the IHC staining?

23 A From the review of their report and then  
24 the lack of everything else.

25 Q Can you point me to any literature that 126

1 says the absence of herpes antigen on IHC stains rules  
2 out the diagnosis of herpes simplex encephalitis?

3 A Again, from a pathologist's standpoint,  
4 we can't -- I can't pull -- I don't recall or know of  
5 the literature that I would be able to say  
6 specifically just this alone.

7 But again, it's the greater picture. So  
8 when I have a negative IHC, the virus is not there.  
9 And so to me, yes, that rules it out, unless for some  
10 crazy reason, something else shows up or the test was  
11 done wrong. But I trust the CDC and Dr. Zaki and his  
12 team there.

13 Q Okay. But can you point me to any  
14 literature that supports you on that?

15 A Well, I don't know if there is any  
16 literature that goes straight down that route.

17 Q All right. Anything else we need to talk  
18 about as far as the IHC staining, as it pertains to  
19 your opinions in this particular case?

20 A No.

21 Q We've covered it?

22 A Yes.

23 Q All right. Let's talk about the MRI.

24 A I'm not going to get into the radiology.  
25 That's for a radiologist and a clinician.

1           I mean, the thing is is that all I can  
2 tell you is that the MRI was -- did not show any  
3 evidence of frontal or temporal necrosis, so the MRI  
4 plays a role in my overall review. There was, I  
5 believe it was the second MRI, I'd have to look again  
6 at my notes, that showed that there was evidence --

7           Q           By the way, you're welcome to look at  
8 your notes any time you want to.

9           A           Right.

10                   -- that there was evidence of the  
11 encephalomyelitis, but there was no findings on the  
12 MRI that would lead me to say, this is again going  
13 towards that hemorrhagic necrosis of the frontal lobes  
14 and the temporal lobes.

15           Q           How often do you order MRIs?

16           A           I don't order MRIs. I review -- I look  
17 at them through the medical records, but I don't order  
18 them.

19           Q           You don't -- and you don't use the MRI  
20 results in a clinical setting? In other words, to  
21 diagnose and treat patients in a clinical setting?

22           A           No. I use it to see if there's anything  
23 that leads me down a path for the autopsy that I've  
24 done.

25           Q           Have you reviewed the films themselves? 128

1           A           No, sir.

2           Q           Do you intend to review the films  
3 themselves?

4           A           If I'm asked to, I will. But again, I'm  
5 not a radiologist so I have to go off of what the  
6 medical records show me.

7           Q           What's the factual basis for your opinion  
8 that the MRI does not show any damage to the temporal  
9 or frontal lobe?

10          A           The report of the MRI.

11          Q           What is the sensitivity of an MRI for  
12 herpes simplex encephalitis?

13          A           You'll have to ask a radiologist.

14          Q           What is the specificity for an MRI in the  
15 diagnosis of herpes simplex encephalitis?

16          A           Again, that's for a radiologist.

17          Q           What's the -- and I guess I'm having a  
18 little bit of a hard time because you've said you're  
19 not a radiologist. The MRI, you're not -- that would  
20 really be for the radiologist to comment on.

21          A           Well, to make an interpretation of. But  
22 as I said before, I look at the medical records. And  
23 so from what I reviewed in the medical records, it's  
24 just another piece that's added to everything else,  
25 that the MRI does not show what would be shown in a

1 frontal-temporal herpes encephalitis death.

2 Q And that's what we need to focus on.

3 So what would -- in your opinion, what  
4 would an MRI show in a patient who had herpes  
5 encephalitis?

6 A Well, in a -- with a death and the  
7 hemorrhagic necrosis, it would show necrosis of tissue  
8 in the temporal lobes and the base of the frontal  
9 lobes.

10 Q What's your basis for that opinion?

11 A Well, it's well known in the literature  
12 that if you have necrosis of the tissue, that you're  
13 going to see that on an MRI.

14 Q Can you point me to any literature that  
15 supports you on that?

16 A Well, I'm sure I can pull out plenty of  
17 textbooks to show that, but --

18 Q What textbooks would you look at?

19 A Oh, I'll pull -- I'll go look at a  
20 neuroradiology textbook. I'll pull out some radiology  
21 textbooks.

22 I mean, that's the whole point of doing  
23 head radiographs, whether it be MRI or CT, is to look  
24 to see if there's a lesion within the brain.

25 Q What -- can you give me -- well, let me 130

1 ask it this way.

2 If you were going to go look for  
3 literature to support your opinions in this case, is  
4 there a textbook or textbooks that you would go grab?

5 A I mean, there's individual books in  
6 different fields where you can go look. But I mean,  
7 this is such a, in my opinion, a very straightforward  
8 pathology diagnosis that's not there.

9 So I mean, I could pull out -- like we  
10 showed you Ellison and Love for the neuropathology. I  
11 could pull out -- I'm sure there's infectious disease  
12 books that can talk about herpes simplex encephalitis.  
13 I'm sure that there's neurosurgical books. I'm sure  
14 there's neuroradiology books. I can't give you the  
15 specific names. If you want me to go look, I'll go  
16 look.

17 Q I'm asking you, as you sit here today,  
18 can you give me the names of any books that we can go  
19 to that would support your opinions in this case?

20 A Oh, yeah. You can go to Ellison and  
21 Love.

22 Q All right. Any others? You've told us  
23 that one, Ellison and Love. Anything else?

24 A Well, I'd have to look to see what  
25 chapters in which books. I can't --

1           Q           I'm not asking for specific chapters.  
2 I'm talking about textbooks that you would go that  
3 would -- we could go to that would support your  
4 opinions in this case. You've given us Ellison and  
5 Love. Anything else?

6           A           I don't think I need to give you anything  
7 else. This is right in my wheel well. This is a very  
8 obvious case to me. So I don't -- I mean, this is  
9 experience and training and education that takes me  
10 down here.

11          Q           Okay. I understand that. But I'm asking  
12 you, if it's that obvious, there ought to be some  
13 textbooks that we could go to that would support you  
14 on this. You've given us Ellison and Love. Can you  
15 give us any others as you sit here today?

16          A           Okay. So as Dr. Schwartz said in his  
17 deposition, his pictures he pulled out, you can go to  
18 Robbins and Cotran, C-O-T-R-A-N. That shows you the  
19 real findings microscopically.

20                    I haven't pulled out specific textbooks  
21 recently so I would have to get back to you on that.

22          Q           Robbins and Cotran, would you consider  
23 that to be a reliable textbook?

24          A           Yeah. It's a -- it's a basic pathology  
25 textbook.

1 Q Would you consider to be -- would you  
2 consider the people that -- the editors and the people  
3 that contribute to that particular textbook to be  
4 authorities in their particular fields?

5 A I think so, yeah.

6 Q All right. The other one you talked  
7 about, Ellison and Love?

8 A Yes. That's one the big neuropathology  
9 textbooks.

10 Q That is neuropathology textbook  
11 considered to be reliable?

12 A Absolutely.

13 Q Are the people that contribute to that  
14 textbook considered to be authorities in their field?

15 A I assume so, yeah.

16 Q Would you consider that textbook to be a  
17 reliable authority in the area of neuropathology?

18 A Yes.

19 Q Same thing with the other book that we  
20 talked about, Robbins and Cotran?

21 A Well, we just -- we did that already.

22 Q Yeah, but that also would be considered  
23 to be a reliable authority in the field of pathology?

24 A In pathology, that's more of a basic  
25 general book. Then you also have Greenfield's

1 Pathology, which is a standard textbook in  
2 neuropathology.

3 Q Would that also be considered to be a  
4 reliable authority?

5 A Yes.

6 Q One of the things in your report, when it  
7 talks about the MRI, it talks about the advanced  
8 disease. What do you mean by advanced disease?

9 A I'm just trying to find -- where is that?  
10 Okay.

11 Right. So within the first 24 -- so you  
12 have the initial infection and then, as it continues  
13 and as we have here, her first symptomatology started  
14 two days or even a day before or even the day of her  
15 initial presentation.

16 She would have advanced to an advanced  
17 disease, meaning that she's left the acute phase,  
18 she's gone from acute to subacute, and that is where  
19 she would die, is in advanced disease, not just an  
20 infection that stopped and went away. And that's when  
21 you get that hemorrhagic necrosis and that would be  
22 obvious on radiology.

23 Q When were the radiology films done in her  
24 particular case?

25 A The MRIs were done, I believe -- so we 134

1 have an MRI done on September 24th and an MRI done on  
2 September 30th.

