IN THE CIRCUIT COURT FOR CARROLL COUNTY, MARYLAND

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STATE OF MARYLAND,                  :
                                    :
          Plaintiff,                :
                                    :
     v.                             :
                                    :
CHARLES DAVID BRIGHTFUL,            :    Criminal No. K-10-040259
HARVEY ALEXANDER CARR,              :    Criminal No. K-10-040331
JENNIFER ADELINE FLANAGAN,          :    Criminal No. K-10-040167
RYAN THOMAS MAHON,                  :    Criminal No. K-09-039370
CHRISTOPHER JAMES MOORE,            :    Criminal No. K-09-039569
VALERIE ANN MULLIKIN,               :    Criminal No. K-09-039636
RONALD DALE TEETER,                 :    Criminal No. K-10-040300
                                    :
          Defendants.               :    Westminster, Maryland
                                    :
- - - - - - - - - - - - - - - - - - x    September 23, 2010
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HEARING

WHEREUPON, proceedings in the above-entitled matter commenced.

BEFORE: THE HONORABLE MICHAEL M. GALLOWAY, Judge

APPEARANCES:

FOR THE STATE:

DAVID DAGGETT, Esq.
ADAM WELLS, Esq.
Carroll County State's Attorney's Office
55 North Court Street, P.O. Box 530
Westminster, Maryland 21157

FOR THE DEFENDANTS:

BRIAN L. DeLEONARDO, Esq.
DeLeonardo Smith & Associates, LLC
215 Main Street, Suite 1
Reisterstown, Maryland 21136

APPEARANCES: (continued)

ALEXANDER J. CRUICKSHANK, Esq.

Office of the Public Defender
101 North Court Street, Suite 140
Westminster, Maryland 21157

I N D E X

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WITNESSES	DIRECT	CROSS	REDIRECT	RECROSS
For the State:				
Dr. Zenon Zuk	5	22	156	169(AC) 170(BD)
For the Defendants:				
Dr. Jeffrey Janofsky	178	--	--	--

EXHIBITS:	FOR IDENTIFICATION	IN EVIDENCE
For the State:		
16	17	18
17	156	159
18	157	159
19 & 20	157	159
For the Defendants:		
5	49	--
6	152	--
7	192	199
8	213	--
9	230	--

KEYNOTE: "---" indicates inaudible in the transcript.

1 P R O C E E D I N G S

2 THE CLERK: Silence in Court, all rise.

3 THE COURT: Good morning, be seated please.

4 MR. WELLS: Good morning, Your Honor.

5 THE COURT: Good morning.

6 MS. WELLS: For the record, Adams Wells, spelled

7 W-e-l-l-s, on behalf of the State, calling the State of

8 Maryland versus Brightful, 10-40259, Carr, 40331, Flanagan

9 40167, Mahon 39370, Moore 39569, Mullikin 39636 and Teeter

10 40300.

11 MR. DAGGETT: And David Daggett also present,

12 D-a-g-g-e-t-t.

13 MR. CRUICKSHANK: And good morning, Your Honor, for

14 the record Alex Cruickshank, C-r-u-i-c-k-s-h-a-n-k, also, Your

15 Honor, on behalf of the Office of the Public Defender's

16 clients.

17 MR. DeLEONARDO: And Brian DeLeonardo,

18 D-e-L-e-o-n-a-r-d-o, on behalf of Mr. Carr as well as many of

19 the other clients here before you.

20 THE COURT: Good morning counsel. Anything

21 preliminarily?

22 MR. WELL: I don't believe so.

23 MR. DeLEONARDO: Ready to proceed.

24 THE COURT: All right, then we will have Dr. Zuk

25 retake the stand.

26 THE CLERK: Please remain standing and raise your

1 right hand.
2 Whereupon,
3 DR. ZENON ZUK
4 was called as a witness by the State, having been first duly
5 sworn, was examined and testified as follows:
6 THE CLERK: Please have a seat. For the record,
7 please state your full name, spelling your first and last and
8 give your business address please?
9 THE WITNESS: My full name is Zenon Zuk, spelled
10 Z-e-n-o-n Z-u-k. The business address is 2020 --- Street,
11 Los Angeles 90058.
12 THE CLERK: Thank you.
13 DIRECT EXAMINATION
14 BY MR. WELLS:
15 Q Good morning, Dr. Zuk.
16 A Good morning.
17 Q Welcome back to the very comfortable chair. Just to
18 set the stage with regards to where we were. We have been
19 going through the 12 steps of the DRE protocol and
20 specifically going through them one by one. And you were
21 correlating how they were generally used within the medical
22 profession and how correlated ---?
23 A Yes.
24 Q Now, I believe we were going through the muscle tone
25 examination. With regards to -- and I am going to stand again
26 just to make it a little bit easier for you. Feel free to

1 just pay attention to the Judge and ignore me.
2 You indicated in your previous testimony, and I will
3 stop with the leading questions before Mr. DeLeonardo objects,
4 that the muscle tone examination sometimes was difficult in
5 the medical profession. Is that correct?
6 A Yes, because there is a wide range of normal and
7 some individuals have such extreme tone that it could be
8 interpreted as spasm yet their conditioning and their
9 condition of their muscles and their -- upon palpation presume
10 to be spastic or in a state of hypotonia.
11 So, I think it's a judgment call that physician,
12 after some bit of experience, will learn when to apply the
13 test and how to interpret it with the understanding that there
14 is a wide range of normal.
15 Q Now with regards to the DRE protocol, what are they
16 look for specifically with regards to muscle tones?
17 A They are looking for the sensation of stiffness when
18 the fingertips penetrate into the muscle that there is a
19 certain difficulty in the sense of firmness in the muscle as
20 opposed to allowing the muscle to allowing the finger to go in
21 as it would into like a ball of dough.
22 That would be on the other extreme of what would be
23 called the flaccid muscle or soft tone that it does feels like
24 the Pillsbury Dough Boy sensation where you are putting your
25 fingers in and it feels like they are sinking deeper into a
26 batch of dough.

1 Q Okay. Now, specifically with just generally a drug
2 category how would stimulant affect muscle tone?
3 A It attempts to create a state of hypertonicity,
4 which means on the continuance of soft and flaccid to stiff
5 and hard, it intends to go towards the side which can increase
6 the tone in the sense of stiffness.
7 Q With regards to say CNS depressants or narcotic
8 analgesics.
9 A They tend to go to the opposite direction.
10 Q Now, you said it was difficult -- can be difficult
11 in the medical field to determine the differences with regards
12 to a DRE during your DRE evaluation. Are they looking for
13 gradations or what?
14 A From my experience, I think they are not so much
15 looking for gradations but I think they are looking for the
16 extremes.
17 Q Okay. Are they capable of doing that?
18 A Yes.
19 Q Is there any other thing that you wish to talk about
20 with regards to the muscle tone study?
21 A No.
22 Q Is that enough?
23 A No.
24 Q Okay, I didn't hear you. And the next step was
25 checking for I believe injection sites, step nine. How is
26 that corroborated with the diagnosis in the medical

1 profession?

2 A Well, the physician in the -- during the process of

3 a physical examination is sensitive to marks or injection

4 marks especially if they are over veins, especially if there

5 are tattoos present, especially if there are thickening of a

6 vein which may indicate a chronic habitual IV injection user.

7 But it is not to say that a physician will just

8 devote a certain amount of time for that part -- looking for

9 those signs.

10 It is really a part of -- a physician may be looking

11 for injection marks or skin as he is doing a blood pressure,

12 or palpating a pulse, or perhaps palpating an area of

13 tenderness, or pain so at the same time physicians over time I

14 think develop the skill and the ability to scan and look for

15 things that are readily obvious when the patient has the skin

16 exposed, to be looking at the skin at the same time that they

17 are looking at other parts of the body or they basically could

18 be doing two more than one part of an examination at a time.

19 But when they -- so they are not specifically

20 looking per se for an injection mark unless it's clinically

21 relevant to the presenting issue or the problem.

22 But I think it would be very unusual for a physician

23 not to see an injection mark and identify it for being what it

24 is.

25 MR. WELLS: Court's indulgence, Your Honor? May I

26 approach again with what has been admitted as State's Exhibit

1 No 5, which is just for the record, is the 12 steps of the
2 manual.
3 BY MR. WELLS:
4 Q Okay, the next was step 10, which was interview the
5 suspect, which I believe we covered. You indicated that was
6 part of the history, correct?
7 A Correct.
8 Q And then the step 11, what is step 11?
9 A The opinions of the evaluator would be the analogue
10 and the medical examination or how a physician approaches a
11 patient, would be his writing, his assessment or his
12 differential diagnosis where he states the -- in descending
13 order the diagnosis, which is most likely to explain the
14 patient’s complaint or presenting a problem.
15 Q And how did this -- excuse me. That is the
16 correlation to the medical profession in the DRE based upon
17 your opinion --
18 A Oh, I’m sorry. You were talking about opinions of
19 the evaluator of number 11?
20 Q Yes.
21 A Yes, okay.
22 Q Now, with regards to the DRE, how does the DRE come
23 to in their opinion?
24 A It is repeated ad nauseam during the training that I
25 attended for the DRE evaluator to defer making any definite
26 opinion until all the data is in.

1 So, I think the evaluator is trained to focus more
2 on obtaining the data points, deferring the opinion until all
3 the data points are available and then to look back and ask
4 what are the strong prominent signs which in medicine we call
5 hard signs and what are the soft signs.
6 And they paint a profile or a picture somewhat of
7 the salient features of that evaluation. And I think they
8 mentally ask which of the seven categories, if any, explains
9 the findings and the history of that particular examination.
10 Q Okay. I am going to ask you to flip over State's
11 Exhibit that you are looking at and just again for the record
12 what is on the front of that Exhibit?
13 A It's the Drug Influence Evaluation Symptomatology
14 Matrix.
15 Q Okay. Are you generally familiar with that?
16 A Yes.
17 Q Do you have it memorized?
18 A No.
19 Q Okay. How is it broken down?
20 A Well, it's broken down in the horizontal access as
21 the different categories of drugs and in this case for the
22 purposes of how the police or the correctional environment
23 classifies what they see in the streets. They have seven
24 different categories.
25 Q Okay. And --
26 A And on the left column, they put the different signs

1 and symptoms in terms of categories. Signs and symptoms that
2 may be encountered during the -- or with those drug
3 categories.
4 Q Now when they are broken down into categories, are
5 the delineation of categories is that consistent with how they
6 are done in the medical community?
7 A More or less. You know they -- in the medical
8 community, for example, something like cocaine may be looked
9 at by -- if it was classified by an anesthesiologist to him
10 that's a vaso presser because it tends to raise blood
11 pressure.
12 For the ENT physician who applies it, they would
13 categorize it as an anesthetic. So, it's really based on what
14 field you are in and how you use that particular medication
15 that you tend to classify it differently.
16 But in general, in terms of the symptoms, I don't
17 think there would be any disagreement.
18 Q Okay. Now, this is a fairly generalized form is it
19 not?
20 A Yes.
21 Q Does this contain every possible permutation of
22 every example of a sign that would be present?
23 A No.
24 Q Do you believe that it is accurate?
25 A Yes.
26 Q Can you analogize what this would be -- make an

1 analogy as to what the matrix would be in another setting?
2 A In a medical setting?
3 Q I don't know, I believe you have made --- before
4 symptomatology by numbers?
5 MR. DeLEONARDO: Mona Lisa, example.
6 THE WITNESS: Yes, the example would be that I am
7 certainly not an artist and I have no artistic skill but if
8 you gave me a set of -- instead of seven categories, you would
9 give me seven different colors with a paint by the numbers
10 with seven possibilities, I suppose if I painted a landscape
11 versus a seascape versus a bowl of fruit or a portrait or a
12 nude, even though I am not an artist I think if you gave me
13 those seven categories of colors and showed me where to paint
14 them, even if several of those were missing, you would be able
15 to ascertain what I have been trying to paint. So, this is
16 basically a neurology by the numbers.
17 BY MR. WELLS:
18 Q Okay. Is there anything new or novel within the
19 matrix or within the opinion category of the DRE protocol?
20 A I am sorry, the opinion category?
21 Q Step 11, which includes using matrix, my apologies.
22 A No.
23 Q The final step is what according to the 12 steps
24 process?
25 A Toxicological examination. The correlate in the
26 medical approach to a clinical dilemma would be obtaining

1 certain testing results to verify and to rule out the list of
2 your differential diagnoses.
3 Q This is done when or clearly it is done as the last
4 step in the DRE protocol, is that correct?
5 A Yes.
6 Q And has the DRE come to their opinion prior to the
7 toxicological sample being made?
8 A Yes.
9 Q Why is that, how is that? And is that correlated
10 with the medical community?
11 A Yes, it's traditionally happens that in most
12 physician/patient encounters where there is a history of
13 physical performed, the physician will generate a history and
14 physical performed that which will include a diagnostic
15 compression with the differential diagnosis and then will
16 write in terms of a plan, which tests he plans to order to
17 rule in or rule out the diagnosis or to begin treatment of the
18 patient.
19 Q Okay, do you have any problems with the fact that
20 the -- with regards to the DRE protocol that they have made an
21 opinion without a toxicological sample already being present
22 for them?
23 A No.
24 Q And why is that?
25 A Because I think the value added by the DRE is not so
26 much that they confirm his opinion with the toxicological

1 sample. I think the key in how it benefits society is that he
2 is able to identify the impairment and document the
3 impairment.
4 For many reasons, it's very difficult to have a 100
5 percent correlation between the toxicological sample and the
6 impairment.
7 Q Okay. Now with regard to the DRE protocol are there
8 certain tools that are used during the process of the DRE
9 evaluation?
10 A Yes.
11 Q And specifically when you are taking pulse what do
12 you use?
13 A Your fingertips.
14 Q Blood pressure?
15 A A sphygmomanometer or a blood pressure cuff and a
16 stethoscope.
17 Q Are either of those used generally within the
18 relevant of the community?
19 A Yes.
20 Q Is there anything difficult about using either of
21 those tools?
22 A No, as a matter of fact in my first day in the field
23 of medicine back in 1970 or '71 as an orderly, we had a two-
24 day training for orderlies before they hit the floors.
25 And within the first hour we are being taught how to
26 apply and take a blood pressure and pulse and two days later

1 on the ward within the first hour or two we are already taking
2 sets of vitals and reporting them to the nurse.
3 Q And the way that they were taught to be used for
4 both this stethoscope and the blood pressure cuff, I won't
5 even try and pronounce the other word, the way that it is
6 taught in the DRE schools, is it taught correctly?
7 A Yes. I think they go to some extreme length of time
8 and detail to teach the basis and scientific basis for how one
9 takes a blood pressure and pulse and how -- why someone even
10 has a blood pressure and pulse.
11 In fact, one or two years I thought one of the
12 classes myself and that was at least a one-hour class just on
13 blood pressure and pulse. So, I think they cover it
14 extensively.
15 Q Are you familiar with States Exhibit No. 4?
16 A It is a pupillometer.
17 Q Is that a tool that is also used during the DRE
18 protocol?
19 A Yes.
20 Q Is there anything new or novel about the use of
21 that?
22 A No, as a matter of fact, most medical students in
23 training get these dispensed to them and have them in their
24 shirt pockets or their lab coat pocket visible so that it is a
25 common tool used.
26 Q Is there -- do you have any problem with the way

1 that it was taught in DRE school for the DRE students?
2 A No.
3 Q Was it taught accurately and correctly?
4 A Yes. In essence, it's quite simple. You are
5 attempting to compare the image of a pupil on the pupillometer
6 to the pupil of being examined and make an estimate of which
7 of the outlines on the pupillometer most closely approximates
8 what one sees on the individual being tested and then to mark
9 and note what diameter size it is.
10 And it's in half millimeters increments from 1.5 to
11 10.5.
12 Q Is there anything difficult about using a
13 pupillometer?
14 A No.
15 Q Is there anything difficult about using any of the
16 tools that are used or involved in the DRE protocol?
17 A No.
18 MR. WELLS: I will have this marked as the next
19 State's Exhibit?
20 MR. WELLS: Any objections.
21 MR. DeLEONARDO: No objection.
22 THE CLERK: State's No. 16.
23 (The document referred to was
24 marked for identification as
25 State's Exhibit No. 16.)
26 THE COURT: This is State's 16 for ID?

1 THE CLERK: Yes, sir.
2 BY MR. WELLS:
3 Q Are you familiar with this?
4 A To some degree, yes.
5 Q What is this?
6 A This is the drug influence evaluation form where
7 upon which the DRE evaluator marks its observations and
8 assessments and estimates and measurements.
9 MR. WELLS: Your Honor, at this time, The State
10 would move to have that admitted as State's Exhibit 16 for --
11 or have it admitted into evidence.
12 MR. DeLEONARDO: No objection.
13 THE COURT: All right. State's 16 is admitted.
14 (The document marked for
15 identification as State's
16 Exhibit No. 16 was received
17 in evidence.)
18 BY MR. WELLS:
19 Q Doctor, are you familiar with the term called
20 charting?
21 A Yes.
22 Q Can you please explain to the Court the correlation
23 between the face sheet and charting in the medical community?
24 A Charting in the medical community is to document a
25 physician's or an examiner's observations and findings from
26 the interaction with the patient.

1 Q Okay and how is it correlated here with the DRE
2 patient?
3 A This is a method by which the evaluator can document
4 his findings, his observations, his data obtained from making
5 the estimates of the pupil to document their observations of
6 the individual, their behavior.
7 Document the results of the psychophysical testing
8 and the physiological testing and blood pressure, pulse and so
9 on and so forth.
10 Everything that is relevant -- that may be relevant
11 to their making an opinion as to whether the individual is
12 impaired and if the impairment is due to non-drug or medical
13 or possibly medical issues and from which to review at the end
14 towards the end of the evaluation and to collect their
15 thoughts, review and make an opinion and document that
16 opinion.
17 Q And why is it important with regards to the medical
18 community?
19 A Well a form like this is very often -- a variation
20 of this would end up in an emergency room where it's --
21 perhaps a physician doesn't have the relationship with the --
22 usually the physician doesn't know the or have a history with
23 a patient and the issues in an emergency room tend to be very
24 repetitive and routine and it allows the physician to document
25 and save him time instead of spending time in designing a
26 unique form for every encounter.

1 They just basically fill in the blanks and usually
2 there is an area for a narrative or if there is any additional
3 information a physician may add as part of the chart, which
4 may be on another page or on the back page.
5 So, it’s part of the documentation and memorializing
6 of the encounter with the patient.
7 Q Going back to the 12 steps generally, is it fair to
8 say that some of the steps and some of the tests within the
9 individual steps are easier or harder than others?
10 A Yes.
11 Q Are there any in there that honestly you believe are
12 harder to do than others?
13 A Well, I think the horizontal gaze nystagmus test
14 requires not an insignificant amount of exposure of teaching
15 of attempts and multiple encounters and one gets better and
16 better at.
17 Obviously, it’s easier to take a pulse than it is to
18 access someone for horizontal gaze nystagmus. And the
19 interpretation of some of the psychophysical tests take time
20 to determine what is really a range of normal and how to apply
21 it and when to really -- when to give the individual being
22 evaluated some slack as to what is a normal mishap and when to
23 allow them to try it again and not rule it against them.
24 So it takes some judgment. There are some parts of
25 the test such as the examination for convergence I think that
26 it’s difficult to know when you have a valid test for

1 convergence because it takes some significant amount of
2 concentration by the patient or by the individual being
3 tested.
4 It requires a significant amount of cooperation to
5 get a valid test. And I think interpreting the finger to nose
6 is sometimes not as easy, obviously, as taking someone's
7 temperature or pulse.
8 So, again, muscle tone takes what I think is a
9 significant number of encounters and sometime before they feel
10 comfortable with making an assessment of muscle tone.
11 So, yes, there are some parts of it that are more
12 mechanical and less difficult and less subject to individual
13 examiner variability.
14 Q Are you familiar generally with the training
15 requirements or the requirements for a person becoming --
16 strike that. Do you have an opinion as to whether or not a
17 properly trained DRE can do all of these steps?
18 A Yes, I believe they can from my experience from the
19 individuals that I have encountered from the testing that I
20 have seen and from my own application of some of the skill
21 sets that I developed and used from the DRE training. I think
22 that they can be taught this.
23 Q Do you have a general opinion as to whether or not
24 using the DRE protocol, a properly trained DRE can make a
25 valid opinion as to whether or not a person is impaired?
26 A Yes, I do.

1 Q And do you have an opinion as to whether or not they
2 can make a valid opinion as to what category of drug that is
3 causing the impairment?
4 A In most cases, I believe they can.
5 Q Is this an absolute perfect thing?
6 A No.
7 MR. WELLS: Court's indulgence?
8 (Pause.)
9 BY MR. WELLS:
10 Q And if I have not already asked that, generally
11 speaking is the DRE 12 step process consistent with the
12 general diagnosis process done in the medical community?
13 A In general.
14 Q And in general, is there anything new or novel about
15 this entire process?
16 A No.
17 MR. WELLS: Court's indulgence.
18 (Pause.)
19 MR. WELLS: Your Honor, I have no further questions.
20 Thank you, Dr. Zuk.
21 THE COURT: Cross?
22 MR. DeLEONARDO: Thank you.
23 CROSS EXAMINATION
24 BY MR. DeLEONARDO:
25 Q Doctor, you said you had attended I believe it was
26 Wayne State University, is that correct?

1 A Yes.

2 Q And you said you did your two years of medical

3 followed by a clinical rotation, essentially, correct?

4 A No, I don't recall saying two years.

5 Q I apologize you did your internship where you did

6 two months in one area, two months in another area, is that

7 right?

8 A Yes.

9 Q And then after that, you have to do a residency and

10 you did that in radiology, correct?

11 A Correct.

12 Q What is radiology?

13 A Radiology is diagnostic radiology. It is using the

14 images obtained from a photon as it passes through an

15 individual and it changes the electri-- the chemical component

16 usually of a silver granule, which is then developed into a

17 typical process of developing film and the silver granules

18 that have been reduced the photons are then lost in the

19 solution.

20 Q Well, without getting to technical, essentially, --

21 A It's producing images.

22 Q -- with radiology, you are reading x-rays?

23 A It's producing images with using different

24 modalities to assist in the diagnosis, assuming that there is

25 a certain correlation between normal structure and function.

26 Q Okay.

1 A So when there is an abnormal image that implies
2 there may be an abnormal --
3 Q So you read x-rays, correct?
4 A I have in the past, yes.
5 Q Cat Scans?
6 A I have in the past.
7 Q MRIs, right?
8 A No, during my time in training, MRI was just
9 starting to come into being and I finished that part of the
10 training in 1983. So, I really did not have much exposure
11 after training with MRI.
12 Q But if I understand but for the two months, you did
13 not do any residency in internal medicine, correct?
14 A I did not do internal medicine residency, no.
15 Q Surgery?
16 A No.
17 Q You did one month in neurology?
18 A Yes.
19 Q You did one month in psychiatry, is that right?
20 A I believe the psychiatry was in senior year of
21 medical school. Those years -- 30 years later become --
22 Q I understand.
23 A -- a blur.
24 Q But you said you did one month in family medicine,
25 correct?
26 A Yes.

1 Q So the, how many years did you take for your
2 residency in radiology?
3 A Three.
4 Q Did you complete your residency?
5 A Yes.
6 Q And essentially during your time there, you were --
7 is it fair to say that your position was not to treat the
8 individual patient but to provide the, I guess I would say,
9 provide the information to the actual treating physician so
10 that they could determine what the treatment plan, is that
11 correct?
12 A In large part correct.
13 Q And so during that time you were not someone who
14 diagnosed the impairment or treated them with medicine, right?
15 A Well, during the internship, we did.
16 Q Well, right, when you did the one month or the two
17 months, correct?
18 A No, I did the whole 12 months of an internship.
19 Q Fair enough. But except for that, your residency in
20 radiology, you did not do those things, correct?
21 A Well, not really. The times we pulled nightshifts
22 in the emergency rooms, I spent just as much time in the
23 emergency room correlating the examination of the x-ray with
24 the patient at the bedside.
25 Q And providing that information to the treating
26 physician, correct?

1 A Yes.
2 Q Now, you -- is radiology part of the drug
3 recognition expert protocol?
4 A No.
5 Q And I want to make sure, too, you are licensed,
6 doctor? You passed the medical school and you completed your
7 residency, correct?
8 A Yes.
9 Q And then in order to actually to be licensed, you
10 have to pass the United States Medical Licensing Examination,
11 correct?
12 A No, I passed the National Boards Part 1, 2 & 3.
13 Q Well it is administered by them but it is actually
14 is a medical licensing examination, correct?
15 A Those three put together, yes.
16 Q Right. And you actually take those through parts 1
17 and 2 are actually during medial school, is that correct?
18 A Part 1 is at the end of the second year, part 2 is
19 at the completion of medical school and part 3 is usually at
20 the completion of internship.
21 Q Your residency, correct?
22 A No, internship.
23 Q Internship, okay. So, you put on the CV licensure
24 and that is to indicate that you passed the exam from the
25 National Board of Medical Examiners, isn't that correct?
26 A No, I think it is to indicate that I am licensed to

1 practice in the State of California.
2 Q Which presumed then that you passed the test to
3 become a doctor, correct?
4 A Yes.
5 Q All right. Now, let me ask you this. Are you Board
6 Certified in Family Medicine?
7 A No.
8 Q Or internal medicine or ophthalmology?
9 A No.
10 Q Psychiatry?
11 A No.
12 Q You even board certified in radiology?
13 A No.
14 Q In fact, you wouldn't be able to come board
15 certified in anything but perhaps radiology, correct?
16 A No, as a matter of fact just to -- four years ago
17 when I was asked to take over the Department of Employee
18 Health for LA County USC, we went through an extensive
19 evaluation and I was deemed board equivalent in occupational
20 medicine after 20 years of work.
21 So, that was part of the way that I was allowed to
22 take over control of the health -- while being on the 10,000
23 of employees there.
24 Q My question is would you be able to become board
25 certified -- you know what that means, don't you?
26 A Yes.

1 Q You know what board -- what is board certification,
2 it is a term of art in medicine is it not?
3 A Not a term of art in medicine. It is a term of art
4 of medical credentialing.
5 Q Okay. And would you agree that board certification
6 is actually defined by the California Board, is it not? You
7 are licensed in California, correct?
8 A Yes.
9 Q And is it defined as a voluntary process granted by
10 a member board of the American Board of Medical Specialties,
11 ABMS, correct?
12 A Uh-huh.
13 Q It is very specific in what board certification is,
14 is it not?
15 A Sure.
16 Q And the medical board also says and I am going to
17 ask you if you agree with this,
18 "Board certification is not required by the Medical
19 Board for a physician to practice, however, pursuant
20 to their business and profession Code Section 651 in
21 California, physicians may not advertise that they
22 are board certified unless they have been certified
23 by the ABMS member board or an equivalent or
24 recognized by the Medical Board of California."
25 Is that correct?
26 A It sounds correct.

1 Q And have you been board certified by the ABMS member
2 board?
3 A No.
4 Q I am going to show you what has been previously
5 marked as State’s Exhibit No. 15, correct? I am going to
6 direct you to the first page of your -- that is yours,
7 correct? That is your CV?
8 A Yes.
9 Q And you actually have a section that says licensure
10 to indicate you are a licensed practicing physician, correct?
11 A Yes.
12 Q And then you have a category next to that that says
13 Board Certification, correct?
14 A Yes.
15 Q You have agreed with me, have you not, that
16 California says you may use the term Board Certification
17 unless you pass the ABMS Boards, correct?
18 A That’s correct.
19 Q But you still include that on your CV to represent
20 that you have board certification, correct?
21 A No. I do not say that I am board certified. It
22 says Board Certification and the line continues in the right
23 side as National Board of Medical Examiners. And to anyone
24 that encounters this, they understand that means National
25 Board Part 1, Part 2, Part 3. If it was meant --
26 Q So, you believe that --

1 A Pardon me. If it was mean to represent that I was
2 Board Certified in a specialty, I would note the specialty.
3 Q I understand that you could. You could also be
4 board certified in family medicine, correct?
5 A In which case it would say Board Certified Family
6 Medicine.
7 Q And my point is you certainly would agree to lay
8 individuals or people in Court if they see Board Certification
9 that was something that could easily confuse people, is it
10 not?
11 A I'm not trying to confuse it and I don't think it
12 should confuse anybody.
13 Q Well, since the National Board of Medical Examiners
14 only means that you licensed, why do you put that on under
15 licensure?
16 MR. WELLS: Objection, argumentative at this point.
17 THE COURT: I will sustain.
18 BY MR. DeLEONARDO:
19 Q You would also agree, would you not, that one of the
20 reasons for board certification is that the Board actually
21 evaluate the qualifications of the individual, is that right?
22 A Sure.
23 Q And you actually have to go through a rigorous
24 testing and peer review process in order to become board
25 certified, right?
26 A Yes.

1 Q You have to actually complete the residency
2 requirements, right?
3 A Yes.
4 Q Written and oral exams, right?
5 A Yes.
6 Q Demonstrate actual proficiency in that field?
7 A Yes.
8 Q And even after that, it is not lifetime, is it?
9 A In some residency it applies, there are --
10 Q Not anymore.
11 A Not anymore.
12 Q But your medical license that you get is actually
13 lifetime as long as you do the continuing education credits?
14 A Yes.
15 Q And so this actually, you have to go through this
16 process on a regular basis, true?
17 A Well, I have to go through the process of completing
18 about 100 continuing medical education hours every two years.
19 Q Fifty hours, isn't it?
20 A Fifty per year or a 100 every two years.
21 Q Okay.
22 A So, you could complete a 100 in the second year and
23 still qualify.
24 Q Okay. But certainly not the same level as a Board
25 Certification, correct?
26 A Of course not.

