

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

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RAJESH BAJI, D.D.S.,

4

Plaintiff,

CASE NO. 1:98CV791

5

JUDGE DONALD C. NUGENT

vs.

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NORTHEAST REGIONAL BOARD OF
DENTAL EXAMINERS, INC.,

7

8

Defendant.

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_____ /

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University of Florida
1600 SW Archer Drive
Gainesville, Florida
1:05 p.m., Wednesday
July 7, 1999

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DEPOSITION

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of

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FRANK J. COURTS, D.D.S., Ph.D.
taken on behalf of the Defendant
pursuant to Notice to Take Deposition

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REPORTED BY KAREN L. BIERY
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23

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1 APPEARANCES:

2 FRANK R. RECKER, Esquire, 418 South Barfield Drive,
Marco Island, Florida 34145-6651, Attorney for the
3 Plaintiff

4 ROBERT J. HANNA, Esquire, 1100 Huntington Building,
925 Euclid Avenue, Cleveland, Ohio 44115-1475, Attorney
5 for the Defendant.

6 ALSO PRESENT:

7 JOSEPH W. ROSSA, DDS, MS

8

9 I N D E X

10 WITNESS: PAGE

11 FRANK J. COURTS, D.D.S., Ph.D.

12 Direct Examination by Mr. Hanna 3

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1 Thereupon,
2 FRANK J. COURTS, D.D.S., Ph.D.,
3 being first duly sworn, testified as follows:

4 DIRECT EXAMINATION

5 BY MR. HANNA:

6 Q Please state your full name.

7 A Frank John Courts.

8 Q Dr. Courts, have you ever been deposed before?

9 A Yes.

10 Q On how many occasions?

11 A Twice.

12 Q When was the last time you were deposed?

13 A Approximately 1993, '94.

14 Q On what occasion? What was the purpose of

15 that?

16 A I was serving as an expert witness for the

17 Board of Dentistry in Florida regarding an injury of a

18 child in a dental practice.

19 Q In a what practice?

20 A Dental practice.

21 Q And before that?

22 A Same type of case.

23 Q '93, '94 was a long time ago, so let me give

24 you a little bit of an explanation of what goes on in a

25 deposition here. I'm going to ask you a number of

1 questions. If you don't understand any of them, let me
2 know. I'll rephrase them and restate them so that you do
3 understand them.

4 If you answer the question, I'm going to assume
5 that you understood my question, okay? Fair enough?

6 A (Witness nods head affirmatively.)

7 Q You're nodding your head, but I think you have
8 to answer out loud.

9 A Yes, that's clear.

10 Q And just so we're clear on that, please answer
11 verbally because shakes of the head are really tough to
12 pick up on a transcript.

13 Do you have a current CV or resume?

14 A I don't have in my possession right now. The
15 pertinent information is on the sheet you have regarding
16 my opinion.

17 Q You're referring to a document that I'm looking
18 at in front of me, which is, I guess, a statement of your
19 opinions. And, on the second page of that, it appears to
20 be a listing of your qualifications that you have, and
21 this looks like it was tailored for this particular
22 report. Is that true?

23 A That's correct.

24 Q My question is, do you have a general resume or
25 CV?

5

1 A Yes, I do.

2 Q Okay, can I get a copy of that before I leave
3 today?

4 A Certainly.

5 Q Now, I notice -- and I'll let you look at one
6 of those. I notice that on your report you list a number

7 of publications. What are the reasons you listed those
8 publications?

9 A Those are my most recent publications.

10 Q I notice that, of the page and a half of
11 articles or publications, only one deals with licensing
12 examinations. Is that true?

13 A Yes.

14 Q And that's the last article referenced?

15 A Yes.

16 Q Have you published or written any other
17 articles at any time on licensing examinations?

18 A No.

19 Q That article that you wrote was in 1997, and
20 the article I'm referring to is the last one on your
21 publications, list of publications. Have you reviewed
22 that recently?

23 A No.

24 Q Was that paper written in conjunction with a
25 presentation you gave in Chicago of 1997?

1 A Yes.

2 Q So, then the presentation listed on the
3 previous page and the publication go hand in hand?

4 A Correct.

5 Q The previous article refers to a Myers-Briggs
6 type indicator on dental school performance. What's
7 that?

8 A It's a personality type testing.

9 Q And what was the essence of that article, if
10 you can recall?

11 A It related to certain personality types that,
12 in their performance in dental school, what types of
13 people tended to do the best in the current dental
14 educational environment.

15 Q And what do you recall to be the conclusion of
16 that?

17 A One of the major conclusions, I guess, was
18 introverts did the best in the first two years of dental
19 school and extroverts did the best in the second two

20 years of dental school.

21 Q Did you ever participate in any studies where
22 it talked about performance in dental school and
23 performance on board examinations?

24 A In this particular study, passing the -- and a
25 subsequent study that's in publication, passing the

7

1 national boards, part one and part two, were components
2 of what success -- the outcome measure of success in
3 dental school were.

4 Q So, if a candidate passes both parts of the
5 boards, national -- or parts one and parts two, would
6 that tend to suggest that he would, or she would, pass
7 the licensing exams afterwards?

8 A That correlation wasn't made.

9 Q Would that correlation connect to performance

10 in dental school?

11 A Yes.

12 Q So, a person who passes both parts of the

13 national board would likely be a better student in dental

14 school?

15 A Correct.

16 Q Conversely, a person who passes -- or doesn't

17 pass both would be a weaker student in dental school?

18 A Correct.

19 Q And do you recall if that's a written article?

20 A I didn't understand the nature of the question.

21 Q Okay, I apologize. Lousy question.

22 Is this an article, this study that -- did it

23 appear in an article?

24 A I'm not sure if that component of the study has

25 been published yet. It's in the process of publication.

1 Q Have you ever seen any articles or in fact
2 participated in your own practice in any studies that
3 would correlate performance in dental school with
4 performance on the licensing exams?

5 A No.

6 Q Do you know who Noel Yapple is, by the way?

7 A Yes.

8 Q Who is Dr. Yapple?

9 A Dr. Yapple was a member of the Ohio Board of
10 Dentistry in 1990 was when I was familiar with him.

11 Q And how were you familiar with him in 1990?

12 A I served as a consultant to the Ohio Board of
13 Dentistry on a manikin exam they administered in 1990.

14 Q We'll get back to that in a minute. Did you
15 work for Dr. Yapple?

16 A No.

17 Q Do you know who Dr. Metsler is?

18 A Dr. Metsler was associated at that same exam.

19 Dr. Metsler was associated with Ohio State University. I
20 think he was director of clinics.

21 Q How about Dr. William Wallace?

22 A Not quite so familiar with Dr. Wallace. It was

23 my understanding he was the dean of the College of
24 Dentistry at Ohio State at the time.

25 Q Dr. Courts, do you believe that it is probable

9

1 that, in any group of entry level candidates, those who
2 were the least successful in dental school would be the
3 ones identified by a licensing exam as not passing?

4 A Could you repeat the question, please?

5 MR. HANNA: Can you read it?

6 (Thereupon, the question referred to was read
7 by the court reporter.)

8 A If the licensure exam was valid and reliable,
9 one would expect that to be true.

10 Q Do you have any articles in the works regarding
11 licensing exams?

12 A Not in the terminal stages, no.

13 Q How about, are you preparing for any
14 presentations or speeches regarding licensing exams?

15 A No.

16 Q Briefly describe for me your educational
17 background. I apologize for asking. I wouldn't have if
18 I'd had a complete CV in front of me.

19 A I received a BS from University of North
20 Carolina in 1972 and in dentistry in 1975. I received my
21 DDS in dentistry from University of North Carolina. In
22 1978, I received my specialty certificate in pediatric
23 dentistry. In 1980, I received my Ph.D. in immunology.

24 Q I'm sorry, I missed the last.

25 A Ph.D. in immunology, microbiology.

1 Q How long have you been teaching?

2 A I've been teaching at the University of Florida

3 since 1980.

4 Q Do you have any formal training in licensing
5 examinations?

6 A I have not received formal course work in that
7 area.

8 Q Do you know what a psychomatrician is?

9 A Yes.

10 Q Are you a psychomatrician?

11 A I don't consider myself to be a
12 psychomatrician. I think I categorize myself as an
13 expert in administration and evaluation of clinical
14 performance in dentistry.

15 Q What other fields do you consider yourself to
16 be an expert in?

17 A Pediatric dentistry, dental education.

18 Q Anything else?

19 A (Witness shakes head negatively.)

20 Q Is that no?

21 A No. Excuse me.

22 Q What is a psychomatrician?

23 A A psychomatrician is an individual that
24 evaluates the statistical nature and validity,
25 reliability and fairness of examination processes.

1 Q Why is it that you consider yourself to be an
2 expert in the evaluation of clinical performance
3 examinations?

4 A Years of hands-on experience working with a
5 number of different boards, the implementation of
6 standardization, calibration, post-exam analysis with
7 on-the-job kind of training, on-the-job experience
8 situations.

9 Q So, someone who spent several years or more,
10 like yourself, could become an expert then without having
11 any of this formal training, is that what you're saying?

12 A You know, I think it's probably true, I think,
13 because of my background and Ph.D. in microbiology and
14 immunology. I had a strong background in statistics and
15 statistical evaluation in the process of obtaining my

16 Ph.D. I also was an individual who became interested in
17 computer programming and database analysis very early on,
18 so I had a group of skills that prepared me to kind of
19 progress toward a more expert level of dental testing.

20 Q Well, did you run any kind of computer analysis
21 to arrive at the opinions you've reached in this case?

22 A I have run literally hundreds of computer
23 analysis as it relates to dental board performance.

24 Q As it relates to this case and your opinions
25 that you're giving in this case, did you run any computer

12

1 analysis?