3 Q All right. The 24th, would that be  
4 considered to be during the advanced stage of the  
5 disease?

6 A If she was dying of herpes simplex  
7 encephalitis, yes.

8 Q Was she dying of herpes encephalitis on  
9 September 24th?

10 A I don't think she was.

11 Q All right. Well, was she dying on  
12 September 24th of whatever type of encephalitis she  
13 had?

14 A I'm sorry. Ask again. I didn't hear it.

15 Q All right. On September -- you said --  
16 let me see the two dates.

17 A They're right here. (Indicating.)

18 Q All right. So the two -- the two MRIs  
19 were done on September 24, 2007. Well, the first one  
20 was done on September 24, 2007; right?

21 A Yes.

22 Q Was Holly dying on September 24, 2007?

23 A It appears so because she already has  
24 herniation of her brain.

25 Q What about -- okay. So then on

1 September 30, same thing?

2 A Yes. Yeah, she didn't recover.

3 Q All right. Anything else we need to talk  
4 about in order for me to fully understand your  
5 opinions as they relate to the MRI findings?

6 A No.

7 Q All right. Let's talk about --

8 MS. STEINBERG: Object to the form.

9 THE COURT REPORTER: Can you identify  
10 yourself, please?

11 MS. STEINBERG: Sorry. Jill Steinberg.

12 Object to the form.

13 BY MR. SMITH:

14 Q All right. Cowdry Type A inclusion  
15 bodies.

16 A Yes.

17 Q What are they?

18 A So those are viral particles that have  
19 replicated within the nucleus of a cell. It can  
20 actually be any cell in the brain. It can be an  
21 astrocyte. It can be a neuron. But when you see  
22 those inclusions, you're now moving down a herpes type  
23 infection.

24 Q Okay. Why are they called Cowdry  
25 inclusion bodies?

1           A           I think that was the person who  
2 identified them, but I don't recall why it's Cowdry.

3           Q           In your report or the disclosure that  
4 you've adopted, it says that the presence of Cowdry  
5 inclusion bodies are plentiful and obvious when the  
6 death is from herpes simplex encephalitis.

7           A           Yes.

8           Q           All right. What's the basis for that  
9 opinion?

10          A           My training and experience.

11          Q           Can you point -- is that 100 percent of  
12 the time?

13          A           It's the majority of the time. I won't  
14 say it's 100 percent.

15          Q           Can you point us to any literature that  
16 supports your opinion that when someone dies from  
17 herpes encephalitis, that Cowdry Type A inclusion  
18 bodies are plentiful and obvious?

19          A           Not off the top of my head, no.

20          Q           Can you point us to any literature that  
21 says the absence of Cowdry Type A inclusion bodies  
22 rules out the diagnosis of herpes simplex  
23 encephalitis?

24          A           Going specifically solely into that  
25 route, no, not off the top of my head.

1           Q           You, in your report, talks about you did  
2 a thorough exam -- examination of the slides that you  
3 were given?

4           A           I did.

5           Q           All right. Why do you consider it a  
6 thorough search?

7           A           Because I looked at them closely.

8           Q           Where did you do it?

9           A           I did it on a microscope at my house.

10          Q           What type of microscope?

11          A           A microscope that has two little lenses  
12 and I look through it. I don't -- I can't tell you  
13 the make and the model off the top of my head.

14          Q           What type of magnification properties  
15 does the microscope in your house have?

16          A           I went through multiple magnifications.  
17 4X, 10X, 100X. I used oil. So I did a very thorough  
18 exam.

19          Q           Tell me all the steps you went through as  
20 part of your exam.

21          A           So I took the slide and I put it on my  
22 microscope, turned the light on, looked through the  
23 objectives. I always do a full scan first at 4X.  
24 Then I go to 10X and I do another scan, and then I go  
25 higher and higher.

1 I write down or document what I see or  
2 what I don't see, and if I see something of  
3 importance, I'll photograph it. And that is  
4 essentially it.

5 Q Where are the notes that you wrote down  
6 where you write what you see?

7 A They're right here. (Indicating.)

8 Q This would be on -- so let's see here.  
9 This is part of Exhibit 13, page -- on the fourth  
10 page, that says 17 -- under the heading 17 autopsy  
11 slides received from Dr. Schwartz?

12 A Yes.

13 Q Those -- that's your notes of what you  
14 see?

15 A Yes. And if there's nothing additional  
16 on subsequent slides, I don't write anything down.

17 Q How long did you take?

18 A Can I see my invoices?

19 Q (Handing.)

20 A I took eight hours.

21 Q Was anybody with you?

22 A No.

23 Q Other than your invoice, is there any  
24 other evidence about how long you took or what you did  
25 during -- to document what you did during your

1 evaluation or examination of those slides?

2 A I'm an honest person and I stated exactly  
3 how long I looked at the slides and I documented  
4 exactly what I did.

5 Q Anything else?

6 MR. BAKER: And photographs.

7 A And the photographs, that's correct.

8 BY MR. SMITH:

9 Q The four photographs that we have?

10 A Right.

11 Q Okay. Anything else?

12 A No.

13 MR. GILMER: Can we take a quick restroom  
14 break. I've got to go.

15 MR. SMITH: Sure.

16 THE VIDEOGRAPHER: This is the end of  
17 tape number three. We're off the record at  
18 3:14 p.m.

19 (VIDEO CAMERA OFF.)

20 (Thereupon, a recess was taken.)

21 (VIDEO CAMERA ON.)

22 THE VIDEOGRAPHER: This is the beginning  
23 of tape number four. We're back on the record  
24 at 3:22 p.m.

25 ///

1 BY MR. SMITH:

2 Q When we went off the record, we were  
3 talking about the MRI and -- I think.

4 A No, we had passed that, but --

5 Q What were we up to?

6 A We talked about my invoices, how long I  
7 looked at the slides.

8 Q Oh, you're right. We were talking about  
9 the slides.

10 THE VIDEOGRAPHER: (Inaudible.) Your  
11 microphone.

12 MR. SMITH: Thank you.

13 BY MR. SMITH:

14 Q You're right. You're absolutely right. I  
15 guess I put that in the wrong pile. That's my fault.

16 A That's fine.

17 MR. BAKER: Don't put them back on the  
18 bottom of the pile.

19 MR. SMITH: We'll just come back to those  
20 and redo it.

21 BY MR. SMITH:

22 Q So let's talk about -- have we fully  
23 discussed your review of the slides from Dr. Schwartz  
24 and how they fit into your evaluation and opinions in  
25 this case?

1           A           Well, I don't think we got into the  
2           specifics of what I did and did not find. But we --  
3           we did talk about that I did not find -- well, you  
4           brought up Cowdry A bodies and I did not find those.

5                       That's essentially what we talked about  
6           with the slides.

7           Q           Okay.

8           A           But earlier in the deposition, you had  
9           asked me about the hemorrhagic necrosis and I think  
10          it's important to mention that I didn't see that under  
11          the microscope either.

12          Q           Okay. Anything else? We probably need  
13          to talk about these pictures at this point in time  
14          too.

15                       Anything else we need to talk about in  
16          order for me to fully understand how your review of  
17          the tissue slides from Dr. Schwartz, how they played  
18          into your evaluation of this case?

19          A           As far as the tissue slides themselves,  
20          no. I think we've gone over everything.

21          Q           So let's talk about -- because you did  
22          take some pictures?

23          A           Yes.

24          Q           So this one we've marked as Exhibit

25          Number 9. If you will tell us what Exhibit Number 9

1 shows and why you took the picture.

2 A Okay. This is actually a higher power of  
3 what the next exhibit's going to be, which is -- these  
4 are the -- what are called the leptomeninges, which is  
5 the overlying -- it overlies the brain. So that's how  
6 you get meningitis as a terminology.

7 And this shows that we have a chronic  
8 inflammatory infiltrate around a vessel.

9 Q I tell you, why don't you -- could you  
10 hold it up and maybe he can zoom in on it and you can  
11 kind of show -- show us what you're talking about.

12 A So this is all out in the leptomeninges  
13 and -- which is the covering of the brain. This is a  
14 vessel with chronic inflammation around it. And  
15 really, all that shows me is that there's a meningitis  
16 component to this. It doesn't get any more specific  
17 than that.

18 Q All right. Meningitis versus  
19 encephalitis, tell us what the difference is.

20 A Meningitis is inflammation of the  
21 meninges, the overlying of the brain. Encephalitis is  
22 inflammation of the brain tissue itself.

23 So if you look at the reports that are  
24 out there in the records, they call it a  
25 meningoencephalitis, and that's what it is. This is 143

1 the meningo portion.

2 Q I'm assuming, from what you said earlier,  
3 that this doesn't help us differentiate between any  
4 specific type of viral encephalitis?

5 A This just tells me that there's --  
6 MS. MALKIN: Object to the form. It's  
7 Andrea Malkin.

8 BY MR. SMITH:

9 Q Go ahead.

10 A This just tells me that there is a --  
11 this picture itself just shows me that there's a  
12 meningitis portion of it. It doesn't help me  
13 differentiate.