1 Q And you would agree that someone that is board
2 certified in their respective --
3 MR. WELLS: Your Honor, I am going to object to this
4 line of questioning. He has indicated he is not board
5 certified. So, we can move on. He has asked --
6 MR. DeLEONARDO: I am not asking if he is I am
7 asking --
8 MR. DAGGETT: In addition --
9 THE COURT: Wait a minute, wait a minute. Only one
10 person raising objections, please.
11 MR. WELLS: My objection is his line of questioning
12 is the fact that we have already established that he is not
13 board certified. So, we don't need to go into everything that
14 a board certified doctor is because we are not -- he was never
15 admitted and he has never said that he is to the level that he
16 is talking about.
17 THE COURT: Mr. DeLeonardo?
18 MR. DeLEONARDO: Your Honor is being asked to decide
19 the credibility as well as who in the medical community that
20 you should play --- in deciding whether or not this is
21 medically accepted or generally in the field.
22 So, I think it is important that he is explaining
23 how much better someone in board certified has demonstrated to
24 be. I mean I think that is important.
25 MR. WELLS: In response, Your Honor, we never had
26 him admitted as a specialty in any specific field of medicine

1 other than general medicine. We admitted him solely for that
2 reason because of the DRE protocol covers multiple genres of
3 medicine. Generally, he is an expert in the field of general
4 practice of medicine. That is all he was admitted for.
5 THE COURT: I think we can move on.
6 MR. DeLEONARDO: Okay, fair enough.
7 BY MR. DeLEONARDO:
8 Q Let's talk about your practice. You worked in the
9 Sheriff's Department for four years, correct? It was their
10 jail, correct?
11 A I am sorry?
12 Q Worked in the Sheriff's Department for four years?
13 A I think it was more than that, it was several years
14 as part-time and several years as three-quarter time. It may
15 have been as many six years from the that.
16 Q Six years in the jail?
17 A It may have been, yeah.
18 Q So, it is like four years Sheriff's Department under
19 that, and then six years under the jail?
20 A No, I think it was six years for the Sheriff's
21 Department in their sheriff's central jail facility, which
22 included the infirmary 354 beds and in addition -- and I'm
23 sorry it's confusing, but there are two entities with the
24 Sheriff's Department and the Police Department. In LA they
25 are separate entities.
26 Q Right. And you did another 10 years for the Vernon

1 Police Department, correct?
2 A No. What I did is at our practice we saw detainees
3 from the Vernon Police Department to, again, determine the
4 safety with which they could be housed at the Vernon City
5 Jail. So, I was doing for them very much similar work, which
6 I was performing for the Sheriff and for the LAPD.
7 Q So, a large part of your practice, though, for a
8 large period of time, you were essentially working in the
9 jails in dispensary?
10 A Of the 30 years, it was the first 10 years. I have
11 not done that work for the last 20 years.
12 Q Fair enough. Now you also indicate you did some
13 work for the immigration services, is that correct?
14 A Yes.
15 Q And you said that you had sometimes the people that
16 had to get deported, they were sent back to their country and
17 you would actually treat them, right?
18 A Correct.
19 Q And were you treating -- just to make sure I guess
20 did you treat them medical and psychiatric problems?
21 A Correct.
22 Q And did they all have that you worked with?
23 A They all had the need for intervention.
24 Q Well, I guess what I am asking though is was the
25 need medically or psychiatrically based or was it because they
26 were unwilling to go? I am just trying to understand.

1 A No. I think -- I never solicited the case. I was
2 called after public health with their medical department to
3 determine that this individual had such extreme anxiety about
4 going back that he would need to have an anxiety quelled and
5 treated because they felt after their psychiatric evaluation
6 that this person would be a danger to himself or others.
7 Q So, in every one of those cases, that is what you
8 had before you intervened?
9 A No, in many of those cases.
10 Q I am asking you, sir, you are telling me that all
11 the cases that you were doing had a medical or psychiatric
12 need?
13 MR. WELLS: Objection, asked and answered.
14 MR. DeLEONARDO: Just trying to clarify.
15 THE WITNESS: Yes, in each case there was either --
16 THE COURT: Overruled.
17 THE WITNESS: -- in each case there was either a
18 medical or psychiatric and in many cases both.
19 BY MR. DeLEONARDO:
20 Q Interesting, because isn't -- what would you
21 prescribe?
22 A I didn't prescribe. I administered.
23 Q All right, what did you administer?
24 A I administered usually a combination of medications
25 so as not to run into a dose which would predictably bring a
26 side effect that was unwanted.

1 So, if I used different combinations each with
2 different side effects or problems, I would run into fewer
3 cases where there were respiratory issues or blood pressure
4 drops.
5 Q Again, I am going to ask you, doctor, what did you
6 administer, what drugs?
7 A I gave --
8 MR. WELLS: Objection, Your Honor, that is an overly
9 broad question considering there were a number of people.
10 MR. DeLEONARDO: Just examples, tell me what you
11 administered?
12 THE WITNESS: In --
13 THE COURT: Wait a minute, wait a minute.
14 Mr. DeLeonardo, do not continue with the question if there is
15 an objection.
16 MR. DeLEONARDO: I apologize.
17 THE COURT: All right. Mr. Wells?
18 MR. WELLS: Your Honor, the objection was when he
19 was doing this, there were a number of different patients,
20 prescribed a number of different things and he just asked
21 generally what did he prescribe. And that could be that is an
22 overly broad question, I guess, is what I am saying.
23 THE COURT: All right. Examples of --
24 MR. DeLEONARDO: Very well.
25 BY MR. DeLEONARDO:
26 Q Did you administer a dissociative anesthetic?

1 A Yes.
2 Q What kinds?
3 A Droperidol.
4 Q I am sorry, say it again?
5 A Droperidol.
6 Q And do you also -- that is a PCP dissociative
7 of ---, correct?
8 A Yes.
9 Q And what effect does that have on a person?
10 A Well the effect that I noticed on the individuals
11 that I administered it to that it would -- they would still
12 perceive an awareness of an event that they were anxious about
13 but they demonstrated less concern about it. So, it was --
14 part of the reason why dissociative made so much sense, it
15 really cuts off their ability to respond emotionally to what
16 they know cognitively.
17 Q Okay. So, essentially, they are unable to really
18 act of a free will?
19 A In a sense it takes away their anxiety for which
20 some of them are willing to attempt suicide for.
21 Q And is that a commonly prescribed medicine to treat
22 anxiety?
23 A No but that wasn't the only medicine.
24 Q And you -- is it not true that you would actually do
25 this against their will, correct?
26 A In probably half the cases it would be considered

1 against their will. In many cases, I asked them, I told them
2 that the United States Government has asked me to intervene on
3 their behalf to make sure that their trip is safe.
4 Well, it may be funny but in significant amount of
5 the cases they thanked me and they said, yes, if you could
6 help me I would appreciate you.
7 So, I did -- in addition to the droperidol, I also
8 administered anti-anxiety medications and hypnotics.
9 Q Well, isn't it true that a lot of these people you
10 previously indicated that were getting sent back because they
11 were going to even be put in jail for the rest of their life
12 or even executed, correct?
13 MR. WELLS: Objection.
14 MR. DAGGETT: Your Honor, I am going to object. I
15 am objecting for the line of questioning and I am getting real
16 tired of Mr. DeLeonardo coming in here and insulting all the
17 witnesses that we have.
18 I mean this line of questioning is not appropriate.
19 It has nothing to do with the DRE. It is just his opportunity
20 to try to insult the witnesses. And it is just not necessary.
21 And it is certainly not speeding up the process and has
22 nothing to do with a Frye-Reed hearing.
23 THE COURT: All right. The objection as I take it
24 is relevance, Mr. DeLeonardo, why is this relevant?
25 MR. DeLEONARDO: Absolutely, Your Honor. The
26 relevancy that I am generating here is he is coming in and

1 talking about medical community who views his behavior in this
2 case is frankly a violation of medical ethics. And if I want
3 to go ahead and disclose it is actually the subject of a
4 medical subject to a Congressional investigation.
5 And he says that he revamped this program to make it
6 better for the Government to go in and do this and in fact
7 what he did, even brought a Congressional investigation. I
8 think that is very relevant.
9 MR. WELLS: And if I could respond to that. This is
10 a Congressional investigation. It has got nothing to do, he
11 has not been -- there is no conviction, there is nothing at
12 all about this that goes to any of his credibility at all.
13 This has got nothing to with the DRE protocol at
14 all. It is just a general attempt to -- it is not remotely
15 relevant to this whole hearing at all.
16 THE COURT: How does it bear on this witness's
17 credibility?
18 MR. DeLEONARDO: Your Honor, I believe what it bears
19 on is when he is coming in and talking about what is generally
20 accepted in the medical community. I think there is a couple
21 of things that is important.
22 Is he really representing the thoughts and the
23 feelings and what is perceived in general in the field of
24 medicine. And if he is engaged in conduct --
25 THE COURT: Well, that is really the crux of why we
26 are here.

1 MR. DeLEONARDO: Absolutely. And I think it is
2 important if he is engaged in certain conduct that is so
3 outside of what the medical community deems appropriate, I
4 think it goes to the weight of what Your Honor may think as to
5 the rest of his testimony. And I think that is relevant. I
6 am not here to simply, unfortunately, to --- people's
7 characters but the State called who they called. I am only
8 working with what they gave me.
9 THE COURT: It goes back to my question though, I
10 mean how does it really bear on credibility? I mean you --
11 are you -- I mean I assume you are saying that the role that
12 Dr. Zuk played for IMS was not something that is generally
13 accepted within the medical community?
14 MR. DeLEONARDO: Correct, a violation of medical
15 ethics.
16 THE COURT: All right and you are hoping to get this
17 witness to acknowledge that?
18 MR. DeLEONARDO: That is what I was, absolutely. I
19 think -- I am sure he may not acknowledge it but I think it
20 was informative some of the statements he has previously made
21 and I think Your Honor can make that decision in the way
22 appropriately as to how you think he represents the full
23 medical community.
24 MR. WELLS: And if I may respond ---.
25 THE COURT: Go ahead.
26 MR. WELLS: If there is an issue with the medical

1 ethics board, that is an issue for the medical ethics board to
2 take up. That is not a question here. That is not what is
3 being brought up here.
4 He is here as a medical expert to discuss whether or
5 not the science and symptoms, the symptomatology, the matrix,
6 the one leg stand all of that, whether or not that is
7 generally accepted within the medical community and whether or
8 not it is new or novel. That is it.
9 There is no allegation that he has been charged.
10 There is no allegation that he has been convicted. The only
11 thing that he has even remotely raised is that there is a
12 potential investigation somewhere about something.
13 That is not relevant, that is just a general smear
14 attempt. And it has nothing to do with the DRE hearing today,
15 nothing.
16 MR. DeLEONARDO: Your Honor, if I could just add one
17 thing. And think it also and I had some questions that I
18 would want to ask as to how he treated the people -- how
19 safety wise he treated these people. And I know, you know, he
20 appears, sure, he wants to answer it. I am just curious as to
21 how he did it. Now, if Your Honor --
22 THE COURT: Well, it takes more than just curiosity,
23 Mr. DeLeonardo.
24 MR. DeLEONARDO: No, but I mean I am saying I think
25 it is part, I mean to see how he is treating these patients.
26 THE COURT: I am going to sustain.

1 BY MR. DeLEONARDO:

2 Q All right, doctor, let's talk -- just to make sure,
3 you -- doctor, one of the things that hospital have, they have
4 committees that screen people for qualification to admit
5 patients, correct?

6 A To screen what?

7 Q Hospitals will typically have a board or a committee
8 that decides who have admitting privileges, correct?

9 A Correct. As I recently went through with LA County
10 USC, --

11 Q Okay.

12 A -- correct, and I was --

13 Q So, you --

14 A -- allowed admitting privileges at LA County General
15 Hospital.

16 Q And when did you finally get admitting privileges to
17 a hospital?

18 A Six months ago.

19 Q Prior to six months ago, when did you, prior to
20 that, ever have any hospital admitting privileges?

21 A I had many privileges in the '90s when were
22 admitting patients from our clinic to Garfield Medical
23 Hospital.

24 Q So, prior to when in the '90s?

25 A Early '90s.

26 Q So between early '90s and six months ago, you had no

1 hospital admitting privileges to any hospital?
2 A Correct.
3 Q Teaching, do you teach in any medical schools or
4 pharmacy schools, nursing schools --
5 A No.
6 Q -- anything?
7 A No.
8 Q The only teaching you have ever done was for the
9 drug recognition expert program?
10 A Formal teaching, yes.
11 Q Okay and that was one class sometime ago?
12 A Yes.
13 Q You -- do you know of another medical doctor who
14 actually testifies on behalf of drug recognition expert?
15 A I think there is a Dr. Jacqueline Frazer at LA that
16 came through the same system through LAPD working the
17 dispensary that took the DRE course as well and I do believe
18 she has testified.
19 Q So, the only other doctor you know that has ever
20 testified is someone you worked with in the same jail
21 dispensary?
22 A No.
23 MR. WELLS: Objection, relevance.
24 THE COURT: Overruled.
25 THE WITNESS: There have been other physicians that
26 have testified in cases, as a matter of fact, the case in

1 Florida, which I am sure you have transcripts of, there was
2 the chief of neurology at the University or the medical school
3 associated in the City of Tampa in Florida. He testified
4 throughout the case as well.
5 BY MR. DeLEONARDO:
6 Q Not brought in today though, right?
7 A No.
8 Q You did say you did some consultant work for some
9 big companies?
10 A Yes.
11 Q As essentially worker's compensation consultation,
12 correct?
13 A Yes.
14 Q And your medical --- that is how it originated, that
15 is what you did was worker's compensation, correct?
16 A Worker's compensation and urgent care. We -- about
17 20 percent of the practice was urgent care not worker's
18 compensation.
19 Q All right. And I assume no publications?
20 A No.
21 Q Never been peer reviewed for anything?
22 A No.
23 Q Never been participated in a peer review, have you?
24 A No.
25 Q When was the last time you read the manual?
26 A The DRE manual?

1 Q Yes.

2 A Probably 15 years ago.

3 Q So, it certainly has gone or gone a lot of changes

4 since then, correct?

5 A From my off the record conversations with the folks

6 involved with the different trials I've been involved in, I

7 understand there has been some modifications but none that

8 have been dramatic or major.

9 Q Well, but again, you have testified -- you said 15

10 times?

11 A Yes.

12 Q And you have not taken the time to even review the

13 manual before coming in here and offering an opinion as to

14 what they are doing is accepted?

15 MR. WELLS: Objection, on multiple levels. Number

16 one, asked and answered. He already said he hasn't.

17 THE COURT: I will sustain.

18 MR. WELLS: Thank you.

19 BY MR. DeLEONARDO:

20 Q Received any awards or recognition in the medical

21 field?

22 A No.

23 Q But you did receive an award from IACP, correct?

24 A No.

25 Q You said you got a nice plaque to put on the wall.

26 A I wouldn't call it an award. I am sorry, maybe

1 that's a --
2 Q Okay. But that is the only thing you have ever
3 received in your career?
4 A In my career, no, no. I get the reward of having
5 built a clinic that sees 23,000 patient visits a year.
6 Q Okay. Let me ask you this. You said that you think
7 this works extremely effectively, this program, correct?
8 A I think it is very effective.
9 Q All right. Have you read any of the validation
10 studies underlying this?
11 A In the past I have read the validation studied for
12 the LAPD -- Field Validation Study.
13 Q And that is the only one you have ever looked at?
14 A No, I think I've looked at several others, I didn't
15 recall the names.
16 Q Well, isn't it true that you previously had said
17 that you haven't had to review in any critical way any of the
18 studies in your whole professional career?
19 A Say that again?
20 Q Isn't it true that you previously testified that you
21 have not looked at the validation studies -- you haven't had
22 to look at them in a critical way in your whole professional
23 career?
24 A I don't know I guess at the time if I was asked that
25 what the meaning of critical way meant.
26 Q And you gave some examples of why you got involved

1 in it. You said that you were initially amused that you saw a
2 DRE using a protractor?
3 A Yes.
4 Q And that they were doing it to try and gain
5 precision, right?
6 A Yes.
7 Q Do they use a protractor in the DRE protocol?
8 A They don't use a protractor, protractor implies that
9 every degree is marked off in one degree increments from zero
10 to 180. Although I do believe they have a certain diagram
11 that gives you zero to 90 and 45 degrees so it may be a
12 modification but the concept of a protractor, I think, is
13 there.
14 Q So that is actually in the manual that tells them to
15 use that?
16 MR. WELLS: Objection. He has already said yes and
17 has been through and read the manual and several years. If
18 this is going to be a cross-examination, of every individual
19 thing that has --
20 MR. DeLEONARDO: Your Honor, I have got to say
21 something.
22 MR. WELLS: -- he has already, if I could finish
23 with my objection. He has already said he hasn't read the
24 manual and he can -- if he is going to go through every single
25 individual line by line of the manual, he has already said he
26 doesn't know that. So really, the relevance?

1 THE COURT: Mr. DeLeonardo?
2 MR. DeLEONARDO: Unless I fell down the rabbit hole,
3 they called him as a DRE expert. That the procedures that are
4 being used and the techniques being used are valid and
5 appropriate in the medical field.
6 And if Mr. Wells doesn't want me to ask him whether
7 he even knows what they are doing, then we have got a problem
8 and he ought to be disqualified and I am going to move to
9 strike his testimony as to all the DRE things that he said.
10 THE COURT: I will overrule.
11 BY MR. DeLEONARDO:
12 Q Again, does the DRE manual say you are supposed to
13 use a protractor or any measuring device?
14 A I assume you are talking about the nystagmus?
15 Q Correct.
16 A I think that the modification of the protractor is
17 in the manual as a guide to show and teach the DRE applicant
18 of how to estimate and what they mean by where zero degrees
19 is, where 90 degrees and where 45 degrees is.
20 Q Okay.
21 MR. DeLEONARDO: Your Honor, I am going to go ahead
22 and have marked the version of 2010 Student Manual.
23 THE CLERK: It will be defense No. 5.
24 MR. WELLS: No objection for the record.
25 THE COURT: Defense 5 for ID.
26 THE CLERK: Yes, sir.

1 (The manual referred to was
2 marked for identification as
3 Defendant's Exhibit No. 5.)
4 THE COURT: And this is the 2010 manual?
5 MR. DeLEONARDO: That is correct, Your Honor,
6 student manual.
7 BY MR. DeLEONARDO:
8 Q I am going to direct you to section four of page 12
9 and certainly feel free to look through the rest of the manual
10 if you need.
11 But can you describe for me where they use a
12 protractor as you described it to determine the onset?
13 A (Reading.)
14 MR. WELLS: Your Honor, objection. He said they
15 don't use a protractor.
16 MR. DeLEONARDO: Or any measuring device.
17 MR. WELLS: I don't believe he said that they use a
18 measuring device.
19 MR. DeLEONARDO: I thought he did. But if he is
20 saying they don't anymore that is fine.
21 THE COURT: I thought what the testimony was, was
22 that there had been some modification of the use of a
23 protractor from 180 degrees to 45 or 90, maybe I
24 misinterpreted.
25 MR. DeLEONARDO: That is what I thought he said.
26 THE WITNESS: There was a -- perhaps a handout may

1 have come with my manual of a line that showed zero to 180
2 degrees, another line in the middle -- I'm sorry, as 90
3 degrees with an image of a nose as if one was looking at
4 actual image of the skull through the nose.
5 And it was showing what they mean by zero, 45
6 degrees and where 90 degrees and 180 degrees was.
7 MR. DeLEONARDO: That is not in here?
8 THE WITNESS: No, not that I could find.
9 BY MR. DeLEONARDO:
10 Q And you gave two examples, I guess the biker example
11 and where the person was running into cars and then they
12 found -- the DRE finds out that they are actually a medical
13 condition and then you also raised the situation where you
14 had -- the jail doctors had actually looked at this person and
15 then found out that they were diagnosed differently to drugs,
16 correct?
17 A Yes.
18 Q And those are the same two stories that you give
19 essentially at every time you testify?
20 A Those are the two most pronounced, most obvious,
21 most striking cases that I saw.
22 Q And the doctors in the jail who missed diagnosed the
23 person, I guess it doesn't say much about their
24 qualifications, does it?
25 MR. WELLS: Objection.
26 THE COURT: Sustained.

1 BY MR. DeLEONARDO:

2 Q You said that you wanted to get the skill set that
3 the DREs have and that is the reason that you got involved, is
4 that correct?

5 A That's correct.

6 Q Are you telling me that when you went through
7 medical school and you went through all that training and
8 residency and got your license that you didn't have the
9 ability to do an evaluation to determine if someone was
10 impaired by drugs and not a medical condition?

11 A No. I was saying that I -- during the training in
12 medical school, internship and parts of my continuous training
13 in residency or work outside of residency, never did I see or
14 was I taught that one could predict the presence of other
15 drugs inside a human being based on the discrepancy between an
16 angle of onset of nystagmus and the breath alcohol level.

17 Q And, in fact, is there any valid research that shows
18 you that you can determine the presence of a drug based on
19 angle of onset now, other than alcohol?

20 A That's correct. There are anecdotal references to
21 the fact that the angle of onset will occur earlier and that
22 the nystagmus is more pronounced and in fact there may be
23 vertical nystagmus with increasing levels of central nervous,
24 depressants and inhalants in PCP.

25 Q But the studies that are out there are only as to
26 alcohol, correct?

1 A Yes, that I know of.
2 Q Right. So, you weren't taught in medical school so
3 if I understand you are relying on your information that that
4 is valid based on the DRE program, correct?
5 A I tried -- I spoke with several ENT physicians as
6 well of which one was familiar with --
7 MR. DeLEONARDO: I am going to move to strike at
8 least as to what he is talking about someone else that we
9 don't even know who they are.
10 MR. WELLS: Your Honor, specifically, he asked the
11 only way that he knew about this that he was relying on this
12 information is from DRE protocol and he is explaining that
13 that is not the case. So, he is answering the question.
14 THE COURT: I will overrule.
15 THE WITNESS: In my inquiry as to what other
16 physicians have become familiar or familiar with this, I did
17 speak to several ear, nose and throat physicians.
18 The two that I recall were not familiar with that --
19 one was familiar with the fact that there is a mathematical
20 association between angle onset and the breath alcohol level.
21 So, I was even surprised that some ear, nose and throat
22 physicians were not aware of that.
23 BY MR. DeLEONARDO:
24 Q But they knew about the breath alcohol, correct?
25 But no one has ever told you drugs, that that applies to
26 drugs?

1 A Not that there is a quantitative association,
2 correct.
3 Q Okay. Now, you also talked about -- and I was a bit
4 confused. You talked about this you had a time when your
5 blood pressure was dropping but your pulse rate was rising and
6 someone saved your life, I was a little unclear, was that a
7 DRE?
8 A No, that was a paramedic.
9 Q Okay. So a paramedic was able to determine that you
10 had a medical condition, correct?
11 A No, I was a victim of a head-on collision and
12 ejected from the car.
13 Q Okay. So, that was a pretty obvious situation that
14 had a medical problem?
15 A Oh, yes.
16 Q But wasn't -- okay, I just wanted to make sure -- I
17 wanted to make sure it wasn't a drug recognition. Now, let's
18 move to the program. Do you know the drug recognition
19 experts, they are taught, is that not true, that they are
20 essentially like chemical breath tests operators, correct?
21 A I have never heard that taught to them, no.
22 Q Well, do you agree that that is essentially kind of
23 what they are? They are just following the symptoms on the
24 matrix and if they follow the protocol exactly they will get
25 the right results?
26 A No, they are --

1 Q Is that your understanding of the way it is taught?
2 A I don’t believe that that would be taught that way.
3 Q I am going to show you again what has been marked as
4 State’s Exhibit No. 5, page 3. I am going to ask if you could
5 read the second paragraph.
6 A “The DRE can be compared to an operator of an
7 evidential chemical test devise, while it is beneficial
8 to understand the general principles involved in the
9 operation of the device, it is not necessary for each
10 operator to be able to explain every detail of the
11 operation.”
12 So, in one reference it may say that anecdotally to
13 stimulate the imagination, I think of the student to give him
14 another way of looking at it but to me when you say is it
15 taught, I am assuming you are saying it’s repeatedly
16 presented, you are a chemical breath test analysis.
17 Q Well then what does it also say here? But it is not
18 necessary.
19 A It is not necessary to become a medical specialist
20 to a technician of human physiology. However, general working
21 knowledge of other body functions is very helpful.
22 Q And in addition what it says at the time and I will
23 give it back to you to read, but it essentially says, as long
24 as you follow the protocol and you plug it in, you will get
25 the right results just like a breath test operator. Follow
26 the instructions, you get the results, right.

1 MR. WELLS: Objection. He has already -- well I
2 will withdraw the objection.
3 THE WITNESS: Could you repeat that again?
4 BY MR. DeLEONARDO:
5 Q That essentially the way -- I know that you are
6 testifying as an expert on how it is taught, isn't it true
7 that it is being taught that as long as you plug in the
8 symptomatology on the matrix and follow the steps, that you
9 will get the right result, you don't really need to
10 have -- you don't even need to be a medical specialist. You
11 don't have to have that as long as you follow the results?
12 A No, I think it means -- it implies that you will be
13 directed in the correct direction towards a proper assessment
14 and towards a proper evaluation.
15 Q Well, let's talk -- and we will get back to that, I
16 want to --
17 A Because I guess the other option would be that you
18 are implying that they are teaching that if you do it, you
19 will get it right a 100 percent of the time and I don't
20 believe they are teaching that. And they certainly didn't
21 teach that when I was there.
22 Q All right, let's talk about the interview of the
23 arresting officer. You said that it is just like a situation
24 where you, in the medical field, would talk to a caring,
25 loving family member in finding out what is going on?
26 A I am implying that the attempt to get information

1 during the evaluation is not unlike the attempt to get
2 information during a history or history component where a
3 doctor encounters a patient with a clinical dilemma or issue
4 to be resolved.
5 Q When you interview or when you talk to other people
6 in your practice, is it not true that one of the things that
7 you are establishing is trust with the patient, correct?
8 A Yes.
9 Q Because a lot of times if you are not establishing
10 the trust, they are not going to be as forthcoming about
11 information they may be experiencing, correct?
12 A That's correct.
13 Q And would you not agree with me that the
14 relationship between an arresting officer and a suspect on the
15 side of the road is quite markedly different from a family
16 member bringing someone to see you?
17 A Of course it is but essentially how it is the same
18 is that there are statements made that assist the doctor as
19 the statements made that assist the DRE evaluator into making
20 an assessment.
21 Q But you certainly -- would you not consider any
22 potential bias that a person may have in giving you the
23 information?
24 A Yes.
25 Q And so you would agree with me that at least someone
26 who has arrested someone for doing something may be not be

1 providing information that would be in the best interest of
2 the suspect in being shown not to be drug impaired?
3 A That sounds to me a little convoluted. Could you
4 repeat that?
5 Q Sure.
6 A We are talking about the officer at the roadside?
7 Q Yes.
8 A And an individual who has been stopped and --
9 Q Correct.
10 A -- and --
11 Q You would agree with me that the arresting officer
12 would not necessarily be looking at things that would lead
13 someone to believe that the driver is only medically impaired
14 because they have already arrested him, correct?
15 A Your Honor, I apologize. English is not my first
16 language, sometimes I have to translate in my own mind and I
17 lost that again. And I apologize. If you could just repeat
18 that one more time?
19 Q Okay. I will try to be clear on it. The arresting
20 officer has already made a decision that this person is
21 impaired and can't drive, correct?
22 A I don't believe so. I think he's looking to see to
23 corroborate his initial concern that there may be impairment.
24 Q So they pulled -- but they have arrested them,
25 right? They have put them in handcuffs, correct?
26 A No, in my -- as I am trying to answer your question,

1 I imagine an individual driver being asked to exit the car and
2 there is a discussion between the officer and the driver. Are
3 we at a point where he's --
4 Q Yes.
5 A -- handcuffed?
6 Q Step 2, is it not, is the DRE interviewing this
7 arresting officer, correct?
8 A After the roadside evaluation.
9 Q Yes.
10 A The DRE is speaking to the arresting officer, yes.
11 Q And you said the DRE doing that is just like you
12 talking to a family member, correct?
13 A In the sense that you are getting verbal information
14 that you may or may not find helpful in your evaluation.
15 Q And that arresting officer is also going to be
16 talking, is he not, about any drugs he found in the car or
17 paraphernalia, correct?
18 A Correct.
19 Q And is it not true that you talked about a long list
20 of questions that you would ask someone who is -- that you
21 would interview, correct?
22 A Correct.
23 Q And that is why I guess it would be a preliminary
24 examination. You said, essentially, you would go through each
25 body system before reaching a differential diagnosis, is that
26 right?