2 A I had no data to run a computer analysis with.

3 Q How long have you been, as you say, an expert
4 in the evaluation of clinical performance examinations?

5 A I have worked with clinical board exams since

6 1985.

7 Q Are you a consultant for -- we'll get to the
8 clinical board exams is, I guess, the way you refer to
9 it, but are you a consultant or an expert in any other
10 fields?

11 MR. RECKER: Other than the ones he already
12 told you?

13 MR. HANNA: Well, let me strike that.

14 Q Are you a consultant to any other -- let me go
15 back.

16 Your primary occupation is an associate
17 professor in dentistry, correct?

18 A Correct.

19 Q What else do you do to occupy your time?

20 A I'm a full time dental educator, I'm an active
21 practitioner of pediatric dentistry, and I'm an advocate
22 of pediatric oral health.

23 Q Do you do consulting work other than for
24 licensing exams?

25 A No.

1 Q How much of your professional time do you spend
2 doing consulting work for licensing exams?

3 A Probably less than five percent of my time.

4 Q Then the remaining ninety-five percent deal
5 with pediatric dentistry of some sort?

6 A Correct.

7 Q Now, you mentioned that you were a consultant
8 to some exam boards, I think is how you referred to them.
9 You listed four in your report, Alabama, North Carolina,
10 Louisiana and Mississippi. Any others?

11 A Not currently.

12 Q When you say not currently, when was the
13 last -- did you have more or less at some other time?

14 A At certain times, I've served as a consultant
15 to other testing agencies, but, currently, I work with
16 four.

17 Q What other agencies have you worked for?

18 A Alabama Board of -- I mean, Hawaii Board of

19 Dentistry, Ohio Board of Dentistry, South Carolina Board
20 of Dentistry, and Florida Board of Dentistry, but not as
21 a testing consultant.

22 Q What did you do for Florida?

23 A Expert witness cases as they relate to
24 pediatric dentistry.

25 Q So, if the dental board brought charges

14

1 against -- disciplinary charges of some sort against a
2 practicing dentist here in Florida, you would work on
3 behalf of the board, is that fair?

4 A Correct.

5 Q How come you're not working on behalf of the
6 Florida dental board for the test it administers?

7 A I think that traditionally it's been viewed as
8 a conflict of interest for a university employee in the

9 state where the board is administering its licensure

10 examination to work on the board.

11 Q Have you ever served as an examiner?

12 A No.

13 Q Have you ever consulted for any regional

14 boards? You know what I mean by regional boards?

15 A No, never have consulted for a regional board.

16 Q Okay, you understood my question?

17 A (Witness nods head affirmatively.)

18 Q And the answer is no, you have not ever

19 consulted for a regional board?

20 A Yes.

21 Q When you listed the Alabama, North Carolina,

22 Louisiana and Mississippi, and then you had three others,

23 Ohio, Hawaii and South Carolina, did you do consulting

24 work for their licensing exams or consulting work for --

25 I'll put against it enforcement practices?

1 A I did consulting work for their licensure exam.

2 Q And how long have you worked for the Alabama
3 board?

4 A Since the mid eighties.

5 Q To the present?

6 A Correct.

7 Q North Carolina?

8 A Since the mid eighties.

9 Q To the present?

10 A (Witness nods head affirmatively.)

11 Q Louisiana?

12 A Since the mid eighties.

13 Q Let me go back to -- North Carolina was mid
14 eighties to the present?

15 A All four of those boards are -- I'm active with
16 them at the present.

17 Q And were they all four mid eighties to the
18 present?

19 A No.

20 Q Louisiana was mid eighties to the present?

21 A Correct.

- 22 Q And Mississippi is my last one.
- 23 A For the last three years.
- 24 Q When did you work for the Hawaii board?
- 25 A Late eighties, early nineties.

16

- 1 Q Of all of those, why would you not continue the
- 2 Hawaii one?
- 3 A I was working in conjunction with a
- 4 court-appointed master to develop a post-exam analysis
- 5 for them.
- 6 Q When was that?
- 7 A Late eighties, early nineties.
- 8 Q Do you remember the name of the case or
- 9 anything like that?
- 10 A It was Picarski (phonetic).
- 11 Q Can you spell that?

12 A No.

13 Q Picarski, P-a-k --

14 A P-i --

15 Q P-i-k-a --

16 A C-a, something like that.

17 Q Other than that one instance of working with a

18 court-ordered requirement to have a post-exam analysis,

19 any other work with the Hawaii board?

20 A There was a stipulation that an outside

21 observer look at the examination on a periodic basis and

22 I performed that task in 1995.

23 (Off the record.)

24 Q How long did you work with the Ohio board?

25 A Just for the year they gave their manikin exam.

1 Q 1990?

2 A Yes.

3 Q And what was your role with them, to do what?

4 A Was an outside observer.

5 Q Who asked you to be an outside observer?

6 A I was contacted through someone in the board.

7 I don't remember who it was.

8 Q And was it just the one year or more -- how

9 many exams was it?

10 A I visited Ohio twice. I was on site during the

11 Ohio State exam and on site during the Case Western exam.

12 Q And this was when Ohio was putting on its own

13 exam?

14 A Correct.

15 Q Did you assist in any other way other than

16 serving as an observer for one exercise of the Ohio exam?

17 A I obtained data and did some cursory looks at

18 the data in an effort to help the Board of Dentistry

19 decide if it was something they wanted to continue.

20 Q And do you recall the conclusions you reached

21 in that?

22 A No, I don't.

23 Q Did you prepare a written report on that?

24 A I prepared a report that was sent to the Board

25 of Dentistry.

18

1 Q Do you still have a copy of that report?

2 A I'm not aware if I do or not.

3 Q Can you take a look and see if you can locate
4 one?

5 A Sure.

6 Q And would your report have only concluded -- or
7 drawn conclusions on the manikin exam?

8 A Yes.

9 Q Who did you work with when you were on the Ohio
10 board, do you recall?

11 A Dr. Yapple was one of my primary contact
12 persons.

13 Q Who else?

14 A I guess the other contact person was Omar

15 Wisman, who was executive director of the Ohio Board of
16 Dentistry.

17 Q Anybody else?

18 A I worked with a number of people during the
19 exam, but they were my primary contacts.

20 Q Who were some of the people that helped form
21 that exam?

22 A Dr. Wallace, as you had mentioned before. I
23 can remember a guy named Lenny Wise; seemed like a pretty
24 nice guy. I can't think of anyone else.

25 Q Do you know why the State of Ohio discontinued

1 putting on their own exam?

2 A No.

3 Q Have you since come to learn why?

4 A No.

5 Q Have you ever observed a NERB exam?

6 A No.

7 Q Do the four states that you now consult with,
8 do they put on a written and clinical exam?

9 A There's a mixed bag. Some of them only give a
10 written exam. Some of them -- I mean, some of them only
11 give a clinical exam, clinical manikin exam. Some of
12 them also give a written exam.

13 Q Okay, which ones give both, clinical and
14 written?

15 A It's more of a complicated question than I led
16 you to believe initially. There are several components
17 of the exam that are written, which includes
18 sterilization and jurisprudence, that fulfill the
19 requirements of state law, but not -- and they have to
20 pass it to receive licensure. All examination agencies I
21 work with give those. There are. . . Actually, the only
22 written components on the exam for all four of those
23 testing agencies are currently those components.

24 Q So, do they all then just rely on, what, the
25 national boards to fulfill, for those particular states,

1 to fulfill any, I'd say, didactic or written portions?

2 A They have -- in the last several years, they've
3 evolved to that point.

4 Q Of these four boards, do they all utilize the
5 services of a psychomatrician?

6 MR. RECKER: Are you talking in addition to
7 Dr. Courts or you're saying --

8 MR. HANNA: Well, he's not a psychomatrician.

9 A They utilize me as their clinical testing
10 expert and, other than myself, they don't rely on -- I'm
11 not aware of them relying on another psychomatrician.

12 Q Just so we're clear, Alabama does not utilize
13 the services of a psychomatrician, correct?

14 A I'm not aware that they do.

15 Q Same with North Carolina?

16 A I'm not aware that they do.

17 Q Louisiana?

18 A Same.

19 Q And Mississippi?

20 A Same.

21 Q Did Ohio when you were consulting with them

22 utilize the services of a psychometrician?

23 A I don't know.

24 Q What did you do for South Carolina?

25 A Standardization/calibration issues.

21

1 Q When was that?

2 A Early nineties.

3 Q And when you say standardization/calibration
4 issues, what does that mean?

5 A I assisted them in standardizing their board
6 and calibrating the performance of their graders.

7 Q And how long did that engagement last?

8 A I think that was two years in total. I think
9 one year -- and it was sporadic, but I visited South
10 Carolina on two occasions.

11 Q Now, when you assisted them in standardizing

12 and calibrating their exam, what did that entail?

13 A In the early nineties, the process was
14 different than it is now. What I assisted them in doing
15 in the early nineties was reviewing their criteria for
16 grading the clinical components of the exam, providing
17 clinical slides of those procedures and potential
18 deviations from the criteria that were associated with
19 the clinical procedures, and then dentiform models and
20 clinical examples of candidate performance for them to
21 review and grade.

22 Q It sounds more like you were focusing on the
23 content of the exam, is that fair?

24 A Not at all. That's not true at all. Content
25 of the board (sic) was established by the board of dental

1 examiners. Once they established a content, I brought

2 the media and helped them review their criteria for
3 grading the media, reviewed their grading scale and how
4 grading would be done and tried to give them some support
5 in terms of communicating their grading criteria to their
6 graders.

7 Q I got it. So, if I were to take a real
8 layman's look at this, it would be something akin to they
9 come up with the content and then you help them develop,
10 let's say, the candidate manual on how to develop the
11 criteria and grading scales for that?