14 It's not a bacterial, let's put it that  
15 way, but it doesn't help me differentiate any further  
16 from that.

17 Q Still where we were at the beginning of  
18 the deposition, as far as --

19 A Yeah.

20 Q -- we know it's an encephalitis, but  
21 going further than that, other than the things that  
22 you've ruled out, we can't go any further?

23 A Correct.

24 Q This is what we've marked as Exhibit  
25 Number 10. If you will just tell us what -- and I

1 think I see this in there?

2 A That's correct. So this is a lower power  
3 image of what we just looked at. And this right here  
4 is the vessel that we see in Exhibit Number 9.

5 And this is all just leptomeninges. You  
6 can see that there's inflammation around some vessels.  
7 It's chronic inflammation. It's not pus or acute  
8 inflammation, meaning it's not bacterial, but it's  
9 some other nonspecific meningitis type picture so far.

10 Q Anything else you can tell or any other  
11 reason you took the picture that we've marked as  
12 Exhibit Number 10?

13 A No. Just to show the inflammation.

14 Q Does Exhibit Number 10 show anything  
15 other than the inflammation that you discussed?

16 A And the rest of the normal meninges, but  
17 that's it.

18 Q I hand you what I've marked as Exhibit  
19 Number 11, and if you'll tell us, that's a picture  
20 that you took?

21 A Yes.

22 Q And why did you take that picture?

23 A So again, this is actually a higher power  
24 than this. We got them in the reverse order.

25 So basically, what I did is, after I went

1 through all the slides and I was unable to find any  
2 Cowdry bodies, I was unable to find any obvious  
3 necrosis or hemorrhage, I focused in on the findings  
4 that I did have.

5 And on this one, you'll see in the next  
6 exhibit, this area has inflammation in the parenchyma.  
7 This is the encephalitis picture. So this is the  
8 chronic inflammatory cells in the parenchyma that show  
9 that it's an encephalitis. It's not specific.

10 But what else we have here is these more  
11 pinkish dots. These just show that there's a hypoxic  
12 episode. It's what we call hypoxic-ischemic  
13 encephalopathy. That's a secondary reaction to any  
14 time that the brain loses oxygen or blood supply,  
15 since the blood carries the oxygen.

16 But the reason I went higher power on  
17 this as well is because, in my opinion, the pictures  
18 that Dr. Schwartz took are showing astrocytes.  
19 They're not showing Cowdry bodies. Those are not  
20 viral inclusions. So I try to show pictures that are  
21 similar to what he claims are viral inclusions.

22 Q Okay. So again, this doesn't -- Exhibit  
23 Number 11, the picture we've marked as Exhibit Number  
24 11, shows encephalitis?

25 A Yes.

1           Q           But it doesn't specify the type of  
2   encephalitis?

3           A           No.

4           Q           You can't differentiate between a  
5   specific type of encephalitis with this particular  
6   picture?

7           A           That's correct.

8           Q           And then if I understand, Exhibit Number  
9   12 is another picture that you took, but it's a lower  
10   power picture of the same thing that you show in  
11   picture Number 11?

12          A           That's correct. And there's nothing new  
13   in that. It shows the same exact findings.

14          Q           Let's look at Exhibit -- well, let's do  
15   it a different way.

16                   Exhibit Number 8, I'm assuming this  
17   doesn't help us with anything; does it?

18          A           Not at all.

19          Q           This is just -- this just shows what you  
20   took possession of?

21          A           Yeah. I think he did that for chain of  
22   custody reasons.

23          Q           No diagnostic significance or we don't  
24   get anything out of any of the pictures on Exhibit  
25   Number 8; true?

1           A           That's true.

2           Q           All right. So let's talk about Exhibit  
3 Number 7, which are some pictures that were provided  
4 by Dr. Schwartz?

5           A           Correct.

6           Q           All right. The top picture is from  
7 the -- it says it's from the University of Rochester  
8 Medical Center.

9                        What does that top picture on the first  
10 page of Exhibit Number 7 show, in your opinion?

11          A           Right there is a viral inclusion.

12          Q           Can you --

13          A           Yes. I'm sorry.

14          Q           And can you zoom in on that and show us  
15 what a viral inclusion is?

16          A           Okay.

17                       MR. BAKER: Is that Exhibit 7?

18                       MR. SMITH: Exhibit 7, right.

19          A           I'm sorry. I'm going to have to stand  
20 up.

21                       So if you see here, we have a cell that  
22 there's a thin rim of darker tissue around the  
23 outside, and that's the nucleus. And inside the  
24 nucleus, it's all filled with this hazy pink material.  
25 That's a true intranuclear viral inclusion.

1 BY MR. SMITH:

2 Q Okay. What about the picture below that?

3 A So the picture below that, you see the  
4 cell here. You see a dot in the center. That's a  
5 nucleus.

6 Do you see how this nucleus in the prior  
7 picture, which is taken from the University of  
8 Rochester, how it's all expanded and it takes up  
9 almost the entire cell? This is a normal -- a normal  
10 neuron that's a little pink because it's hypoxic, with  
11 a nucleus. There's nothing inside that nucleus.  
12 Well, there is stuff inside the nucleus, but not  
13 viral -- not virus.

14 Q Okay. Let's go to page two of Exhibit  
15 Number 7. Same thing.

16 There's a top picture, which is from  
17 Rubin's and -- Rubin's Pathology. That's another book  
18 we didn't talk about.

19 Is Rubin's Pathology considered to be a  
20 standard pathology textbook?

21 A It may be. I don't -- I don't use  
22 Rubin's so I can't really answer that. I don't even  
23 know -- I don't recall Rubin's.

24 Q Okay.

25 A But basically, what he's showing here is,

1 again, you see how this cell, the whole center of it  
2 has that hazy pink material in it. That's the virus.

3 And the outside is that little dark line.  
4 That's the nucleus that's been pushed out to the side.  
5 So it's not just a little dot in the center like we  
6 have on the Simms picture that Dr. Schwartz took.

7 Then if we go to the bottom, this is  
8 extremely easy to see that the entire nucleus has been  
9 pushed out. This actually has what we call an owl eye  
10 appearance to it. So this is obviously also from a  
11 neuropathology, either Web site or textbook or  
12 something, and that's a real inclusion.

13 Q All right. So the two pictures on page  
14 two of Exhibit Number 7 show viral inclusion bodies?

15 A Yes.

16 Q Okay. Go to the third page.

17 All right. So the top picture on page  
18 three of Exhibit Number 7, what does that show us?  
19 And it's from Pediatrics Red Book Online.

20 A Right. Many of these pictures are from  
21 Web sites that I don't know. They're not actual  
22 textbooks, so this is an online. And my assumption is  
23 is that what he's showing here is that -- here's a  
24 perfect example of looking at two cells right next to  
25 each other.

1           See how the whole center portion of that  
2 cell is filled with that pinkish material, but this  
3 cell has the dots inside and this center part is much  
4 smaller than that? So that is most likely filled with  
5 a virus and that's normal.

6           And then if you go to the next one, which  
7 is from Studyblue.com, which I don't know what that is  
8 either, you see here again, the whole center of that  
9 cell is filled with pink stuff pushing that little  
10 blue part out to the side. So this again is going to  
11 be, most likely, a viral inclusion.

12           Q           Okay. So let's go to the next page,  
13 which I guess would be page four of Exhibit Number 7,  
14 and what do those pictures show?

15           A           Okay. So the top picture here is from  
16 Holland Simms' autopsy, which in all honesty, I didn't  
17 even really need to look at that part because, do you  
18 see there's that dot in the center? That dot in the  
19 center is not expanded by anything. This is the whole  
20 cell. The dot in the center is the nucleus. It's a  
21 normal cell. There's no virus in that.

22           Now, if you were to take that blue dot in  
23 the center and spread it out and have that little line  
24 of blue around the outside with the center all filled  
25 with that pink hazy stuff, then you'll have a virus. 151

1 That's a normal cell. Maybe a little hypoxic.

2 In comparison to that, do you see how the  
3 blue line of the nucleus is on the outside with the  
4 whole center portion of that being filled with hazy  
5 stuff? And that's from Surgical Pathology Atlas Image  
6 Database.

7 So again, not a virus. Not viral  
8 inclusion from Holland Simms. Virus inclusion from  
9 whichever database he used there.

10 Q All right. Go to the next page.

11 A So this is from something called  
12 Cram.com. I'm assuming that means that you're  
13 cramming for a test. But this is a -- this is a  
14 smear, so it really won't even help us in this case  
15 because when you take a slide and you just push it  
16 down and you get a smear, you can look at it. It  
17 doesn't always look the same.

18 But to me, in all honesty, I'm not  
19 100 percent sure what he's showing here. This may be  
20 a virus that's pushing it out. That looks like a  
21 neutrophil. So I'm not 100 percent sure.