1 A Correct.
2 Q That essentially you would -- you want to get the
3 full history as well because you recognize that there may be
4 symptoms that you could see that could be explained as a
5 medical condition based on someone's history, right?
6 A Correct.
7 Q And I think you talked about, for example, you want
8 to know whether he have allergies, medications taken,
9 headaches, whether he had a double vision, right?
10 A Correct.
11 Q Any change in sleeping patterns, correct?
12 A Sure.
13 Q You want to know, I think you even said how many
14 pillows they would use to sleep with, right?
15 A If the presenting complaint were related to the
16 cardiovascular system such as shortness of breath or chest
17 pain.
18 Q Right. And you would --
19 A So, if someone would come with joint pain, that may
20 not necessarily be a question that would be asked.
21 Q But at the same that you have, I assume through
22 medical school, the training and experience to decide what
23 questions you would ask, right?
24 A Yes.
25 Q And what questions are the DRE to ask, do you know?
26 A They would ask are you sick or injured, are you

1 hurt, are you under the care of a physician, do you have any
2 medical requirements, are you in pain, were you injured, are
3 you taking medicines, did you -- it appear to me that the car
4 may not have been driving safely is there any reason you have
5 to explain that?
6 Do you have any orthopedic problems, any problems
7 with your legs?
8 Q Wow.
9 A Any problems with your vision, do you wear glasses,
10 are you wearing them now? Are you taking any drugs or have
11 you taken any drugs? Are you smoking marijuana? There are
12 any number of questions that they could be asking.
13 Q Okay. So, you believe all of those would be
14 necessary in order to get really a proper evaluation of the
15 person?
16 A I wouldn't characterize it as that, but I would say
17 that the more information you have, the more time you have,
18 the more you ask -- there is somewhat of a law of diminishing
19 returns where you get proportionally less information the more
20 time you spend.
21 But, yes, I think the more questions you ask the
22 more information you have of which some may be of benefit to
23 your evaluation.
24 Q Okay.
25 A Now, in the medical world the range of possibilities
26 is so much broader that it requires so many more questions and

1 a review of systems of so many different systems.
2 Q Now, you -- in looking at the manual, did you
3 actually see what they are taught? I would like to approach?
4 I am going to show you, again, State's Exhibit No. 5. This is
5 page 10 and this is essentially, you certainly can scan
6 through if you would like, the overview of the preliminary
7 examination.
8 A Do you want me to read it?
9 Q Well, if you can flip the next page, I am going to
10 ask you some questions. And essentially there it says --
11 A Pardon me, pardon me. In case what you are going to
12 ask on the second page relates to the one small paragraph on
13 the bottom of the previous --
14 Q I --
15 A Let me just catch up with you.
16 Q Absolutely, absolutely.
17 A (Reading.) Okay.
18 Q Okay. Now, on the next page, it tells you, it says,
19 does it not, that one of the major purposes of the preliminary
20 examination is to determine if the subject may be suffering
21 from an injury or some other condition not necessarily related
22 to drugs, correct?
23 A That's right.
24 Q It then says the questions include: Are you sick or
25 injured, right?
26 A Yes.

1 Q Do you have any physical defects?
2 A Yes.
3 Q Are you a diabetic or epileptic?
4 A Yes.
5 Q Do you take insulin?
6 A Yes.
7 Q Are you under a doctor or dentist care, right?
8 A You're reading.
9 Q And are you taking medication, correct?
10 A Yes.
11 Q The many questions that you have indicated that you
12 would need to know, a medical history, how many pillows,
13 whether they have any symptoms because you would -- none of
14 those questions are listed, are they?
15 A I said are you sick or injured, do you have any
16 physical defects, I think I implied those two. Do you have
17 any medical problems, that would cover the diabetic,
18 epileptic. Are you taking insulin.
19 I did specifically mention the doctor's care. I
20 didn't mention dentist care, I apologize. Are you taking
21 medicines? I think I've got about 92 percent of that.
22 Q Okay, well, I ask you does it discuss failing
23 history?
24 A No.
25 Q Does it discuss whether you have been having
26 headaches?

1 A It could.

2 Q It could? I mean again when we talk about this --

3 A This -- I -- you know, these questions are not like

4 a Miranda Warning where it's memorized as one read off a card

5 and read 10 times and memorized.

6 I think the interviewer has the latitude and has the

7 right to ask questions and can continue asking questions based

8 on the answers.

9 This is just a rough guide. I think this implies

10 that these are the basic issues that should be covered and

11 based on the answers from this, the officer is free to ask

12 other questions.

13 Q Okay. So, let's make this step. You agree with me

14 it then says answers to these questions may disclose

15 circumstances that could impede or confound the subsequent

16 steps in the drug evaluation.

17 The subject's answers and the manner in which he or

18 she answers could also give evidence of the possible presence

19 of certain types of drugs.

20 Now if affirmative responses are given the DRE

21 should take appropriate follow up questions, correct?

22 A Beautiful.

23 Q All right. Now, I am going to ask you based on the

24 medical profession and your training, you would know what

25 questions to ask if somebody said well I have been having some

26 headaches a couple of weeks ago and my vision is blur, right?

1 A Would the --

2 Q Would you know what questions to follow up with?

3 A Would I or the --

4 Q I am asking you.

5 A I hope so.

6 Q All right. Is there anything in the manual that

7 tells a DRE who is not even consider a medical specialist what

8 follow up questions to ask?

9 A No.

10 Q And so when they tell them that you may have to give

11 that some weight or discard certain observations, how would a

12 DRE know that if they have no medical training?

13 A I think we all have an intuitive sense of when a

14 question is answered and it requires some judicious

15 application of further questions or some concern on your part

16 that may modify the officer's evaluation.

17 Q So, it would be intuitive -- if I understand you,

18 you are saying it is intuitive that the officer would know

19 what impact that would have on blood pressure, on pulse, on

20 HGN, on Romberg, it would be intuitive that they would know

21 that someone who has been reporting some headaches a couple of

22 weeks and had some blur vision, they would know what to do

23 with that information?

24 A No, but I think intuitively they understand that if

25 someone is making claims that they had some double visions

26 recently that that would be part of their concern and they

1 may, in fact, ask for a medical evaluation even before they
2 perform the DRE evaluation.
3 Q So, then they would not --
4 A It certainly happened at the medical dispensary in
5 LAPD where hundreds of times the DRE evaluator aborted the
6 evaluation at different stages many of them -- most of the
7 aborted evaluations actually occurred in the beginning from
8 historical information.
9 Fewer and fewer aborted evaluations came when they
10 were observing and didn't understand some findings that they
11 encountered.
12 I would say that most of the times that they aborted
13 or they interrupted the evaluations came from the historical
14 information from the individual.
15 Q So, the DRE then are you saying they wouldn't be
16 able to medically rule out or rule in, they would have to go
17 and get a medical person to do that evaluation?
18 A In many occasions in my experience I am just saying
19 that when an officer had some concerns most of those concerns
20 came from the historical information.
21 And, you know, we trust officers to make other
22 assessments as they deal with the public. And so I think
23 officers part of their training is to interact with the
24 citizens and ask questions appropriate to the situation at
25 hand and how to determine how to proceed further.
26 I mean we are not -- I don't consider a police

1 officer simply as robotic. They are -- a part of what I think
2 they have is skills, interpersonal skills in communicating
3 with the citizens.
4 Q But you have already agreed to me, initially, that
5 without the trust a person may not be as forthright in
6 disclosing that, correct?
7 A Yes, I think -- I will grant you and I am glad to do
8 that that I think there is probably more misinformation given
9 between a driver at the roadside or an arrestee being
10 evaluated by a DRE officer than what a physician gets when he
11 evaluates his patient.
12 Q Because sometimes -- I assume you don't typically
13 give your patients a Miranda Warning prior to getting a
14 history, do you?
15 A I don't give them any warning.
16 Q And I think you would agree with me that giving a
17 Miranda Warning to a person may mean that they are not as
18 forthright for you or want to share that information, correct?
19 A Exactly.
20 Q Or they could give misinformation because there is
21 not that trust, correct? And you would agree with me that
22 even without that information, the medical experience and
23 training is even more important when you are trying to make a
24 conclusion because you are going to have to base that opinion
25 not just on what the person is saying but on the symptoms and
26 signs that you see in your medical training, isn't that true?

1 A Yes, I mean if you'll give me the liberty to just
2 take this process where I think it's going, I will concede
3 that --
4 Q I would just ask that you answer the question?
5 A It would be idea if we could have a physician ride
6 along with every police car. I would agree to that.
7 Q That wasn't my question.
8 A Okay.
9 Q My question specifically was would you agree that
10 without the relationship of trust and the fact that there can
11 be that kind misinformation that it is even actually more
12 important when you don't have that to be medically trained and
13 diagnose things that a person may not report?
14 A I will say it makes the job of the evaluator more
15 difficult, yes.
16 Q Now, you -- is there -- when someone is asked and we
17 refer to the manual it said asked about any drugs taken -- oh,
18 I am sorry, -- let's me step back. On medical conditions, it
19 says ask if they have any medical conditions. What kinds of
20 conditions would you want them to ask about?
21 A I would certainly want to ask them questions that
22 allow me to understand or to consider the conditions which
23 might mimic an impaired driver due to drugs or alcohol.
24 Those are usually toxic conditions and the most
25 common ones encountered in the emergency rooms and society and
26 I think the most encountered -- often encountered by the

1 correctional police officer would be liver failure, very
2 common renal failure, metabolic disturbances that cause a
3 generalized encephalopathy that may actually mimic drug
4 impairment.
5 Q But I guess what I am asking is even as to the
6 medications they may be taking would you want to know things
7 like does amount?
8 A I think it would help. I don't know that it
9 would -- a police officer would have some of these dosage in
10 his mind memorized to know what's a high dose or what is not a
11 high dose. But I would still recommend that if an officer has
12 time and he asked that, it tells you that you have more of a
13 reliable individual and an individual that's more aware in
14 dealing with his medical problems.
15 And if I -- from my experience in a correctional
16 setting, when I have an arrestee or a prisoner or a detainee
17 that tells me his medications and his dosage. Again, that
18 starts building the trust and I'm starting to believe that the
19 more information I have is more credible.
20 Q Well, you told me that even as to you, they wouldn't
21 be forthright initially when they came in many times, correct?
22 A Correct.
23 Q And that in fact you have to kind of go bribe the
24 inmate to work with you later. I think that is actually your
25 words. That you go bribe the inmates to work with you after
26 the fact.

1 A I will even go one step further, I did noticed that
2 if I asked the police officer whether they are DRE or not to
3 step outside of the dispensary, I felt that I got better
4 information.
5 Q And so you would try to get that to pass on to them?
6 A To pass on to the DRE?
7 Q Yes.
8 A Never.
9 THE COURT: All right. I am going to take a 15-
10 minute recess.
11 THE CLERK: All rise.
12 (Whereupon, a brief recess was taken.)
13 THE CLERK: Silence in Court, all rise.
14 THE COURT: Be seated, please.
15 THE CLERK: Doctor, please remember you are under
16 oath.
17 MR. DeLEONARDO: You need to recall the case or not?
18 THE COURT: No, we are all right.
19 MR. DeLEONARDO: Okay.
20 CROSS-EXAMINATION (Resumed)
21 BY MR. DeLEONARDO:
22 Q I think we left off, I want to discuss eye
23 examinations. Now, medically when you are taught for eye
24 examinations is that something that is typically performed for
25 family physicians?
26 A Yes.

1 Q And is it performed in variant lighting conditions?
2 A Yes.
3 Q And do you use that as a diagnostic tool for any
4 impairment?
5 A As a family physician?
6 Q Yes.
7 A As a general practitioner do we use the
8 examination --
9 Q Use that --
10 A -- of the eyes to determine impairment?
11 Q Maybe I -- let me just be clear, I guess on my
12 question. Are you using that to diagnose that a person has an
13 impairment?
14 A It could be yes but it's part of every exam.
15 Q Do use it to diagnose drug impairment?
16 A Yes.
17 Q Now is there a difference between a diagnostic tool
18 and a screening test?
19 A A screening test is not to meant to -- it's meant to
20 see a large number of entities from which you are more likely
21 to gain -- find the diagnosis that's being screened for by
22 eliminating -- by seeing a broad number and eliminating a
23 significant number of individuals.
24 But that's not to say that will make the diagnosis.
25 It's just creates the statistical possibility that what's
26 remaining after the screening is more likely to have what you

1 are ultimately looking for.

2 Q So, just to go back to my question, do you consider

3 the eye test a screening tool or a tool to actually diagnose

4 impairment?

5 A It depends on what setting.

6 Q I am asking for you in the medical community?

7 A In the medical community, it's meant to be a

8 screening tool.

9 Q Okay. It's not meant to actually diagnose

10 impairment, correct?

11 A The only time that would be, would be the most

12 typical encounter would be in an emergency room and in fact

13 someone's altered behavior or accident of some sort or

14 confusion or state of --

15 Q None of it has anything to do with the eyes,

16 correct?

17 A No but that's where that would be used as a

18 diagnostic tool. Most often in a non-correctional setting,

19 it's used as a screening maneuver.

20 Q And so if I understand it, let's talk about at least

21 as to HGN, you would agree that the horizontal gaze nystagmus

22 test and onset and all the things that we have heard, the

23 Judge has certainly heard, those have only been validated for

24 alcohol presence at particular level, is that correct?

25 A Correct.

26 Q That doesn't even show alcohol impairment, correct?

1 A No, I believe that is indicative of impairment
2 because what that demonstrates is that the individual if they
3 are maneuvering a vehicle and they have nystagmus that’s proof
4 positive that whatever they are focusing on is intermittently
5 projected on the retina and it is not a continuous real time
6 image that is incorporated into the visual cortex.
7 So if there is nystagmus, there is no question that
8 the individual whatever they are focusing on is on that retina
9 less often and it is the three dimensional reality that’s
10 created in our brain from the image of what we are looking at
11 is less accurate because of the fleeting nature of the
12 position of the image on the retina.
13 Q Now, you are aware of Marcelline Burns, is that
14 correct?
15 A I’ve met Dr. Burns, yes.
16 Q And she was actually the one who did the validation
17 studies in this field, is that correct?
18 A I think it’s not completely -- I think she was part
19 of the institution --
20 Q She is the main person when it comes to --- of
21 validation in this HGN area, is that fair to say?
22 A I think it’s her entity the California -- I think it
23 is Southern California Research.
24 Q Research Institute, correct?
25 A Yes.
26 Q Her and Adler, right?

1 A I don’t think Dr. Adler is part of that but he was
2 part of the validation study of that, I think so, yes.
3 Q Let me just put it this way, you know that she
4 actually in the study that there was a paper validation of the
5 standardized field sobriety test battery at BACs below .10
6 percent in 1998, correct?
7 A Yes.
8 Q And you are familiar with that, are you not?
9 A Vaguely.
10 Q Well, let me ask if you agree with this and I will
11 quote,
12 “Many individuals including some judges believe that
13 the purpose of a field sobriety test is to measure
14 driving impairment. For this reason they tend to
15 expect tests to possess face validity. That is test
16 that appear to be related to actual driving tests.
17 Tests of physical and cognitive ability such as balance
18 reaction time and information process has face validity
19 to variant degrees based on the involvement of these
20 abilities in driving tests, that is the testing to be
21 relevant on the face of it.
22 Horizontal gaze nystagmus lacks face validity because
23 it does not appear to be linked to the requirement of
24 driving a motor vehicle.”
25 You ever read that?
26 A Yes.

1 Q So, you are at direct odds today with Dr. Burns, is
2 that what you are telling us?
3 A Yes, I am looking at it at it from a purely medical
4 neurological point of view.
5 Q But the only studies in the field say that HGN does
6 not impact driving abilities, isn't that true? And these are
7 studies by the National Highway Transportation Safety
8 Administration, right?
9 A That may be the case. I cannot accept the fact that
10 an image on the retina that is not -- that is intermittent
11 adds to the ability to drive a vehicle safely.
12 Q And, of course, you know we have heard from
13 Dr. Citek but -- so, I am not going to go over that. We have
14 established you are not an optometrist or an ophthalmologist
15 at all. You didn't even have any residency or rotation in
16 that, is that correct?
17 A Correct.
18 Q Now, in addition, let me ask you this. Was someone
19 who lacks -- in your setting, you said you utilized this?
20 A Which part?
21 Q The HGN test. Have you ever utilized that to
22 actually see if someone was under the influence of drugs?
23 A Absolutely.
24 Q And so you say that every drug does something to the
25 eyes regardless of tolerance, is that your position?
26 A No. I didn't say never -- I don't believe I said

1 every drug does something to they eyes. Now, if you,
2 depending on your method of investigation, it's possible that
3 if you apply electros and you have sophisticated video
4 analysis of the images on the retina and the pupil and the
5 reaction time that you will be able to measure the affect of
6 the drug on the eye.
7 But in general some drugs of abuse have an affect on
8 the eyes but not all that are discernable.
9 Q So, there are many drugs that have no affect and you
10 would agree with me, however, that someone who takes a
11 therapeutic dose, do you know how often they would exhibit a
12 sign of HGN even though it is not impairing them?
13 A Well, some individuals are on therapeutic
14 medications that in fact bring upon nystagmus.
15 Q So, you would agree with me that someone could be
16 taking a prescribed therapeutic -- and just to make sure we
17 are on the same page. Someone could actually take a dose of a
18 medication and have no behavioral impairment, is that correct?
19 A Someone could take a prescribed dose of medication
20 and have what?
21 Q No behavioral impairment. In other words, their
22 coordination is not off, they are able to walk fine, they are
23 able to talk fine, correct?
24 A Yes, to the naked eye, to the routine evaluation
25 whether it's by a physician or not. Again, if you get more
26 scientific and you get investigated tools, there are ways to

1 measure changes in the body’s physiology even from smallest
2 amounts of therapeutic medication.
3 Q And are you claiming that the DRE protocol is a
4 scientific tool?
5 A It is based on scientific methods.
6 Q And if we look at the lack of smooth pursuit and
7 that is the ability to track an object, is that correct?
8 A Yes.
9 Q And you would agree that that doesn’t necessarily
10 even have to be present to show a horizontal gaze nystagmus
11 abnormality, correct?
12 A From my experience when I -- when there is
13 horizontal gaze and especially if there is vertical gaze,
14 there will be poor tracking as well.
15 Q But would you agree with me that there are medical
16 conditions that could show that you don’t have lack of
17 tracking even with horizontal gaze?
18 A Probably.
19 Q All right. You would also agree that there is a
20 number of other reasons other than drug impairment that would
21 account for lack of smooth pursuit, correct?
22 A Yes.
23 Q And because you would also agree, would you not,
24 that it can produce naturally by the way the test is done,
25 true?
26 A That you would have lack of smooth pursuit by the

1 way the test is done?

2 Q Yes.

3 A I think there is some belief that if the stimulus is

4 held closer that may result in more lack of a smooth pursuit,

5 so I think the distance where the stimulus held may have an

6 affect on the smooth pursuit.

7 Q Is that the only thing?

8 A That I can think of.

9 Q How about how quickly you move out?

10 A Oh, absolutely, I'm sorry. I am assuming that --

11 yeah, yeah, I'm sorry. If you go too fast, obviously, the eye

12 can only move so fast.

13 Q Okay. So, not only can it be medical conditions but

14 also it can be in the way you apply the test, correct?

15 A Okay, yes.

16 Q And medical conditions that can cause this, can

17 strokes cause it, right?

18 A When a stroke is causing nystagmus, it typically

19 will be unilateral. And it typically will abate with a

20 stimulus. So that the nystagmus is visible typically without

21 the use of the pen but when there is -- when they are focused,

22 is when it actually abates.

23 And the reason is because you are using your visual

24 system to override the lesion's effect on the inability to

25 track properly.

26 Q Are drug recognition experts instructed as to those

1 variances that you see?
2 A Yes.
3 Q They are?
4 A Yes.
5 Q Okay. And that is part of the manual as well?
6 A It's part of the training with the broad
7 understanding that drugs influence on the eyes and especially
8 extra optic movements in nystagmus in particular will always
9 cause a bilateral horizontal gaze nystagmus and not
10 unilateral.
11 Q Have you reviewed the section on medical conditions
12 will sometimes mimic impairment?
13 A I don't believe I reviewed it.
14 Q I am going to show you again State's Exhibit No. 5,
15 looking at page 13 of section 6 and ask is that a medical
16 condition that could make an impairment?
17 A Oh, we are talking about impairment not nystagmus,
18 now?
19 Q I am talking in general. And certainly you could
20 also look back, if you would like, to section on eyes to see
21 if it is discussed there as well.
22 A Okay.
23 Q It constitutes just a little over one page, correct?
24 A Yes.
25 Q Would you agree with me that the list that is there
26 is not -- it doesn't cover the kind of medical condition that

1 can make impairment, would you agree with that?
2 A Correct.
3 Q In fact, that is the extremely small number of
4 things that could cause or mimic drug impairment, is it not?
5 A Correct.
6 Q And is there anything else in there that tells even
7 as to the ones that are in there, tells the officer what
8 affect those conditions will have on the matrix? There are a
9 couple of matrix.
10 A Right.
11 Q There are a couple there and they indicate a few
12 things, correct?
13 A Correct. But it would be very difficult to do that
14 because you know they know just on diabetes alone, which is
15 only six lines, --
16 Q Right.
17 A -- there are double volume books written on diabetes
18 itself.
19 Q And that is why you go to medical school to make
20 that assessment, correct?
21 A Correct.
22 Q You would agree with that a drug recognition expert
23 who essentially gets a page and a quarter of training on
24 medical conditions and six lines on diabetes would not be able
25 to make those kinds of distinctions, correct?
26 A Correct. But for example in a case where it is

1 citing diabetes, there are ample opportunities for the
2 evaluator to factor that in. For example, in the history when
3 he is asking during the first encounter are you sick, ill or
4 injured, do you take medications, are you on any medications,
5 do you take drugs.
6 Hopefully, you will have some kind of response from
7 that. Even if the arresting officer says, you know, I found
8 some syringes in the glove compartment, and when you integrate
9 that with the history that the detainee is telling you that
10 they are taking insulin or on insulin or took insulin earlier.
11 So I think there is some opportunities -- I think
12 there are some natural opportunities in the evaluation that
13 give the evaluator an opportunity to at least at the notion
14 and get tipped off to the fact that there may be some medical
15 issues.
16 Now most of these I think in the example that you
17 used as stroke mimicking an impaired driving condition. I for
18 one, if I'm allowed to have the -- to speak for my community,
19 I want the arresting officer to detain someone who is driving
20 impaired because of a stroke.
21 I think that is good social hygiene and it promotes
22 safety in the community. And I've got five kids running
23 around streets. And I want someone to be detained and pulled
24 over if they are --
25 Q Should they be thrown in jail for it?
26 A I'm sorry?

1 Q Should they be thrown in jail for having a stroke?
2 A But I don't think they necessarily would be.
3 Q So you would want that person to be able to diagnose
4 the difference between stroke --
5 MR. WELLS: Objection, --
6 MR. DeLEONARDO: -- and a medical condition.
7 MR. WELLS: -- if he will allow him to answer --
8 THE COURT: Wait a minute, wait a minute. What is
9 the objection?
10 MR. WELLS: He is cutting off the witness again. He
11 is asking multiple questions without allowing him to answer
12 the question. I understand we are trying to stay on time and
13 I am not trying to say --
14 MR. DeLEONARDO: As long as I don't hear he is
15 missing his plane --
16 MR. WELLS: -- every individual questions --
17 MR. DeLEONARDO: -- I am fine.
18 MR. WELLS: -- but he is asking --
19 THE COURT: As long as what?
20 MR. WELLS: -- five or six questions at a time.
21 MR. DeLEONARDO: As long as I don't hear he is
22 missing his plane, I am fine. I mean the answers are
23 taking -- I am trying to work through as quickly as I can.
24 If the State is not going to tell me he is missing
25 his plane, I'm fine.
26 MR. WELLS: I am not -- I am asking that he be

1 allowed to answer the questions. He is cutting him off.
2 MR. DeLEONARDO: He is talking about his kids and
3 how he is afraid someone is going to run them over while
4 having a stroke. I mean let's be reasonable --
5 MR. WELLS: And you asked him a question after that
6 and he was not allowed to finish answering the question is my
7 point.
8 THE COURT: Let him finish. Dr. Zuk, is there
9 anything you want to add?
10 THE WITNESS: No. So, there are opportunities for
11 the evaluator to get tipped off that some of those conditions
12 exist and in fact some of those conditions I would hope that
13 the driver would be corrected and have an opportunity to get
14 that driver off the road.
15 THE COURT: But you don't want him thrown in jail?
16 THE WITNESS: Absolutely, not.
17 THE COURT: All right.
18 BY MR. DeLEONARDO:
19 Q Would you agree that one of the things that the DRE
20 has to do is be able to make that distinction, correct?
21 A Yes.
22 Q And you would agree with me that people even with
23 diabetes -- you certainly when people come into your office
24 don't go, "Hey, I have diabetes." Do they?
25 A Most of them do.
26 Q They come in and tell you what they have before they

1 see a doctor?

2 A Most diabetics are already diagnosed. It's very

3 rare for a diabetic not to be diagnosed.

4 Q There is not situations where you have untreated

5 diabetes in a patient?

6 A Yes. I would say 1 out of 10 diabetics come as a

7 first diagnosis.

8 Q And, in fact, this also has a paragraph, it says,

9 some other medical conditions that may cause signs and

10 symptoms similar to drug impairment include, carbon monoxide

11 poisoning, right?

12 A Yes.

13 Q Seizures?

14 A Yes.

15 Q Endocrine disorders?

16 A Yes.

17 Q Neurological conditions?

18 A Yes.

19 Q Psychiatric conditions?

20 A Yes.

21 Q And infections, right?

22 A Yes.

23 Q These are also normal conditions which can affect

24 vital signs, correct?

25 A Correct.

26 Q Are they told how these things, how, for example,

1 someone who suffers from anxiety or is bipolar what affect
2 that would have on their vital signs?
3 A I don’t believe that they go into detail. However,
4 the encounters by the DRE or by arresting officers are so
5 frequent when it’s related to drugs that it really creates a
6 gestalt for them that most things that fall out of that realm,
7 out of that range, they are very sensitive and hyperacutely
8 sensitive to and they are always on the lookout for things
9 that may be causing that are not drug impairment.
10 Q But you would agree with me that those conditions
11 would actually trigger the major indicators on the
12 symptomatology chart?
13 A They could but all those -- most of those conditions
14 have such a dramatic appearance, they have unique history to
15 them that even in the case where I described where the man was
16 going north on the sideswiping cars with his car was a bicycle
17 on them in Pasadena. Even he, was able to mumble the word
18 insulin.
19 Q So, I guess it is fortunate for him he was able to
20 do so because that is how the DRE determined that he had an
21 insulin problem?
22 MR. WELL: Objection.
23 THE WITNESS: No, he murmured that --
24 THE COURT: Whoa, whoa, whoa. Hold on when there is
25 an objection, Dr. Zuk.
26 THE WITNESS: Yes.

1 THE COURT: Mr. Wells, what is your objection?
2 MR. WELLS: The whole tone of that question was the
3 only way that they ever figured this out was because he
4 mentioned insulin. We don’t need the sarcasm.
5 THE COURT: Is it a question or is it a --
6 MR. DeLEONARDO: I asked a question.
7 THE COURT: -- or is it a comment.
8 MR. DeLEONARDO: No, it was a question. He said
9 that the guy was able to mumble insulin and then they took him
10 and got him treatment. And I was --
11 THE COURT: And your question is?
12 MR. DeLEONARDO: My question is, is that the only
13 reason they determined that he had diabetes?
14 THE COURT: Well, I don’t think you said is that the
15 only reason?
16 MR. DeLEONARDO: I don’t remember exactly how I said
17 it but I said all right sir, --
18 THE COURT: All right.
19 MR. DeLEONARDO: -- is that the only reason --
20 THE COURT: I will overrule if that is the question.
21 THE WITNESS: No, this was already while he was
22 being resuscitated.
23 BY MR. DeLEONARDO:
24 Q Angle of onset. Isn’t it true that even you
25 wouldn’t weigh that heavily in trying to gauge whether someone
26 is impaired?

1 A I would weigh that less heavily than the
2 psychophysical testing, yes.
3 Q So, you wouldn't weigh that heavily because --
4 A As heavily.
5 Q -- because it is in your opinion very difficult to
6 gauge, correct?
7 A No, because the level of impairment on
8 psychophysical testing can be disproportionately present with
9 whatever amount of nystagmus there is.
10 Q Is it true that you previously testified that you
11 would not weigh that heavily as it is more difficult to gauge
12 an actual angle of onset?
13 A That it is more difficult than angle of onset?
14 Could you say that again?
15 Q Well let me ask if you had previously said, "I'm not
16 so sure of nystagmus at 45 degrees would be a hard sign as I
17 interpreted it. And I would use the scales that I obtained
18 from the DRE class. I wouldn't weigh that heavily." Isn't
19 that correct?
20 A Well that would correlate with a -- that would not
21 be a early onset. That would correlate -- if it was just
22 purely ascribed to alcohol, that would be a .05 -- that would
23 be a low alcohol level.
24 Q My point is you said that even gauging the time of
25 onset that is not something you weigh heavily -- when it is,
26 right?

1 A Well when it’s early onset, I wouldn’t weigh that --
2 I would weigh that heavier than I would if it were at 45
3 degrees.
4 Q Can you diagnose it within a .01?
5 A No.
6 Q Can you do it within a .05?
7 A Yes.
8 Q So, that based on your medical training -- it’s
9 difficult to do, is it not, it is very difficult?
10 A It’s not difficult to do but I think the more you
11 do, you become very accurate with it.
12 Q Okay. Now this idea of the Tharp’s Equation. You
13 are familiar with that?
14 A Tharp’s Equation is the -- that predicts the angle
15 of onset -- that talks about the angle of onset as predicting
16 the blood alcohol -- blood breath alcohol -- or blood alcohol
17 level, yes.
18 Q Let me ask you in the medical community do you
19 utilize what is called the Tharp’s Equation?
20 A No.
21 Q And the Tharp’s Equation, and you tell me if you
22 agree, is where you take the number 50 you minus it by the
23 angle of onset and that is supposed to prove say blood alcohol
24 content that should be expected in a person, correct?
25 A If it is due simply and only due to alcohol.
26 Q But I am saying that is what the test is supposed to

1 be correct?
2 A I wouldn’t call it a test. I would call it an
3 association.
4 Q Well the DRE actually looks for the actual angle of
5 onset, correct?
6 A Okay.
7 Q And they are taught to determine what that number
8 equates to by using this Tharp’s Equation, correct?
9 A Okay, so you are saying the test for nystagmus
10 utilizing the Tharp’s relationship equation, yes.
11 Q Well, you do know they use that, correct?
12 A Yes.
13 Q And it is not used anywhere in the medical
14 community, correct?
15 A Not that I know of, not that I have seen.
16 Q And you also don’t know of anywhere that has ever
17 been validated as shown to be proper, correct?
18 A What do you mean proper?
19 Q Well, it has never been validated to show to be
20 reliable, correct?
21 A I don’t know, I imagine you would have covered this
22 with Dr. Citek.
23 Q I am asking you --
24 A I don’t know.
25 Q -- you are coming in and saying the medical
26 community --

1 A I don't know.

2 Q -- that the DRE protocol follows everything. And I
3 am asking you is that true?

4 A I don't know. I've never -- being very honest as
5 always I am, I have not seen it utilized by an emergency room
6 physician or by an urgent care physicians.