12 A No, that's not correct. They would develop
13 that candidate manual and, once they had the candidate
14 manual, what criteria they'd use, I would provide them
15 media and hopefully some experience in helping
16 communicate a standard of grading to their group of
17 graders and provide the media for them to test grade and
18 help them evaluate the effectiveness of their graders
19 once the -- once they'd gone through the standardization
20 exercise, there would be a formal calibration where the
21 graders would actually have to demonstrate that they
22 could grade.

23 Subsequent to that standardization and
24 calibration, they shared with me the data, raw data from

25 the exam, and I performed post-examination analysis on

23

1 that.

2 Q Okay, so, your work was primarily pretest with
3 the examiners and then you did some post-exam analysis?

4 A Correct.

5 Q The pretest is this calibration/standardization
6 process you're referring to, right?

7 A Standardization/calibration.

8 Q Okay, standardization/calibration. And that is
9 similar to what NERB does, right? You educate the
10 examiners and then you test them and, if they accomplish
11 a certain grade or reach a certain level on the test,
12 they are calibrated, right?

13 A The process that I've heard described in the
14 depositions and the information that I've been able to

15 review indicates that they actually do a standardization,
16 and the standardization is similar to what would have
17 been done in South Carolina or other places I work with.
18 The absence of a formal calibration -- the definition of
19 calibration is to measure or to closely evaluate
20 performance in an objective manner.

21 So, standardization is -- from what I've been
22 able to read about the NERB examination, standardization
23 is a process that they engage in where they discuss the
24 criteria. They have sample grading efforts. They
25 discuss their grading efforts. They have an interaction

1 in which they familiarize each other with the grading
2 process. So, my determination of what's done in the NERB
3 calibration exercise is that it's actually
4 standardization. The calibration is a more formal

5 measurement to demonstrate that standardization has been
6 successful.

7 Q Let me ask you this. If after you do the
8 standardization as you described, then you give the
9 examiner an exam to have to show what he or she learned
10 from that standardization, is that the calibration
11 process you're talking about?

12 A A formal examination with a formal measurement.

13 Q Okay. So, if there is an examination that is
14 given to the examiners and that they have to reach eighty
15 percent of the answers, they have to answer eighty
16 percent of them correctly, is that the calibration
17 exercise you're talking about?

18 A Not the one that I heard described by NERB.

19 Q But, I mean, is that what you're talking about,
20 separate and aside from NERB?

21 A I don't understand what you're talking about.

22 Q I'm just trying to understand the calibration
23 exercise or the formal exam you're talking about.

24 You standardize the examiners by giving them
25 whatever training is required for that particular exam,

1 and then you test -- that's the standardization process,
2 the training. And then you test them, and that's the
3 calibration process.

4 And your statement is that you need to have a
5 formalized calibration or formalized examination given to
6 the examiners, right?

7 A Correct.

8 Q And if that examiner takes that test and
9 reaches an eighty percent or better score, is that the
10 formal examination process you're referring to?

11 A I think it's even more sophisticated than that.
12 If you end up looking at the content of the calibration
13 exam, the calibration exam can contain examples of very
14 bad performances and excellent performances. If that is
15 the makeup of the calibration exam, it's very easy for
16 people to obtain an acceptable rating of reliability in
17 that examination.

18 So, construction of the examination and the
19 nature or the kind of materials that people are asked to
20 examine are critical in terms of the development of the
21 calibration exam.

22 So, I think, if your bias is to have everyone
23 pass, it's easy to construct an exam where everyone would
24 pass. If your bias is to have only the best graders
25 pass, it's not as easy, but it's reasonable to construct

26

1 an examination that will delineate your very best
2 graders.

3 Q Do you know if NERB actually constructs an
4 exam -- let me finish my question -- constructs an exam
5 for their examiners?

6 A It was my impression that they do construct an
7 exam.

8 Q Have you drawn any opinions on the construction
9 of that exam?

10 A I have no data to draw an opinion on that.

11 Q You mentioned that when you were consulting
12 with South Carolina you did the standardization and
13 calibration process. How many times did you do the
14 calibration process for -- that is a poor question.

15 How many times do the examiners under the
16 advice that you gave them undertake this calibration
17 process?

18 A Typically, in different situations -- I would
19 choose to kind of broaden my response because South
20 Carolina's exam that I only worked on a very short term
21 basis with, I would rather talk about generally how it's
22 done.

23 There's two approaches that individuals use.
24 Smaller boards either decide to have a group, cadre of
25 excellent examiners that are not board members if their

1 state law permits that. Most boards have decided to go
2 in that direction because the board members are under
3 less pressure and they're not in double jeopardy and they
4 can evaluate the results of the exam without bias.

5 So, in that case, we will calibrate a group of
6 volunteers after a one-day standardization process that's
7 done in the early spring, late winter, and those
8 individuals that score well on that are asked to return
9 for the exam.

10 Within twenty-four hours of the exam, those
11 individuals will recalibrate, asked to pass the same
12 exam -- not the same exam but a similar exam and,
13 following successful completion of that, they're allowed
14 to grade. If they don't successfully complete that,
15 they're not allowed to grade.

16 On smaller boards where it's mandatory that
17 board members actually perform the grading themselves, we
18 do a similar process where, in the springtime, we'll
19 standardize and calibrate all the graders. We can
20 identify board members who are bound by their states to

21 participate in the exam, and we find a number of those
22 individuals have difficulty calibrating.

23 In those instances, very frequently what will
24 happen is we'll go over the criteria again. We give them
25 a test within twenty-four hours of the exam and, if they

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1 pass it, they're allowed to grade. If they don't pass
2 it, we ask them to perform duties that are not associated
3 with the grading process. They may be floor monitors or
4 they might monitor a laboratory exercise, but they
5 participate in the board, but they don't actively grade.

6 Q Would you agree that, the more times you
7 calibrate someone, the increased -- or you enhance
8 reliability, is that a fair statement? Reliability is
9 enhanced if you calibrate more times?

10 A The actual reliability in the grading process

11 is -- you can identify someone that has the potential to
12 be a good grader by calibration. It's not necessarily
13 true that the more times they calibrate the better they
14 get. Matter of fact, people that calibrate poorly one
15 year very frequently do the next or they always do
16 because it's -- they don't use other people's criteria
17 well; they like to use their own.

18 Q Well, I mean, I guess based upon at least the
19 consulting work you've given, you would agree that, if a
20 dental testing agency does utilize pretest calibration,
21 that does enhance reliability of that exam?

22 A Only if they have an outcome associated with
23 that calibration.

24 Q Okay, an outcome of what, a high performance?

25 A An outcome that they're able to distill a group

1 of excellent graders.

2 Q And do you have -- can you quantify that
3 outcome or is it not -- I mean, do you put a
4 quantification on that, a number on it?

5 A I think in terms of a formal performance, it's
6 independently graded with a range of difficulty in the
7 questions. I think a seventy-five, eighty percent level
8 of performance is -- most people would consider minimally
9 acceptable.

10 Q And do all of the agencies that you consult
11 with have a formal calibration process that is
12 independently graded?

13 A Yes.

14 Q And if the examiner does not reach the
15 seventy-five or eighty percent, what happens? Can they
16 retake the exam?

17 A If they are in a board that has nonboard
18 members as graders, they can take the exam next year, but
19 they're not allowed to proceed in the process. If there
20 are board members that fail the examination, they have a
21 chance to restandardize and demonstrate their calibration
22 there, but, in almost every board I've worked with, some
23 of those people have been excluded because they were not

24 able to be retrained.

25 Q But, certainly, you've had others that have

30

1 gone through it, retrained and sat for the exams, right?

2 A In many instances, what happened was those
3 individuals that were retrained ended up performing
4 marginally on the examination per se and, in
5 post-examination analysis, they were able to plan the
6 next year in advance that this individual needed to be
7 assigned a nongrading duty on the licensure examination.

8 Q What are the pass-fail rates for the four
9 boards that you consult with?

10 A They range from as low as five percent to as
11 high as thirty-five percent.

12 Q Five percent fail, as high as thirty-five
13 percent fail?

14 A Correct.

15 Q When were you first contacted to offer opinions
16 in this case or asked by plaintiffs to render any
17 assistance in this case?

18 A Early fall of '98.

19 Q Who contacted you?

20 A Dr. Recker.

21 Q And what did he ask you to do?

22 A He said he had some information, documents,
23 depositions that he'd like me to look over.

24 Q Did he tell you anything else?

25 A I think it was just generalities of the case.

1 I asked, you know, what it's associated with, and he said
2 it was board examinations. I said, "What board?"
3 "NERB." It was, you know, not any specific stuff; just

4 wanted me to evaluate the material that he had.

5 Q Had you known Frank Recker before he contacted
6 you in the fall?

7 A Never heard of him.

8 Q Did you ever work with him or see him when you
9 were in Ohio consulting for them?

10 A No.

11 Q Do any of your associates here at the
12 university know of Frank Recker?

13 A I'm not aware that they do.

14 Q The box that is behind you, is that everything
15 that you reviewed?

16 A Yes.

17 Q Did all of that come from Frank Recker?

18 A Frank Recker or his associate.

19 Q I guess as opposed to you seeking out and
20 obtaining any information on your own?

21 A Correct, I have not done that. It all came
22 from Dr. Recker.

23 Q Did you enter into any kind of contract or
24 engagement letter with Dr. Recker?

25 A Yes.

1 Q I didn't see that in the box. Do you have a
2 copy of that somewhere?

3 A I don't -- I may or may not have. I don't have
4 it in my possession.

5 Q You don't have it in your possession right now?

6 A Right.

7 Q Can you get a copy of that before we leave?

8 A I will attempt to.

9 MR. RECKER: Glad you didn't ask me that
10 question. I couldn't tell you.

11 Q Did you ask Frank Recker for anything that he
12 didn't provide you?

13 A I'm not aware of anything.

14 Q Did you conduct any review or independent
15 review of things other than what appears behind you in
16 that box?

17 A I think the -- my recollections and post-exam
18 analysis from other exams I'd worked with. I don't think
19 I consulted them directly, but I have a wealth of
20 experience performing those things, so I relied on that
21 experience heavily.