22 I'm guessing he's trying to say that  
23 that's the virus, but I don't want to talk about  
24 cytology. That's a different field and so I'm going  
25 to leave that one.

1 Q All right.

2 A The bottom one is from Quizlet.com. And  
3 again, this is sort of a blurry picture, but I think  
4 what they're showing here is the nucleus of this whole  
5 cell here that is spread out.

6 But this one does not look like a virus  
7 to me. I don't know what he was trying to show here.  
8 To me, this really sort of looks like a neuron that  
9 may be hypoxic as well. So I don't want to guess as  
10 to what he's trying to show there.

11 Q What do you see there?

12 A What I see there is, I see some clear  
13 space around the neuron which goes along with a  
14 hypoxic change. I call that -- well, it's in the -- I  
15 won't get technical. It's a hypoxic change.

16 So to me, that may be a hypoxic neuron  
17 because you don't have -- if you recall from the prior  
18 pictures where the whole center is this hazy pink,  
19 here you have some dots inside. To me, that's the  
20 nucleolus, the smaller part of the nucleus, has some  
21 dots that move around. So to me, that's maybe a  
22 hypoxic neuron.

23 Q So the next page of Exhibit Number 7?

24 A I'm sorry. My back is a little sore.

25 So the top one is from the Department of

1 Pathology at VCU for medical students. And again, do  
2 you see this big, pink fuzzy sort of thing inside,  
3 pushing the darker blue around the outside? That's an  
4 inclusion inside of a nucleus.

5 And again here, this is from  
6 neuropathology-web.org. And do you see how this cell  
7 here, again, pink on the inside pushed the blue all  
8 the way to the outside. That's an inclusion.

9 (Indicating.) That's not an inclusion  
10 because you have the nucleus and the cytoplasm. That  
11 is an inclusion.

12 Is there one more? There's one more.

13 Q I think two more pages; right?

14 A Two more pages, you're right.

15 Okay. This is from -- I'm going to try  
16 to sit down. I'm getting a little older and my back  
17 doesn't stay up as long.

18 THE WITNESS: Are we good?

19 THE VIDEOGRAPHER: Yes.

20 A So this is from something called  
21 Meducation.net. And again, we see that cell with the  
22 pink on the inside pushing the blue out. That's an  
23 inclusion. You see those in at least two of those  
24 cells.

25 Okay. So now we've moved away from the 154

1 inclusions and what we're doing is, this is just like  
2 the photograph I took. You see the inflammation  
3 around a vessel that's gone down into the parenchyma  
4 with some --

5 MR. BAKER: Stop. We lost our people.

6 THE VIDEOGRAPHER: We're off the record  
7 at 3:39.

8 (VIDEO CAMERA OFF.)

9 (Thereupon, a brief recess was taken.)

10 (VIDEO CAMERA ON.)

11 THE VIDEOGRAPHER: We are back on the  
12 record at 3:43 p.m.

13 A Okay. So now we've moved away from the  
14 inclusion pictures and we're down at the inflammation  
15 pictures. And this just shows that there's  
16 inflammation around the vessel.

17 So again, it's a nonspecific chronic  
18 inflammation that's leeching out into the parenchyma,  
19 so it's a meningoencephalitis.

20 And then here again, he's taking a  
21 picture from Rubin's Pathology and a picture from  
22 Holland Simms' autopsy and it just shows the  
23 perivascular inflammation, which I agree with.

24 BY MR. SMITH:

25 Q Okay. All right. Let me ask you, in

1 your disclosure, it says that Dr. Schwartz returned  
2 with photographs that were so badly focused that they  
3 are useless for diagnostic purposes.

4 What does that mean?

5 A So that means that the photographs he  
6 submitted, if he's trying to say that those are viral  
7 inclusions, then you need it much more -- much clearer  
8 than that.

9 Me, looking at it, I think they're bad  
10 pictures. I think they're blurry and that they're out  
11 of focus. But at the same time, I can look at that  
12 and I can tell you that those are not viral  
13 inclusions, one of the reasons being is, I looked at  
14 the slides myself.

15 So I tried to find what he -- he dotted.  
16 He used a dotting pen on one of the slides. I tried  
17 to find what she's showing here. I found plenty of  
18 what he's showing there, but those are not viral  
19 inclusions.

20 Q Let's back up.

21 What does it mean when you say that the  
22 pictures that he provided are useless? I mean, if I  
23 read that, useless for diagnostic purposes means  
24 they're just -- they're no good whatsoever because you  
25 said they're too blurry?

1           A           Right. I don't think they're in focus  
2 enough to say that there's any viral component in  
3 there.

4           Q           But, if we back up, when -- the diagnosis  
5 that you made and that Dr. Schwartz has made were made  
6 from the slides, not the pictures?

7           A           That's correct.

8           Q           Okay. And the pictures were taken to try  
9 to, in some form or fashion, to show what -- I mean, I  
10 assume they're going to be used at trial for  
11 demonstrative purposes to try to explain things to the  
12 jury, but the ultimate diagnosis was not made from  
13 pictures. It was made from looking at slides?

14          A           Sure. Fair enough.

15          Q           All right. So we've gone through and we  
16 talked about Cowdry Type A inclusion bodies, your  
17 review of the slides from Dr. Schwartz.

18                    Maybe I need to go back through here and  
19 just make sure that we go through your notes so that I  
20 know exactly what you mean by the notes.

21                    So for Slide A, you have perivasc and  
22 parenchy CI?

23          A           Let me -- these are my little -- perivasc  
24 means perivascular.

25          Q           So tell me what -- so if we're going

1 through your notes, you have an A with a dash next to  
2 it and some notes.

3 A Right.

4 Q So I'm assuming that means those are  
5 things that you saw on Slide A?

6 A Correct.

7 Q All right. So tell me what you -- your  
8 notes indicate that you saw on Slide A.

9 A So I saw perivascular and parenchymal  
10 chronic inflammation. So that's the  
11 meningoencephalitis.

12 I saw microglia, and that means that  
13 there has been hypoxic -- that's a reactive cell that  
14 is like a scavenger within the brain. I saw reactive  
15 astrocytes. That goes along with a hypoxic-ischemic  
16 encephalopathy, but I saw no necrosis.

17 Q All right. Let me see if I can summarize  
18 somewhat.

19 A Uh-huh (affirmative).

20 Q So the things that you noted that you saw  
21 on Slide A are consistent with encephalitis?

22 A Correct.

23 Q But they don't specify what type of  
24 encephalitis it was? They're general findings?

25 A Correct.

1 Q Okay.

2 A And essentially, B, C, and E -- I don't  
3 have D written down. I don't know why.

4 Can I see that picture of all the slides  
5 he gave me, because I know that I did not get Slide P,  
6 as in Paul. I think I may have just accidentally  
7 forgot to put D down.

8 They're completely out of order.

9 Yeah, I didn't get Slide D either. So  
10 there's a few slides that I did not get from him. But  
11 essentially, B, C -- all of the rest of the slides  
12 essentially either show the same thing or nothing.

13 There's diffuse areas of this  
14 perivascular inflammation. There's diffuse hypoxic  
15 changes. But there are absolutely no Cowdry bodies  
16 anywhere. There's no necrosis anywhere. And even his  
17 Slide G, as in -- well, I should have thought of  
18 something before I said that. G. There was a --  
19 that's what he dotted with. And there was -- I don't  
20 know what he was dotting. Probably trying to say it  
21 was an inclusion, but in my opinion, there was not.

22 The only other thing that is here would  
23 be on Q, which is the cerebellum. That's the bottom  
24 back part.

25 In addition to what we have in the other<sub>159</sub>

1 slides, there's some slight necrosis of the granular  
2 layer. That's a different type of necrosis. That's a  
3 hypoxic-ischemic necrosis. Again, no inclusions.

4 Slide S was of the pituitary gland.  
5 Nothing of importance there.

6 I will say also, with the cerebellum,  
7 that's an important one to look for rabies. I didn't  
8 see that.

9 And then Slide T, as in Tom, is meninges  
10 dura. And there was the patchy chronic inflammation  
11 around the vessels, but nothing more.

12 Q Okay. Anything else that we need to talk  
13 about for me to fully understand how your review of  
14 the slides factors into the opinions you have about  
15 this case?

16 A Just the lack of certain findings is  
17 extremely important in this case.

18 Q And the lack of what specifically?  
19 Necrosis and Cowdry Type A --

20 A Yes.

21 Q -- inclusion bodies?

22 A That's correct.

23 Q Anything else?

24 A Those -- those are the two main things.

25 Q All right. You say main things. I want

1 to make sure we cover everything.

2 So anything else? You say the absence of  
3 findings. Are there any other absent findings that  
4 are significant for the opinions that you have in this  
5 particular case?