7 Q Now, the other thing that you would do, is it not,
8 as a medical doctor, that if you found abnormalities in the
9 eyes, you would do follow up questions, is that right?

10 A Yes.

11 Q You would ask, what would ask if you were to see
12 something -- an abnormality in the eyes, what kind of
13 questions would you ask?

14 A Have you ever been injured? Has your eye ever been
15 injured, have you ever had surgery of the eyes? Do you have
16 any reasons why you are wearing glasses? Have you ever had
17 any eye infections? Have you ever been to an ophthalmologist?
18 Have you ever been to a neuro ophthalmologist?

19 Have you ever been to a neurologist, have you had
20 head trauma? Have you had any piercing injuries to the eye
21 with a sharp body? Have you ever had infections either viral
22 or bacterial to your eyes? Are you taking medicines for
23 glaucoma?

24 Do you have a family history of eye problems? These
25 are the kind of questions one could ask.

26 Q And is the DRE instructed to ask those questions

1 after they make a diagnosis on HGN?

2 A Not to my knowledge although they hopefully will

3 have asked questions during the interview and it is not

4 unusual for when the DRE evaluator encounters a finding that

5 make some kind of -- ask some probative questions that they

6 would have a whole litany prepared nor are they taught to

7 necessarily divert and abort and start asking questions.

8 In fact if they believe something may not be pure

9 they do the drugs that they will ask some follow up questions.

10 Would they resemble the ones I asked, perhaps not, but I do

11 believe they would certainly ask if you had an eye injury, if

12 you ever had any eye problems, have you ever seen -- do you

13 wear glasses?

14 They do ask follow up questions, maybe not as

15 extensive as what I just asked.

16 Q You were even asking about as a child whether they

17 had problems, correct?

18 A Correct.

19 Q Because they are trying to determine whether it is

20 congenital, correct?

21 A Well, a lot of cases of strabismus which happened --

22 appeared in childhood even after they are corrected surgically

23 may have some element of nystagmus that may not be evident as

24 their eye malady has been surgically corrected.

25 Q But you would agree with me that certainly someone

26 who is not even a medical technician would probably not know

1 to ask all those questions?

2 A Again, no questions it would be better to have the

3 physician and the ride-along, yes.

4 Q And it is your opinion that horizontal gaze

5 nystagmus is essentially the linchpin of the DRE protocol, is

6 that correct?

7 A In the sense that it was probably one of the

8 earliest findings that were used by the LAPD officers that

9 instituted the foundation for the entire department.

10 Q Because if I look at State's Exhibit No. 5 across

11 the top there is categories, you can certainly take a look at

12 that, there are categories that show HGN present and some that

13 show that it is not, correct?

14 A Correct.

15 Q And you would agree with me that the reason why you

16 believe it is the linchpin because it is the first major

17 indicator and it starts focusing the person on which drug

18 category is present, correct?

19 A I think it's a major point where the decision allows

20 you to fine tune your opinion.

21 Q And if the HGN was not able to be used to show

22 presence of drugs, you would agree with me that that would

23 make arriving at the opinion difficult if not impossible for

24 the DRE?

25 A No, it would make it more difficult.

26 Q Okay. Now, you also -- you would agree that you

1 could and I think you have said that maximum deviation -- the
2 nystagmus maximum deviation can be found as low as .04 BAC?
3 A Probably.
4 Q So, you would agree that even with someone with a
5 .04 BAC could exhibit signs of horizontal gaze nystagmus,
6 correct?
7 A And quite at the end point, yes.
8 Q And you would also agree with me that the DRE will
9 evaluate people with that level of alcohol in their system,
10 correct?
11 A They could because they could be much more severely
12 impaired than what could be explained by the .04 in which case
13 they would be more inclined to proceed and do a more in depth
14 evaluation.
15 Q Right. Okay. So, if you agree that horizontal gaze
16 nystagmus that is a CNS suppressor?
17 A It could be.
18 Q So, if that is present, you would agree with me,
19 would you not, that the drug recognition expert really has no
20 way to distinguish between what horizontal gaze is caused by
21 alcohol and what horizontal gaze is caused by drugs, true?
22 A If without the benefit of the breath alcohol --
23 Q That is .04.
24 A Oh, we have a breath alcohol that's .04?
25 Q .04.
26 A Then if he encounters nystagmus and out of

1 proportion which can be explained by the .04, then there is a
2 reason why he may consider and consider and be mindful of
3 other signs or symptoms that may be present that would explain
4 that.
5 Q Now, let's step back. You just said if what he sees
6 is out of range, correct?
7 A Correct.
8 Q What range?
9 A So, if he has early onset nystagmus, that would
10 certainly be a reason to -- and you have a breath alcohol of
11 .05, that would be the reason to start considering and being
12 mindful and vigilant for other depressants or inhalants.
13 Q Again, you agree that you can even have an early
14 onset in that situation, correct? Some people can have early
15 onset even at .05, correct?
16 A Yes. Typically, they're novices at drinking.
17 Q So, again, my question to you is how does the drug
18 recognition expert distinguish between horizontal gaze
19 nystagmus caused by that alcohol and horizontal gaze nystagmus
20 caused by a drug other than alcohol?
21 A Because there is more to the examination than just
22 the exam of the eye and the breath alcohol.
23 Q Okay. But you would agree with me that the linchpin
24 is not something that they are going to be able to use,
25 correct? It is not going to tell them anything, the linchpin?
26 MR. DAGGETT: Your Honor, I am going to object to

1 this because he is not familiar with Maryland Law. Maryland
2 Law there is a crime for driving in combination of the two.
3 So, I am not quite sure what the relevance of that particular
4 -- whether or not it is -- whether or not the nystagmus comes
5 from the alcohol or the drugs or the mixture of the two, there
6 are crimes for that. Where is a charge for that. So, I
7 don't, I fail to see the relevance and I am not sure this
8 doctor can -- can't possibly know what Maryland Law is.
9 MR. DeLEONARDO: Your Honor, if I can respond. It
10 has nothing to do with Maryland Law. It is not a crime to
11 drive with a .04 or .05 blood alcohol content. It is only if
12 you are impaired by that.
13 My question is -- I mean I think Mr. Daggett is
14 assuming drugs are also there. I am not assuming that. I am
15 saying how can you tell if there is horizontal gaze nystagmus
16 that is from drugs or not from drugs when you already have a
17 BAC that is going to produce the very same exact result. That
18 is what I was trying to understand --
19 THE COURT: I will overrule.
20 MR. DeLEONARDO: Thank you.
21 THE WITNESS: Okay, if you have a BAC of .05 and you
22 have an onset of nystagmus at 20 degrees that's very early.
23 So, that cannot be explained by the .05.
24 BY MR. DeLEONARDO:
25 Q I am so glad you said that. What you are referring
26 to, stepping back, is the Tharp's Equation, correct?

1 A Yes.
2 Q The one that has not been accepted in the medical
3 community anywhere, correct?
4 A Not that I have seen it applied.
5 Q And it has never been validated, correct?
6 A Perhaps you are right.
7 Q So, they are using this technique to try to
8 determine between alcohol and drug impairment using something
9 that no one has ever said is even reliable, is that a fair
10 assessment?
11 A If that’s how you look at it, I’ve found it to be
12 very reliable when I used it.
13 Q I am asking how you look at it?
14 A I think it’s reliable.
15 Q Okay. Do you know of any medical literature that
16 says it is reliable?
17 A Not much in medical literature involves itself with
18 these issues.
19 Q Vertical nystagmus, they are taught that shows a
20 high dose of a drug?
21 A That it could be a high dose.
22 Q Could?
23 A Yes.
24 Q Any validation studies anywhere that shows that
25 vertical nystagmus can be proven as a certain amount of drugs
26 in the system?

1 A Not that I am aware of or I don't believe so.
2 Q You know of anything that validates that in the
3 medical community --
4 A No.
5 Q -- this idea of vertical nystagmus?
6 A That validates it?
7 Q That validates that it actually is a sign or symptom
8 of a high dose?
9 A I'm not aware of any validation study to that?
10 Q All right. Lack of convergence. You said on this
11 one that it was difficult to know or to get a valid test with
12 lack of convergence. And I assume you were referring to
13 yourself, correct?
14 A Yes.
15 Q That as a medical doctor, did you get training in
16 medical school how to determine lack of convergence?
17 A Yes.
18 Q What is the medical reason for doing it?
19 A To test the optic nerve tracts and the enervation
20 for the extract of the muscles and the visual tract as well.
21 Q Okay, because you are using it to diagnose possible
22 medical conditions, correct?
23 A Yes.
24 Q And you would agree with me that even there you said
25 it was difficult to really get a valid test because it is very
26 hard to do, correct?

1 A It's hard in the sense that it requires a lot of
2 concentration on the examinee and a lot of cooperation.
3 Q Now when you have someone with a lack of
4 convergence, you would agree with me that there is a
5 substantial number of the general population who have lack of
6 convergence, correct?
7 A Yes.
8 Q And certainly they have a lack of convergence at two
9 inches from the bridge of the nose, right?
10 A Probably.
11 Q So, you would agree with me that the presence of
12 lack of convergence, which is one of the major indicators,
13 really tells you nothing about drugs being present in a
14 person's body, does it?
15 A In and of itself, it is a minor or soft sign, yes.
16 Q When you find it in your medical practice, do you
17 think there must be drugs in this person's system?
18 A No.
19 Q Let's talk about -- does age affect your vision?
20 A Yes.
21 Q Age affects your ability to have lack of
22 convergence, correct?
23 A Probably.
24 Q So, in fact, is it not true that people even as
25 early as their 30's will start demonstrating greater lacks of
26 convergence, correct?

1 A If you have sensitive equipment, you are able to
2 test large numbers, you may come up with that conclusion.
3 Q You don't believe that lack of convergence means
4 that you are unable to operate a vehicle safely, do you?
5 A No.
6 Q Let's talk about pupil size. You said it is quite
7 simple to do, right? That you put a card up besides somebody
8 and you determine their pupil size. Is that a fair
9 assessment?
10 A It is relatively easy to make a comparison.
11 Q But I guess in medical school they don't get it
12 actually until their second year of medicine, right?
13 A Second year of medical school.
14 Q Medical school, right?
15 A Yes.
16 Q And that is after they have had extensive training
17 in medical causes, the body and what to look for in the eyes,
18 right?
19 A They are starting to get that training, yes.
20 Q Because you would agree with me that when you
21 actually go to look at the pupils, you are also looking at the
22 eyes for disease, infection, and neurological problems,
23 correct?
24 A Well if are estimating the size of the pupil, pretty
25 much what you are going to be -- because of your field of
26 vision, you are probably able to just to see the sclera and

1 any abnormalities of the iris if you can get that much. So,
2 it's only so much that you can look at, at one time.
3 Q As a medical doctor when you see someone, what do
4 you consider to be an abnormal -- I guess what I -- let me
5 rephrase. In regular lighting conditions, what do you
6 consider to be an abnormal pupil size?
7 A Well, to me and I may be guilty of cherry picking,
8 but to me it's abnormal if it's constricted around two
9 millimeters and it's as dilated as maybe eight or eight and a
10 half and also in addition to just the pupil size, I think the
11 responsive time, the responsiveness is also a factor.
12 Q So, you would say in normal room light that you
13 would only consider it abnormal if it was two millimeters as
14 far as constricted or eight and half dilated? I think that is
15 what you said.
16 MR. WELLS: Objection. That is not what he said.
17 MR. DeLEONARDO: I am clarifying because that is
18 what I thought I heard.
19 THE COURT: All right.
20 BY MR. DeLEONARDO:
21 Q Is that correct, you were saying in room light you
22 would only find it abnormal if it was down to two constricted
23 and up to eight and a half dilated?
24 A Roughly.
25 Q Okay. So, I was correct. So, have you taken a look
26 at near darkness ranges, do you know what you would say near

1 darkness, what would be abnormal in near darkness?
2 A In darkness, I would --
3 Q In near darkness?
4 A In near darkness, your pupils obviously tend to want
5 to be dilated to allow any light in it to enter.
6 Q Okay.
7 A So, if it was less than three or four, I would
8 imagine I would start considering that as a possible finding.
9 Q And how --
10 A But I must admit it's very rarely that I would use
11 actually a pupillometer at my side.
12 Q I agree but I am asking you, you said you did use it
13 in medical school?
14 A Yes.
15 Q And so I guess I am curious. You said less than
16 three or four, how about dilation, how large would you allow
17 it to become?
18 A In what lighting condition? You said you were --
19 Q In near darkness, near total darkness?
20 A Well, if it were 9-1/2 and 10 it wouldn't -- I
21 wouldn't be concerned.
22 Q All right. Well, how about direct light, when you
23 are shining the light directly in their pupil? What would
24 your ranges be for that?
25 A More importantly than the range, I think it would be
26 the reaction time than important than the range.

1 Q Well, that is a separate issue, correct?
2 A Yes.
3 Q I am asking you about pupil size? What would you
4 consider with direct light, what would you consider to being
5 normal range for pupil size?
6 A Direct light, I would accept probably -- I hate to
7 be put in this because to me it's more of a gestalt rather
8 than it is an actual measurement.
9 Q Well, I appreciate that but I am asking you a
10 specific question, doctor. I am asking you what you would
11 consider a normal pupil size range with direct light?
12 A Between two and three millimeters.
13 Q Okay. All right. Have you had the opportunity to
14 look at the ranges used by the drug recognition expert
15 protocol?
16 A In the past I have. I understand they have changed
17 recently.
18 Q Do you believe and I think you testified earlier
19 that what they do is consistent with the medical community,
20 right?
21 A With their broad ranges, yes.
22 Q Okay. So, you like their ranges?
23 A Pretty much.
24 Q I am going to show you State's Exhibit No. 5. What
25 is the range, doctor, that they use for room light?
26 A I don't know. It would be in the manual.

1 Q It would be on the bottom right hand of the diagram
2 I just gave you, sir.
3 A Okay. (Reading.) Room light two and a half to five
4 millimeters.
5 Q And you indicated to us that in your medical opinion
6 the range should be two to eight and a half, is that correct?
7 A Yes.
8 Q So, you would agree with me that they are saying
9 people have a constricted or dilated pupil in situations that
10 you consider normal, true?
11 A I guess what I would be doing is cherry picking.
12 I'm looking for the cases that are much more dramatic.
13 Q Well, whether you call it cherry picking or not, is
14 it not true that the DRE actually uses a diagnosis of
15 constriction or dilation in situations that you say is normal?
16 A Personally, yes, but I think --
17 Q That is all I need.
18 A Okay.
19 Q Let me go to the next one. Near total darkness,
20 what is the range that the DRE uses?
21 A Five to eight and a half.
22 Q You indicated to us that you believed the normal
23 range would be less than three or four and up to 9-1/2 and 10,
24 correct?
25 A Okay, yes.
26 Q So, you would again would agree with me that the

1 range that you are testifying is medically normal is much
2 broader or much wider than what the DRE uses, correct?
3 THE COURT: What is the DRE range again?
4 THE WITNESS: Five to eight and a half.
5 MR. DeLEONARDO: The DRE range, Your Honor, was --
6 THE WITNESS: Five to eight and a half.
7 THE COURT: Five to eight and a half.
8 MR. DeLEONARDO: your Honor, if I can, just as a ---
9 exhibit for the Court, so the Court can follow along. Your
10 Honor, I am not going to even mark it. But just so you have
11 something to following along with.
12 THE COURT: Thank you.
13 MR. DeLEONARDO: In the bottom right hand corner,
14 Your Honor.
15 BY MR. DeLEONARDO:
16 Q So, just to go back, so, we were talking about the
17 range that was there, correct? And we talked about near total
18 darkness, right? The range for the DRE is five to eight and a
19 half? And you indicated that actually the normal range should
20 be less than three to four and up to nine and a half to ten,
21 correct?
22 A Okay, yes.
23 Q You would agree with me then that the DRE is going
24 to be indicating people having abnormal dilation or abnormal
25 constriction in situations that you medically would consider
26 them to be perfectly normal, correct?

1 A Actually, since I said that, I will stick with it.
2 It would appear that way.
3 Q Okay. All right, fair enough. Now as to total
4 darkness, you actually say the range is only two to three
5 millimeters, is that what you are saying?
6 A Uh-huh.
7 Q So, --
8 A Well, wait, I am sorry, total darkness?
9 Q I am sorry, direct light. I apologize, direct
10 light. That was my mistake. In direct light. Now, you were
11 saying it is only two to three millimeters, that is the extent
12 of the range that you would use for direct light?
13 A Well, it's not that much difference from two to four
14 and a half.
15 Q I agree. I am just asking you. You think two to
16 three millimeters, you think medically that is a normal range?
17 I mean your other ranges were quite wide. I am curious why it
18 is only --
19 A For direct light?
20 Q Yes.
21 A Well, I will tell you why, maybe because I do more
22 direct light than I do the others.
23 Q Okay, so you believe as to that two to three
24 millimeters is what you would go?
25 A Yes.
26 Q So as to three eye ranges, the only one that you

1 seem to agree with is the range that they use for direct
2 light, correct?
3 A It would appear that way.
4 Q All right, thank you, sir. Let's talk about
5 reaction to light. What medical conditions cause a problem --
6 oh, I am sorry. Let me step back real quick. So, when you
7 told me earlier that pupillometer is simple to use, you would
8 agree with me if you are using it against the wrong ranges,
9 you are going to reach the wrong result, true?
10 A As a DRE, you are using the pupillometer and you
11 measure it -- you have estimated inaccurately, is that what
12 you are saying?
13 Q If you measure it, even if you get it right, let's
14 assume -- it's only an estimate anyway, correct?
15 A Right.
16 Q Let's assume that you get it accurately. You would
17 agree with me that if you are using it and you are comparing
18 it against a range that is not even medically correct, you are
19 going to reach a wrong result in many cases, right?
20 A Okay, yes.
21 Q All right.
22 A But that's -- if you are concluding and making your
23 opinion on that alone.
24 Q Oh, I know. It is a gestalt, I got you. Let me go
25 to reaction to light, okay. Reaction to light. What are the
26 medical conditions that causes slow reaction?

1 A There could be traumatic reasons, there could be --
2 the question is, is it unilateral or bilateral. There are
3 conditions such as Argyll Robertson pupils and tonic pupils.
4 But these are not that common.
5 Q Okay, are there other more common reasons?
6 A The most common would be neurological events and
7 strokes but that's usually unilateral as well.
8 Q Or pinpoint stress --
9 A The most common one would be traumatic and post
10 infectious.
11 Q It could also slow with age, correct?
12 A Correct.
13 Q Your reaction time could actually start slowing
14 again even at 30 years of age, correct?
15 A I don't know exactly when but there is a continuum,
16 yes, the older the slower.
17 Q Is there anything in the manual that discusses the
18 effect of age and allows it to tell the DRE to factor that in
19 when determining reaction time?
20 A Not that I know of.
21 Q Is there anything that discusses the effect of
22 reaction time on any of the things that you have just listed?
23 A In the manual that you are saying?
24 Q Yes.
25 A No.
26 Q Now, what do you consider to be "a normal reaction

1 time?”

2 A Brisk.

3 Q Okay. Brisk? What does brisk mean if you can give

4 us some definition?

5 A Well, I think if you’ve done 20 of them you will get

6 a feel for what brisk is.

7 Q So, for you -- but you would also agree that brisk

8 depends on the patient that you are evaluating?

9 A Yes.

10 Q That each patient, you are going to have sort of a

11 sliding scale depending upon how old the patient is, how much

12 they weigh, whether they are taking prescription medications,

13 is that fair?

14 A I wouldn’t -- I’m not going to consider all those at

15 the same time about their weight as it impacts their reaction

16 time. But I would, if we have to be objective about it,

17 probably say within a third or fourth of a second, four tenths

18 or three tenths of a second.

19 Q Okay. So, you would agree, however, that it can be

20 longer than that? Again, it can be longer than that if there

21 are other medical conditions or some people naturally have

22 that?

23 A Yes.

24 Q All right. So, again, would you consider that a

25 major indicator of the presence of drugs?

26 A Yes, I would consider it a major indicator.

1 Q So, when you see a slower reaction time, you are
2 telling me medically your reaction is that somebody has got
3 drugs in them?
4 A No, it's from the many, many individuals that I saw
5 under the influence that I saw those findings.
6 Q It was in your years of medical experience, correct?
7 A No, it was the years working with the police
8 department.
9 Q Would you agree with me, however, that someone who
10 is taking a therapeutic dose of a drug could have a slowed
11 reaction time and not be impaired by the drug behaviorally?
12 A Yes.
13 Q So, you would agree with me that even if you use the
14 factor of reaction time that that tells you really nothing
15 about the ability of the person to, one, even be impaired by
16 the drug and, two, operate a car?
17 A In most cases, yes. It's hard to make a correlation
18 and predict that because of someone's pupil reaction that they
19 are going to be impaired to certain degree -- that there's --
20 I don't know the correlation to that.
21 Q Okay.
22 THE COURT: All right. We are going to recess for
23 lunch. A couple of questions before we do. What is the
24 absolute deadline for Dr. Zuk to leave to catch his flight?
25 MR. WELLS: Dr. Zuk, what is your absolute deadline?
26 THE COURT: 6 o'clock flight?

1 THE WITNESS: 6:30 or 7:00, I looked it up at the
2 reservation. It wasn't at 6:00. It's a little after 6:00.
3 THE COURT: A little after?
4 THE WITNESS: Yes.
5 THE COURT: 6:30 let's say?
6 THE WITNESS: Yes.
7 THE COURT: And you would like to leave by -- is
8 4:00 too late?
9 MR. DAGGETT: Yes, Your Honor.
10 MR. WELLS: Yes. I think 4:00 would definitely be
11 too late.
12 THE COURT: How about 3:30?
13 MR. WELLS: 3:30 is pushing it. I think 3 o'clock.
14 THE WITNESS: I will take the chance.
15 THE COURT: Unlike me, Dr. Zuk probably abides by
16 the speed limits.
17 (Laughter.)
18 THE COURT: What about 3 o'clock?
19 THE WITNESS: 3:15.
20 THE COURT: 3:15, all right. Now, any reason if we
21 recess until 1:30 that we can't get Dr. Zuk out of here by
22 3:15?
23 MR. DeLEONARDO: Again, I think I should be able to
24 get through probably in another hour and 15 minutes or so.
25 THE COURT: Hour and 15 minutes. Well 1:30 that
26 would then put us at 2:45. So, we are already within a half

1 an hour of the deadline. How much time does State need for
2 redirect?
3 MR. WELLS: It depends on his cross.
4 THE COURT: Well, how --
5 MR. WELLS: I don't expect my redirect to take an
6 exceptionally long period of time but I also haven't heard
7 half of his cross so it is kind of hard to gauge.
8 THE COURT: Well, Mr. DeLeonardo, I think you can
9 expect me to be moving you along on cross when we come back.
10 MR. DeLEONARDO: Okay. And I am trying to move as
11 quickly as I can.
12 THE COURT: I am not saying you are not trying. I
13 am just saying reality is that I am going to be --
14 MR. DeLEONARDO: Okay.
15 THE COURT: -- moving you along.
16 MR. DeLEONARDO: Well understood.
17 THE COURT: All right, now, another question is did
18 you all confirm whether you are available Monday and/or
19 Wednesday afternoon?
20 MR. DeLEONARDO: I am available for --
21 THE COURT: You are already scheduled for Tuesday,
22 right?
23 MR. DAGGETT: Right.
24 THE COURT: Right. All right, Monday afternoon,
25 Wednesday afternoon?
26 MR. DAGGETT: Yes.

1 THE COURT: All right, when I say afternoon, I mean
2 beginning at 1:30.
3 MR. DAGGETT: Yes.
4 THE COURT: Everybody?
5 MR. DeLEONARDO: I am good.
6 MR. WELLS: I believe so, Your Honor.
7 THE COURT: All right. So, we will figure then that
8 after today, the next time we will be back here will be 1:30
9 on Monday afternoon. All right and then one final question
10 for Dr. Zuk.
11 THE WITNESS: Yes, sir.
12 THE COURT: Easier than the questions that you have
13 been asked so far. What is your first language?
14 THE WITNESS: Ukrainian.
15 THE COURT: Based on your name, I thought perhaps --
16 THE WITNESS: Greek.
17 THE COURT: No, I actually -- I was thinking that
18 perhaps you might originally have some ancestry from that part
19 of the world but how long have you been in the United States?
20 THE WITNESS: I was born here but we were in a kind
21 of European ghetto where we didn't speak English until we
22 started school.
23 THE COURT: Didn't speak English until you started
24 school?
25 THE WITNESS: No. Nobody in my community spoke --
26 THE COURT: Well, I am not able to detect -- I mean

1 your English seems perfect to me.
2 THE WITNESS: Well, the Detroit ghetto whips that
3 out of you real fast.
4 THE COURT: But are you saying that you still have
5 to do sometime some translations?
6 THE WITNESS: Yes. The words don't -- they are not
7 as fluent as I used to be in my native language.
8 THE COURT: Well, your English is, as far as I am
9 concerned, extremely fluent. All right. We will be back here
10 at 1:30.
11 THE CLERK: All rise.
12 (Luncheon recess was taken.)
13
14
15
16
17
18
19 A F T E R N O O N S E S S I O N
20 THE CLERK: Silence in Court, all rise.
21 THE COURT: Be seated, please. I apologize for my
22 tardiness. Ironically, I have been on the phone trying to
23 schedule a medical appointment. So, I apologize for being
24 late. All right, Mr. DeLeonardo?
25 MR. DeLEONARDO: Thank you, Your Honor.
26 THE COURT: And your very kindness that we need to

1 move along.

2 MR. DeLEONARDO: I am doing my best, Your Honor,

3 doing my best.

4 CROSS-EXAMINATION (Resumed)

5 BY MR. DeLEONARDO:

6 Q Step 5, divide attention test. There is essentially

7 several that are used and I am just going to walk through

8 generally some of those if I could with you, okay?

9 A Sure.

10 Q First of all was the Romberg test. And you would

11 agree with me, would you not, that there is actually the way

12 the DRE protocol does it. It has never been scientifically

13 validated, is that right?

14 A Probably.

15 Q And, in fact, it was actually excluded from initial

16 types of tests that were considered to do roadside field

17 sobriety test, correct?

18 A Yes.

19 Q And the way that you described, you said that the

20 way they do it is the way that you would see it done in the

21 medical community, is that fair?

22 A More or less.

23 Q Well you say more or less, what are the differences?

24 A Well they add the issue of divided attention where

25 they ask you to estimate timing. That is a significant

26 difference.

1 Q Significant? That is something in the medical
2 community, they never ask a person to estimate time while they
3 are doing the Romberg test, correct?
4 A That's not necessarily so. They may ask in order to
5 stress the test to make it evoke illicit in abnormality.
6 Q But you said that that was --
7 A It's not routinely, not routinely.
8 Q You just said that was a significant difference from
9 what is done in the medical community, correct?
10 A Because it's routinely done in the DRE evaluation.
11 Q Correct, okay.
12 A Yes.
13 Q In addition, you would agree with me that when you
14 previously had said that in medical, you have actually never
15 had a person estimate 30 seconds when you did the Romberg, is
16 that correct?
17 A Correct.
18 Q And you would also agree with me that --
19 A That is prior to my, at times, being required or
20 applying some of the DRE protocol to a issue where, for
21 example, there was a -- the question of probable cause for an
22 accident whether there is a need to obtain a urine drug screen
23 or blood drug screen in an industrial setting where the
24 employer presents an injured employee and asked me, there was
25 a significant injury could you tell me should we be asking the
26 union to get involved, should we get a drug test, do we need a

1 urine drug test.
2 So, I would apply it in that case whether to get a
3 better idea of whether further testing is indicated.
4 Q But when you did it, you were basically just using
5 what you had learned from the DRE program?
6 A Correct.
7 Q All right. Not from medical school?
8 A Correct.
9 Q And you also, is it not true, that the Romberg test
10 it is actually looking for potentially spinal cord
11 neurological issues, correct?
12 A Posterior column spinal cord, the middle ear,
13 acoustic eighth nerve issue, --- issue, frontal cortex issues.
14 Q Well now when a DRE does that evaluation, what would
15 happen if you saw that a person swayed and fell to one side as
16 opposed to both sides?
17 A Yes, that's a very good question because usually
18 with drug impairment and intoxic states of delirium or with
19 liver failure, renal failure, the abnormalities tend to be
20 global in effect on the central nervous system. In which
21 case, there is no predilection for falling one way or another.
22 Q So, if I understand then, when you do the Romberg
23 test in the medical setting, the interpretation of what you
24 see, it is not only how they fall or sway but -- let me ---,
25 it is not that if they fall or sway, it is how they do it that
26 you are interpreting base on your medical experience, correct?