22 Q Did you interview anybody or speak with anybody
23 about the NERB exam?

24 A Spoken with no one.

25 Q You spoke with Frank Recker, right?

33

1 A Dr. Recker, yes.

2 Q Was he the one who provided you, other than the
3 paper that's behind you, with everything that you are
4 relying on to form your opinions?

5 A Provided me with everything associated with
6 this case.

7 Q Did you ever talk to Dr. Baji?

8 A Never have spoken with Dr. Baji.

9 Q Have you been paid so far?

10 A Yes. My wife tells me I've been paid.

11 (Thereupon, an off-the-record discussion was

12 had.)

13 Q Have you ever spoken with anybody from NERB

14 about their exam and their process?

15 A No, I haven't.

16 Q Have you ever talked to -- is it Martin

17 Shapiro?

18 A Yes, I met with Martin Shapiro and Dr. Recker

19 in the first of January of 1999, first week in January

20 1999.

21 Q Where did you meet?

22 A Atlanta.

23 Q Why'd you meet with Dr. Shapiro and Frank

24 Recker?

25 A Consult regarding this particular case.

1 Q How long did you meet?

2 A I think it was two and a half, three, three and
3 a half hours.

4 Q What did you talk about during that time?

5 A APA testing standards, the ADA, AADE guidelines
6 on testing, and the components of validity and
7 reliability in testing.

8 Q Did you have any sense that Dr. Shapiro was
9 familiar with the ADA or AADE standards?

10 A I think he was only mildly familiar with that,
11 but I was very impressed that he was extremely familiar
12 with APA standards.

13 Q What is APA standards? What does APA stand
14 for?

15 A American Psychological Association.

16 Q What else did you talk about?

17 A Dr. Shapiro and I talked about Emory
18 University, which he was a faculty member, and it was a
19 particularly cold day. We talked a lot about the cold

20 weather. But the nature of the conversation related to
21 this case was associated with reliability and validity of
22 the examination process.

23 Q Did you in forming your opinions rely on
24 anything that Dr. Shapiro was saying?

25 A No.

35

1 Q Any other meetings or phone calls with
2 Dr. Shapiro?

3 A No.

4 Q Did you take notes of that Atlanta meeting?

5 A No.

6 Q On how many occasions have you spoken with
7 Dr. Recker?

8 A Half a dozen.

9 Q Have you ever had in-person meetings with him?

10 A Other than the Atlanta trip is the only time

11 I've met with him personally.

12 Q Did Dr. Baji come down for that Atlanta trip?

13 A No.

14 Q What were your marching orders or what were you

15 supposed to do after that meeting in Atlanta? Did you

16 ever have any sense?

17 MR. RECKER: I'll object to the --

18 Q I'll strike the word or phrase "marching

19 orders," but what were you intending to do after that?

20 A My intention was, I guess, familiarize myself

21 with the case more. I had not met Dr. Recker. I was

22 more interested in speaking with Dr. Recker than I was

23 Dr. Shapiro. I had had several phone conversations with

24 him, but I hadn't met directly with him, and it was an

25 opportunity for us to put our heads together. But my

1 primary interest in that trip was to meet with

2 Dr. Recker.

3 Q How much time have you spent in total on this
4 particular engagement?

5 MR. RECKER: For the record, you mean the case?

6 Q Yeah, this case.

7 A I think, you know, twenty-five to thirty hours.

8 Q Have you sent bills for that?

9 A Only for the first half of it.

10 Q Was the first half before your report of
11 January?

12 A I think the last bill I sent in, when I sent
13 that report in in January.

14 Q That was the last bill?

15 A Yeah.

16 Q Because you have a subsequent report or a
17 supplemental report?

18 A I have not billed for that.

19 Q When you say the twenty-five to thirty hours,
20 does that include what you've done inclusive of the
21 supplemental report?

22 A Yes.

23 Q And that's at two hundred dollars an hour?

24 A Correct.

25 Q Have you ever testified in court?

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1 A Yes.

2 Q When?

3 A Early nineties in relationship to the Florida

4 Board of Dentistry case.

5 Q Any other opportunities to testify in court?

6 A No.

7 Q And court, I want to say administrative

8 proceedings as well. Any opportunity to testify under

9 oath?

10 A I've had some testimony in front of the Florida

11 Board of Dentistry. I guess they're administrative

12 proceedings. Only a couple other times other than the

13 one court case.

14 Q What positions do you hold here at the

15 university?

16 A I'm chairman of the Department of Pediatric

17 Dentistry. I'm chair of the FDA College of Dentistry

18 Liaison Committee.

19 Q You said the FDA?

20 A Right, Florida Dental Association.

21 Q Okay. FDA medically connoted to me with

22 Federal Drug Administration.

23 A Member of the college steering committee and

24 curriculum committee and statewide coordinating counsel

25 on oral health. Typical academic appointments.

1 Q Have you had any contact with anyone from the

2 Ohio State Dental Board within the last five years?

3 A No.

4 Q Do you know who Dr. Awadalla is?

5 A Yes.

6 Q How do you know her?

7 A I received an expert opinion -- copy of an

8 expert opinion that she had rendered.

9 Q Is that the only knowledge you have of her?

10 A Yes.

11 (Thereupon, an off-the-record discussion was

12 had.)

13 Q Dr. Courts, I'm handing you what we've just

14 marked as Exhibit A and ask you to take a look at that.

15 Can you identify for the record what that document is?

16 A It's documentation I received in the last

17 month, month and a half regarding Eleanore Awadalla's

18 opinion on the NERB examination.

19 Q Can I ask you to -- there's some handwriting on

20 that. Do you see that?

21 A Yes.

22 Q Whose handwriting is that?

23 A That is my handwriting.

24 Q Can you read what's under item number two?

25 A It says, "I have evaluated numerous regional

1 and state testing agency examinations during my tenure as
2 an Ohio State Dental Board member, including NERB's 1995
3 and 1996 examinations taken by Dr. Baji." After that, I
4 have written "NERB and who else?"

5 Q Okay. And then the -- just what's the
6 handwriting right below that, just above the exhibit
7 sticker?

8 A I think that's associated with the third
9 statement.

10 Q And that says what? "Using --"

11 A "Using what standards?"

12 Q Oh, okay. And your handwriting on that is,
13 under number five, "Based on what?"

14 A Correct.

15 Q Were these the only questions you had after

16 reading her report?

17 A I'm not sure that's true. It's the only ones I

18 wrote down.

19 Q Do you know -- I apologize if I asked this.

20 Did you ever meet Dr. Awadalla?

21 A No.

22 Q Have you ever met with or spoken to

23 Dr. Fortune?

24 A No.

25 Q You have a copy of his report in your file as

40

1 well, right?

2 A Correct.

3 Q And you have handwriting on that, and I'm going

4 to ask you to read that for me as well, but let me just

5 get this marked first.

6 Have you ever heard of Dr. Fortune before this

7 case?

8 A No.

9 Q Let me show you what we've marked as Exhibit B

10 and ask you just to identify that for the record.

11 Can you identify that?

12 A That is a report on NERB's test validation

13 regarding Baji versus Northeast Regional Board of Dental

14 Examiners, Inc.

15 Q Okay, at the bottom of this page, next to

16 number one, there is handwriting on the side. I assume

17 that that's your handwriting?

18 A Correct.

19 Q Now, on the top left handwritten notation, it

20 says, I think, "didactic, Shapiro"?

21 A Right.

22 Q That's in pen. Why is that in pen as opposed

23 to the others that is in pencil?

24 A I think my initial comments were made with

25 pencil. I decided that number one applied to written

1 only and so it was didactic, and I wanted to -- I felt
2 like Dr. Shapiro had better background in evaluation of
3 written examinations. So, I would have referred anything
4 regarding that to him.

5 Q Just so I'm clear and the record is clear,
6 you're not going to offer any opinions on the written
7 exam, correct?

8 A I would choose not to.

9 Q So, my answer is -- but the answer to my
10 question is correct?

11 A Correct.

12 Q The top of the second page has a line next
13 to -- on the right side, it says CRDT. Do you know what
14 that stands for?

15 A CRDT.

16 Q What does that mean?

17 A Central Regional Testing something -- Dental
18 Testing.

19 Q And why did you write that? If you want to
20 take an opportunity to read that, paragraph two, you can.

21 A The CRDT is associated with the independence of
22 rating is adequate. In some of the material I reviewed
23 that I received, there was some question in the mind of
24 CRDT representatives if that was actually true.

25 Q So, you were just making yourself a note that

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1 someone else may question that?

2 A Correct.

3 Q Have you ever followed up with anyone from
4 CRDT's?

5 A No.

6 Q You have at the bottom there, "Ignores the
7 facts," with some exclamation points. Just so the record
8 is also clear, this also on the second page is all your

9 handwriting?

10 A Correct.

11 Q It says, "Ignores the facts." What facts do
12 you believe were ignored?

13 A I think the --

14 MR. RECKER: Excuse me. Let me just object for
15 the record. This deposition is related to his
16 opinion that's been filed with the court, not his
17 opinion or whether or not he has any opinions
18 regarding a report submitted by Dr. Fortune to
19 counsel and not filed with the court.

20 So, to the extent he's not here to talk about
21 any criticism or opinions or any comments about
22 Dr. Fortune's report, I'm just objecting to that
23 extent. I don't think it's relevant or admissible.

24 MR. HANNA: That's fine. If you will stipulate
25 that this witness will not challenge or say anything

1 contrary to what has been written by Dr. Awadalla or
2 Dr. Fortune, then --

3 MR. RECKER: I haven't had a chance to depose
4 them yet. How can I say that?

5 MR. HANNA: Well, then why are you objecting to
6 me asking him questions?

7 MR. RECKER: He's been given reports, and I
8 think it would be more fair to give him a deposition
9 to review before he can say if he's going to
10 challenge or not challenge them.