6 A Well, we can go out into a greater extent  
7 if we want to move from herpes. You know, like I  
8 said, there's no rabies. There's no bacterial  
9 infection. There's no tumor. There's no metabolic  
10 disorder. There's no stroke, as in hemorrhage.

11 And then we have the no Cowdry bodies.  
12 We have the no hemorrhagic necrosis. And in essence,  
13 that rules out a whole slew of diagnoses.

14 Q Okay. Anything else?

15 A Not that I can think of off the top of my  
16 head.

17 Q Have we now covered all of your opinions  
18 as they relate to your review of the slides you  
19 received from Dr. Schwartz?

20 A I believe so.

21 Q By the way, do you know Dr. Schwartz?

22 A No. The only time I've ever met him was  
23 when he gave me the slides through -- well, through an  
24 intermediary, but he was there. He gave them to her;  
25 she gave them to me.

1 Q Let's talk about Acyclovir. What is  
2 Acyclovir?

3 A It's an antiviral medication.

4 Q And have you ever -- well, have you ever  
5 diagnosed herpes simplex encephalitis in a live  
6 patient?

7 A If I have, it was probably in medical  
8 school, so I don't think so.

9 Q Have you ever treated a patient with  
10 viral encephalitis -- a live patient with viral  
11 encephalitis?

12 A I don't think so.

13 Q Have you ever prescribed Acyclovir to a  
14 live patient?

15 A Possibly, but I can't recall. I did a  
16 year and a half of surgery and then during that time,  
17 we had clinic. But in all honesty, if I did, it was  
18 rare. I honestly don't remember.

19 Q So to say you did would be speculative?

20 A Yeah, I guess so.

21 Q And if you did, it would have been back  
22 during your residency before -- your first year, when  
23 you were doing general surgery?

24 A That's correct.

25 Q Have you reviewed any information about 162

1 Acyclovir?

2 A No.

3 Q Do you know how it's given?

4 A I believe it can be given intravascular  
5 or IV. I'm not going to go any further. You might be  
6 able to give it intrathecal. But I don't give it, so  
7 I'm not going to go into more than that.

8 Q Do you know what the side effects of  
9 Acyclovir are?

10 A Not off the top of my head.

11 Q Do you know if there are any  
12 complications associated with Acyclovir?

13 A Not off the top of my head.

14 Q Can you tell us what the  
15 contraindications of Acyclovir are?

16 A No. I don't prescribe it.

17 Q Can you give us how an effective -- a  
18 percentage rate on how effective Acyclovir --

19 THE COURT REPORTER: I'm sorry. Can you  
20 repeat that?

21 BY MR. SMITH:

22 Q Can you give us a percentage rate on how  
23 effective Acyclovir is in the treatment of herpes  
24 encephalitis?

25 A No. You're asking me a lot of clinical 163

1 questions that are clinically oriented.

2 Q Are there any things that you can tell us  
3 that interfere with the effectiveness of Acyclovir in  
4 the treatment of herpes encephalitis?

5 A That, again, is a clinical question.

6 Q Is Acyclovir -- can you tell us, is it --  
7 does the effectiveness of Acyclovir depend on how  
8 quickly it's given?

9 A That is -- that's more of a clinical  
10 question about if it's given a day before or after.  
11 Well, I'll let you continue.

12 Q Can you tell us?

13 A No.

14 Q Okay. You don't know how -- you don't  
15 know how the timing of the Acyclovir factors into its  
16 effectiveness; is that fair?

17 A If it's given to somebody with the  
18 correct -- with HSV? I don't know about that.

19 Q What's the basis for your opinion that  
20 patients with herpes simplex encephalitis respond  
21 favorably to Acyclovir?

22 A Well, Acyclovir is the treatment of  
23 choice for herpes and so there's -- from my education  
24 and training, you give Acyclovir and it treats the  
25 herpes. But I mean, that's just from years.

1 Q Can you point me to any literature that  
2 supports your opinion about patients with herpes  
3 simplex encephalitis, how they respond to Acyclovir?

4 A Not today. I can go find some for you if  
5 you want.

6 Q You do have in your disclosure some  
7 information about Acyclovir. And in particular, the  
8 disclosure says, (reading): It's well known that  
9 patients suffering HSE or herpes simplex encephalitis  
10 respond favorably to the antiviral Acyclovir.  
11 Ms. Simms did not respond.

12 So tell me how that factors into this  
13 overall picture.

14 A Well, number one, first of all, I don't  
15 believe she had herpes, so the Acyclovir wouldn't have  
16 done anything.

17 If she had herpes and she was given the  
18 right treatment, then if it was given at the  
19 appropriate time, then she would have responded  
20 appropriately.

21 This is going back to my medical  
22 education about giving Acyclovir to people who have  
23 herpes in that they, more often than not, respond to  
24 it.

25 Q Do you know if -- but that assumes that 165

1 it was given in a timely manner?

2 A Right, and -- yes.

3 Q And you can't give us an opinion on  
4 whether or not Ms. Simms received Acyclovir in a  
5 timely manner?

6 A Well, no. But I can give you an opinion  
7 that she didn't have herpes encephalitis, so the  
8 Acyclovir, in my opinion, wouldn't have mattered.

9 Q All right. Have we gone through all the  
10 factors that -- that go into your opinion that herpes  
11 simplex encephalitis can be ruled out in this  
12 particular case?

13 A Yes, I believe so.

14 Q All right. And I want to go through it  
15 and make a list of them. The fact -- just in a  
16 general sense.

17 The factors that you've given us are, the  
18 absence of hemorrhagic necrosis?

19 A Correct.

20 Q The negative PCR of spinal fluid?

21 A Correct.

22 Q The IHC stains or the lack of herpes on  
23 the IHC stains?

24 A Correct.

25 Q The MRI?

1 A Correct.

2 Q The lack of Cowdry type inclusion bodies?

3 A Correct.

4 Q And her failure to respond to Acyclovir?

5 A Correct.

6 Q Are there any other factors that you  
7 considered in reaching the conclusion or being able to  
8 rule out herpes simplex encephalitis as a cause of  
9 death in this particular case?

10 A The fact that there's no pathologic  
11 evidence of herpes. I mean, that's essentially it.

12 Q Anything else?

13 A Everything else we talked about.

14 Q So we've covered all the reasons that you  
15 say herpes simplex encephalitis can be ruled out?

16 A I believe so, yes.

17 Q All right. Dr. Chesney would have done a  
18 gross evaluation of the brain?

19 A Yes.

20 Q If there was no hemorrhagic necrosis, he  
21 would have been aware of that fact?

22 A I would hope so, yes.

23 Q Dr. Chesney, are you aware -- do you know  
24 whether or not he was involved in or had conversations  
25 with the people at Vanderbilt?

1 A No. I don't recall.

2 Q Do you know if he was aware of the PCR  
3 testing of the spinal fluid?

4 This is yours.

5 A Oh, okay.

6 Q I'd give you mine but it's got some  
7 highlights on it.

8 A No, that's okay.

9 Q I don't really care, to be honest with  
10 you, but --

11 A No. No worries.

12 I don't see in here that -- I do know  
13 that he mentions the immunohistochemical staining.

14 Q Okay.

15 A That it was all negative.

16 Q Okay.

17 A He did not identify any inclusions.

18 Q Okay.

19 A I don't see anything in here about a  
20 discussion with anybody else.

21 Q Presumably, Dr. Chesney would have also  
22 had medical records or would have gone through medical  
23 records from Holly's admission to the hospital?

24 A I don't want to presume that because I  
25 don't know. Sometimes yes; sometimes no.

1 Q Okay. So at a very minimum, Dr. Chesney  
2 would have had information from the autopsy that you  
3 would have reviewed?

4 A Right.

5 Q In addition, he would have done a gross  
6 examination of the brain itself?

7 A Correct.

8 Q He would have known about the  
9 immunohistochemical staining?

10 A Correct.

11 Q And he would have looked at the slide or  
12 some slides and not seen any Cowdry Type A inclusion  
13 bodies?

14 A That's correct.

15 Q Do you see anywhere in his report where  
16 he excluded the diagnosis of herpes simplex  
17 encephalitis?

18 A He states, (reading): While herpes virus  
19 encephalitis remains a leading cause of this sort of  
20 devastating encephalitis in young adults, we have not  
21 been able to establish that as the etiology.

22 MR. SMITH: That's an exhibit. It's  
23 Exhibit Number 19.

24 BY MR. SMITH:

25 Q All right. In the autopsy report at the 169

1 beginning, it has some diagnosis coding; correct?

2 A Correct.

3 Q And it says -- read this one right here.

4 A This one?

5 Q Yes.

6 A (Reading.) Etiology unknown, despite  
7 extensive in vivo and in vitro studies, presumed  
8 herpes simplex virus etiology.