1 A I think you are asking two questions there?
2 Q I am asking is when you are evaluating the Romberg
3 test, is it true that you are not just looking if there they
4 sway or if they fall but how they do it, correct?
5 A Correct. And the DRE is told that when your
6 findings tend to be unilateral whether it is the pupil,
7 whether it is nystagmus, whether it is falling to one side on
8 the walk and turn or whether it is the Romberg, that
9 unilateral issues -- unilateral findings tend to be in the
10 medial realm and less in the drug impairment realm.
11 Q Have you looked at the 2010 manual?
12 A No.
13 Q I am going to show you page 16 of section 4, it was
14 defense Exhibit No. 5. And if you would take a look at that,
15 is that the section where they are talking about Romberg
16 Balance test and how to administer it.
17 THE COURT: Actually, isn't this Defendant's Exhibit
18 5?
19 MR. DeLEONARDO: I think -- did I said State, I am
20 sorry it is Defendant's, you are right.
21 THE COURT: Okay.
22 MR. DeLEONARDO: Defendant's Exhibit 5.
23 THE WITNESS: (Reading.) Okay, I have reviewed the
24 two and a half pages in the section of Romberg and the
25 question was?
26 BY MR. DeLEONARDO:

1 Q The question was is the DRE manual does it explain
2 the nuances that you described in evaluating and judging
3 whether a person has a neurological condition or it is from
4 drugs?
5 A No, evidently who compiled this, didn't attend my
6 lecture to the International Chiefs of Police on the topic.
7 Q I am sorry, I didn't hear you?
8 A Evidently, whoever compiled that didn't take notes
9 from my lecture.
10 Q Because you would tell them that you have to
11 absolutely do that if you have any ability to apply the test
12 correctly?
13 A If I were to give the least amount instructions, I
14 would include as an asterisk on many of those pages that any
15 unilateral finding should be suspect more and more in the
16 direction of a non-drug issue and as opposed to bilateral
17 symmetrical findings.
18 Q Now, in the medical community as well, how do you
19 perform the Romberg test?
20 A I first of all make sure that they do not have a
21 broad based gait, I have -- because a broad plant of the feet
22 will stabilize any abnormality and hide any abnormality of
23 that Romberg.
24 So it's imperative that their feet be close
25 together. The toes, next to the toes and the hill, next to
26 the hill.

1 In which point, I have them at times either put
2 their hands at their side or actually stick their hands out in
3 front 90 degrees.
4 Q Okay.
5 A Because in my experience with hands at the side if
6 they are faltering they will tend to use the appropriate sense
7 of their hands sliding on their legs to give them an idea of
8 which way they are falling.
9 So I do ask them to have their hands straight out at
10 90 degrees and I observe first with their eyes closed -- or
11 with their eyes opened because there is a significance to a
12 sway or a fall unilaterally or fall bilaterally if it occurs
13 with the eyes opened as opposed to their eyes closed.
14 Q Okay.
15 A The sway -- the fall of impairment with the eyes
16 opened tends to implicate the cerebellar region more than it
17 does the middle ear and the frontal cord, --- and the
18 posterior columns.
19 Q So you have them -- just to summarize if I have got
20 it right. You have your feet together, your toes together,
21 you have them put their arms out in front, correct?
22 A Yes.
23 Q And you have them stand looking ahead?
24 A I have them stand looking ahead but also I do at
25 times ask them to look up because I learned years ago from an
26 instructor that if you have them look straight they tend to

1 look at the horizon as an indicator, as to more information
2 feedback perceptibly as to where their body is so they use
3 that visual feedback.
4 So, if you have them look up, they are less likely
5 to see the horizon or anything that can duplicate that.
6 Q How far do you have them tilt their head back?
7 A 30 degrees.
8 Q So just a little bit up like this?
9 A Yes.
10 Q Okay. And you testified earlier that you found that
11 what they do is consistent with the medical community, what
12 the DRE does how they conduct the Romberg. You said that was
13 consistent with the medical community, correct?
14 A It's within reason, yes.
15 Q Okay. I am going to show you again page 17, which
16 describes to the officer how to do the Romberg test. Could
17 you take a look at that and I am going to ask you some
18 questions?
19 A (Reading.)
20 Q Do they instruct the individual to put their arms
21 out in front of them?
22 A No, their hands are at their sides.
23 Q So, you would agree with me that that is not
24 consistent with the medical community at large and not even
25 consistent with what you do?
26 A No, that is not how I do it.

1 Q Okay.
2 A I would venture to say you have just as many
3 physicians doing it with the arm at the side as opposed to the
4 arms --
5 Q Really?
6 A Yes.
7 Q So, just as many physicians then wouldn't be
8 counteracting the issues that you raised when I asked you
9 about why you do it that way?
10 A Again, there is no uniformity. You won't find --
11 you can have 20 physician do the Romberg and you will get 18
12 variations.
13 Q In addition, is it not true that the Romberg test
14 medically the way that it is taught that you are not to tilt
15 your head back, isn't that true?
16 A Not that I was -- I was taught that the additional
17 extension of the head takes away the ability to focus on the
18 horizon and it puts the semicircular canals in the horizontal
19 position so that you are more likely to find abnormalities of
20 the middle ear that would demonstrate themselves --
21 demonstrate itself as a sway or a fall.
22 Q Without fighting over that issue, you would agree
23 with me and I am talking about myself, you would agree with me
24 where in the medical literature does it tell you or is it --
25 let's strike that. Is there any medical literature that says
26 that you should tilt head back in the Romberg test, that you

1 know of anywhere?
2 A No.
3 Q And when you say 30 degrees, why not 45 degrees?
4 A As I recall --
5 Q Why not go farther back like this?
6 A The reason is because if you are roughly at 30
7 degrees you are going to put one the semicircular canals
8 exactly parallel to the floor so that the endolymph can flow
9 unimpeded and it will elicit abnormalities of the middle ear.
10 Q Which means anybody -- any normal person who did it
11 that way would exhibit the sway or to stumble, correct?
12 A Any normal --
13 Q When you go that far back?
14 A Any normal person?
15 Q Yes. I mean a lot of people would sway or stumble
16 if you standing there like this and putting your head back,
17 right?
18 A Well, maybe you are right because you have just
19 demonstrated yourself, you almost stumbled a little bit to the
20 side.
21 Q Absolutely.
22 A Yes.
23 Q So I am standing here and trust me I didn't have
24 anything for lunch that was CNS depressant.
25 A It tends to stabilize very quickly.
26 Q Okay. In that book, does it say how far back they

1 should tilt their head?
2 A (Reading.) It doesn’t specifically say in degrees.
3 But it stands to reason that if you go too far back you are
4 going to --
5 Q Stands to reason for someone who is a physician,
6 correct?
7 A Well, not really. We all have our own personal
8 experiences. You go anything passed 40 degrees, it’s going to
9 be a little more difficult. We have more range of motion.
10 Q You also said that you don’t look for sway, you look
11 for significant sway, right?
12 A Persistent sway, yes. Certainly not the initial few
13 seconds.
14 Q Does it in anywhere describe that you should only
15 score this if there are significant swaying?
16 A (Reading.) It doesn’t verbatim say that, however,
17 in the documentation because the documentation reflects the
18 degree, the documentation in itself should speak to the degree
19 of the sway.
20 Q But it doesn’t tell the DRE how much weight to give
21 normal swaying versus as you described significant swaying,
22 does it?
23 A Right.
24 Q And you would also agree with me on this 30-second
25 how long would a person -- first of all, we are not told how
26 to count 30 seconds, correct, to the test?

1 A They are told to estimate how long it takes for 30
2 seconds to elapse.
3 Q And so you would agree with me --- how long when you
4 are doing that do you give a person, what margin of error
5 around 30 seconds before you find abnormal?
6 A Personally, if it was in my urgent care setting
7 depending on the reason why I'm doing it, I mean, if I'm
8 estimating that, I'm already -- chances are, I'm considering
9 the impact issue of potential influence of being under the
10 influence of drugs. In which --
11 Q Do you want to answer my question --
12 A In which case I would estimate anything shorter than
13 25 or more than 35 -- I would make note of that and return
14 back to that if there were other --- of other abnormalities.
15 Q But if it was within 25 or 35 you would not
16 necessarily find it abnormal?
17 A No.
18 Q And does the manual tell DRE what to consider normal
19 when it comes to estimating time?
20 A (Reading.) No, it just repeatedly admonishes the 30
21 seconds to estimate the 30 seconds.
22 Q Now on the one leg stand, you also have -- is that
23 something you were taught in medical school to utilize?
24 A I have seen it in training, yes.
25 Q And how are you told to utilize the one leg stand in
26 medical?

1 A I can't specifically recall the experience where I
2 was taught that.
3 Q Well, you testified earlier that the way they do
4 things is consistent with the medical community?
5 A Meaning that there is a range and that it is not out
6 of the range.
7 Q But if you don't recall how you were taught to do
8 it, I am confused as to how you can say that the way they do
9 is medically accepted?
10 A Because I don't recall ever doing the class or
11 having watched them perform it where I thought for any reason
12 that it was anything other than acceptable.
13 Q Just acceptable to you?
14 A Yeah, it didn't seem abnormal or unusual. Again,
15 the only unusual part I've already mentioned about was the
16 protractor over to the nose.
17 Q You also would agree with me that in the field
18 validation study -- field sobriety tests, it only uses one
19 leg, correct?
20 A I'm not familiar with the details of that. I know
21 that it was presumed that it was in there. I didn't know that
22 it tested only one leg.
23 Q Well would that be significant to you that they are
24 now requiring someone to do it with both legs?
25 A Well I think it should be done with both legs.
26 Q And so you think it ought to be done with both legs.

1 What kind of allowances should be made for the person doing it
2 with one leg and versus both legs? What happens if they can
3 only do it with one leg?
4 THE COURT: What happens what?
5 MR. DeLEONARDO: I am sorry. I will rephrase.
6 BY MR. DeLEONARDO:
7 Q What medically would you derive from the fact that a
8 person can only do it with one leg?
9 A Well, I am assuming also then they would not be able
10 to do much of the -- well, let me rephrase that. If they are
11 only able to do with one leg, I would inquire as to why that
12 individual is having difficulty and may even ask him verbally
13 to respond as to are you having trouble and why, can you tell
14 me why?
15 And if I really still needed to probe I would ask if
16 he was having hip problems? Does he have any history of hip
17 injuries, are then ay arthritic changes, any surgeries, any
18 abnormalities, do they take medicine for arthritis? Any
19 problems with their ankle or foot or even with --
20 Q So, those would be questions that you would need --
21 A -- the back. You can have a pain in the back or in
22 the neck that would limit your ability to lift your foot
23 because as you lift your right foot, the entire musculature of
24 the backs of your spine from the neck down to the sacrum
25 actually stiffens this proportionate to stabilize and make up
26 for the fact that this instability is -- the weight is now not

1 shared evenly on both sides.
2 Q So you would agree with me then that an abnormality
3 on the one leg stand doesn't mean that you are impaired by
4 drugs?
5 A Not in and of itself, no.
6 Q And you also would agree that those are not the kind
7 of questions that a DRE is instructed in the manuals not
8 instructed to ask, are they?
9 A From the class I attended, they were instructed
10 in --
11 Q And that was again when?
12 A 20 some years ago.
13 Q Okay.
14 A They were instructed and encouraged to talk and to
15 interact with the individual being evaluated constantly and
16 consistently.
17 Q You would agree that is not a person they have trust
18 with though, correct?
19 A Not necessarily, they tend to have less trust with
20 them than I would see in a medical environment.
21 Q And that test is done after they are given the
22 Miranda Warning according to the protocol, correct?
23 A I think so, yes.
24 Q Finger to nose. You said -- you described the
25 finger to nose test, were you taught that in medical school?
26 A Yes.

1 Q And how were you taught to perform that?
2 A With the standing feet together, eyes closed, hands
3 at your side and then at about 90 degrees to extend your arm
4 and your hand with your index finger pointed and make a
5 wide --
6 Q Okay, I am sorry, if I could just stop, I want to
7 make sure that I follow. You said that their hands together?
8 A Initially, yes.
9 Q Hands together in front?
10 A No, hands together at your side?
11 Q On the side?
12 A Yes.
13 Q Okay.
14 A Then abduct each arm out --
15 Q Okay.
16 A -- to the plain of the body with your eyes closed at
17 all times, and then make a large arch so that it's not with
18 your elbow or wrist flexed, so that it makes a large arch and
19 then come back and touch the tip of your nose.
20 Q So, I assume because they have their eyes closed in
21 this test, it doesn't matter that they look straight ahead,
22 does it?
23 A Personally, I think if they are looking straight
24 ahead, it would probably easy than if their head is extended.
25 Q Okay. Because if their heads is actually tilted
26 back it could throw off their equilibrium?

1 A Yeah, I think it makes it probably a little bit more
2 difficult to do.
3 Q Okay. You know how the DRE teaches it?
4 A I'm sure you will tell me.
5 Q And I will. Section 4, page 22. You testify the
6 way they do it is medically accepted in your opinion? Do they
7 do it the way you just described?
8 A (Reading.) It doesn't remark as to how to extend
9 the hand and make a wide arch. But from my recollection of
10 the instructions, the instructor demonstrates it in that way
11 where the arch is a wide arch.
12 Q Is there any difference?
13 A And the head is tilted back. So what that does that
14 adds -- it's almost a minor form of divided attention where
15 you are stressing the system and you are making it slightly
16 more difficult to unmask any abnormalities sooner.
17 Q What you just told me by tilting the head back it
18 would give you less reliable results, you just said you
19 wouldn't do that, correct?
20 A I'm saying that because in the urgent care setting
21 unless I'm looking for drugs, I'm not -- if I make my
22 screening test so difficult, I'm going to be concluding that
23 all my patients are abnormal.
24 Q But the only training that you received in having
25 them to it that way is from the drug recognition expert
26 program, correct?

1 A About the head back?
2 Q Yes.
3 A No, that was shown to us in another time years ago.
4 Q In a medical?
5 A Yes. Probably not for the same reason. I think it
6 was meant to -- this was meant to -- I think it was in the ENT
7 setting --
8 Q I don't want to talk about any further than -- my
9 understanding is that is not what you said but I will move on.
10 Pulse rate. How do you medically when you take pulse, what
11 timeframe do you use?
12 A If the heart rate is exceptionally slow or irregular
13 or exceptionally fast, I will take it for a full minute. If
14 for the first 15 seconds, I feel no irregularity and if it is
15 within what I believe will end up being a range of 60 or so
16 beats per minutes even as much as 70 or 80, I will take the
17 liberty of counting up for 15 seconds and multiplying by four.
18 The faster the heart rate I will tend to take it for
19 the full minute with the understanding that with a very slow
20 rate or a very fast rate if you take if for 15 seconds and
21 multiply by four you could be multiplying an error.
22 Q You were taught in medical school to do a pulse for
23 60 seconds isn't that true?
24 A 60 seconds, yes.
25 Q Thank you. You also would agree with me that -- I
26 guess it was previously discussed -- actually I will step back

1 from that. There are a number of things that will affect the
2 pulse rate, correct?
3 A Yes.
4 Q Would you agree with these things how frequently
5 someone's exercise will affect it, correct?
6 A Correct.
7 Q Their fitness level and whether they are obese,
8 correct?
9 A Absolutely.
10 Q The stress of the situation that they are in,
11 correct?
12 A It could?
13 Q And especially when they are now in a situation when
14 they have been arrested and they are being examined, that
15 would be a pretty stressful situation and experience, would it
16 not?
17 A You know I've had that question before and I've got
18 to tell you in Los Angeles the arrest didn't seem to phase
19 anyone.
20 Q Well, I guess things are a little different in LA.
21 What about -- don't you agree that you would need some sort of
22 a baseline for the pulse to see what is normal for a person?
23 You would need to know what is their normal pulse rate,
24 correct?
25 A What is their normal pulse rate?
26 Q Right. To decide whether it is abnormal?

1 A Well, I think there are two different issues here.
2 If you are treating them one on one as a patient, as a doctor,
3 then you already have their baseline because it's taken over
4 several visits or over time.
5 To have their baseline is a luxury. If you don't
6 have that baseline, you then fall back to the range.
7 Q And is that a luxury with the Romberg test as well
8 to have a baseline?
9 A Well even in the medical setting very few doctors
10 will have a baseline on the Romberg unless they are following
11 someone for a specific --
12 Q Unless they are doing the test, is there
13 medically --
14 MR. WELLS: Objection. He needs to be allowed to
15 answer, he is cutting him off.
16 THE COURT: Let him answer. Doctor?
17 THE WITNESS: Yes, sir. Clearly, if in evaluating
18 someone that you suspect has an abnormal performance on a
19 Romberg to have seen that -- to examined that individual
20 sometimes in the premorbid state, meaning before whatever
21 abnormality you are ascribing has caused the abnormal Romberg
22 it would be good to know that they had a baseline that was
23 negative, in which case the positive is even that much more
24 significant.
25 BY MR. DeLEONARDO:
26 Q Doctor, when I asked you earlier how you performed

1 the Romberg test, you went to great lengths to tell me you do
2 it with the eyes opened and the eyes closed so you had a
3 comparison, is that correct?
4 A Yes, you can say that.
5 Q Thank you. The pulse rate, normal pulse rate is it
6 widely accepted in the medical community that the normal rate
7 would between 60 and a 100?
8 A I think most physicians would consider it normal
9 between 60 and 90, when you are hitting a 100, you are
10 starting to be -- it's officially called a tachycardia at a
11 100.
12 Q Really?
13 A Yes.
14 Q And is that in medical literature?
15 A Yes.
16 Q Tachycardia you believe starts prior to a 100?
17 A Yes -- no, no, at a 100.
18 Q Okay. So, up to a 100 there is no medical diagnosis
19 for anything between 60 to a 100, is there?
20 A It could be interpreted as normal, correct.
21 Q Thank you. As far as blood pressure, you said when
22 you were an orderly that you actually -- it was very simple to
23 do this and when you were an orderly you even were able to
24 find someone with an abnormal rate, correct?
25 A Correct. The assumption is that we don't have a
26 markedly abnormal rhythm. When the rhythm -- if the rhythm is

1 abnormal, it would becomes a little bit more technically
2 difficult to do.
3 Q And when you found that abnormality, did you
4 conclude anything as to the presence of drugs?
5 A Which abnormality?
6 Q When you were an orderly? When you described it --
7 A No, I reported it to the nurse.
8 Q Right. So, when you found that, what did you do
9 with that information?
10 A I brought it to the attention of the nurse.
11 Q Who then brought it to the attention of who?
12 A The primary -- the primary medical doctor.
13 Q There was a primary medical doctor who made the
14 diagnosis of a medical problem as a result of that, correct?
15 A As I recall the patient was transferred to a
16 different unit?
17 Q Okay. Is it not true that among the medical
18 community a normal heart rate is considered to be 120 over 80
19 or less?
20 A I'm sure you mean blood pressure.
21 Q I am sorry I meant blood pressure, you are right,
22 blood pressure. Isn't it normal that 120 over 80 and under is
23 considered is considered normal?
24 A 120 and 80 or --
25 Q 120 over 80 --
26 A -- and under?

1 Q -- and under? That if you are under that, actually
2 less than that is considered normal?
3 A Well, it depends on how far down and depending --
4 Q Obviously, there are extremes?
5 A Yes. But 120 over --
6 Q But generally how --
7 A -- 80 is sort of the -- is the mantra.
8 Q Okay. All right. And that it is not until you get
9 to 120 to 139 over 80 to 89 consistently that you would
10 diagnose someone with pre-hypertension, correct?
11 A Okay. Yes.
12 Q All right. Now, have you looked at the ranges for
13 the DRE protocol?
14 A As I recall that when I was in class it was 120 to
15 140 over 60 over 60 to 80.
16 Q So, the ranges they used that they consider you not
17 to be normal unless you are pre-hypertensive, right?
18 A They're considering 120 to 140 as a normal range.
19 Q I am going to show you State's Exhibit No. 5. This
20 was the matrix that you were discussing earlier, see that. In
21 the bottom hand under normal ranges, see that?
22 A Yes.
23 Q It says the normal range is 120 to 140, correct?
24 A Yes.
25 Q What is the diastolic range?
26 A 70 to 90.

1 Q And you indicated to me that actually 120 over 80
2 and under is what is considered normal, correct?
3 A Yes.
4 Q So, the ranges listed there actually are the ranges
5 for someone who is pre-hypertensive in the medical community,
6 correct?
7 A You could consider it that. I think the --
8 Q I am asking you what you consider?
9 A What I consider this is this is being extreme. If
10 they start making a much to do about a blood pressure of 126,
11 then there won't be enough time to do the evaluation.
12 Q So, if someone is under 120 over 80, let's say 115
13 over 80, that would consider to be a down blood pressure to
14 the DRE, correct?
15 A I would think under the DRE concept it is tending --
16 trending down --
17 Q Trending? Because, you don't rely on one blood
18 pressure, do you?
19 A You what?
20 Q You wouldn't rely on one blood pressure, correct?
21 A No, no.
22 Q How many blood pressure readings do they take in the
23 DRE protocol?
24 A I think they take two.
25 Q Really?
26 A Or one or -- one -- it's been --

1 Q Is it one or two?
2 A -- awhile.
3 Q I understand. Would you like to look at the manual
4 or would you presume it is one?
5 A I believe it is --
6 Q I am going to show you what has been previously
7 marked as State's Exhibit No. 16 and there is actually a place
8 on here for blood pressure, is that correct? On there, there
9 is actually three places to put pulse. How many places are
10 there to put a blood pressure?
11 A (Reading.) One. But that is -- that isn't the
12 whole picture. When an individual --
13 Q Please, I know it is not the whole picture. And you
14 are going to have an opportunity --
15 A No, but I mean it's even about the blood pressure.
16 Q Okay.
17 A Very often when they encounter blood pressure that
18 they feel is abnormal, they will repeat it even if it's not on
19 the protocol.
20 Q Really. It says that in the manual?
21 A They do it routinely.
22 Q When was the last time you attended a DRE training?
23 A The training, 20 years ago.
24 Q Thank you. Now, you also when you look at this, you
25 would agree with me that you would only -- it would only be an
26 issue for you as to how -- what you consider a high blood

1 pressure if it was persistent, correct?
2 A Yes.
3 Q You don't draw any inferences from a single blood
4 pressure reading, do you?
5 A You do if it is an individual that's on the floor
6 unresponsive --
7 Q All right, obviously, we can go through -- I am
8 asking specific. I mean generally in the medical community
9 one reading you would not draw a medical inference from, would
10 you?
11 A Even if they are not -- if someone that comes with
12 210 over 150 that is significant --
13 Q All right, let's assume that it is not. Let's
14 assume it is pre-hypertensive range?
15 A No, it wouldn't phase me at all.
16 Q Exactly. So, if someone actually took a reading,
17 they were in the pre-hypertensive range, it was only one time,
18 no significance to you?
19 A No.
20 Q Thank you. Now, --
21 A In and of itself, no.
22 Q All right. We talk about the taking the blood
23 pressure. You said it was a very easy thing to teach someone,
24 correct?
25 A Yes.
26 Q You would agree actually though, it is a very

1 subjective event, is it not?
2 A It is a subjective event subject to your ability to
3 perceive sounds.
4 Q Because you have to be able to listen to when you
5 first hear the sound and then when it stops, correct?
6 A Yes.
7 Q And that is not a precise thing to do to begin with,
8 is it?
9 A The slower you release the pressure, the more
10 accurate it becomes.
11 Q All right. What kind of errors can happen with
12 blood pressure cuff placement?
13 A If the individual's arm is too small -- actually,
14 too large is a much more common event, when it's too large and
15 you use a regular blood pressure cuff, you can overestimate
16 the systolic and diastolic and the inverse is true as well.
17 If the arm is very thin, you can underestimate the blood
18 pressure.
19 Q How many blood pressure cuffs do you use in your
20 medical practice?
21 A Three.
22 Q And does the DRE protocol, do they describe to them
23 about using a proper -- appropriate pressure cuff?
24 A From my experience, the vast majority of blood
25 pressures were taken with the standard size cuff during the
26 time in the dispensary very frequently they would come in and

1 request the oversized, extra large cuff.

2 Q Because they were not actually even provided that,

3 correct?

4 A Apparently not because they came in and requested

5 it.

6 Q And as far as --

7 A You could also miss -- you could place the blood

8 pressure cuff too far away from the point of where you are

9 using your stethoscope to listen, in which case, that's a

10 potential error as well.

11 You want to be maybe two or three inches at the most

12 above the point of where you are compressing or listening for

13 the sounds.

14 Q And in addition to those errors though you would

15 agree with me that those errors are actually not described in

16 the DRE program or things to be aware of, exactly where to

17 place on the arm, is it?

18 A I sure hope they say it.

19 Q You sure hope they did? Would you like to look?

20 A (Reading.)

21 MR. WELLS: Your Honor, in the interest of time, if

22 Mr. DeLeonardo could point out where specifically he is

23 looking so he is not flipping through the --

24 MR. DeLEONARDO: Unfortunately, I can't point it

25 out --

26 THE WITNESS: No, he did a good job.

1 THE COURT: Wait a minute. Say what?
2 MR. WELLS: Withdraw. I will withdraw that.
3 THE WITNESS: (Reading.)
4 THE COURT: I am sorry, Mr. Wells, anytime somebody
5 says something now at this point that begins with the interest
6 of time, my ears perk up, so what were you saying?
7 MR. WELLS: I withdrew it. I am just still standing
8 because my back hurts that is all, Your Honor.
9 MR. DAGGETT: And what I was going to say I think it
10 is appropriate at this time to see if there is a timeframe
11 here because we don't won't to be left with any time. And I
12 don't know if Mr. Cruickshank is going to have questions and
13 how long --
14 MR. CRUICKSHANK: Mr. Cruickshank is fine.
15 MR. DAGGETT: -- Mr. DeLeonardo is going to go.
16 THE COURT: What?
17 MR. CRUICKSHANK: I am fine. I think I will --
18 THE COURT: How much more time do you need,
19 Mr. DeLeonardo?
20 MR. DeLEONARDO: You are talking to me?
21 THE COURT: Yes.
22 MR. DeLEONARDO: Another 10 minutes.
23 THE COURT: 10 minutes. That would leave, it the
24 witness is excused at 3:15, that would leave 40 minutes for
25 the State.
26 MR. WELLS: That is fine, that is fine.

1 MR. DeLEONARDO: About 10 minutes.
2 MR. WELLS: Assuming it is 10 minutes.
3 MR. DeLEONARDO: Well, I mean, I can't control ---,
4 MR. WELLS: That is all I am saying.
5 MR. DeLEONARDO: So, I am trying.
6 THE WITNESS: On page 7, it gives a step by step
7 procedures for measuring blood pressure and I think it is very
8 nicely documented the instructions --
9 MR. DeLEONARDO: In the interest of time.
10 THE WITNESS: -- with the exception that it doesn't
11 give as in my year there was a caricature cartoon drawing of
12 where to place it on the arm. I don't see that same that same
13 caricature in this book.
14 BY MR. DeLEONARDO:
15 Q So, it doesn't tell anything about using the
16 appropriate cuff size, correct?
17 A It does mention that there are -- to pick the
18 appropriate size for the -- it says -- makes a reference to
19 the size --
20 Q It says to wrap it snuggly around, correct?
21 A No, there is a page before that. There is a
22 reference.
23 Q And it also doesn't say anything about placement on
24 the arm, correct?
25 A I didn't -- that's what I was looking for, I didn't
26 see that?

1 Q Quickly on -- I will pass on that. Let's go to
2 ultimately, I guess the real issue is the opinion, okay. If I
3 understood you correctly, did you say that you believe that
4 the DRE opinion is in fact more objective than the medical
5 community?
6 A From my experience in the medical community and even
7 observing in emergency rooms, when someone is deemed to be
8 under the influence of drugs, they really -- the issue is not
9 to document indicia of any impairment. The impairment is
10 really secondary.
11 The question is are the vital signs stable? If not,
12 do they need support to maintain stable vital signs and do
13 they need any intervention in terms of IVs, fluids, blood
14 pressure correction --
15 Q All right, if I could get to the question. State's
16 Exhibit No. 5, this is being matrix, correct?
17 A Yes.
18 Q This is what you described as the paint by number
19 Mona Lisa, correct?
20 A It wasn't just the Mona Lisa I said but --
21 Q Oh, an apple too, right?
22 A Okay.
23 Q But I guess what I am clarifying is when you do a
24 paint by numbers in order to figure out what it is, you
25 actually have to actually fill in all the numbers, correct? I
26 mean if I only filled in two of them, it obviously still

1 wouldn't tell what it is, correct?
2 A Well, that was my point. Is that in painting by the
3 numbers if you fill in as much data as you have very often
4 like I said even if I didn't paint the entire painting, you
5 would have an idea whether it is a bowl of fruit or a nude --
6 Q Well, how many numbers, boxes does the DRE have to
7 fill in before we can figure out it is a Mona Lisa? How many
8 do they have to hit? How many major indicators do they have
9 to have before they know it is a Mona Lisa?
10 A They should fill as many as they feel comfortable
11 and many as were obtained --
12 Q I am asking you --
13 A -- during the evaluation.
14 Q -- how many should they have?
15 A There is no number and there is no -- we can't break
16 it down that simple. For example, in my experience in the
17 jail dispensaries years ago if an individual had the right
18 psychomotor picture and had pinpoint pupils, that's all I
19 needed. It was an opiate, and if there were no other reasons
20 to think that there was nothing else on board --
21 Q So you wouldn't do any testing or do anything. You
22 would just treat him for an opiate and move on?
23 A Well, quite frankly, when we were seeing one after
24 the other, very often that's what we would do and then the
25 question would be are they safe to house. And this is where
26 it was made up. If there was any question, we'd ask -- go in

1 the order and say, okay to book, reevaluate in one hour.
2 Q So, if I understand you correctly, you would tell me
3 that there is no set number of major indicators that have to
4 be present for the DRE to reach an opinion, correct?
5 A I think that is over -- such an oversimplification
6 as to make it impossible.
7 Q It is pretty straight, you are saying no. There is
8 no set number of indicators they need?
9 A If you want to phrase it that way and you are not
10 going to do adjust that, yes, there is no set number.
11 Q General indicators, all right. Is there any set
12 number of general indicators that you need?
13 A No.
14 Q So, and you said that this is subjective. How does
15 the DRE determine that someone is talkative? Is that an
16 objective evaluation or a subjective evaluation?
17 A That's subjective.
18 Q How about that they are fumbling, would that be a
19 subjective evaluation or an objective?
20 A That's on the border.
21 Q How about it being exaggerated reflexes?
22 A That's objective.
23 Q That is?
24 A Yes.
25 Q So, what is -- you don't believe that one person
26 might have a different definition of what exaggerated is to

1 the next?
2 A I think we're arguing about how many angels sit on
3 the head of a pin.
4 Q Oh, we are?
5 A Yeah.
6 Q I guess that is better than Mona Lisa. Let me ask
7 you this. You would agree with me that one of the things that
8 the DRE must -- strike that. Let me move back. You said that
9 there is none, but isn't there a concept in medicine the one
10 plus two, plus three, plus four, correct? You head that
11 before?
12 A No.
13 Q You never heard that?
14 A No.
15 Q Did you previously testify in Nebraska --
16 A Yes.
17 Q -- and in that you were also under oath, right?
18 A Under what?
19 Q You were under oath then --
20 A Yes.
21 Q Okay.
22 A If you can -- if that, in fact, is the case, maybe
23 you can --
24 Q I want to ask you -- I want to read it to you.
25 A -- let me to -- allow me to find what context that
26 was in?