11 To the extent you can answer, Dr. Courts, go
12 right ahead.

13 Q So, you were answering the question about the
14 facts you were putting down. What facts were ignored?

15 A I felt that his opinion was not based on what
16 the testing standard is, and that's you have a
17 post-examination analysis, you have empirical data that
18 supports the reliability and validity of tests, and, to
19 me, that was the facts. You've got to have the data. If
20 you don't have the data, no facts.

21 Q So, without the data, you can't draw any

22 conclusions?

23 A I think, without the data, the conclusion you
24 draw is that it's guilty until proven innocent. It's
25 guilty because there's no data to support it.

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1 Q Why that presumption? Why is it guilty until
2 proven innocent and not innocent until proven guilty?

3 A I think the nature of the -- the high stake
4 nature of dental exam testing and the penalty of denying
5 somebody a license for six months or a year is extreme,
6 and the test-developing agency has the burden to make
7 sure that the exam is both reliable and valid before they
8 administer the instrument.

9 Q But isn't there a converse to that, Dr. Courts?
10 I mean, isn't the public part of the equation here?

11 A If you can't prove a test is valid and

12 reliable, you can't demonstrate to the public that you're
13 protecting them.

14 Q Well, but, if you're not passing candidates
15 that shouldn't be passed, isn't your test performing the
16 way it should be performed?

17 A If you don't have a valid and reliable test,
18 you could conversely pass people that shouldn't be
19 practicing and then it's not performing its task either.

20 Q How long have you been in dental education?

21 A Since 1980.

22 Q Did you hold any other positions before that?

23 What did you do before '80?

24 A I was a graduate student.

25 Q You ever serve in the military?

1 A No.

2 Q Do you know any of the NERB examiners?

3 A No.

4 Q Do you know any of the examiners that
5 participated in any of the exams that Dr. Baji took? And
6 the reason that question is different -- it's not a trick
7 question. The reason it's different is because, at the
8 time, NERB was in CORE, participated in CORE.

9 A Actually, I checked to see because I felt like
10 there may be a possibility some of the guys I knew in
11 Hawaii -- I mean in Ohio in 1990 during the manikin exam
12 was there. So, I looked, actually looked at the list,
13 and I knew no one that graded.

14 Q We met about an hour before this -- not even,
15 about forty-five minutes before the deposition. What did
16 you do to prepare for this deposition other than meet
17 with Dr. Recker?

18 A I told him I was nervous because I hadn't given
19 a deposition in a long time and I wanted to talk to him
20 and have him kind of clue me in on what kind of behaviors
21 were acceptable and unacceptable.

22 MR. RECKER: I instructed him not to attack
23 defense counsel.

24 MR. HANNA: Good instruction.

25 A And talked generally about the materials. And,

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1 after a couple hours, we degenerated into talking about
2 boats and children and decided to go to lunch.

3 Q When did he come here?

4 A Came at a little bit after eight this morning.
5 I wasn't in yet, and I came in and we met -- started
6 meeting about nine.

7 Q The other document I want to just -- we don't
8 have to mark this. This is the 1997 dental examination
9 pass, fail and retake statistics for Northeast Regional
10 Board of Dental Exams, spring 1997, summer '97. And you
11 circled the fifty-eight percent and forty-two percent.
12 There's handwriting on the right. Can you read what that
13 handwriting is?

14 A That's my handwriting. It says, "Ask Marty to
15 do stats."

16 Q And do you know if Marty -- is Marty referring
17 to Martin Shapiro?

18 A Correct.

19 Q And do you know if Marty did stats?

20 A It just was one of those late-night things, and
21 I'm assuming -- I didn't ask him to do it. I never
22 followed up or did anything else with that.

23 Q And what kind of stats did you want Marty to
24 do?

25 A I looked at the data and it seemed like a

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1 process in which there was a sixty-forty percent pass
2 rate -- sixty percent pass rate each time the exam was
3 administered, and the more you administer -- if you have
4 a group of -- a subgroup of candidates who have failed
5 the exam and have demonstrated that they have performed
6 poorly, you'd expect the exam to -- if the exam was based
7 on reliable issues, you'd expect some kind of pattern to
8 occur.

9 Q And does this indicate a pattern?

10 A Looks like the same process -- the same outcome
11 no matter how many times the candidate took the exam.

12 Q Is that the pattern you're expecting to occur?

13 A No.

14 MR. HANNA: Want to take a five-minute break?

15 (Thereupon, a brief recess was taken.)

16 Q Dr. Courts, the two reports that you've offered
17 in this case, are those all of the opinions that you've
18 been asked to give in this matter?

19 A This is the second one, and the first one, yes,
20 is all.

21 Q Now, do I understand this correctly, that you
22 have an opinion that SRTA's test is valid and reliable?

23 A My opinion is that they develop a database that
24 suggests that they can demonstrate to an outside agency
25 or individual that they have reliability in their testing

1 process.

2 Q So, am I clear then, you're not offering an
3 opinion then that SRTA's test is in fact valid and
4 reliable, or is it just by virtue of the fact that they
5 have a database, does that necessarily mean that it is
6 valid and reliable?

7 A As I stated here, they have appropriate
8 psychometric and related data to support validity and
9 reliability in dental examinations as required by the
10 applicable standards. The data was not collected by an
11 outside agency. There are, you know -- there can be a
12 lot of questions that you can ask. Certainly, the data
13 supports the fact that they are, and I think that's a
14 step in the right direction. You can't absolutely
15 determine that they're reliable and valid unless other
16 measures are taken, but they have the related data to
17 support the fact that they are.

18 Q What is the related data that they have?

19 A They have a specific record of each grading
20 triad that was performed on the clinical portion of the
21 examination.

22 Q What does that mean?

23 A It means that three people independently look
24 at a clinical procedure that's being evaluated, develop
25 three independent grades, and those grades are entered

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1 into a database and are available for analysis based on
2 reliability, based on grading trends, and they're able to
3 do that for all the sections of the exam.

4 Q And do you know what SRTA does with that
5 information?

6 A It's my impression that they on a periodic
7 basis evaluate different procedures on the exam, how
8 reliable they're graded, overall reliability of the
9 grading process for the exam, and they break it down and
10 look at individual examiner performances on the
11 examination.

12 Q And how is it that you form that impression?

13 A Through the deposition of Mr. Minnich.

14 Q Minnich?

15 A Minnich. And associated materials I received
16 from the SRTA examination.

17 Q And from that deposition and the materials, you
18 were able to determine that they do this comprehensive
19 analysis after the exam?

20 A They suggested that they developed a database
21 that allowed them to do the kind of basic things that one
22 would expect to support validity and reliability.

23 Q What other related data?

24 A I think basically it relates to the smallest
25 component of the exam, which is individual graders'

1 grades on individual procedures, being able to put that
2 into a database and look at those grading triads that are

3 developed by three graders or, in some instances, diads
4 where you can look at grading patterns and reliability.

5 Q I'm trying to understand what other related
6 data you referred to in your report, your supplemental
7 report at item five.

8 A I think the fact that they had consulted with a
9 psychomatrician, Dr. Schmidt, and that they had employed
10 a psychomatrician, another psychomatrician,
11 Mr. Fortune -- or Dr. Fortune, that they had several
12 areas in which the exam was evaluated outside the
13 examining -- or the SRTA organization. They had outside
14 corroboration that there were safeguards to ensure
15 reliability and validity.

16 Q And did you see any reports rendered by any of
17 those individuals you just mentioned?

18 A I think I saw letters and correspondence that
19 tended to indicate that that was true. And they were
20 able to satisfy those individuals that they did actually
21 have the data and it seemed to support reliability and
22 validity.

23 Q How does the SRTA exam compare to the NERB
24 exam?

25 A I have not observed either examination

1 processes, so I don't consider I'm an expert on SRTA exam
2 or NERB exam. I consider myself an extremely
3 knowledgeable person when it comes to examination data
4 and management of examination data in determining the
5 consistency and reliability of that data.

6 So, in terms of the examinations themselves, I
7 don't think that I can draw a reasonable opinion. In
8 terms of the data and data analysis, I feel a little bit
9 more comfortable, and that's what I based number five on
10 was the data.

11 Q Well, were you aware that SRTA changed its
12 scoring methodology the year before Dr. Baji took his
13 exam?

14 A Vaguely aware of that.

15 Q And do you know what it changed it to?

16 A Scoring systems -- one of the things I found
17 out is scoring systems on different examinations in
18 different regions are clearly apples and oranges. And I
19 think the scoring system to me is not as important as the
20 documentations to support the fact that the scoring
21 system was used in a logical, reasonable, reproducible
22 manner.

23 Q Okay, just so that I'm clear, you're not
24 critical of NERB's scoring system per se; you're just
25 critical of what you perceive to be a lack of data

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1 surrounding that scoring system, right?

2 A The criteria and the grading levels I am not
3 critical of of NERB's. I am somewhat cautious and
4 concerned about the two graders and only having two
5 graders evaluate the procedure in most instances.

6 Q And of the four states that you consult with,
7 how many graders are used there?

8 A Every state that I've ever agreed to work
9 with -- or every agency I have ever agreed to work with
10 have utilized three graders.

11 Q Did Ohio utilize three when you worked with
12 Ohio?

13 A Yes, I think so.

14 Q And did those three work in the same fashion
15 that -- well, describe for me how the three worked
16 together.

17 A As an observer -- let me backtrack. As an
18 observer in that exam, I had no input into that process.
19 I observed and looked at the numbers, looked at
20 department. So, I wouldn't want to overstate the case
21 with Ohio.