9 Q That would seem to indicate that, despite  
10 the fact that they didn't receive any confirmatory  
11 tests, that it was still presumed to be herpes simplex  
12 encephalitis?

13 A That is 12/7/2007.

14 Q Okay.

15 A I don't know if that's the printed date.

16 So that's at 2:44 and then this is at  
17 3:47. I don't know if that hour makes a difference to  
18 him or not, but this is the final comment and what  
19 you're looking at here -- what you're looking at here  
20 is a listing of what was done.

21 You would have to ask him why, at  
22 2:44 p.m. on December 7th, he says, presumed herpes  
23 simplex virus etiology, if that means it was presumed  
24 clinically.

25 But then, what is it, an hour and -- an 170

1 hour later, he states that they've done all this  
2 testing, but they were unable to establish that as the  
3 diagnosis. That, you'd have to ask him.

4 Q All right. I'm just talking about this  
5 report that you've relied on.

6 There's nowhere in here does it  
7 specifically say that they have ruled out or excluded,  
8 in other words, excluded the diagnosis of herpes?

9 A He may not have. I'm using what all the  
10 tests were. But I don't know what -- I'm not going to  
11 speak for him. There's two sentences there that are  
12 semi-contradictory.

13 Q Okay. Because one says that his  
14 conclusion is presumed herpes simplex virus etiology.

15 A Well, again, I think you need to ask him.  
16 I don't know if that's his impression or if that's the  
17 presumed diagnosis as it came to him, and it could be  
18 one or the other. I honestly don't know.

19 Q But I'm talking about you -- part of, at  
20 least, your opinion is based on your interpretation of  
21 this report?

22 A Right, but not his opinions. My  
23 interpretation is of his gross description of the  
24 brain.

25 Q So you don't agree, if he says -- if his<sub>171</sub>

1 opinion was presumed herpes simplex virus etiology,  
2 you disagree with him?

3 A I absolutely do.

4 Q Are you aware that TUES -- and so the  
5 TUES program, which was Vanderbilt?

6 A Yes.

7 Q A well-respected university?

8 A Yes.

9 Q Well-respected medical school?

10 A Yes.

11 Q Presumably, the Vanderbilt University has  
12 good labs?

13 A Presumably, yes.

14 Q Do you know Karen Bloch?

15 A No, I do not.

16 Q Do you have any idea what her  
17 qualifications or background is?

18 A I do not.

19 Q You are aware, though, that they did  
20 additional testing after Holly's death?

21 A Yes.

22 Q And after the autopsy?

23 A Yes.

24 Q They're the ones that did the PCR testing  
25 in their laboratory and then sent things out to the

1 CDC, as well as the California Encephalitis Study?

2 A Correct.

3 Q Do you know anything about the California  
4 Encephalitis Study Program?

5 A I do not.

6 Q We talked about all the things that  
7 factor into your opinions. And I want you to assume  
8 that Dr. Bloch and her group spoke with Dr. Chesney  
9 about the autopsy and they had the autopsy report.

10 A Okay.

11 Q That would mean that they would know,  
12 presumably, that there was no description of  
13 hemorrhagic necrosis in the autopsy report on the  
14 gross examination.

15 A Okay.

16 Q Right? Right?

17 A Maybe. I mean, I don't know what they  
18 would know.

19 Q Well, if they had the report --

20 A Oh, if they had the report. Yeah, if  
21 we're making the assumption that they had the report,  
22 then they should know, yes.

23 Q And they would have the same information  
24 that was available to you?

25 A Yes. If they had the same report, yes. 173

1 Q And they would -- they would see on the  
2 autopsy report that there was no description on the  
3 gross examination of hemorrhagic necrosis; right?

4 A I presume, yes.

5 Q They're the ones that sent the tissue off  
6 to the CDC?

7 A Right. The ones that came back -- the  
8 IHC that came back negative.

9 Q Right. So they would know about the  
10 results from the IHC, the negative IHC stains; true?

11 A Once it came back, yes.

12 Q They would know that Dr. Chesney did not  
13 find any Cowdry Type A inclusion bodies when he  
14 examined the slides, if they had the autopsy report?

15 A Yeah. I mean, you're asking me to assume  
16 things, but sure.

17 Q They would also have known about the PCR  
18 testing of the brain tissue?

19 A Correct.

20 Q They would also have known about the PCR  
21 of the spinal fluid?

22 A I would assume so.

23 Q If they -- assuming that the people at  
24 Vanderbilt --

25 MR. ALEXANDER: Excuse me. This is John<sub>174</sub>

1 Alexander. I'm going to object to this line of  
2 questioning with regards to the assumptions or  
3 the assumption of information that was  
4 conveyed. I don't think that it's an accurate  
5 description and it's assuming facts not in  
6 evidence.

7 MR. SMITH: You can object to the form,  
8 John. I'm going to object to your speaking  
9 objection. If you want to make a form  
10 objection, that's fine.

11 MR. ALEXANDER: Well, now I'll add to  
12 that. If I am correct, I'll add that it's  
13 misleading. Thank you.

14 BY MR. SMITH:

15 Q All right. Assuming that the TUES  
16 program had medical records, they would also know what  
17 the MRI findings were?

18 A If they reviewed all of them and they had  
19 them all.

20 Q And they would also know that,  
21 presumably, that Holly received Acyclovir at Baptist?

22 A If they reviewed all the medical records,  
23 yes.

24 Q Are you aware that there are additional  
25 records from the TUES study that you have not

1 received?

2 A If I haven't received them, I'm not aware  
3 of them.

4 Q Would it change your opinion at all if  
5 their conclusion in e-mails back and forth between  
6 members of that team was that, at the end of all this,  
7 they -- their diagnosis was probable death from herpes  
8 simplex encephalitis?

9 A I would like to see all that  
10 documentation and when those e-mails were sent back  
11 and forth.

12 MR. ALEXANDER: This is John Alexander  
13 again. I'm going to object to the form.  
14 Assuming facts not in evidence. Again,  
15 misleading as well.

16 A I would definitely like to take a look at  
17 that. I would like to look at the timing of those  
18 conversations or e-mails, when the reports came back  
19 in relation to that, and I would take it into account.

20 But I'm still confident that there is no  
21 evidence of a herpes encephalitis here from a  
22 pathologic standpoint. We have one positive test,  
23 which was confirmed to be negative on multiple other  
24 specimens.

25 ///

1 BY MR. SMITH:

2 Q That they would have known about as well?

3 A Maybe. I don't know. I'd have to see  
4 what they -- what they've seen.

5 Q You don't think they knew about the PCR  
6 testing that they ordered?

7 A No, no, no. You asked me about other  
8 stuff. So I don't know -- of course they would know  
9 about their own testing, but I don't know about all of  
10 the other testing, what they were privy to prior to  
11 these e-mails you're talking about.

12 That's a lot of assumptions that I don't  
13 want to make without actually looking at the  
14 documentation.

15 Q But you haven't seen that?

16 A No, I have not.

17 Q Let me ask you -- let me ask you some  
18 other questions about your publications.

19 A Sure.

20 Q Have you had any publications accepted  
21 dealing with herpes simplex encephalitis?

22 A No. I haven't submitted any.

23 Q Has anybody -- okay. Fair enough.  
24 Have you had any publications accepted  
25 in -- on the topic of encephalitis in general?

1           A           I don't believe I've even submitted any  
2 either.

3           Q           Have you been asked to submit -- has  
4 anybody asked you to submit any articles on the topics  
5 of encephalitis in general or herpes encephalitis?

6           A           Publications, no. I've lectured on  
7 encephalitis and that's in my CV on the lectures. It  
8 doesn't say specifically encephalitis, but I'll show  
9 you which lectures.

10          Q           (Handing.)

11          A           I should say meningoencephalitis.  
12 Do you want to try to keep them in order?

13          Q           It doesn't matter. They've got numbers  
14 on them. We'll figure it out later.

15          A           Okay. So off the top of my head, I've  
16 lectured, actually, overseas at the main medical  
17 school in Nairobi, Kenya. And part of that lecture  
18 revolved around tuberculosis, meningoencephalitis, and  
19 its differential diagnosis.

20          Q           Is that on your list?

21          A           Yes, it is. It is right here,  
22 October 11th of 2005.

23                       I've lectured on the neuropathology of  
24 HIV at the chief medical examiner's office in New  
25 York. And the neuropathology of HIV is almost all

1 about encephalitis, a lot of CMV, opportunistic  
2 infections. And I believe those are the two -- yeah,  
3 those are the two main lectures.

4 Q All right. The one on HIV --

5 A Yes, sir.

6 Q -- was not specific to herpes simplex?

7 A Well, no, it talks about what -- what is  
8 the neuropathology of an individual who has HIV and  
9 you have a number of possibilities. And this was back  
10 in 2005.