1 Q Okay, well you just said that you never have used
2 that. I am just trying to clarify. Give me one second. I
3 will certainly give you a chance. Did you ever say, one plus
4 two, plus three, plus four is a term in medicine when it's
5 four plus, it's severe. One plus it's there but in a mild
6 way?
7 A Okay, I'm sorry. Now that makes sense.
8 Q So, you remember that?
9 A I thought you meant one plus with one finding, with
10 another finding and another finding gives a diagnosis.
11 Q And you went on to say --
12 A Well let me explain that.
13 Q Well let me just finish it and then you can explain
14 all of that. Okay? You went on to say so there is an attempt
15 to quantify it but in the end result what you have here is
16 general indicators. These are all different ways impairment
17 shows itself and you can't quantitate it. Is that what you
18 are saying?
19 A Very much of this you can't quantitate and it's
20 subjective, yes.
21 Q But in the medical community they do attempt to say
22 unless you have a certain number of indicators you are not
23 going to make a finding, correct?
24 A (No audible response.)
25 Q Unless you demonstrate a certain number of abnormal
26 situations in the medical community, you are not going to make

1 a finding in that, correct?
2 A Well, you may not state it emphatically but you may
3 say that's a possibility and whether it's important or not,
4 you can do testing to rule it in or rule it out.
5 Q Okay. So you would have to do --
6 A But the concept of one plus --
7 Q -- further testing, correct?
8 A The concept that you mentioned the one, two, three
9 or four plus means that, for example, if someone has performed
10 poorly on the Romberg, a very typical way of documenting it
11 would be if it was severely poorly performed. It's that four
12 plus. As if there is swelling in the ankle, the graded
13 ranges of swelling of the ankle would me minor one plus, two
14 plus, three plus and four pulse.
15 Q You understand that and, again, so those are all
16 medical assessments that have to be made individually for each
17 person, right?
18 A Yes.
19 Q Now, I assume you spent extensive time through
20 medical school and residency learning about --
21 THE CLERK: Defendant's Exhibit 6.
22 MR. DeLEONARDO: Thank you.
23 (The document referred to was
24 marked for identification as
25 Defendant's Exhibit 6.)
26 BY MR. DeLEONARDO:

1 Q -- medical issues, correct?
2 A Yes.
3 Q I show you defense Exhibit No. 6 and have you see
4 this schedule, the DRE protocol and how it is taught in the
5 class?
6 A Not this particular one.
7 Q Okay, but it is a schedule that you have seen before
8 the DRE school schedule?
9 A Yes.
10 Q Okay. Do you know how long they spend on physiology
11 and drugs in the DRE program?
12 A Maybe if you would tell me -- if you have done the
13 math, I will you tell you what I think.
14 Q Well, I can tell you. If you will look at Thursday,
15 9:00 to 10:05 and then 10:15 to 11:10. correct, an hour and 50
16 minutes?
17 A Okay.
18 Q You think that is sufficient to be able to make
19 those kind of medical assessments?
20 A Depending if these things were reiterated or
21 amplified and other things brought up in the course of the
22 other lectures because it's never that sterile, it's never
23 that clean cut, there is a lot of overlap from one class to
24 another.
25 Q And do you think that that adequately can be covered
26 in 12 pages in the manual?

1 A Well, they taught me blood pressures and pulse in 10
2 minutes and we were off and running.
3 Q You say you work in a hospital, does your hospital
4 emergency room physicians utilize the DRE protocol to diagnose
5 someone that is impaired by drugs?
6 A They use aspects of --
7 Q I am asking if they use this?
8 A They do not use this matrix, no.
9 Q Okay. Does any medical facility that you know of
10 use the DRE protocol to assess drug impairment being unable to
11 drive?
12 A To my knowledge, emergency rooms aren't burden with
13 that task of determining who's impaired and who can't drive.
14 Q Do they use this matrix or protocol to do that?
15 A If --
16 MR. WELLS: Objection. He just answered that.
17 THE COURT: To --
18 MR. DeLEONARDO: To determine if someone is impaired
19 and unable to drive?
20 MR. WELLS: He answered that and --
21 THE COURT: Well, I think he just said they don't do
22 that.
23 MR. DeLEONARDO: Okay. I --
24 THE COURT: They don't make the determination.
25 MR. DeLEONARDO: Maybe I missed that part, my
26 apologies.

1 BY MR. DeLEONARDO:

2 Q You, and in fact, at the end of this evaluation and
3 they are reaching their opinion, it is a differential
4 diagnosis, correct?

5 A Yes.

6 Q And so they are, in fact, reaching a medical
7 diagnosis at the end of this evaluation, are they not?

8 A It's not the traditional differential diagnosis with
9 the whole realm of medical possibilities. We're limited to
10 the question is this person impaired, is he chemically
11 impaired or impaired for other reasons? And what are the
12 conditions of the impairment?

13 Q But when they say that a person is impaired by drugs
14 and not a medical condition, you would agree with me that what
15 they are doing is making a medical diagnosis, correct?

16 A If you want to think of it that way. But in the
17 emergency room if it's --

18 Q You have answered, doctor, thank you. The last
19 thing I want to ask is you also -- they reached this opinion
20 without the benefit and frankly completely independent of any
21 confirmatory testing, true?

22 A That's correct.

23 Q And you would not do that, would you?

24 A Well, very often, that's all you have.

25 Q But --

26 A The toxicology doesn't come back for days.

1 Q But would you render a medical diagnosis of drug
2 impairment and no medical impairment without the benefit of
3 toxicology?
4 A I would, I have.
5 MR. DeLEONARDO: No further questions.
6 MR. WELLS: Thank you.
7 REDIRECT EXAMINATION
8 BY MR. WELLS:
9 Q Dr. Zuk, with regards to some of the questions that
10 Mr. DeLeonardo asked, one of the questions that he asked was
11 are you familiar with any other doctor that has ever testified
12 on behalf of the DRE protocol? Are you familiar with any
13 other ones that do?
14 A I mentioned the physician -- the neurologist in
15 Tampa. His name is Dr. Leonard Prockup, P-r-o-c-k-u-p, who is
16 the Chief of Neurology at the medical center in Tampa.
17 Q Are you familiar with any other medical
18 organizations that endorse DRE protocol?
19 A Yes, there were endorsements by two counties from
20 Florida and also by the State of Hawaii's Medical Association
21 rendered a unanimous opinion in support of the DRE program.
22 And it's tenants.
23 Q I am showing you what is marked as State's Exhibit
24 No. 17, do you recognize this?
25 A Dade County Medical Association unanimously endorses
26 the DRE program. Signed by Dr. Franco, M.D.

1 (The document referred to was
2 marked for identification as
3 State's Exhibit No. 17.)
4 BY MR. WELLS:
5 Q States' Exhibit No. 18, what is this.
6 A Broward County Psychiatric Society, signed by
7 Dr. ---, County Psychiatric Society, American Board of
8 Psychiatry and Neurology, American Board of Addiction
9 Medicine, Academy of Pain Management, American Board of
10 Quality Assurance and Utilization Review.
11 (The document referred to was
12 marked for identification as
13 State's Exhibit No. 18.)
14 THE CLERK: State's 19 and State's 20.
15 (The documents referred to were
16 marked for identification as
17 State's Exhibit Nos. 19 and 20.)
18 BY MR. WELLS:
19 Q State's Exhibit 19, what is this?
20 A It's a letter crafted by the Counsel of Hawaiian
21 Medical Association, signed by three physicians, their
22 legislative chair president and their health chair, after
23 reviewing materials and a hearing presented by the physician
24 who's also mentioned in signing the bottom that the Hawaiian
25 Medical Association endorses the DRE program and the
26 evaluation process. And believes these procedure, if properly

1 performed, by laypeople who are specially trained, so on and
2 so forth.
3 Q State's Exhibit No. 20 is actually a reiteration of
4 State's Exhibit 17. So, I ---. Now, with regards to medical
5 associations, clearly, how many -- what is the medical
6 association generally?
7 A It's a group of physicians that are practicing in a
8 community or county or city or state.
9 Q Okay. Now, what does it take to have a medical
10 association endorse a specific protocol or program?
11 A Well, I'm sure that they -- you have to submit them
12 documentation, paperwork, testaments, testimonials, and give a
13 demonstration and allow them to review the documents and
14 materials and await for them to have a meeting and discuss the
15 situation, take a vote on it, and render an opinion or
16 endorsement.
17 I think in all of those cases it was -- it went to
18 some trouble to mention that it was an unanimous opinion.
19 MR. WELLS: Move to admit.
20 MR. DeLEONARDO: No objection, I think it goes to
21 weight. I have no objection of the admission.
22 THE COURT: This would be State's --
23 MR. WELLS: 17 through 20, Your Honor.
24 THE COURT: State's Exhibits 17, 18, 19 and 20 are
25 admitted.
26 (The documents marked for

1 identification as State's
2 Exhibits 17, 18, 19 and 20 were
3 received in evidence.)
4 MR. WELLS: Court's indulgence?
5 (Pause.)
6 MR. WELLS: May I have this marked as State's
7 Exhibit No. 21.
8 THE CLERK: 21.
9 (The document referred to was
10 marked for identification as
11 State's Exhibit No. 21.)
12 BY MR. WELLS:
13 Q Did you have a chance to review this document?
14 A No.
15 Q What is this?
16 A It's a document that states at the heading that New
17 Jersey endorses the Drug Recognition Expert Program.
18 Q Can you continue to read, just briefly, not to the
19 Court but just scan over it?
20 MR. DeLEONARDO: I am just going to object as to
21 this. I think it is hearsay. It is an article basically in
22 some publication. That is all it is.
23 MR. WELLS: I will withdraw with regards to this
24 one, Your Honor.
25 THE COURT: All right.
26 (The document previously

1 marked for identification
2 as State's Exhibit 21
3 was withdrawn.)
4 BY MR. WELLS:
5 Q So, there are multiple organizations, not just
6 doctors, but whole associations of doctors that endorse the
7 DRE protocol, is that correct?
8 A Apparently.
9 Q Including the entire State of Hawaii's Medical
10 Association?
11 A Yes.
12 Q Can you give a ballpark number of the number of
13 doctors in Hawaii?
14 A Probably, I would say 8,000 to 10,000.
15 Q So, it is fair to say generally speaking that it is
16 generally accepted within the State of Hawaii the entire DRE
17 protocol?
18 A Yes.
19 Q Including everything that is taught there?
20 A Yes.
21 Q Including everything that Mr. DeLeonardo has spent
22 an inordinate amount of time trying to pick apart? I will
23 withdraw that. I didn't mean it quite that way.
24 MR. DeLEONARDO: I just wanted to know if they knew
25 it as well as he did.
26 BY MR. WELLS:

1 Q Is that correct?
2 A I miss that.
3 Q Withdraw.
4 THE COURT: I am going to reserve ruling on that.
5 BY MR. WELLS:
6 Q With regards to some of the other questions that
7 were asked, specifically, -- well a lot of the examples that
8 Mr. DeLeonardo has introduced or brought up with regards to
9 say the eye examination is a HGN or some of the things that he
10 asked are specifically with -- no not issues, lack of
11 convergence.
12 If somebody walked into your medical facility and
13 displayed lack of convergence, would you immediately think,
14 oh, they are under the influence of drugs?
15 A No.
16 Q Okay. Is that what the DRE does with the DRE
17 protocol?
18 A No.
19 Q Okay, what do they do?
20 A As been repeated probably numerous times, they
21 obtain the data, all the data points they can from the
22 information obtained from the observation of the individual,
23 from the evaluation, the assessments, the psychophysical
24 testing, the measurements, the statements, the findings,
25 putting it all together, deferring opinion until all that
26 information is in.

1 Looking at the salient features, the presence of the
2 pertinent positives, absence of pertinent negatives and
3 saying, does this fit any pattern that is familiar and could
4 it be caused by drugs and if so, which drugs.
5 Q Okay. Now with regards to horizontal gaze
6 nystagmus, Mr. DeLeonardo brought up a number of different
7 types of nystagmus. With regards to the test, the horizontal
8 gaze nystagmus, how does that deal with the different --
9 potentially different types of nystagmus versus chemically
10 induced nystagmus?
11 A Well, there are -- truly there are significant
12 number of types of nystagmus. However, most of those can only
13 be discerned using sensitive electrical testing and electros
14 and sensitive machines.
15 Many of the types of nystagmus that if they are seen
16 in the general population, they are so dramatic and so
17 dramatically different in character from the horizontal gaze
18 nystagmus as to be easily distinguished.
19 There are cases where eyes go in opposite
20 directions. There is a type of nystagmus that slowly goes to
21 one side and then jerks past the midline over to the other
22 side.
23 There is types of nystagmus where the eyes are
24 bouncing in opposite directions up and down. There is
25 rotatory, there is elliptical, there is pendular nystagmus.
26 And it’s distinctly different from the horizontal gaze

1 nystagmus.

2 In fact many types of nystagmus that are present are
3 actually abated and are amassed by having them focus on the
4 pencil, on the object and focusing on that actually allows the
5 visual system to override the abnormality and the nystagmus
6 abates and goes away when they are forced to focus on a pen.

7 So, the horizontal gaze nystagmus is pretty uniform
8 and has a distinctive quality that is not easily
9 misinterpreted and misjudged by other types of nystagmus.

10 Q Now I want to talk about eye results I want to bring
11 up the issues with regards to pupil sizes. Do you remember
12 the question that Mr. DeLeonardo brought up about the pupil
13 sizes that you considered acceptable versus the pupil sizes
14 which are specifically delineated in the DRE program?

15 A Yes and it's not at all unusual for me to have a
16 different range than for the DREs to have a range.

17 Q Explain that?

18 A To understand that allow me to use an example. If
19 we look at a PPD -- TB skin test applied in Los Angeles
20 versus --

21 Q A what test?

22 A TB skin test applied.

23 Q Which is what?

24 A It's a --

25 Q TB, oh, I didn't know what you said.

26 A It's a protein derivative from the microbateria in

1 TB bug that is used to test someone's responsiveness and
2 allergic response implies that they may have had an exposure
3 in the past.
4 So, in Los Angeles, if we apply a PPD skin test and
5 it's read in two to three or four days, it is positive if it
6 is 10 millimeters wide.
7 If you have that same test to the same individual
8 done in South Dakota or North Dakota or Nebraska or Iowa, it
9 is positive at five millimeters. So what is the difference?
10 The difference is we have different populations.
11 The point is in Los Angeles there is such a high
12 prevalence of tuberculosis that if we assess anything over
13 five millimeters as being positive, we are going to rule the
14 entire population as positive reactors to TB skin test.
15 Whereas in North Dakota, South Dakota, and parts of
16 the Midwest, it's so rare that you scale back and you have a
17 lower threshold because you have fewer people that would be
18 reacting and if someone is reacting at five millimeters, there
19 are more likely to have been exposed to TB in the past.
20 So how does that go to the fact that my -- what I
21 consider abnormal ranges. My range is wider therefore I will
22 consider more patients as having fallen into the normal range
23 because I'm not -- in my practice, I'm not seeing
24 predominately impaired drivers and possibly under the
25 influence of drugs.
26 So, it's simply a mechanism to if you have a

1 narrower range as the DRE program has it will identify more
2 people as possibly involved -- you have simply more data
3 points and if you are painting a Mona Lisa, you'll have more
4 shading and you will be able to interpret it and understand it
5 as Mona Lisa even more acutely.
6 So, there is a reason why the ranges are different.
7 Q Okay. But that would mean to indicate that more
8 people would be picked up under this range, is that correct?
9 A Right. And if that were the only reason why --
10 Q Let me finish. What refers to that, would that mean
11 that in people who were -- I mean, isn't that a flaw, I mean
12 wouldn't that under the DRE protocol just in and of itself
13 isn't that a flaw or is there something that makes it -- that
14 takes care of that issue then?
15 A If it were the only set of data that you had to
16 determine in that you would assess someone as being under the
17 influence because of that, then that would be a problem with
18 that.
19 But because we have so many other corrective
20 factors, we have 70, 80, 90 other types of input into the DRE
21 report and the opinion that it will mitigate that. It just,
22 again, it just gives you more data points to give more of a
23 correct image.
24 Q Okay. Some of the examples Mr. DeLeonardo gave with
25 regards to therapeutic dosage and I believe it was therapeutic
26 dosage of something with regards to say causing HGN and that

1 is it -- and I believe the response was -- and if you will
2 allow me a little bit leave just to phrase the question.
3 The question was basically are the therapeutic
4 dosage which could cause horizontal gaze nystagmus? So, if
5 somebody was under a therapeutic dose is it possible that they
6 could come up with horizontal gaze nystagmus?
7 A Yes.
8 Q Okay, my question with regards to the DRE protocol,
9 is there something that takes care of that possibility that
10 would negate that being a flaw or negate that being from
11 automatically determining that person must be under the
12 influence of a depressant?
13 A Well, there's -- I guess the answer would be the
14 degree to which it occurs and the -- are there other findings
15 because as everyone has heard, the opinion does not come from
16 one finding alone. So other findings would mitigate that.
17 The presence of or the absence of.
18 Q Okay, with the Romberg test, there are differences
19 between the medical -- excuse me, the way that you do it and
20 the way that that DRE does it. Do you find those differences
21 to be fatal to the usefulness of the Romberg text?
22 A No.
23 Q So, the finger to the nose test is not done exactly.
24 Is the finger to the nose test still useful?
25 A It is not a deal breaker.
26 Q What about the pulse?

1 A The same thing.

2 Q The timeframes were different, it was 30 times 2
3 versus 60 times 1, how much difference does that really make?

4 A I don't say -- I don't think it's critical but I
5 would prefer they go back to the minute.

6 Q Okay. That is more accurate --

7 A Yes.

8 Q -- the minute? Okay.

9 A And because you get so much more information just
10 for 30 seconds more.

11 Q Okay. With regards to the blood pressure cuff
12 placement, are these the --- size of the cuff and the
13 placement -- is it generally discernable if something that the
14 DREs can easily and usually do correctly?

15 A If they have the ability -- assuming they are not
16 doing their evals totally in the field where and assuming they
17 have access to a large blood pressure cuff, I think a large
18 blood pressure cuff can make a difference and maybe as much as
19 10 millimeters of mercury.

20 Q With regards to the opinion, the final phase, there
21 was subjective indications versus objective indications, is
22 that correct?

23 A Yes.

24 Q Is that consistent with what happens in the medical
25 community as well under subjective and objective conditions in
26 the medical community as well?

1 A Yes.
2 Q Is that -- well strike that. So, that goes to the
3 weight -- strike that as well. Now, with making a diagnosis,
4 Mr. DeLeonardo was quick to point out that there is no -- you
5 have to have three or five or seven or all of the main
6 categories in say or four or three of the general indicators,
7 is that consistent with what happened with the diagnosis in
8 the medical community?
9 A (No audible response.)
10 Q Should I rephrase that question?
11 A Yes.
12 Q Okay. He indicated that there is no A plus, B plus,
13 C plus, D equals dissociative anesthetics in the DRE protocol,
14 is that correct?
15 A Okay.
16 Q When you are making a diagnosis in the medical
17 community is it that simple in the medical community either?
18 And is there a one plus two plus 3 plus 4?
19 A Very seldom, at times there is. Most of the time
20 you need some more investigation, more information and,
21 however, even at those points, you still proceed with a
22 provisional assessment of what you think is the diagnosis and
23 make some plans in terms of ruling some of your other
24 differential diagnosis in or out and you can proceed with your
25 treatment plan even without nailing down 100 percent with 100
26 percent certainty, which you believe is your differential

1 diagnosis. So, it doesn't stop you from proceeding forward.
2 Q Do you support the DRE protocol as being accurate?
3 A Yes, I do.
4 MR. WELLS: I have no further questions.
5 MR. CRUICKSHANK: May I ask some questions?
6 THE COURT: I thought you were fine?
7 MR. CRUICKSHANK: I was fine until I --
8 THE COURT: Go ahead.
9 RECROSS-EXAMINATION
10 BY MR. CRUICKSHANK:
11 Q: The medical associations that you are associated
12 with appear in your resume?
13 A I am not associated with the AMA or the Los Angeles
14 Medical Association.
15 Q Are any of the medical associations that you are
16 associated with as a member are in your resume?
17 A Are you saying written down?
18 Q No, I am asking you, are they in your resume?
19 A I don't belong to any medical associations.
20 Q You don't belong to any medical associations, zero?
21 A No.
22 Q Not Dade County or any of those --
23 A No.
24 Q -- we mentioned?
25 A No.
26 Q Okay. Thanks.

1 RECROSS-EXAMINATION
2 BY MR. DeLEONARDO:
3 Q Very quickly. Are the endorsements that you were
4 you were discussing about were they aware of the issues that
5 we raised when we discussed today about blood pressure, pulse,
6 Romberg, different dilation, pupil range, muscle tone, lack of
7 convergence, were those associations of all the things we
8 pointed out today that are not consistent with the medical
9 community?
10 A I am surprised you don’t have a dossier on the
11 signers.
12 Q Hey look, you have to catch a plane or I would be
13 happy, okay. So, I am trying to cut it direct here, okay. I
14 am asking you, do they know any of that information?
15 A I would imagine if someone signs their name as the
16 head of --
17 Q Do you know if they knew that information?
18 A I don’t know.
19 Q Did they know it as well as you seem to know the DRE
20 protocol? Do you know that?
21 A I don’t know.
22 Q And did these associations send this out to all
23 their members to vote on, or is this just a letter from
24 somebody who is in charge that somebody went to ask for it?
25 A No, it appears if you read them, it appears that
26 they had a meeting or convened a meeting or a committee and

1 because they stated they voted unanimously approved the
2 motion.
3 Q So, 8,000 to 10,000 doctors in Hawaii didn't get
4 together and review this program in detail and say this is
5 great?
6 A Correct, they did not.
7 Q And you would also -- do you also agree with me that
8 when you are talking about this diagnosis, when they go
9 through this protocol, does the DRE in reaching this opinion
10 have to do every step to reach the opinion?
11 A No.
12 Q How many steps can they miss?
13 A That is impossible to answer.
14 Q Could they completely not do the matrix at all in
15 other words not evaluate the person at all in reaching an
16 opinion?
17 A No.
18 Q Could they reach an opinion in a category that they
19 are impaired by and unable to operate safely if they have no
20 matrix indicators? Would that be acceptable if they had no
21 major indicators, could they reach an opinion that someone is
22 impaired by drug, not a medical condition and unable to drive?
23 A The one that comes to mind would be -- and we have
24 actually seen this, would be inhalational, hallucinogens,
25 which would -- the DRE evaluation could look exactly like that
26 based on the history of how the individual -- the description

1 of hallucination by individuals.

2 Q I am asking you though could a DRE find someone

3 impaired by a drug, unable to operate safely, if they have

4 none of the major indicators for these categories, other than

5 normal?

6 A If that has happened, I wouldn't condone it.

7 Q What about one?

8 A Could you give an example and which one?

9 Q Any kind -- let's take cannabis, could they find

10 that someone is under the influence of cannabis because their

11 pulse rate and blood pressure is up?

12 A No.

13 Q Would that be sufficient for you?

14 A No.

15 Q What about if they had a odor of marijuana?

16 A With the blood pressure and pulse up?

17 Q Correct.

18 A No. Now, the question is are they also showing

19 impairment and psychophysical testing?

20 Q Well, but you would agree with me that

21 uncoordination is not one of the indicators for marijuana, is

22 it?

23 A It is not on the general indicators.

24 Q So, again, in that situation if you had, let's say,

25 pulse rate, blood pressure, let's say that they determined

26 your pupils were dilated, would that be enough for you?

1 MR. WELLS: Your Honor, I am going to object to this
2 line of questioning. It is strictly hypothetical if he is
3 going to go through -- possibly with all these different
4 combinations --
5 MR. DeLEONARDO: I am just doing this one. I am
6 just doing this category.
7 MR. WELLS: I still object. It is a hypothetical
8 and he is not laying a foundation for a hypothetical and I
9 think it is unfair to ask the doctor saying could they do
10 this. I mean there is just too many factors that go into
11 play.
12 THE COURT: I will sustain. I think the doctor
13 answered -- said earlier in response to a question that there
14 is no set number of indicators that would be required -- I
15 think it is pretty tough -- I understand the purpose of the
16 line of questioning but --
17 MR. DeLEONARDO: That is fine. I will move on. I
18 understand, Your Honor. Let me just -- I will ask one more
19 thing.
20 BY MR. DeLEONARDO:
21 Q Is it not true that these major indicators can also
22 be seen in a person who is going through withdrawal or
23 doesn't have the drugs acting in the person?
24 A That is correct in some cases.
25 Q Correct.
26 A In which case they're -- the opinion of doctors that

1 I have spoken to about this topic, they're still under the
2 influence of that drug.
3 Q But you would agree that the drug, if they are going
4 through withdrawal, the signs and symptoms -- they may be
5 going through withdrawal on one drug but the signs or symptoms
6 may be -- make it appear that it is a different drug, correct?
7 A Correct.
8 Q Which means that if the lack of drug in their body,
9 not the drug that is making them --
10 A Precisely.
11 Q -- exhibit these signs?
12 A That's one of the reasons why you can't expect a 100
13 percent concordance with the opinion in the toxicology.
14 Q I understand. I am just being very precise. So,
15 you would agree with me that there are definitely situations
16 where it is the lack of the drug in the body that is causing
17 the signs and symptoms and not a drug at all, true?
18 A Correct, yes.
19 MR. DeLEONARDO: That is all I have, Your Honor.
20 THE COURT: Mr. Wells?
21 MR. WELLS: Nothing further, Your Honor.
22 (Witness excused.)
23 THE COURT: We have completed that with lots of time
24 to spare.
25 MR. DeLEONARDO: There we go.
26 MR. WELLS: Maybe I can respond to the Senate

1 Subcommittee now in Washington.
2 MR. DeLEONARDO: I don't think you want to go there.
3 THE COURT: I think I would stay away from them.
4 MR. DeLEONARDO: Yes, I think you don't want to go
5 there.
6 THE COURT: One thing I would observe on the blood
7 pressure issue, I have a doctor who doesn't think a 120 over
8 80 is really good enough. And I am starting to hear that more
9 and more. That 120 over 80 -- they would like it a little
10 lower than that. So, taking --
11 DR. ZUK: Atenolol once a day.
12 THE COURT: What?
13 DR. ZUK: Atenolol, --- once a day.
14 THE COURT: Actually, I take DiaPan.
15 DR. ZUK: DiaPan?
16 THE COURT: DiaPan, yes.
17 MR. DeLEONARDO: I suggest we have some doctors you
18 might want to talk to that are coming up.
19 THE COURT: All right, Dr. Zuk, have a safe trip and
20 a smooth flight. What airline are you flying.
21 DR. ZUK: United.
22 THE COURT: United, the friendly skies. First
23 class, no doubt?
24 DR. ZUK: No, sir.
25 MR. WELLS: Business.
26 DR. ZUK: It was business but the contract with the

1 prosecutor was that if any portion of my CV is redacted I go
2 back to the back.
3 THE COURT: All right. Want to take a recess or are
4 we ready to plow on?
5 MR. DeLEONARDO: I think maybe at least a short
6 recess would probably be appropriate just so we can pull all
7 the books out.
8 THE COURT: Oh, just because I will forget it. You
9 know we couldn't be in the same courtroom three days in a row.
10 We will be in Courtroom 2 on Monday afternoon. And I will be
11 sitting regular criminal in the morning and that is one reason
12 for that.
13 MR. DeLEONARDO: Okay. Understood, Your Honor.
14 THE COURT: All right, we will take a 15-minute
15 recess and then we will resume.
16 THE CLERK: All rise.
17 (Whereupon, a brief recess was taken.)
18 THE CLERK: Silence in Court, all rise.
19 THE COURT: Be seated, please.
20 MR. DeLEONARDO: Back on the record, do we need to
21 identify everybody?
22 THE COURT: No, I think we can --
23 MR. DeLEONARDO: Okay.
24 THE COURT: -- just press on.
25 MR. DeLEONARDO: All right. Well, Your Honor, we
26 are going to call, I know we indicated we would call a little

1 out of order just to accommodate all of the schedules, so, I
2 would call Dr. Jeffrey Janofsky to the stand.
3 THE CLERK: Please remain standing and raise your
4 right hand.
5 Whereupon,
6 DR. JEFFREY JANOFSKY
7 was called as a witness by the Defendants, having been first
8 duly sworn, was examined and testified as follows:
9 THE CLERK: Please have a seat. For the record,
10 please state your full name, spelling your first and last and
11 give your business address.
12 THE WITNESS: It's Jeffrey Janofsky, Your Honor.
13 J-e-f-f-r-e-y, last name is J-a-n-o-f-s-k-y. My business is
14 30 East Padonia Road, Suite 206, Timonium, Maryland 21093.
15 THE COURT: So, you don't have to catch a flight.
16 THE WITNESS: Just back to Pikesville, Your Honor.
17 DIRECT EXAMINATION
18 BY MR. DeLEONARDO:
19 Q All right, well thank you, doctor. If I could start
20 with first of all could you give us your educational
21 background, please?
22 A Sure. I attended Emory University for two years and
23 then obtained a BA from Johns Hopkins University. I then
24 obtained a MD from Johns Hopkins University.
25 I did an internship -- a rotating internship in
26 which is in psychiatry neurology in internal medicine. I then

1 was a resident in psychiatry at Johns Hopkins, did a
2 fellowship in forensic psychiatry at the University of
3 Maryland with Jonas Rappeport, and I guess that's the end of
4 my training.
5 Q Okay. Well, you had a lot of information there.
6 So, you went through -- you said your medical school was at
7 Johns Hopkins University?
8 A Right.
9 Q And you said you did various internships. Can you
10 tell us what that is?
11 A Well, in psychiatry one does a rotating internship
12 in the first year, so that's in both psychiatry, neurology and
13 general internal medicine.
14 Q Okay. And upon the completion of that internship,
15 what was your medical training after that?
16 A After the internship, I did a residency in general
17 psychiatry.
18 Q And as part of that just to ensure you are in
19 psychiatry, you have all the medical training as a medical
20 doctor, is that correct?
21 A Yes, I'm licensed -- I have been licensed to
22 practice in Maryland. I have been licensed to practice
23 medicine in Maryland since 1982.
24 Q And as far as where you currently work, where is
25 that?
26 A My primary place of work is at the Johns Hopkins

1 University School of Medicine. I'm an associate professor of
2 psychiatry. I direct the psychiatry and law program there. I
3 also co-direct an in-patient ward where I treat general
4 patients with psychiatric conditions many of which have
5 comorbid substance abuse or intoxication problems.
6 That's my major place of work. My other place of
7 work as a clinician and teacher is at the University of
8 Maryland. I'm a clinical professor of psychiatry at Maryland
9 and I co-direct the forensic psychiatry fellowship there.
10 Your Honor, that's the fellowship of Maryland that
11 trains forensic psychiatrist. Finally, Your Honor, I have a
12 private practice in forensic psychiatry and that's my Timonium
13 address.
14 Q So, currently, you said at Johns Hopkins you are the
15 director of psychiatry in the law division of that, is that
16 correct?
17 A Yes, program, yes.
18 Q Program, I meant. And you are the co-director at
19 University of Maryland School of Medicine?
20 A Of the forensic psychiatry fellowship, yes.
21 Q What does it mean to have a fellowship in forensic
22 psychiatry?
23 A Your Honor, after -- you are only eligible to do a
24 fellowship in forensic psychiatry after you have finished a
25 general psychiatry fellowship. So forensic psychiatry is a
26 subspecialty of general psychiatry.