22 With all the other boards I've ever worked
23 with, there were three independent grades that were
24 arrived at at the time of each procedure evaluation.

25 I was -- I'm under the assumption, but I am not

1 totally sure, that that was true with Ohio since I wasn't
2 part of the process to decide that. I just kind of
3 looked over their shoulders in terms of how things were
4 going, had they had enough time allocated, other issues
5 like that.

6 Q And how do the three graders work?

7 A Three people go in with a separate grade sheet
8 and evaluate the clinical performance. And that's done
9 on every candidate and those grades are not compared
10 until after -- there's not a formal comparison of those
11 grades and a process that generates an average grade
12 until after the procedure is completed.

13 Q Is there some standard that says two is wrong,
14 to have two examiners is just inappropriate or wrong?

15 A I think -- in a high stakes exam where
16 interrater reliability is difficult to achieve, I think
17 there is a significant risk associated with two
18 examiners. That's my personal opinion.

19 Q Other than your opinion, are you basing that on
20 any particular standard or rule or regulation of any
21 sort?

22 A In modeling data, going back as early as data I
23 received as an educator from the Florida board to all the
24 other boards I've worked with, the potential of having
25 one person be able to negatively affect the result of a

1 clinical examination when you only have two graders is
2 very significant.

3 And the repercussions of that are so severe in
4 terms of denying someone a license to practice that I
5 would always like -- I've always strongly advised
6 everyone I've always consulted with that the risk is too
7 great for making the wrong decision either at the neglect
8 of the safety of the public or at the personal damage to

9 a new practitioner that it was worth the effort to
10 utilize three graders to verify with a majority that
11 something was either clinically acceptable and qualified
12 the candidate to operate at a safe beginner level or not.

13 Q How is it that scores are arrived at with three
14 examiners? Is it two -- I mean, the way I understand
15 SRTA to do it is, if two examiners agree, then that's the
16 score. Is that right?

17 A I don't know. I've never participated in a
18 SRTA exam. I would hate to comment on that.

19 Q You didn't read that in the deposition of
20 Mr. Minnich?

21 A I think they have three graders, but -- it
22 suggests that they have three. I don't know how they
23 deal with the third individual.

24 Q Do you know how NERB examiners deal with each
25 other?

1 A Yes.

2 Q Tell me how.

3 A Two examiners look at the procedure, develop
4 two independent grades. If the independent grades
5 differ, there is a process they call validation in which
6 they negotiate a grade that seems acceptable to both of
7 them. If that can't occur, they have a third party
8 determine the final grade in that contended situation.

9 Q You referred to some standard or model from
10 long ago that says that two graders, the way you just
11 described, or NERB's grading is inappropriate. Tell me
12 what standards. Be specific.

13 A The model -- the directive from APA 1985
14 indicates that all measures to ensure interrater
15 reliability should be taken.

16 My interpretation of that statement was and
17 always has been that, when you have a subjective or an
18 opinion examination which expert opinions are being
19 rendered on the result of a new candidate performance,
20 that it's best to do everything you can to assure you've
21 got the right answer coming up.

22 I think if we could calibrate perfectly and we
23 had super interrater agreement, one examiner would be
24 more than enough. What we've come to find out in dental
25 clinical testing is that interrater agreement is not

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1 always so good and, to make sure that we don't injure the
2 public or the candidate, it's best to expend as many
3 resources as we can on making sure we have three
4 independent grades.

5 Q Do you know how SRTA calibrates its examiners?

6 A In reading through the materials, I think they
7 have some kind of allegiance with REB and they use REB
8 calibration information or they share calibration
9 information between them and REB and they use that
10 information to calibrate.

11 Q Do you know if they use an independent source

12 to grade those exams?

13 MR. RECKER: Excuse me. Talking about

14 examiners' exams or post --

15 Q The pretest calibration exercise.

16 A I'm not familiar exactly how they manage the

17 pretest calibration exercise.

18 Q What is the psychometric data you're referring

19 to in your opinion?

20 A I think the primary data is the 1985 American

21 Psychological Association standards and, subsequent to

22 those standards, the ADA, AADE guidelines '92 on clinical

23 testing.

24 Q And in reference to paragraph five there, you

25 talk about the appropriate psychometric data. What is

1 the data that you're referring to there?

2 A They have the raw data that, if they chose to
3 on a regular basis -- I didn't actually see the report,
4 but, if they chose to on a regular report, they could
5 comport with those 1985 APA standards and the 1992 AADE
6 standards.

7 Q And the APA standards suggest what? You need
8 to comport with the APA standards. To comport with to do
9 what?

10 A The interrater reliability is a critical issue
11 in professional testing where subtle differences in
12 performance can mean the difference between obtaining and
13 not obtaining a license or being clinically competent or
14 clinically incompetent.

15 Q Define interrater reliability for me.

16 A Interrater reliability relates to the
17 consistency that independent raters obtain the same grade
18 from the same clinical performance.

19 Q And isn't it true that -- and how do you
20 measure that, at least insofar as the '92 guidelines?

21 A There are some simple ways to do that, and
22 dentistry generally has looked at the simple way.
23 Basically, as NERB had decided to do in the calibration
24 exam, a reasonable level of performance is usually about

25 eighty percent agreement between examiners.

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1 Q And that is pretest?

2 A That's pretest, post-test, whatever.

3 Q And you're saying that, as long as an agency
4 does that, they're satisfying the APA standards?

5 A If they're doing it at a level that's described
6 in the APA '95 edition of that book, they certainly would
7 be.

8 Q And what is that level of the '95 edition?

9 A The '85 edition. I'm sorry.

10 Q What is the level that they should be doing it
11 in the '85 edition?

12 A Well, I think that there sets a pretty serious
13 standard that dentistry is becoming aware of in the last
14 decade and has moved in that direction. Certainly, the

15 subjective kinds of evaluation, the opinion that
16 candidate A did well and candidate B seemed like he
17 really didn't know what he was doing, those kinds of
18 evidence are no longer acceptable in terms of evaluating
19 whether someone's competent or not.

20 So, the standard is that it has to be
21 empirically -- that the test has to be empirically
22 evaluated, it has to be scientifically developed.

23 Q My question is trying to figure out, if I can
24 go to the APA, I'm going to find a standard that says you
25 have to have the interrater reliability --

1 A Certainly.

2 Q -- at a certain serious level. What is that
3 level?

4 A But it's much more significant than that. You

5 have to develop an instrument in which it's reliable or
6 valid enough and constructed enough that the interrater
7 reliability can have some significance.

8 As I mentioned before, you can construct a test
9 of all preparations that are made by very poor dentists
10 or very excellent dentists, and that test will
11 demonstrate a high level of interrater reliability even
12 though the dentists are not calibrated. Another test
13 that's constructed to determine that reliability actually
14 is taking place will be much more difficult, and the same
15 group of uncalibrated -- or unstandardized graders would
16 have a very difficult time with that.

17 So, it's not just the level of performance. It
18 has to do with construction of the instrument per se.
19 So, you can't talk about percentages and really get to
20 the heart of what's being talked about.

21 Q You mentioned that the dental community in the
22 last decade is finally catching up with these items in
23 the APA. Now, why are you saying that just in the last
24 decade they're doing that?

25 A I think --

1 Q I assume that this is an evolutionary process,
2 right?

3 A (Witness nods head affirmatively.)

4 Q And every year -- is that right, every year
5 tests improve? People learn new things on how to improve
6 tests, right?

7 A That would seem to be true.

8 Q And that there is no perfect, reliable exam, or
9 perfectly reliable exam?

10 A There are exams that are clearly reliable and
11 then there are exams that clearly are not. In terms of
12 perfection, only my wife achieves that.

13 Q And you're under oath, so those are truly
14 things that will be remembered.

15 So, I assume then that the dental examination
16 process is also an evolving process whereby agencies are
17 learning how to improve their exams, right?

18 A One would hope so, yes.

19 Q And, in fact, the guidelines you're referring

20 to were improved at a subsequent date, right?

21 A Correct.

22 Q So, '92, these guidelines came out and, in '98,

23 they corrected some mistakes that were made in the '92

24 version, right?

25 A I don't think any mistakes were corrected. I

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1 think the process of standardization and calibration was

2 more carefully articulated.

3 Q And it was carefully articulated to mean

4 something occurring after the exam as opposed to before

5 the exam, right?

6 A No.

7 Q Okay, explain for me how it was carefully

8 articulated.

9 A More carefully articulated.

10 Q Okay.

11 A The process of calibration -- or
12 standardization and calibration was discussed, the
13 importance of which were carefully discussed in the 1992
14 document. In the subsequent activities, the actual
15 process and what needed to be done and how it might be
16 accomplished were more carefully delineated.

17 So, the importance of standardization and
18 calibration was clearly established in the 1992 document.
19 The how-to or what the best practices were with those two
20 processes were more carefully described in the '97-'98
21 document.

22 Q The guidelines that we're referring to are
23 these '92 Guidelines for Valid and Reliable Dental
24 Licensure Clinical Examinations, right?

25 A Correct.

1 Q Okay. And I notice you have a copy of them in
2 your file. It's May '92.

3 Just so I'm clear on what these things are,
4 these are, in effect, just guidelines, right?

5 A That's not my opinion.

6 Q What is your opinion?

7 A My opinion, they're standards of testing that
8 are applied throughout the testing community. Not
9 dentistry, not medicine, not plumbers; they are standards
10 that have to be used if testing for licensure is being
11 utilized.

12 Q So that if a testing agency does not utilize
13 every one of these guidelines listed in this '92
14 publication, then you're saying that they're falling
15 below the standards?

16 A Yes.

17 Q And what do you base that opinion on?

18 A On the APA guidelines that were promulgated in
19 1985 and the significant, serious nature of high stakes
20 licensure exams being required to comport with those --

21 that level of examination efficiency.