11 You can get infections, most often viral.  
12 CMV is one of those. Those have viral inclusions.  
13 You can get parasitic infections. You can get  
14 lymphomas. So it doesn't specifically say HSV, but  
15 that's within the realm of viral encephalitides.

16 Q Okay. The other one -- do you have  
17 materials for that lecture?

18 A Oh, gosh, no. That was 11 years ago.

19 Q What about the other one that you gave in  
20 Kenya?

21 A That was around the same time, so . . .

22 Q Any materials from that one?

23 A I don't.

24 Q Have you written any chapters on  
25 encephalitis?

1           A           No, not on encephalitis.

2           Q           Have you written any chapters on herpes  
3 simplex?

4           A           No.

5           Q           Or the herpes virus?

6           A           No, sir.

7           Q           Have you been asked by any editors to  
8 submit a chapter on herpes?

9           A           No.

10          Q           Have you been asked by any editors to  
11 submit or to write a chapter on herpes simplex  
12 encephalitis?

13          A           No, I've not been asked.

14          Q           Have you been asked by any editors to  
15 write a chapter on encephalitis in general?

16          A           No, I don't believe so.

17          Q           Have you received any competitive grants  
18 to study herpes simplex encephalitis?

19          A           No.

20          Q           Have you received any competitive grants  
21 to study encephalitis in general?

22          A           No. I don't really apply for grants.

23          Q           Have you ever applied for a grant to  
24 study -- to conduct a study on encephalitis, herpes  
25 encephalitis, or the herpes virus in general?

1           A           No. I have never submitted a grant for  
2 anything.

3           Q           Have you worked with any federal agency  
4 to organize any type of medical study?

5           A           No.

6           Q           For example, have you worked with the  
7 CDC?

8           A           I was about -- I was about to go back.  
9                        There was a point where we didn't submit  
10 anything and there was no grant, but we follow -- I do  
11 a lot of death in the young because of my training,  
12 and I think there was a point where we were  
13 considering trying to publish the epidemiology around  
14 sudden death in the young, but it never went anywhere.

15          Q           Would that be SIDS?

16          A           Well, no. SIDS is one part of -- it's a  
17 lot more than just SIDS.

18          Q           All right. But you never actually --  
19 that never came to fruition?

20          A           No. There was no time. We just said  
21 forget it.

22          Q           Sort of talked about it, but then nothing  
23 ever came of it?

24          A           That's correct.

25          Q           Okay. Have you ever -- have you edited 181

1 any textbooks?

2 A Edited, no. I have a book chapter, but  
3 I've never edited.

4 Q And your book chapter was on what?

5 A Forensic pathology in a textbook called  
6 Pediatric Pathology.

7 Q Is that the only chapter you've written  
8 in a textbook?

9 It looks like you have some that you  
10 submitted for publication. What about -- what  
11 happened with that?

12 A Right. So the main editor of that  
13 textbook -- there's about 30 authors and it's supposed  
14 to -- it was supposed be the new tome of forensic  
15 pathology, probably in the area of 3,000 pages.

16 The main editor has sort of let it lapse  
17 and there's many of us who are not happy about that.  
18 So all of those chapters have been submitted and they  
19 were just waiting for final review.

20 Q But nothing ever came of them?

21 A Not yet. We're all hoping.

22 Q What does "in press 2013" mean?

23 A That's when it went into press. And then  
24 the -- there's the -- you have the main individual.  
25 There's three individuals that were supposed to be the

1 main editors.

2 It got sent into the publisher. The  
3 publisher accepted them all and said, okay, they're  
4 going to go -- they're starting in press. And then  
5 the main editor just did not do his job.

6 Q Who were the editors?

7 A Well, the main editor who was supposed to  
8 do this, his name is -- I can't believe it. I have so  
9 much on my mind, I just blanked on his name.

10 Give me a minute and I'll remember his  
11 name.

12 Q Okay. I'll tell you what. If you don't  
13 remember it, when you go back and read and sign your  
14 deposition transcript, you can just put it in the  
15 notes at the end.

16 A Oh, sure. That's easy enough.

17 Q If you think of it today, just give it to  
18 me.

19 A Sure.

20 Q All right. So then -- but it's fair to  
21 say that you haven't written any chapters on herpes,  
22 herpes encephalitis, or encephalitis in general?

23 A That's correct.

24 Q You have written one book chapter in  
25 Pediatric Forensic Pathology?

1           A           Yeah. The chapter is Pediatric Forensic  
2 Pathology in the book Pediatric Pathology.

3           Q           What's that chapter about?

4           A           Investigation of childhood death, SIDS,  
5 sudden unexplained infant death, sudden death in the  
6 young, trauma analysis, et cetera.

7           Q           All right. And then the other book  
8 chapters that you've submitted, you've submitted but  
9 the project is stalled out?

10          A           It's on hold until this one guy gets his  
11 act together.

12          Q           Have you sat on any editorial boards  
13 of -- any editorial boards?

14          A           No. I don't have time.

15          Q           Have you been asked to sit on any  
16 editorial boards?

17          A           I have.

18          Q           Which ones?

19          A           Well, I sit on the executive committee  
20 for the Society of Cardiovascular Pathology. And I  
21 was asked to sit on their editorial board for their  
22 journal. I don't have time. I think that's really  
23 it.

24          Q           All right. You have had some faculty  
25 appointments?

1           A           Yes, in the past.  And we're -- I'm  
2           sorry.  Go ahead.

3           Q           Go ahead.

4           A           I was going to say, and we're in the  
5           process, now that I've taken over as the chief medical  
6           examiner, we are trying -- in the process of getting a  
7           fellowship program.  And that fellowship program will  
8           be in conjunction with a university here in Georgia, a  
9           medical university, and that will put me on as a  
10          faculty member.

11          Q           Who?  Which university?

12          A           So it used to be called Medical College  
13          of Georgia.  They changed their name to Georgia  
14          Regents and then they just changed it again to  
15          Augusta --

16                    THE COURT REPORTER:  I'm sorry.

17                    Georgia --

18                    THE WITNESS:  I'm sorry, ma'am.  Georgia  
19                    Regents.

20          A           And they've just changed it again to  
21          Augusta University.

22          BY MR. SMITH:

23          Q           Have you had any faculty appointments --  
24          well, have you traveled to lecture on herpes simplex  
25          encephalitis?

1           A           No, I have not traveled to lecture on  
2 that specifically, no.

3           Q           Have you been asked to?

4           A           I don't think so, no.

5           Q           Do you have any peer acceptance or  
6 acknowledgment of expertise in infectious disease  
7 pathology?

8           A           No, I don't think so.

9           Q           Peer acceptance or acknowledgment of  
10 expertise in -- well, scratch that.

11          A           Can I ask what you mean by peer  
12 acceptance? I mean, I'm the chief medical examiner  
13 for the state ME's office. I review hundreds of cases  
14 every year. Many of them involve infections. I  
15 believe my peers accept me, quote, unquote.

16                    So, you know, I -- I don't know what to  
17 say about that. I mean, within forensic pathology, we  
18 do a lot of infectious pathology. So my peers, I  
19 believe, accept me in that capacity.

20          Q           Have we -- have we discussed all the  
21 opinions and the reasons that you have those opinions?

22          A           I believe so.

23          Q           Is there anything as we sit here today  
24 that you can think of that we have not talked about?

25          A           No.

1 Q And that's probably too general of a  
2 question. Let me drill down a little bit on that.

3 Is there any opinion that you intend to  
4 give at trial that we have not discussed?

5 A I don't think so.

6 Q Is there -- have we gone over all the  
7 bases for the opinions that you do have at this point?

8 A I believe so, yes.

9 Q I want to ask you about this Exhibit  
10 Number 14. Obviously, the first page of it is a cover  
11 letter from Mr. Baker's office, where they sent you  
12 information about the case.

13 A Right.

14 Q The second page is a summary of, it looks  
15 like a 15-minute conversation that you had with  
16 Mr. Baker's office on June 14, 2011?

17 A Yes.

18 Q Does this summarize your thought process  
19 at the time, based on the information that you had  
20 reviewed?

21 A At the time, yes.

22 Q All right. DD means differential  
23 diagnosis?

24 A Correct.

25 Q What is aseptic meningitis?

1           A           It basically -- well, it should say  
2 meningoencephalitis.

3                       Basically, I didn't see any evidence of  
4 herpes, but talking about the long laundry list of  
5 meningoencephalitis, you know, we talked about the  
6 possibility of -- you and I talked about the  
7 possibility of other viruses, of the autoimmune  
8 phenomenons.

9                       So there is a laundry list of  
10 differential diagnoses, but I didn't see anything that  
11 would put me down the herpes route.

12           Q           And we talked about this earlier, but  
13 based on everything that you reviewed and the  
14 information that you have, it's your opinion it was a  
15 encephalitis?