1 And it’s the interface -- the general forensic
2 psychiatry is the interface between psychiatry and the law has
3 a broad area of things like competency to stand trial,
4 criminal responsibility, taking care of patients in
5 correctional settings and maximum security hospitals like
6 Perkins.
7 And on the civil side, things like malpractice
8 psychic injury, ad guardianship, et cetera.
9 Q So Clifton T. Perkins Hospital Center, you have been
10 a consultant for them as well?
11 A I spent part of my fellowship -- actually, I
12 started -- I worked there a medical student. I worked there
13 as a general residence and I worked there as a fellow and I
14 consulted there as a consultant for high risk cases for many
15 years.
16 Q And at Sinai Hospital, you were also in the
17 emergency room as a psychiatrist there?
18 A Yes. I spent -- I do not have my CV in front of me
19 but I spent a good many years as an emergency room
20 psychiatrist there.
21 Q Is it also true that part of your practice is in
22 relation to the District Court for the Baltimore City in doing
23 pretrial screenings?
24 A Right. So, as part of the District Court pretrial
25 screening program, one of the hats I wear actually while co-
26 directing the fellowship is doing evaluations for competency

1 and responsibility in the District Court.
2 I also do many other functions -- the District Court
3 offices is actually located in the Circuit Court in downtown
4 Baltimore, and it's there that I supervise actually medical
5 students, residence and fellows who are rotating through
6 forensic psychiatry teaching them how to do various kinds of
7 evaluations.
8 Q Now, in addition to your medical license, are you --
9 do you have any board certifications?
10 A Yes, I do.
11 Q And can you explain to us what is it to have a board
12 certification?
13 A Well, Your Honor, the recognized boards in various
14 medical specialties are governed by the American Board of
15 Medical Specialties and each individual specialty sets its
16 specialty requirements based on general American Board of
17 Medical Specialty requirements.
18 So, in psychiatry, right now, one has to complete a
19 year of internship as I said, which is rotating and then three
20 full years in general psychiatry in various -- there are
21 various things you have to do and number of patients you have
22 to see, et cetera.
23 If and only if you complete the residency, are you
24 then eligible to take the exam in psychiatry and in psychiatry
25 or the last board actually until this year required both a
26 written and an oral exam.

1 So you had to pass the written exam. If you passed
2 that, you take the oral exam. And if you pass that you become
3 a board certified general psychiatrist.
4 In order to be eligible to take the forensic
5 psychiatry subspecialty board, one has to complete a
6 fellowship in forensic psychiatry, which is an additional year
7 of training, which I have taken, and that includes rotations
8 of various sites, such as court clinics and one I run and work
9 at, rotations at maximum security hospitals, rotations at --
10 in prisons and jails and also some civil experience.
11 And if and only if you complete that training, are
12 you then eligible to take the written board in forensic
13 psychiatry and if you pass that you become a board certified
14 forensic psychiatrist.
15 Q And what about being a diplomat, what does that
16 mean?
17 A Diplomat is just another term of our -- means that
18 you have passed the board.
19 Q Okay. As far as medical licensure, you are licensed
20 in three states?
21 A Yes.
22 Q And what states would those be?
23 A Maryland, Florida and Pennsylvania.
24 Q As far as any teaching appointments, in addition to
25 your clinical practice, do you teach?
26 A Yes.

1 Q And where do you teach?
2 A I teach at Hopkins in Maryland, at Hopkins my
3 primary teaching responsibility is as a clinical general
4 psychiatrist. I run an in-patient unit, that's a teaching
5 unit, it has residence, medical students, nursing students,
6 social worker students and I'm responsible for most of the
7 hands on clinical teaching on that unit.
8 I also run the psychiatry and law program as I said
9 at Hopkins, and I am responsible through that for teaching
10 forensic psychiatry and also ethics. They have both been
11 major interests of mine.
12 At Maryland I'm -- and my official teaching
13 appointment at Hopkins is an associate professor of
14 psychiatry. At the University of Maryland, I have -- I teach,
15 again, primarily or almost all at the site for our fellowship
16 at the Circuit Court Medical Office, and my teaching
17 appointment at Maryland is as a clinical professor of
18 psychiatry.
19 Q Now you also have hospital staff appointments?
20 A Yes.
21 Q What does that mean and where are they?
22 A Well, what a hospital staff appointment means, Your
23 Honor, is that you have been -- the board or the department
24 that you applying to sets certain basic requirement in order
25 for one to have either admitting or consulting privileges.
26 In today's world that almost always mean that you

1 have to be or you have to a specialty, a certification,
2 because the hospitals rely on the board essentially to make
3 sure that the person has the technical skills necessary to be
4 an appropriate clinician.
5 So, I have admitting privileges and I am on the
6 active staff at Johns Hopkins as a psychiatrist and the
7 minimum requirement to be on the active staff is to be board
8 certified in general psychiatry.
9 I have, I think I am more technically on the
10 consultant staff at Sheppard Pratt and at Sheppard Pratt I'm
11 primarily asked to do forensic consults on difficult forensic
12 cases such as high risk suicide or violence to other cases and
13 help the general psychiatrist to do that.
14 In order to be a forensic psychiatry consultant at
15 Sheppard, I had to show them that I was board certified in
16 both general and forensic psychiatry.
17 I think those are the two current hospitals I have
18 privileges at right now.
19 Q Okay. Also have you received any -- well, let me
20 change that again. Do you belong to any medical professional
21 associations?
22 A Yes. I am a member of the American Psychiatric
23 Association, that's the general professional association for
24 general psychiatrist. I am a member of the American Academy
25 of Psychiatry and Law, that's the general professional
26 organization for the subspecialty forensic psychiatry.

1 And I am a member of the local branches of each of
2 the Maryland Psychiatric Society and the Baltimore/Washington
3 Chapter of the American Academy of Psychiatry and Law.
4 I am a member of the American Medical Association
5 and the local branch, which is called ---.
6 Q Have you ever held any positions in those
7 associations?
8 A Yes. I am a past president, Your Honor of the
9 American Academy of Psychiatry and Law, which is the national
10 teaching organization.
11 THE COURT: I am sorry. The American Academy of
12 Science?
13 THE WITNESS: Of Psychiatry and the Law, which is
14 the national professional teaching organization for forensic
15 psychiatry.
16 I have also held -- I have been chair of several
17 significant committees for the American Psychiatric
18 Association. One of them is the committee that decides what
19 litigation nationally the American Psychiatric Association
20 become involved in to further the professional interest of the
21 organization. That’s usually about patient care and that’s at
22 the trial level.
23 Up until July, I was chair of the committee that
24 reviewed Supreme Court and State Highest Appellate Court cases
25 where we would decide whether to write an amicus brief -- a
26 scientific amicus brief, again to inform the Court of various

1 scientific principles regarding a case -- cases before them.
2 Q Okay. In addition to your positions that you have
3 held, have you received any honors or awards?
4 A Yes. I think probably the most important award I
5 have received is the --- Teaching Award at Hopkins. I enjoy
6 teaching and I am glad the residents chose me for them.
7 Q You have had several, is that correct? They are
8 listed in your CV?
9 A Yes.
10 Q Now, just to touch on this a little bit in more
11 detail, the clinical practice, you talked generally about the
12 type of things you do, in the clinical practice settings, what
13 are the kind of patients you see and what are the kind of
14 activities you are engaged in?
15 A Well, I see a lot of patients. I run a very busy
16 in-patient ward in downtown East Baltimore where I'm
17 primarily -- our ward is primarily responsible for taking care
18 of the community psychiatry patients around Johns Hopkins
19 Hospital.
20 It is a very impoverished neighborhood with a huge
21 comorbid substance abuse. So many of the patients I see are
22 very sick, psychiatrically, very sick medically, and are
23 abusing currently or have abused multiple drugs of abuse.
24 Q And in that setting, I assume and I know this is
25 going to sound odd but just to be sure, you prescribe
26 medication, is that correct?

1 A Yes.
2 Q You evaluate individuals based on their level of
3 impairment, correct?
4 A Well, I make diagnoses of folks and to see how
5 impaired they are psychiatrically, yes.
6 Q And you also teach on these issues?
7 A Yes.
8 Q And I assume in addition to your time in emergency
9 room you spent quite a bit of time in emergency rooms, is that
10 correct?
11 A Yes.
12 Q About how many rooms have you spent in emergency
13 rooms with all kind of medical issues?
14 A Well, if you are counting residency and fellowship
15 and when I was working at Sinai in their emergency room,
16 probably more than eight or 10 years total.
17 Q Have you also -- you say you were a member of the
18 American Psychiatric Association, correct?
19 A Yes.
20 Q You also held positions as far as in their peer
21 review department, is that correct, in task force?
22 A Yes, I have been on -- again, I don't have my CV in
23 front of me, but I have been on various task forces for the
24 American Psychiatric Association generally to answer important
25 questions around ethics and peer review.
26 I've also been -- I failed to mention an

1 organization, the American Board of Psychiatry and Neurology,
2 which is the board that actually does board, it makes -- is
3 responsible for deciding what the rules are for board
4 certification and writing the test that I've been on -- I had
5 been on the committee that actually wrote the test for the
6 American Board of Psychiatry and Neurology for the
7 subspecialty forensic psychiatry for a number of years, I
8 think it was eight or 10 years.
9 So you have to write the questions and if people
10 passed enough of them, they became board certified forensic
11 psychiatrist.
12 Q Very well. Now, can you -- I am going to ask you if
13 you can tell us what does it mean to have peer review work?
14 A Peer review science -- well peer review have a
15 number of meetings but I think in terms of what we are talking
16 about today, what peer review means is that if you are doing
17 scholarly research or you are submitting a paper, scientific
18 paper, to a recognized scientific journal what happen is you
19 submit the paper to the editor.
20 The editor does a brief screening to make sure it's
21 in a worthy peer review and depending on the journal a lot of
22 the articles at sent back at that stage.
23 But if the editor thinks it's worthy of peer review,
24 it get sent out to a number of peer reviewers, sometimes three
25 to 10 depending on the journal and the article.
26 The peer reviewers review the article anonymously.

1 Meaning if you are a reviewer, you do not know who the author
2 is and if the editor is doing his job he has made sure that
3 there is no way to find out who the author is. So, it's
4 called blind peer review.
5 Your job as a peer reviewer is to make sure that the
6 article meets scientific merit. It is a decent article. And
7 your other job is, whether you think it is decent or not, to
8 make suggestions to improve the article.
9 So what generally happens if you are a peer
10 reviewer, if you have been asked to be a peer reviewer by a
11 journal editor, you will get the blinded article and you will
12 have a form with checkboxes and whether you are recommended
13 gets published.
14 But probably the most important thing is you will be
15 given a blank piece of paper and you are expected to write
16 your three, four, five pages of comments on the article
17 talking about its strengths and weaknesses and how it can get
18 improved and many times the editor sends your -- or the
19 reviewer's comments back to the author and they incorporate
20 some of the changes and hopefully if it's done right, it gets
21 accepted or rejected.
22 So, it's this peer review process, Your Honor,
23 that's really sine qua non for acceptability of article in the
24 scientific literature.
25 When one is looking at the literature, the top
26 articles that you are looking at for reliability and validity

1 are peer review articles published in peer review journals.
2 Q Okay. And you said that those -- that is sort of
3 the top, is there lesser works that are in the medical world?
4 A Yes. The next level would be articles that you
5 submit that are reviewed by the editor only and are accepted
6 or rejected based on what the editor says.
7 And then the next level, people -- many people
8 wouldn't even cite these in journal articles, are technical
9 reports. Things that are published in government publication
10 that aren't even reviewed by an editor but are just published
11 essentially because they have to be published because the
12 contract is over.
13 Q Okay, very well. As far as peer reviewed
14 publications in peer review journals --
15 A Yes.
16 Q -- do you know approximately how many you have done?
17 A I don't have my CV in front of me so if you send it
18 to me --
19 Q Okay, all right, if I can approach, Your Honor?
20 THE COURT: All right.
21 MR. DeLEONARDO: I will mark defense --
22 THE CLERK: No. 7.
23 MR. DeLEONARDO: 7, okay, thank you.
24 THE CLERK: You are welcome.
25 (The document referred to was
26 marked for identification as

1 Defendant's Exhibit 7.)

2 THE CLERK: There you are.

3 THE WITNESS: Thank you.

4 THE CLERK: You are welcome.

5 THE WITNESS: (Reading.)

6 (Pause.)

7 THE WITNESS: It's like 24, Your Honor.

8 BY MR. DeLEONARDO:

9 Q And they have been in various publications including

10 the Journal of Academy of Psychiatry and the Law, is that

11 right?

12 A Right. The Journal of the American Academy of

13 Psychiatry and the Law, the Journal of the American

14 Psychiatric Association and other journals.

15 Q American Medical Journal?

16 A Actually, that's not a peer review article.

17 Q Oh, that was a reply, okay.

18 A Right.

19 Q You have also done the -- you have also presented

20 many lectures, correct?

21 A Yes.

22 Q Have you presented any lectures or presentations to

23 any of these academies of science?

24 A Yes. I've given lectures at the annual meetings of

25 the American Psychiatric Association, the American Academy of

26 Psychiatry and Law, their local equivalents and at various

1 other scientific meetings across the country.
2 Q And you regularly provide lectures as well as
3 through hospitals?
4 A Yes.
5 Q And can you describe what those are?
6 A Well, I've given lectures in various area, usually
7 focusing on some aspect of forensic psychiatry or test design.
8 I've also lectured to the judges at their -- when the -- I
9 will try to remember it. The national scientific organization
10 that's charged with educating just the judges on science.
11 They had a meeting at Hopkins. I was asked to give
12 a couple of talks there.
13 THE COURT: It wasn't ASTAR was it?
14 THE WITNESS: Yes, it was, thank you, Your Honor.
15 THE COURT: I am an ASTAR Fellow and this is the
16 first case I have had where I actually feel like I might apply
17 some of what I have learned.
18 THE WITNESS: Good.
19 THE COURT: After being shuttled around Berkeley and
20 North Carolina and Hopkins and many other places.
21 BY MR. DeLEONARDO:
22 Q So, if I can also ask you in addition to all the
23 clinical work and teaching, what about research? Do you have
24 any experience in not only the peer review and publication
25 process, let me start there first, have you ever been asked to
26 peer review and publish?

1 A Yes. I have had all of my -- all the peer review
2 articles that are in my CV -- I obviously have been subjected
3 to peer review but I have also been a peer reviewer for many
4 journals including the American Journal of -- The Journal of
5 American Academy Psychiatry and the Law, Behavioral Sciences
6 and the Law, the Journal of the American Psychiatric
7 Association, Hospital and Community Psychiatry, Psychiatric
8 Services, those are the ones that comes to mind.
9 Q Okay. Have you actually ever had an opportunity to
10 conduct your own research?
11 A Yes.
12 Q Can you tell us about your research background?
13 A Yes. So my research, Your Honor, has been primarily
14 in -- well, it's been in several areas. But mostly it's in
15 predicted areas. Can you predict who will commit suicide?
16 Can you predict -- are there ways to predict or ways -- are
17 there tests available that can help one decide whether someone
18 is competent to make informed decisions about healthcare.
19 Those are really the two major areas.
20 Q And in those areas have you come to learn the
21 principles of appropriate research and design?
22 A Yes.
23 Q Can you tell us a little bit about how?
24 A Well, it's through my training both in medical
25 school where I took specific courses. Those areas in
26 residency where I continued to take specific course work and

1 research design.

2 And continuing as a faculty member at Hopkins, one
3 is offered courses to take in research and design. And of
4 course if you want to get your study published in the
5 Scientific Journal and you are designing it, it better be
6 designed correctly or it's not going to pass peer review.

7 So, we are motivated to learn about these things,
8 and I have.

9 Q And specifically not only general research to design
10 but specifically in terms of a predicted value of a diagnostic
11 test?

12 A Yes. So, this is interesting, this idea of
13 predicted evaluation of a diagnostic test is both important in
14 research but it's also extremely important in front of a
15 practice, Your Honor. Because you have to -- it's not obvious
16 to anyone, I don't think, but you can't go ordering diagnostic
17 test Willy-nilly, you should only order specific test under
18 specific circumstances because if you do order them Willy-
19 nilly, you will have high false positive or high false
20 negative rates, which means that actually ordering the tests
21 causes more confusion and actually gives you less information
22 than if you hadn't ordered them at all.

23 And that's from a principle called base fear, which
24 I'm sure we are going to get into later.

25 Q Now just to specifically, you have been previously
26 qualified as an expert, is that correct?

1 A Yes.
2 Q What are the areas you have been previously
3 qualified in?
4 A General psychiatry, forensic psychiatry, psychiatry
5 in neurology and research design.
6 Q I assume that all of those also include general
7 medical issues?
8 A Yes, sure.
9 Q And where have you generally testified?
10 A I have testified in almost every county in Maryland
11 including this one. I've testified in various states,
12 Florida, Minnesota, Alabama, I'm sure I'm missing some, both
13 in Federal Court and State Courts.
14 Q All right. And can you give us a range of the
15 topics that you testified on?
16 A Yes, I've testified on a variety of topics,
17 sometimes on the criminal side, usually competency
18 responsibility sentencing issues. On the civil side, usually
19 guardianship, psychic injury or malpractice. And I've
20 testified in various venues about the DRE.
21 Q Okay. Well, first of all let's get into the -- on
22 the criminal side, so you have testified about competency?
23 A Yes.
24 Q Have that been for both defense and the State?
25 A Defense, State and the Court.
26 Q Okay. So, you --

1 A Because when I work at the Circuit Court Medical
2 Office we're actually court officers so we work for the Court.
3 Q Okay. So, you have actually done, I guess, for all
4 three parties at various times?
5 A Yes.
6 Q And as far as the drug recognition expert program,
7 you have actually testified several times in that, correct?
8 A Yes, I have.
9 Q And where has that been?
10 A It has been in Maryland in 1992 when I got a call
11 from George Lipman who is now the District Court Judge, but he
12 was at that time was head of a health division and asked me
13 to, you know, he had this case about the DRE, which I knew
14 nothing about.
15 He asked me to familiarize myself with it and I did
16 and testified in Court in Maryland in '92. And I presumed
17 from that I got called to testify in Minnesota in '93 and in
18 Florida in '94 and then in Nevada -- that was a wild case in
19 Nevada because they had a law in Nevada at that time called
20 internal possession.
21 So these were actually not driving cases, these were
22 people that were walking down the street and the DRE did their
23 thing and just decided that these folks were in a containers
24 for heroin, which is a crime in Nevada. So, I testified in
25 that case.
26 Q Was that in Federal Court?

1 A Yes, it was a civil rights case.

2 THE COURT: When was that?

3 THE WITNESS: That was in 1999. The case is, Your

4 Honor, Quinn v. Reno, Q-u-i-n-n, Bennett v. Reno, Ahern v.

5 Reno, in the US District Court in Nevada. And the last time

6 was in Nebraska in 2006.

7 BY MR. DeLEONARDO:

8 Q Okay. Now as far as part of your research, you also

9 when you are conducting that research or publishing studies I

10 assume you are testing it as well, correct?

11 A I'm sorry, testing?

12 Q Testing your research when you are conducting the

13 studies, right?

14 A Yes.

15 Q And have you had those opportunities in the past to

16 apply those in a clinical setting?

17 A Well, it's not exactly how I would frame it.

18 Q Okay.

19 A The research was primarily to design certain

20 instruments, et cetera. In the clinical setting, the

21 important part of base fear when I, you know, will talk about

22 is really when to order diagnostic test. How do order it and

23 what the result means.

24 Q Okay.

25 MR. DeLEONARDO: Your Honor, at this time, I am

26 going to offer up Dr. Janofsky as an expert in the fields of

1 psychiatry, forensic psychiatry, neurology and clinical
2 research. And I am going to move to admit his CV, which would
3 be defense Exhibit No. 7.
4 THE COURT: All right, the CV will be admitted.
5 Voir dire?
6 (The document marked for
7 identification as Defendant's
8 Exhibit 7 was received
9 in evidence.)
10 MR. WELLS: I missed the areas you wanted to have
11 him certified in?
12 MR. DeLEONARDO: I am offering up his psychiatry,
13 forensic psychiatry, neurology and clinical research.
14 MR. WELLS: That is fine, no objection.
15 THE COURT: All right. We will accept Dr. Janofsky
16 as an expert as tendered.
17 BY MR. DeLEONARDO:
18 Q Okay, very well. Doctor, you talked about initially
19 when you were brought into this case it was brought into the
20 Drug Recognition Expert Program and have any involvement with
21 it. Describe that again, it was by who?
22 A It was by George Lipman who was the head of the
23 Public Defenders Mental Health Division at the time. He is
24 now a District Court Judge in Baltimore City.
25 Q And when you first -- was that your first
26 opportunity to review the program?

1 A Yes.
2 Q And when you investigated the program, did you look
3 to see whether there was any valid research at the time to
4 support the program?
5 A Yes. So, when I looked and this was in 1992, I
6 discovered that there was actually not a single study
7 regarding the DRE published in the peer review scientific --
8 peer review scientific literature.
9 Q Okay, why was that significant to you?
10 A Well because if you are going to use a test that
11 purportedly can predict an impairment and not only whether
12 someone is impaired but on which specific drug, which
13 parenthetically, Your Honor, is something that no reasonable
14 physician clinical practice would ever do.
15 But if you are going to say that you can do this,
16 you would at least want a couple or more than of a couple of
17 peer reviewed studies saying that you can do it and that's
18 especially important, Your Honor, when it's about criminal
19 sanctions. So, I was actually quite shocked.
20 Q Now, the program when you looked to assess, when you
21 were in the process of assessing whether this was reliable and
22 a valid program as far as your background, what were you
23 looking for?
24 A Well, --
25 Q You are talking about lack of peer review, I mean
26 what specifically in general are you looking for? Are there

1 any standards when it comes to research?
2 A Yes, sure. So, again, you review the literature and
3 then, as with any test, you ask yourself a series of questions
4 for determining the use on this as a diagnostic test. And
5 there are really -- there are four questions you have to ask
6 yourself.
7 One, has there been an independent line comparison
8 of the test with an appropriate gold standard?
9 And what that means, Your Honor, is that you have
10 to -- a test is a proxy for something else. So, we all get at
11 a certain age get tested for blood in their stools by our
12 doctor. And that's a proxy for colon cancer amongst other
13 things.
14 So, you have to know what the gold standard is and
15 the comparison with the gold standard has to be blind.
16 So, one of the problems, just to give you the big
17 picture, one of the major problems with all of the literature
18 regarding the DRE peer reviewed or not, is the wrong -- well,
19 the DRE has never been tested against the gold standard of
20 driving impairment.
21 So, Your Honor, if you find as the finder of law in
22 this case that what needs to be testified to or what the
23 conclusion needs to be is driving impairment.
24 There has not been a single study anywhere either in
25 the non-peer review literature or the peer reviewed literature
26 that test the DRE protocol against driving impairment. It has

1 not been done. No one has done it.

2 The gold standard that the studies that I believe

3 are appropriate use, meaning that the studies that are

4 scientifically valid use is the presence or absence of a drug

5 in the person's blood.

6 Q And so just to clarify?

7 A Yes.

8 Q You are saying that the appropriate gold standard

9 based on the opinion being given in your opinion is are they

10 able to determine not only that a drug is present but is it

11 impairing their ability to drive?

12 A Well, I that's the legal question that the Judge has

13 to answer. But the problem as I see it in the literature is

14 that if the finder of law decides that the appropriate legal

15 standard is driving impairment, then we can stop right now. I

16 don't have to testify anymore because I can tell you that

17 there is not a single study in the literature that links the

18 DRE with driving impairment. It doesn't exist.

19 What the manual does is confuse terms of art. The

20 manual talks about impairment but they don't mean driving

21 impairment, they mean impairment in certain neurological

22 systems, which does not equate with driving impairment.

23 In fact, there is not a single study in the

24 literature that equates any of the impairments that are

25 discussed in the DRE manual with driving impairment for drugs.

26 Q What about even in the field sobriety standardized

1 alcohol for sobriety test?

2 A There are studies that look at particular alcohol

3 levels in driving impairment, okay, they are there. And, you

4 know, they have been done over the years.

5 But there’s no such studies that exist in the

6 literature that I’m aware of that have done the same thing

7 with the drugs that the DRE is talking about.

8 Q And so assuming that the Judge doesn’t hold them to

9 the gold standard that you have suggested, the second level

10 would be presence of drugs. And you said there has been

11 presence --

12 A Right. So, if as a matter of law, the finder of

13 law, the Judge finds that it’s not driving impairment that’s

14 important, it’s presence of drugs in the body that’s

15 important. There have been several studies that I think they

16 use that as the gold standard in their reasonable studies.

17 Q And let’s -- and based on that I guess at least

18 getting -- let’s step back for a second and just define a

19 couple of concepts.

20 You told me what the gold standard is. It is

21 essentially to prove the point that it purports to prove,

22 correct?

23 A In order to validate a study, Your Honor, you have

24 to test the studier of the test and test can be blood test,

25 they can be protocols like the DRE, they can be forms, et

26 cetera, you have to test that test against the gold standard

1 that you've selected.
2 Q And the ---?
3 A Yes.
4 Q Okay. And when it comes to studies just to define
5 the terms up front before we get into them. There is a
6 concept of sensitivity and specificity?
7 A Right.
8 Q Can you explain those what each of those terms mean
9 as best you can in layman's terms and explain why those are
10 significant with the ---.
11 A Okay, so, Your Honor, sensitivity and specificity
12 are terms of art. They are ratios where you determine a four
13 by four block with the block on the left side being the test
14 result being positive or negative and the block on the top
15 being the gold standard, you know, positive or negative.
16 In this case, the block on the left would be whether
17 the DRE calls the test positive or negative and the blocks on
18 the top would be actual presence of the drug based on the
19 study.
20 From that four by -- well two by two table, one can
21 determine sensitivity and specificity and from that you can
22 generate something called a likelihood ratio.
23 I hate to do this to you Your Honor because I know
24 it's complicated.
25 Q --- that is why it is important just to explain it -
26 - I can step back. Sensitivity essentially means how

1 sensitive is the test to detect what is says it is trying to
2 detect?
3 A Well, no, it's not exactly that.
4 Q Okay.
5 A It's the proportion of subjects with the actual
6 condition who have a positive test result.
7 Q Right, okay.
8 A And specificity is the proportion of subjects
9 without the actual condition who have a negative test result.
10 And, Your Honor, it's important to generate these numbers
11 because if you don't generate these ratios and you just
12 generate raw numbers of how many positives there are, how many
13 negatives there are, the problem is you will have falsely
14 elevated numbers if the prevalence of the condition you are
15 testing for and the population you are testing for is high.
16 So, the way to compensate for that is to do these
17 ratios, generate sensitivities and specificity numbers, from
18 those numbers generate something called likelihood ratios.
19 And the likelihood ratios really - it's the key
20 number here because that likelihood ratio tells you how good
21 the test is in this context.
22 And the likelihood ratio it's relatively easy. A
23 likelihood ratio of one means that the test gives you no
24 additional information.
25 A likelihood ratio significantly less than one --
26 point one, means the test is worse than useless because when

1 the test predicts the drug is there, it really means it’s not
2 there.
3 And a likelihood ratio of 10 or more means you have
4 a really good test. It adds significant information.
5 Q It actually provides a basis to reach the decision
6 correctly?
7 A Yes, correct.
8 Q Okay. And so just as a general question, that is
9 something you look at in a scientifically -- medically you
10 look at and determine whether you are going to accept that
11 test?
12 A That is something that is generally accepted in the
13 scientific community to decide whether a test is useful or
14 valid.
15 Q Now, in the review, again, we will get to it more
16 specifically, but in the review of the studies that you have
17 done, all of the studies whether peer reviewed or not, did the
18 peer reviewed studies provide the specificity, the sensitivity
19 and the likelihood ratios?
20 A Only the more recent studies actually generate
21 sensitivity and specificity. The Heishman studies did not
22 generate those numbers but those numbers can be generated from
23 the data that they provide and I’ve generated them.
24 Q So, as far as the studies that have actually been
25 peer reviewed and published, you actually can obtain that
26 information from those studies, correct?