22 Q What does the APA guidelines say about

23 incorporating -- or the APA standards say about

24 incorporating these guidelines?

25 A The APA -- this is actually a subset, a dental

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1 subset of the APA 1985 guidelines, and they are quite

2 specific about interrater reliability as it related to

3 clinical testing and professional testing and the

4 development of instruments that can assure reliability.

5 Q Well, how many other professions do clinical

6 exams?

7 A Very few.

8 Q And before these '92 guidelines, what

9 guidelines existed for clinical exams?

10 A The 1985 APA guidelines.

11 Q And those were specific to clinical exams?

12 A Talked about interrater reliability for

13 professional examinations.

14 Q For clinical exams, not oral exams?

15 A Professional examinations where subtle

16 differences had to be observed.

17 Q What else do you base this opinion that

18 agencies or organizations have to follow these particular

19 guidelines?

20 A It's my understanding that the quality of care,

21 the level of performance for professionals is such that

22 one expects a licensing body or developing agency to

23 comport to these standards. I think it's understood.

24 Q Have you ever gone through an attempt to

25 identify how many of these guidelines NERB satisfies?

1 MR. RECKER: On his own?

2 MR. HANNA: As opposed to having someone else
3 do it, you mean?

4 MR. RECKER: The ADA annual survey?

5 Q Have you ever gone through and analyzed how
6 many of these guidelines NERB satisfies?

7 A Without --

8 Q Notwithstanding Dr. Recker's testimony here.

9 A In order to actually analyze that and come up
10 with an objective evaluation, I think you'd have to have
11 an on-site analysis. I have never been on-site at
12 NERB's, so I can't totally evaluate what guidelines they
13 comfort with and what guidelines they don't comport with.

14 I was able to determine --

15 Q That's my -- okay, my question is are you going
16 to offer an opinion --

17 MR. RECKER: Would you allow him to finish his
18 answer?

19 Q Well, go ahead, but you did answer my question.

20 A I was able to determine that there were some
21 guidelines I was sure that they did not comport with,
22 from the data.

23 Q How many of those are there, the guidelines

24 that they did not comport with?

25 A I think in terms of the -- all the guidelines

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1 that relate to interrater reliability and reliability of
2 the exam cannot be demonstrated that NERB's comports with
3 them.

4 Q Your testimony is that all of the guidelines
5 relating to reliability --

6 A Interrater reliability.

7 Q Okay, I thought you expanded that to say
8 reliability. Your testimony is that all of the
9 references to interrater reliability are the ones that
10 NERB has not satisfied?

11 A Correct.

12 Q Anything else?

13 A I think the guidelines that relate to the

14 calibration exercise that was stated in the 1992
15 guidelines document because there is no documented
16 independent grading calibration exercise. I think NERB
17 falls short on the calibration guideline.

18 Q In other words, you'd need to see some kind of
19 formal report of how these examiners calibrated?

20 A I think there needs to be a process to
21 demonstrate that they independently are able to perform.

22 Q And what is the process that NERB employs?

23 A Self grading; is inadequate to demonstrate
24 calibration has actually occurred.

25 Q And is that the critical flaw?

1 A I think the nature of the -- I can't determine
2 what the nature is, but the nature of the development of
3 the calibration exam needs to be demonstrated. I've not

4 seen any discussion about how the calibration exam was
5 developed and what the intent of the calibration --

6 Q Right, and you said that you have no opinion on
7 that?

8 A Right.

9 Q What other guidelines listed in the '92
10 guidelines does NERB not satisfy?

11 A The only ones that I can -- based on the
12 information I've been able to review that I feel NERB
13 does not comply with are the calibration and the
14 interrater reliability issues.

15 Q And as far as these other guidelines referenced
16 in this fifty-page report, you're not going to offer any
17 opinions that NERB violates or comports with?

18 A No.

19 MR. RECKER: Other than what he's already
20 stated in his reports?

21 MR. HANNA: Well, I mean, I'm here to find out
22 that information now, Frank.

23 A The major issues that come to my mind at this
24 moment relate to calibration and interrater reliability.

25 Q This is my only chance unless you're willing to

1 come up to Cleveland for me to depose you again.

2 MR. RECKER: Rob, for the record, as you know,
3 I haven't had the opportunity to depose anybody
4 you've submitted. So, whether or not he'll have
5 additional opinions, depending on what Dr. Awadalla
6 and Mr. Fortune say and, obviously, he can't --

7 MR. HANNA: You have their reports.

8 MR. RECKER: You wouldn't need his deposition
9 if the report was all there was.

10 THE WITNESS: Off the record, can I ask --

11 MR. HANNA: We're not going to go off the
12 record, but go ahead.

13 A The question appears to me to be so general.
14 I'm not trying to be obtuse, but the question appears to
15 be so general. I don't want to answer a general
16 question. I would prefer a more specific question so I

17 could focus my attention a bit more.

18 Q But here's the process by which we came to this
19 question is I wanted to know whether you have evaluated
20 whether or not NERB satisfies the guidelines, and your
21 answer was, "Not specifically." And the only evaluation
22 you did and the only conclusions you've drawn is or are
23 that NERB violated the guideline referring to interrater
24 reliability and calibration. Right?

25 A I'm concerned, but I don't have direct proof,

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1 that anonymity may be an issue. I have concerns that
2 independent grading may be an issue.

3 Q Okay, you say you're concerned, but you have no
4 proof. So, you have no information one way or other that
5 anonymity was an issue?

6 A I have information to demonstrate to me that --

7 Q A concern?

8 A No, please let me finish.

9 Q I'm sorry.

10 A I have information that leads me to believe
11 that anonymity was not an important issue to the NERB
12 administrative staff, and that is a great concern to me.

13 Q And what information do you have that would
14 lead you to believe that anonymity was not a concern for
15 NERB's administrative staff?

16 A The special identification on Dr. Baji's ID
17 badge may be an administrative -- may facilitate
18 administrative matters, but it's certainly not the kind
19 of procedure that I would recommend or suggest a board
20 engage in that was giving a licensure exam.

21 Q Any other facts that would lead you to that
22 conclusion on anonymity?

23 A That's it.

24 Q Do you have any information or do you hold a
25 belief that any of the examiners that ultimately graded

1 Dr. Baji on that exam knew or had any information
2 regarding this highlighted name badge?

3 A I don't.

4 Q You also mentioned that you have concerns about
5 the independence of examiners. What facts do you have to
6 suggest -- or that form the basis of that concern?

7 A The individual grading sheets that Dr. Baji --
8 that were used for Dr. Baji, the rules, the protocol for
9 grading, for negotiating grades, for making comments and
10 for generating a final grade were not, in many instances,
11 followed. There seemed to be major discrepancies in the
12 way that grades were entered and how a final grade was
13 determined.

14 Q How does that deal with independence?

15 A The issue of whether -- how those grades were
16 negotiated or what they were negotiated off seems to be
17 different than the rules NERB itself supports and
18 recommends.

19 Q What did you review to reach that conclusion?

20 A I reviewed the actual grading sheets and the
21 rules that NERB or CORE had in one year that -- how
22 grades were supposed to be validated.

23 Q Are you critical of how those procedures exist
24 or are formed? Are you critical of the procedures?

25 A I'm critical of the process.

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1 Q That's why I wanted to get the procedures out
2 of the way. Okay, now, you say you're critical of the
3 process and you have some concerns based upon your review
4 of grade sheets?

5 A Correct.

6 Q How can you tell what occurred on the grade
7 sheets from seeing them?

8 A The validation process and how a final grade
9 was arrived at in some instances required circling of

10 differences in the criteria when one instructor had
11 graded at one level and -- one grader had graded at one
12 level, another grader had graded at another level, that
13 there was supposed to be a validation process that would
14 indicate circling of the grades. In more than one
15 instance, I was not able to observe that.

16 Q How do you know the validation process even
17 occurred then?

18 A You don't.

19 Q How do you know it was supposed to occur?

20 A According to the directives that I read,
21 validation was supposed to occur when there were
22 differences not at the CO level or 1, 2 level.
23 Differences other than the CO level or the 1, 2 level
24 were supposed to require interaction between the two
25 graders.

1 Q And what is it that you understand the
2 validation process to be?

3 A The validation process is that either the
4 second grader can independently decide to agree with the
5 first grader and not have an interaction or that, if he
6 chooses not to do that, there needs to be a conversation
7 that occurs in which they decide one of the two grades is
8 actually correct. And they should circle those, those
9 grades, indicating that the process required them to
10 interact with each other to arrive at that grade.

11 Q And do you recall seeing any of the test sheets
12 that had circles on them?

13 A There were some -- some tests were circled --
14 actually, one of the grade sheets was circled in one
15 instance and not circled in another; others weren't
16 circled at all.

17 Q Do you know what the third column is on the
18 grade sheets?

19 A Yes.

20 Q And what's that?

21 A That's the final grade ---

22 MR. RECKER: I think for the record, because I

23 have no idea what you mean by third column, can you
24 be more specific?
25 Q I'd like you to get them. Can you locate those

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1 instances in your file where you're referring to?
2 (Off the record.)
3 Q You're looking at the summer of '95 exam.
4 Where do you see a validation process?
5 A The validation is in this column right here.
6 It was my understanding --
7 Q Which is the third column on the left side of
8 the chart.
9 A It's my understanding that a discrepancy --
10 MR. RECKER: Excuse me, on the right side?
11 MR. HANNA: No, on the left side. On the
12 document, the amalgam preparation document, there is

13 a group of items, external form, internal form.

14 That chart, it's the right side of that particular

15 chart, which appears on the left side of the

16 document. Got it?

17 MR. RECKER: No, because it goes all the way

18 across.

19 MR. HANNA: As opposed to the summary marks and

20 final marks.

21 MR. RECKER: You talking about this column

22 right here?

23 MR. HANNA: Right. It's the third column --

24 MR. RECKER: It's the only column where there

25 isn't double O, double R, double E.