16           A           Yes.

17           Q           Cannot rule out viral encephalitis?

18           A           I cannot. I can rule out a number of  
19 them, but I can't rule out all of them.

20           Q           You can rule out a number of  
21 encephalitis, in your opinion, including herpes?

22           A           That's correct.

23           Q           But you can't rule out viral  
24 encephalitis, in a general sense?

25           A           That's correct.

1 MR. SMITH: Let's take a quick break and  
2 give me a few minutes.

3 THE WITNESS: I remembered his name.

4 MR. SMITH: Oh, wait a minute.

5 THE WITNESS: I'm sorry.

6 MR. SMITH: Don't go off the record yet.

7 THE WITNESS: It just hit me. Evan,  
8 E-V-A-N, Matshes, M-A-T-S-H-E-S or S-C-H-E-S.  
9 I can't remember.

10 Don't let him know I'm saying that we're  
11 all waiting on him.

12 MR. BAKER: No, this is all a big secret.  
13 Nobody will say a word.

14 THE WITNESS: That's it.

15 THE VIDEOGRAPHER: We're off the record  
16 at 4:22 p.m.

17 (VIDEO CAMERA OFF.)

18 (Thereupon, a recess was taken.)

19 (VIDEO CAMERA ON.)

20 THE VIDEOGRAPHER: This is the beginning  
21 of tape number five. We are back on the record  
22 at 4:30 p.m.

23 (Thereupon, marked for identification,  
24 Plaintiffs' Exhibit Number [P-21](#).)

25 ///

1 BY MR. SMITH:

2 Q I want to hand you what I've marked as  
3 Exhibit Number 21. Have you seen that before?

4 A I may have. I don't -- I'd have to look  
5 at my notes. I don't recall if I've seen the death  
6 certificate or not.

7 Q All right. The final diagnosis was death  
8 due to viral encephalitis. It says unknown etiology  
9 for three weeks' duration.

10 A Right. Acute viral encephalitis, unknown  
11 cause.

12 Q You don't necessarily disagree with that?

13 A That fits into --

14 MS. MALKIN: Object to the form.

15 THE COURT REPORTER: Who said that,  
16 please?

17 MS. MALKIN: Andrea Malkin.

18 A That falls into the overall category. I  
19 would have taken out the viral part because I think  
20 there are other possibilities, but it falls within the  
21 umbrella.

22 BY MR. SMITH:

23 Q You don't disagree with that?

24 A Well, I don't know if it's viral or not.

25 We don't know the cause, so I would say acute

1 encephalitis, unknown cause, in essence.

2 Q Well, let me ask it a different way.

3 You're not saying that's wrong; you're  
4 just saying you don't know if it was viral or not?

5 A Okay, right. I don't know if it's viral  
6 or not.

7 Q You told me that you had worked with  
8 Mr. Baker's office, how many --

9 A Twice before, I think.

10 Q Twice? You're saying two or three, I  
11 think, maybe?

12 A Yeah. I recall twice. This may be the  
13 third. I don't know if -- I really think it was only  
14 twice.

15 Q Twice before this time?

16 A Before. Before this time, yes, sir.

17 Q We talked about the other attorneys and  
18 firms. You don't remember ever working with any of  
19 the other firms involved in this case; true?

20 A Not off the top of my head.

21 Q Have you ever been the subject of any  
22 disciplinary action at a hospital?

23 A No, sir.

24 Q Have you ever had to give up your  
25 hospital privileges in order to avoid disciplinary

1 action?

2 A No, sir.

3 Q Have you ever been the subject of any  
4 disciplinary action by a state licensing board?

5 A No.

6 Q Have you ever had to give up a state  
7 license in order to avoid disciplinary action?

8 A No.

9 Q Have you ever been disciplined by any  
10 government agency?

11 A No.

12 Q Have you ever had to resign in order to  
13 avoid disciplinary action by a governmental agency?

14 A I've never resigned, no.

15 Q Have you ever been charged or convicted  
16 with a crime?

17 A No.

18 Q Have you ever been sued before?

19 A No.

20 Q You gave us a list of all your  
21 depositions?

22 A Yes, sir.

23 Q And trial testimony, I'm assuming?

24 A That's correct.

25 Q We've gone through the deposition. I

1 think, for the most part, you've answered all the  
2 questions that I've asked. Have you understood all my  
3 questions.

4 A I have.

5 Q You're going to get a chance to go back  
6 and read the deposition and make changes to it if you  
7 need to.

8 And I know that you can't sit here today  
9 and tell us that there's -- you know, sometimes you  
10 read the transcript and you don't recognize that  
11 there's a mistake or something that needs to be  
12 changed until you read the transcript.

13 Setting that aside for now and leaving  
14 open the possibility that when you read the  
15 transcript, there may, in fact, be things that need to  
16 be changed or updated, as we sit here today, is there  
17 anything that you need to change or add to any of your  
18 testimony to make sure that it's accurate and complete  
19 and truthful?

20 A I don't think I have any changes right  
21 now, no.

22 Q If you come up -- if -- two things. If  
23 you review new materials, would you let Mr. Baker  
24 know?

25 A Absolutely. I mean, he would be sending<sub>193</sub>

1 it to me, so . . .

2 Q And the reason I'm asking that is  
3 because, even if you don't -- even if they don't  
4 change your opinions, I may still want to either get  
5 on a videoconference or phone conference to ask you  
6 what you've reviewed and how it factors into your  
7 evaluation of the case.

8 A Sure. Fair enough.

9 Q So if you look at anything else,  
10 Mr. Baker will know so that he can let me know?

11 A Absolutely.

12 Q If you come up with new opinions or you  
13 revise your opinions or you change any of your  
14 opinions, will you likewise let Mr. Baker know?

15 A Absolutely.

16 Q And will you do so in a timely manner,  
17 meaning not the day before trial?

18 When I say timely manner, I mean enough  
19 time for me to get back on the telephone with you or a  
20 videoconference or fly back down here if I need to, to  
21 go over any changes or updates to your opinions?

22 A If I receive more information, I will  
23 look at it as quickly as possible and immediately let  
24 Dr. -- not Dr. Baker -- Mr. Baker know.

25 Q He's not -- I promise you, he's not a

1 doctor. He's not that smart.

2 MR. SMITH: That's all that I have right  
3 now.

4 MR. BAKER: No questions.

5 MR. GILMER: No questions.

6 MS. BENNETT: No questions.

7 MR. ALEXANDER: No questions.

8 MS. STEINBERG: No questions.

9 MS. MALKIN: No questions. Thank you.

10 MR. SMITH: You're done.

11 THE VIDEOGRAPHER: This is the end of  
12 tape number five. We're off the record at  
13 4:34 p.m.

14 (VIDEO CAMERA OFF.)

15 (Deposition concluded at 4:34 p.m.)

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C E R T I F I C A T E

I hereby certify that the foregoing transcript was reported, as stated in the caption; that the witness was duly sworn and elected to reserve signature in this matter; that the colloquies, questions and answers were reduced to writing under my direction; and that the foregoing pages 1 through 195 represent a true, correct, and complete record of the evidence given.

I further certify that I am not disqualified for a relationship of interest under O.C.G.A. 9-11-28(c); that I am a Georgia Certified Court Reporter here as a representative of D'Amico Gershwin, Inc.; that I/D'Amico Gershwin was contacted by the party taking the deposition to provide court reporting services for this deposition; that I will not be taking this deposition under any contract that is prohibited by O.C.G.A. 15-14-37(a) and (b) or Article 7C of the Rules and Regulations of the Board; and by the attached disclosure forms I confirm that I/D'Amico Gershwin is not a party to a contract prohibited by O.C.G.A. 15-14-37 or Article 7C of the Rules and Regulations of the Board.

The above certification is expressly withdrawn and denied upon the disassembly or photocopying of the foregoing transcript, unless said disassembly or photocopying is done under the auspices of D'Amico Gershwin, Inc. and the signature and original seal is attached thereto.

This, the 15th day of April, 2016.



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STEPHANIE K. FEEN, CCR-2573  
Certified Court Reporter

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E R R A T A S H E E T

Pursuant to Rule 30(e) of the Federal Rules of Civil Procedure and/or O.C.G.A. 9-11-30(e), any changes in form or substance which you desire to make to your deposition testimony shall be entered upon the deposition with a statement of the reasons given for making them.

To assist you in making any such corrections, please use the form below. If supplemental or additional pages are necessary, please furnish same and attach them to this errata sheet.

- - -

I, the undersigned, JONATHAN EISENSTAT, M.D., do hereby certify that I have read the foregoing deposition and that said transcript is true and accurate, with the exception of the following changes noted below, if any:

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JONATHAN EISENSTAT, M.D.,

Sworn to and subscribed before me,

23 \_\_\_\_\_, Notary Public.

24 This\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

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