1 A Correct, yes.
2 Q What about the studies that were not published but
3 released for technical reports?
4 A They cannot be generated because of massive problems
5 and their design the data that they provide, et cetera.
6 Q Okay. So, let's begin if we can, let's -- if we
7 could turn to some of the studies. Now you have reviewed what
8 studies in reaching your opinion?
9 A I have reviewed and I will go through -- you want me
10 to go through the list I will be glad to?
11 Q Yes, if you could just -- we will start off if you
12 could give us all of them and then we will go through them?
13 A Sure.
14 Q So, I've reviewed the Bigelow Study titled
15 Identifying Drug Intoxication, Laboratory Evaluation of a
16 Subject Examination Procedure. That is a technical report
17 that was published by the Department of Transportation in
18 1985. It is not peer reviewed.
19 I have reviewed the Compton Study, it's by a guy
20 named Compton, called Field Evaluation of Los Angeles Police
21 Department Drug Detection Program. That's the National
22 Highway and Transportation Safety Administration technical
23 report in 1986, it is not peer reviewed.
24 I have reviewed a study that's been talked about in
25 prior cases that hasn't even been published by Hardin, called
26 the Minnesota Corroboration Study a Comparison of DRE Opinions

1 and Toxicology Findings, dated April 16th, 1993.
2 I have reviewed a study that's also never been
3 published but has been discussed in other cases like this by
4 Adler and Burns called Drug Recognition Expert Validation
5 Study the Final Report to the Governor's Office of Highway
6 Safety of Arizona, dated June 4th, 1994.
7 I've reviewed the first Heishman study, which is the
8 first peer reviewed study published in the literature about
9 the DRE and that one is called Laboratory Validation Study of
10 Drug Evaluation and Classification Program: Ethanol, Cocaine
11 and Marijuana. And it's published in '96.
12 I've reviewed the second Heishman study, published
13 in 1998, which is titled Laboratory Validation Study of Drug
14 Evaluation Classification Program.
15 I've reviewed the drug evaluation and classification
16 training manuals, Student Manual 9/04 and the Drug Recognition
17 Expert School Student Manual also published in 2004.
18 THE COURT: I am sorry, what the last --
19 THE WITNESS: These are two documents published by
20 the Drug Recognition Expert Organization. The student manual
21 in September '04 and the student manual published September
22 2004.
23 I've reviewed the Oxford Center for Evidence Base
24 Medicine Likelihood Ratios and these are published on the
25 internet. It's probably the best summary for likelihood
26 ratios and it also has some tools for generating likelihood

1 ratios.

2 I've reviewed another study talking about likelihood

3 ratios and how one uses them to assess the validity of

4 diagnostic test. This is by Decks, D-e-c-k-s, land Altman

5 called Diagnostic Test for Likelihood Ratios in the British

6 Medical Journal.

7 I've reviewed the classic book by Sackett who is

8 really the father of this methodology. And it's by -- the

9 latest edition is by Sackett and Haynes, called Clinical

10 Epidemiology a Basic Science for Clinical Medicine, published

11 in '91, that's the second edition.

12 I've reviewed a paper by Ogden and Muskowitz,

13 Effects of Alcohol and other Drugs on Driver's Performance

14 published in 2004, Traffic Injury Prevention.

15 I've reviewed the two more recent papers, the first

16 by Shinar and Schechtman in 2005 entitled Drug Identification

17 Performance on the Basis of an Observable Science and Symptoms

18 and Accident Analysis and Prevention.

19 And the second by Schechtman and Shinar although

20 it's the same authors reversed in Accident Analysis and

21 Prevention, titled Modeling Drug Detection and Diagnosis with

22 the Drug Evaluation and Classification Program.

23 BY MR. DeLEONARDO:

24 Q Very well. And in addition to that after reviewing

25 all of those studies and I am going to ask essentially for

26 your conclusion and just simply why?

1 So after reviewing all of those studies, and
2 conducting the analysis on the sensitivity and specificity and
3 likelihood ratios on Heishman, and looking at what was found
4 in Shinar and Schechtman as well as reviewing the unpublished
5 studies, what is your opinion as to the validity of the
6 research underlying the DRE protocol?
7 A That the DRE is neither a reliable or valid measure
8 for determining whether a person has alcohol or illicit drugs
9 in his blood or urine.
10 That there is no scientific data whatsoever which
11 shows that the DRE can predict whether an individual is
12 impaired and driving ability from the use of alcohol or
13 illicit drugs.
14 There is no data whatsoever in literature testing
15 the DRE's reliability meaning reliability as another term of
16 art different from validity, Your Honor, what reliability
17 means is whether two people given the same training,
18 administering the same test will reach the same result as
19 opposed to validity, which measures whether the test result
20 matches the gold standard.
21 And there is nothing, there is a not a single study
22 in the literature about reliability meaning that officer A --
23 I hate to go back to the Mona Lisa analogy with the dots, but
24 what that means, Your Honor, is there is no way of knowing
25 whether Officer A is painting the Mona Lisa and Officer B is
26 painting the Jackson Pollack because there is no reliability

1 studies whatsoever.

2 There is no studies that show that what one officer
3 does is going to get the same result as another officer is
4 zero in literature about that.

5 And then all of the prior studies with the exception
6 of the Heishman studies and the two Shinar studies I mentioned
7 are seriously flawed. And falsely portray high accuracy
8 numbers when in fact careful analysis shows the validity is
9 close to chance or worse than chance.

10 In fact, sometimes the study when carefully analyzed
11 show that, in fact, when the DRE says cocaine is present, it
12 certainly is not present. Pretty high.

13 The Heishman studies and the Shinar and Schechtman
14 studies, in my opinion, conclusively show that the DRE, when
15 tested appropriately and looked at appropriately, is not an
16 accurate predictor of the presence of drugs.

17 In fact, the four studies I mentioned conclusively
18 show that police officer's predictions are either no better
19 than chance, it may be slightly better than chance or worse
20 than chance.

21 And the other thing you should know, Your Honor, is
22 that none of the studies attempted to test multiple drugs. So
23 the only studies that are out there test a single drug as a
24 gold standard.

25 None of them test a combination of alcohol drugs.
26 There is no data on that at all.

1 Q Just to stop on that.

2 A Yes.

3 Q You are aware that there are concepts in the manual
4 about polydrug, null effects, addictive effects, --

5 A Yes.

6 Q -- all of those things that DRE should ---.

7 A Yes. There is no validity data anywhere in the
8 literature whatsoever about that, Your Honor. It's
9 witchcraft. There is nothing there. It's never been tested.

10 Q Okay. Now, in your opinion that you just stated
11 they being a reasonable degree of medical scientific
12 certainty?

13 A They would be.

14 Q I am going to show you what has been marked as
15 defense Exhibit No. 8. And you actually, did you not prepare
16 a 37-page report evaluating the studies and indicating your
17 findings as to the studies, is that correct?

18 A Yes, I did.

19 (The document referred to was
20 marked for identification as
21 Defendant's Exhibit 8.)

22 BY MR. DeLEONARDO:

23 Q And does that fairly and accurately represent your
24 opinions and the findings?

25 A Yes, it does.

26 Q All right.

1 MR. DeLEONARDO: Your Honor, I would move to admit
2 defense Exhibit No. 8.
3 MR. WELLS: Objection, Your Honor. Not that there
4 is any foundation upon what type of report it is about, what
5 it refers to --
6 MR. DeLEONARDO: I will step through the studies
7 first, that is fine. All right, we will just mark it for
8 identification. I was just trying to give you something to
9 look at.
10 THE COURT: This would be Defendant's Exhibit --
11 THE CLERK: 8.
12 THE COURT: -- 8 for ID.
13 MR. DeLEONARDO: For identification. Okay.
14 BY MR. DeLEONARDO:
15 Q So, let's start going through the studies as to why
16 you reached this conclusion --
17 A Sure.
18 Q -- with the first study that you referred to being,
19 I will shorthand it, the Bigelow Study, correct?
20 A Right.
21 Q The Bigelow Study and that was released in 1985, is
22 that correct?
23 A That's correct.
24 Q And that was released, you indicated as a technical
25 report?
26 A Correct.

1 Q And so just to be clear, was that peer reviewed and
2 published in any scientific or medical journal?
3 A No.
4 Q And so as far as you are concerned in the field, was
5 that subjected to any critical outside review?
6 A No, it was not. And I should also say it was done
7 before the DRE protocol was standardized. Meaning that the
8 DRE evaluators were not performing the DRE as they had been
9 instructed to do so in the standardized training manuals in
10 2004 and before.
11 Q Because those were initially for LA Officers,
12 correct?
13 A Yes.
14 Q That had been trained in doing what they were doing?
15 A Yes.
16 Q The Bigelow Study is that essentially what -- after
17 that, you are saying the actual manual and the practice became
18 standardized?
19 A It was published -- well, it was technically
20 reported before the practice became standardized, yes.
21 Q Okay. Now, this study -- I would say this technical
22 report was done -- just to specifically go through, does it
23 actually say or does it actually find the DRE was able to
24 determine whether the person actually was impaired by drugs so
25 as not to be able to drive safely?
26 A No.

1 Q And does the study actually acknowledge that?
2 A Yes.
3 Q And in addition to that there is a concept called
4 double-blind study, is that right?
5 A Correct, yes.
6 Q Can you explain what that means?
7 A Yes. Your Honor, when you are testing an
8 instrument, it's very important that neither the test's
9 subject nor the tester, the people in the experiment know who
10 has -- it's positive for the gold standard presence or absence
11 of the illicit drug or who's negative.
12 Because otherwise if one side or the other side
13 knows, you are confounding variables and you actually don't
14 know if you are testing the protocol. You could be testing
15 something else.
16 Double-blind studies are the top of the heap of
17 scientific studies.
18 Q Now the drug recognition expert program and I am
19 going to step back on this as we talk about this when we use
20 the study. Is it fair to characterize this as a diagnostic
21 test?
22 A Well, no.
23 Q Okay. Can you explain why? Can you tell us first
24 what a diagnostic test is and then could you explain to us why
25 it is not?
26 A It's a protocol that's a combination of the 12

1 factors that have been discussed I'm sure ad nauseam before
2 that are in the manual with the police officer, the DRE
3 expert, whoever, reaching a conclusion based on the matrix and
4 other factors.
5 It's not a diagnostic test and it's not a
6 standardized protocol either. Your Honor, when -- I work with
7 professionals at all levels.
8 I work with MDPHD's all the way down to orderly or
9 aids and when someone -- when you are working with folks
10 without professional training but you are asking them to
11 administer a protocol it's extremely important that the
12 protocol be standardized and administered the same way every
13 time by all of the non-professional folks that are
14 administering it.
15 And it's important that there be a standardized way
16 of reporting the results. So, physicians and perhaps nurses
17 or at least advanced practice nurses go beyond protocols. We
18 don't use a cookbook because we have thousands of hours of
19 training and experience in multiple areas that allows us to
20 use what is called clinical judgment.
21 And what that -- all clinical judgment means, Your
22 Honor, is the experience of the examiner based on thousands of
23 hours of training and patient contact.
24 Folks that don't have such training, technicians,
25 for example, laboratory technicians, aids, can be trained to
26 administer a protocol as long as it's done in exactly the same

1 way every single time and the results can be clearly discerned
2 from each stage.
3 So you would never ask someone who is acting as a
4 technician to use their judgment to decide to use the DRE
5 example, you know, which factors on the matrix are most
6 important or even more ridiculously, frankly, to rule out a
7 medical condition. They can't do it. They don't have the
8 training or experience to do it.
9 So, when you design a protocol for a non-
10 professional, it's very important that it be standardized in a
11 way that can be done the same way over and over again that's
12 reliable meaning that when multiple people test the same
13 subject they get exactly the same result and that it's valid.
14 That it's repeatedly actually measures what it purports to
15 measure.
16 And all of the studies that I've reviewed showed
17 first of all there is no reliability data at all. And showed
18 that the studies are not valid when tested appropriately.
19 Q Okay. Now, specifically back to Bigelow.
20 A Yes.
21 Q We talked about the need for double-blind and
22 double-blind against the gold standard.
23 A Yes.
24 Q You indicated in this case they didn't follow the
25 gold standard of driving impairment --
26 A Right.

1 Q -- with drug presence, correct?
2 A Right.
3 Q And would you consider this to have been a double-
4 blind study?
5 A No, because the DRE examiners were allowed to
6 question the subjects and ask them questions such as, you
7 know, what does this feel like? What drug might this be? And
8 the test subjects are motivated to cooperate with the
9 examiners unlike a usual arrest situation when they are not
10 motivated. They are motivated because in order to get paid at
11 the end of the study, they have to be compliant.
12 So, it's a totally unnatural situation where the
13 DREs are questioning the subjects, asking them what drug they
14 think it is. This is not double-blind.
15 If you are going to design a study, you would design
16 a study -- and this is what Heishman did in the two Heishman
17 studies and the two subsequent studies. The DREs were
18 prohibited from asking the test subjects those kinds of
19 questions.
20 They were perfectly or allowed to ask the subjects
21 the necessary questions to complete the matrix but they
22 weren't allowed to ask them the kinds of questions that I just
23 talked about.
24 Q And in this particular, the Bigelow Study, was that,
25 was it significant that the people had previously taken
26 certain drugs?

1 A Yes.
2 Q And then were being asked how they felt?
3 A Right. So, in the Bigelow -- in order to be a test
4 subject ethically, you could only recruit test subjects who
5 you know and there is a -- and you have to know, people who
6 have been addicted to these drugs or have taken these drugs
7 before.
8 You don't want to introduce cocaine to someone who
9 has never taken cocaine before. So, all of these people have
10 or experienced addicts who knew what the effects of the drugs
11 were.
12 Q In your clinical experience do you believe that a
13 person probably would have known if they were a prior user
14 whether they were taking a CNS stimulant or CNS depressant?
15 A Yes, based on my clinical experience.
16 Q Now, in addition, were the DREs actually told by the
17 researchers a certain truth, for example, do you recall
18 whether they were told that there was no alcohol, PCP or LSD?
19 A Yes. Right. So, the DRE examiners were told at the
20 front end that there would only be limited drugs being tested
21 for and that's not of course real world either.
22 Q And were they also told that there was no
23 combination of drugs?
24 A Yes.
25 Q Were they also told that all of the subjects would
26 be normal and healthy?

1 A Yes.

2 Q And were they also told that none of them had a
3 clinically significant drug abuse?

4 A Yes.

5 Q Why is it important about not having clinical
6 significant drug abuse in your experience in working with the
7 patients?

8 A Well, what it means is, is that the subjects
9 currently weren't abusing drugs.

10 Q And does that affect issues of tolerance?

11 A Yes. So, they knew that the subjects hadn't
12 developed tolerance, which means that they would even be more
13 explicitly sensitive to the drugs that were given.

14 Q Very well. Now, did the study actually determine
15 whether the DRE could distinguish between a drug impaired
16 person and a person suffering from a medical psychiatric
17 condition?

18 A No, because such people were excluded from the
19 study.

20 Q And in addition as far as the study actually
21 acknowledges that all of those people were excluded is that
22 correct?

23 A Yes.

24 Q In your experience will someone even with a
25 psychiatric or medical condition can that mimic drug
26 impairment?

1 A Oh, of course. It is one of our major differential
2 diagnosis. It’s what I do all day long for all of my
3 admissions is scratch my head and I’m trying to figure out
4 whether the person’s presentation is due to acute intoxication
5 with particular drugs, withdraw from drugs, general medical
6 conditions or psychiatric conditions.
7 I probably spend more than 50 percent of my time
8 doing that.
9 Q I assume you have never used the matrix to do that?
10 A I have never used the matrix to do that you can be
11 certain of that.
12 Q And now as to inter-rater reliability. That was an
13 important point you said to ensure reliability. Is that
14 actually tested in this?
15 A No.
16 Q How about just to verify polydrug use, is that
17 tested?
18 A No, single drugs.
19 Q So, as far as this study is concerned, do you
20 consider any of the results from this study to have any
21 scientific or medical validity at all?
22 A None.
23 Q Do you know of anyone in your profession, medical,
24 psychiatric, scientific, medical research and you certain -- I
25 assume you mean association with --- you make your way around
26 the country with different professionals?

1 A Yes. Well, this is something -- I have got to tell
2 you, Your Honor, DRE is something that's not foremost in the
3 mind of those of us who take care substance abusers or
4 clinically or forensically. People are aware of it.
5 But it's -- no one I know of, no physician I know of
6 would even consider using this matrix or the -- even pieces of
7 it in determining either whether someone was impaired on drugs
8 or even more ridiculously to tell which specific drug
9 category. It's ridiculous, I can't emphasize that enough.
10 Q So, let me ask you then if we can turn the -- well
11 turn to the LA field study, it is common in all those studies
12 in 1986, right?
13 A Right.
14 Q And that was a technical report?
15 A Yes.
16 Q Was it ever published or peer reviewed?
17 A No.
18 Q Were they able to actually -- you talked about the
19 gold standard, did they test whether or not they could
20 actually determine the driving ability based on DRE matrix?
21 A No.
22 Q And did the study actually acknowledge that?
23 A Yes.
24 Q And it is interesting because we have heard prior
25 testimony that well of course there was because the officer
26 that arrested them would have seen behavioral signs and then

1 DRE would have seen behavioral signs. Why is that not
2 sufficient in validating your results?
3 A Well because they didn't collect any data at all on
4 folks who the DREs felt were not impaired by drugs. And
5 without that piece of data there is no way to generate
6 validity statistics. And if you can't generate validity
7 statistics, there is no way to see whether the study is
8 valid.
9 Q Okay. So, the reasons -- now this was also not a
10 double-blind study, correct?
11 A Right, yes.
12 Q And in this particular case, why is that particular
13 troublesome that it was not double-blind?
14 A Well because in this study, police officers directly
15 interrogated folks and also had access to data collected
16 either by themselves or by police officers at the scene of
17 drug paraphernalia, marijuana roaches, cocaine residue, pills,
18 et cetera.
19 So, you know, if you see somebody with a marijuana
20 cigarette in your search incident to arrest, chances are, it's
21 probably likely that you are going to pick marijuana as the
22 impairing drug. It doesn't require any of this matrix
23 witchcraft. It's good police work.
24 And let me take a step back, Your Honor, there is
25 nothing wrong with good police work. I mean that's what
26 police officers are supposed to do. They're supposed to

1 interrogate subject, they're supposed to do searches incident
2 to arrest, they're supposed to observe behavior and then reach
3 a reasonable conclusion based on that.
4 But to put this mantle of scientific validity around
5 this matrix and the DRE over that, there is just no evidence
6 for it. It doesn't exist.
7 Q And in this particular case did they track what
8 symptoms were found by the officer and equate that to drugs?
9 Are you aware of any of those studies done -- published
10 studies that actually looked to see what they based it on?
11 A Not that I'm aware of.
12 Q Okay. Now as far as additionally being able to
13 distinguish between those with medical impairments those were
14 not?
15 A Yes.
16 Q This study provided valid and reliable indicator of
17 their ability to do that?
18 A Say that again?
19 Q Let me rephrase it.
20 A Yes.
21 Q Did this study actually show that they could
22 distinguish between medical impairment and drug impairment?
23 A No, there is no data here whatsoever about
24 confounding medical impairment.
25 Q Now, it is true too, in fact, that over half of the
26 people here was detected as PCP, correct?

1 A Yes.
2 Q Now, in your experience what is the difference if
3 you were to exclude the PCP in this, is that going to be a
4 difficult thing to find out?
5 A No, Your Honor, I actually did my internship at a
6 time when there was a PCP epidemic in Baltimore City. And,
7 you know, PCP -- the presentation of PCP intoxication is quite
8 striking. It looks different than almost all of the drugs.
9 So, if 50 percent -- and thank God we've passed
10 that. Those people were crazy when they came into the
11 emergency room. So, it's not a major problem in this area any
12 more and PCP intoxication looks like no other intoxication
13 that I know of.
14 Q Okay. So probably not really needed to use the
15 matrix to figure that out?
16 A No, you don't need the matrix to figure that out.
17 Q Okay. When you --
18 A But, let me say that although you wouldn't need the
19 matrix to figure it out, you wouldn't rely on clinical
20 observation alone to make the diagnosis because it can look
21 like other things that make people look really crazy. Like
22 brain injuries, strokes, schizophrenia, manic depression, all
23 this.
24 It just looks different than other kinds of
25 intoxication but no -- it would be malpractice for a physician
26 to rely on clinical data alone to make the diagnosis of PCP

1 intoxication.

2 The key piece, Your Honor, for all of these

3 intoxications including PCP, which is the easiest one to look

4 at clinically, is validation by a blood or urine test. That's

5 the only way one does it clinically. So, you can't do it, you

6 cannot make a diagnosis of impairment or intoxication based on

7 clinical data alone.

8 Q Well, you were in the courtroom though and you heard

9 Dr. Zuk, is that correct?

10 A Yes, I did.

11 Q And what is your feeling as to that point ---?

12 A I'm glad he's not a practicing physician in Maryland

13 because what he said that he was making diagnoses of -- I

14 think he said opium intoxication based on clinical data alone

15 is gross malpractice.

16 Q As far as if you looked -- was there any inter-rater

17 reliability?

18 A No.

19 Q And, again, that is something you would look for to

20 validate this?

21 A That's something you would look at to look at

22 reliability separate from validity but it's an important

23 factor.

24 Q So, taking the PCP out, there was actually three

25 other categories discussed, marijuana, CNS depressants and CNS

26 stimulants, correct?

1 A Yes, correct.
2 Q And were you -- the blood test -- is it true that
3 the blood test detected marijuana 78 percent of the time?
4 A Well, this is what they reported.
5 Q Correct?
6 A Right. They reported high numbers of detection.
7 Q And as the CNS depressants they found, that they
8 say, only 50 percent of the time?
9 A Right.
10 Q And as to cocaine they found only 32 percent?
11 A Right.
12 Q And that was based on them actually -- even with all
13 of the flaws that you discussed, those rates would you
14 consider that to be in the field of good rates?
15 A They're meaningless. They're meaningless, Your
16 Honor, because they only collected data from people who they
17 thought were impaired by drugs. They did not collect any data
18 for people they didn't think were impaired by drugs. So, you
19 cannot generate the necessary statistics, the likelihood ratio
20 where you taking a step back, you can't generate sensitivity
21 and specificity.
22 Because you can't generate those numbers, there is
23 no way to test for validity. So, it's absolutely -- the study
24 is worthless. Even though it has been cited, ad nauseam by
25 certain experts to show that this is a great thing, it means
26 nothing. It is literally meaningless.

1 Q Well, let's talk about -- let's move from that and
2 we will talk about the Minnesota Corroboration Study. You
3 actually analyzed that. You heard that one in Court before.
4 Let me make sure that I actually admit a copy to the Court.
5 (Pause.)
6 THE CLERK: Defendant's 9.
7 (The document referred to was
8 marked for identification as
9 Defendant's Exhibit No. 9.)
10 BY MR. DeLEONARDO:
11 Q I am going to show you what has been marked as
12 Defendant's Exhibit No. 9. Will you take a look at that?
13 When you referred to the Minnesota Study is that the study
14 that you are referring to?
15 A Yes.
16 Q And this was actually a study done by one of the
17 Minnesota forensic class, is that correct?
18 A Yes. It's by three authors from the Minnesota
19 Bureau of Criminal Apprehension Forensic Science Laboratory in
20 St. Paul, Minnesota.
21 Q And that was one of them that you came across that
22 actually you had not heard about, right?
23 A Right. I came across it only because of my work in
24 prior cases like this.
25 Q Now as to this particular study, was it peer
26 reviewed or published?

1 A No, it was neither peer reviewed nor published.
2 Q Was it even released as a technical report?
3 A No.
4 Q So, what would you consider this and the research
5 done?
6 A Worthless.
7 Q As far as the ability of the DRE to determine
8 the ---, would you do that?
9 A No.
10 Q ---, that correct?
11 A Yes.
12 Q And they also indicated a study, is it not true,
13 that the urine test they considered evidence of confirmation
14 of the DRE opinion?
15 A Right.
16 Q Is there any problems that you have with that?
17 A Yes. The major problem, Your Honor, is that a urine
18 test only tells you that the person used a particular drug at
19 some time in the past. It does not tell you whether someone
20 is intoxicated on the drug at the time of the urine test.
21 The only way to do get at whether someone is
22 intoxicated at the time of the text is to get a blood test or
23 for alcohol a breath test, which is a proxy for a blood test.
24 So, what blood test measure is whether the drug is present in
25 the blood and therefore affecting the brain.
26 Urine test measure whether you have the drug in your

1 system at some point in the past. It might being that you are
2 currently intoxicated or it might mean that you used the drug
3 24 or even -- it could be, you know, a week depending on the
4 test and you certainly weren't currently intoxicated.
5 Q You would agree that even in the blood it doesn't
6 necessarily mean impairment to drive?
7 A Absolutely. You are talking about presence or
8 absence affecting the brain but not necessarily causing the
9 impairment.
10 Q Now as far as the study you -- it was not a double-
11 blind, was it?
12 A No.
13 Q Just a review of information --
14 A Yes, it was a post -- if I could go over why it's a
15 bad --
16 Q That is okay. I mean essentially that was the
17 situation. It really didn't discuss any inter-rater
18 reliability either?
19 A No.
20 MR. WELLS: Your Honor, at this point in time, I
21 know we are trying to deal with time constraints as well but
22 there is an awful lot of leeway, Your Honor. If we could
23 just --
24 MR. DeLEONARDO: I am sorry, I didn't hear you?
25 MR. WELLS: An awful lot of leading questions, Your
26 Honor.

1 MR. DeLEONARDO: Okay, fair enough.
2 THE COURT: Well, in the next two minutes, --
3 MR. DeLEONARDO: Next two minutes don't lead.
4 THE COURT: -- cut down on the leading.
5 MR. DeLEONARDO: Fair enough. Well, Your Honor, I
6 would say at this point it is probably a good stopping point
7 before I get into the next study. And that is essentially
8 the --
9 THE COURT: That make sense.
10 MR. DeLEONARDO: I am sorry, Your Honor?
11 THE COURT: That make sense.
12 MR. DeLEONARDO: And, at that point, I will just
13 leave this as identification and we will pick it up when we
14 come back.
15 THE COURT: All right. Well, Madam Clerk, you are
16 going to have to haul everything. Actually, you might have
17 some help over there maybe.
18 MR. DeLEONARDO: Your Honor, I will have light
19 reading --
20 THE CLERK: You want me to keep it or are you going
21 to take it?
22 THE COURT: Curl up with these reports and a bottle
23 of wine over the weekend.
24 MR. DeLEONARDO: Have a little CNS depressant, Your
25 Honor. May I ask if he could step down, Dr. Janofsky?
26 THE COURT: Yes.

1 MR. DeLEONARDO: Thank you, Your Honor.
2 THE COURT: Thank you, doctor. All right. As I
3 indicated, we will be in Courtroom 2 beginning on Monday at
4 1:30 and in case anybody is starting his or her weekend early,
5 have a good weekend.
6 MR. DeLEONARDO: Thank you.
7 THE CLERK: All rise.
8 (Whereupon, the hearing was recessed to reconvene at
9 1:30 p.m. on Monday, September 27, 2010.)
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C E R T I F I C A T E

CompuScribe hereby certifies that the attached pages represent an accurate transcript of the electronic sound recording of the proceedings heard on September 23, 2010, in the Circuit Court for Carroll County in the matter of:

Criminal No. K-10-040259
STATE OF MARYLAND
v.
CHARLES DAVID BRIGHTFUL

Criminal No. K-10-040331
STATE OF MARYLAND
v.
HARVEY ALEXANDER CARR

Criminal No. K-10-040167
STATE OF MARYLAND
v.
JENNIFER ADELINE FLANAGAN

Criminal No. K-09-039370
STATE OF MARYLAND
v.
RYAN THOMAS MAHON

Criminal No. K-09-039569
STATE OF MARYLAND
v.
CHRISTOPHER JAMES MOORE

Criminal No. K-09-039636
STATE OF MARYLAND
v.
VALERIE ANN MULLIKIN

Criminal No. K-10-040300
STATE OF MARYLAND
v.
RONALD DALE TEETER

By:

____________________________ ______________________

Cora C. Holliday, Transcriber Date