1 MR. HANNA: Right.

2 Q Now that we've clarified that for the record,

3 go ahead, Doctor. My wife criticizes me for interrupting
4 her, too. Before we end the deposition, we'll both get
5 to know each other's wives pretty well, I think.

6 A I don't think so.

7 I was under the impression that, if there
8 was -- in this particular instance, there was an
9 overextension. There's an R and the E here, which means
10 that the performance was rated as marginal but failing by
11 examiner 1, and by examiner 2 was rated as totally
12 failing at a zero level. The grade that was given was an
13 E, and I was kind of -- I was under the impression that
14 there should have been some interaction or some
15 documentation of that interaction.

16 There are situations -- maybe this is not the
17 best example. There are situations in here where
18 statements -- where failing grades were given without any
19 kind of comment.

20 Q So, at least insofar as exam number -- in the
21 summer of '95, that does not give you -- or you do not
22 use that as an example of a question of independence?

23 MR. RECKER: You talking about that one
24 criteria grading or should we go down --

25 MR. HANNA: Well, you know, Frank, frankly, I

1 appreciate it if you don't testify in this case.

2 MR. RECKER: Well, be specific in what you're
3 asking. Don't try to trap him in some general "it's
4 okay."

5 MR. HANNA: I'm not. His testimony is what I'm
6 asking for here, okay? Not yours. You will
7 probably have a chance to testify at a later date.

8 A There are discrepancies in the grading process.
9 This is one example. There are multiple examples where I
10 read the instructions to the graders how validation
11 should occur and I did not see situations where
12 validation would occur. Let me show you an example of
13 one where it did occur.

14 Q So, just so we're clear then, this is not
15 one -- and I'm referring to this amalgam prep for the

16 summer of '95. This is not one where a validation error
17 occurred?

18 MR. RECKER: Objection unless you give him time
19 to go down and look at every grade -- every
20 criterion marked by both examiners.

21 MR. HANNA: Are you through? State your
22 objection and that's it. All right?

23 THE WITNESS: Could you repeat the question?

24 MR. HANNA: I don't have a question.

25 It's called coaching the witness. It's called

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1 testifying, Frank. It's called violating Federal
2 Rules of Civil Procedure.

3 MR. RECKER: Is that right?

4 MR. HANNA: That's right.

5 MR. RECKER: I disagree.

6 MR. HANNA: And local rules; I forgot. Maybe
7 you're referring to the local rules that you're
8 violating as well.

9 Q Now that you've been sufficiently coached,
10 Dr. Courts, is there anything about amalgam prep 1 summer
11 of '95 that you're critical of?

12 A There were several instances where grades were
13 given that were not validated here. One instance here,
14 and I won't use the one that Dr. Recker suggested, where
15 grader 1 gave an R4, which is a failing level, for
16 inclination, grader 2 did not mark anything. So, my
17 interpretation of that is that was at the C level or the
18 1 level and there was no documentation in that.

19 Q And is that an error?

20 A That's a process that was not followed. The
21 issue of how you end up grading and arriving at a grade
22 should be a well-considered process that should be
23 associated with the seriousness of a licensure exam.

24 Q And on any specific item, you're going to have
25 a disagreement, right? I mean, by the very nature of the

1 exam process, you would have one person -- I mean, the
2 calibration process isn't one hundred percent correct,
3 right?

4 A Well, in some cases, it's not. This is a good
5 example to look at. If we look at calibration here and
6 interrater agreement, it's my understanding that grader 1
7 in this individual situation graded for internal form,
8 external form and treatment management at the R level in
9 all three cases. It's also my understanding based on
10 these summary marks that grader 2 graded at the E level
11 in all three of those situations. It's a little bit
12 disturbing if you ask a psychometrician what the
13 interrater agreement on that was. Their answer would be
14 zero.

15 Q But the fact of the matter is they're both
16 failing scores, right?

17 A They are both failing scores. But there's no
18 interrater agreement.

19 Q Now, when does this process occur? When do
20 they fill out the summary marks?

21 A I'm assuming the summary marks are filled out
22 by the second grader after all the -- no, the summary
23 marks are placed -- I guess they're placed through the
24 NCR form. I've never seen the NCR form. So, these are
25 independently placed by the individual graders, and this

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1 one is filled out on the final sheet after the grades
2 have been --

3 Q You're looking at the validation process,
4 right?

5 A Right.

6 Q And that's that third column with the O, R and
7 E?

8 A Uh-huh.

9 Q And all three of those -- I mean, that
10 validation column shows E's for everything down the row?

11 A Right.

12 Q That would show consistency among the graders,
13 right?

14 A Well, they had to negotiate a level here. I
15 thought it had to be circled if they negotiated it.

16 Q And your understanding of it having to be
17 circled is based on reading NERB's procedures?

18 A Well, you know, there was a procedure I read
19 that circles occurred, and I've got a different set of
20 stuff. I've got Dr. Cartwright's deposition and I can't
21 find the grading sheet on that. I'm looking for grading
22 sheets in which they were actually circled. I don't see
23 it here. I have them someplace, another deposition.

24 I think my review of this material is that some
25 of the rules about how validation occurred actually were

1 not followed. In Dr. Cartwright's deposition, as I went
2 through that deposition, I was able to determine that
3 Dr. Cartwright indicated that in certain instances the
4 rules did not appear to have been followed.

5 That doesn't indicate that there has been poor
6 behavior on the part of -- or bad behavior on the part of
7 the examiners. It means that the rules in a complex exam
8 like this are very important and they should be carefully
9 followed.

10 The suggestion is, when rules are not followed,
11 errors can be made and those errors can result in
12 negative effects on candidates and negative effects on
13 the public. It's very important that the rules be
14 followed.

15 Q Looking at this amalgam prep for the summer '95
16 exam, I'm still -- I don't know if you mentioned an
17 error, but did that affect the outcome of this exam?

18 A In this particular instance, it did not affect
19 the outcome of the exam.

20 Q Do you see any of the multiple instances that
21 you're referring to in your report in this document, this

22 amalgam prep number 1 for the summer of '95 exam?
23 A You know, there are instances here that bother
24 me. You have one grader grading at the lowest level, E,
25 and the other grader not finding any problems. You've

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1 got that once, twice, three times.
2 So, you know, in the individual criteria, you
3 have one grader that seems to be seeing big problems and
4 another grader that says this looks good, I see no
5 problems at all. That seriously concerns me in terms of
6 the interrater reliability.
7 And the issues of how these grade sheets are
8 done, my person opinion, this is a very complex grading
9 sheet that requires a lot of attention by the graders and
10 it is a situation, when a grader is busy and it's been a
11 long day, mistakes can be made, particularly by tired

12 humans.

13 Q Do you know how many examiners -- or candidates
14 an examiner grades in any given day?

15 A No.

16 Q Do you know how long the examiners work on a
17 given day?

18 A No.

19 Q Do you know how many candidates NERB tests in
20 any given testing period?

21 A I saw some data that related to about, over a
22 year period of time, there's seventeen hundred exams, two
23 thousand, three thousand exams.

24 Q How many does Louisiana?

25 A Louisiana typically does seventy in a two- or

2 Q And how about Mississippi?

3 A Mississippi has a smaller exam, only about
4 forty. North Carolina over a period of a year will do
5 around two hundred. Alabama only does seventy to eighty.
6 Usually on a site -- usually a site performance, seventy
7 candidates to a hundred and forty candidates is what I'm
8 most familiar with and, in situations like that, over a
9 three- or four-day period, graders can become quite
10 fatigued.

11 Q As you sit here today, can you identify any of
12 these other instances of questionable independence? And
13 I'm not quite sure that you did in this instance,
14 but. . .

15 A I think the process is cumbersome enough that
16 it would be very difficult for an examiner to perform at
17 a consistent level throughout the exam with a sheet if
18 things got busy. I think my experience with examiners is
19 that, when they get tired, they try to take shortcuts. I
20 think this process encourages that behavior rather than
21 discourages it.

22 Q But do you know if any of these examiners took
23 shortcuts with Dr. Baji?

24 A I have no idea.

25 Q This whole line started when we were talking

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1 about these guidelines, and you've mentioned two items
2 that you raise as areas that NERB doesn't follow and two
3 items that concern you. Anything else that NERB doesn't
4 follow in these guidelines?

5 MR. RECKER: Did you give him the guidelines,
6 Rob?

7 (Mr. Hanna shakes head negatively.)

8 A No, I think that -- I'm not aware of any at
9 this time.

10 Q Does Louisiana or Alabama or North Carolina
11 satisfy every one of the guidelines listed in the ADA
12 guidelines?

13 A They currently do.

14 Q When did they reach that level where they

15 currently do?

16 A Some boards, it was 1993. Some boards I work
17 with ended up didn't change until '94. Started working
18 with Mississippi three years ago and they did not comply
19 with the measures until '97.

20 Q So, this sounds fairly recent, in the nineties.

21 A There were nuances to the new guidelines. I
22 would say Alabama, Louisiana and North Carolina were
23 basically in compliance when the guidelines came out.
24 There were nuances where they had to elevate their
25 standard, as you might expect.

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1 Q Have you ever seen the NERB examiner manual?

2 A Yes.

3 Q Are you critical of anything that's in the
4 manuals?

5 A No.

6 Q Are you critical of anything that's in the CORE
7 candidate manual?

8 A The manuals are well thought out.

9 Q Same with the NERB dental candidate manual?

10 A Good.

11 Q Same thing, well written and well thought out?

12 A (Witness nods head affirmatively.).

13 Q And you're not going to offer any opinions on
14 the content of the NERB exam, clinical exam?

15 A Content is not an issue that I think is
16 critical in this exam.

17 MR. HANNA: Let's take five minutes.

18 (Thereupon, a brief recess was taken.)

19 Q Did you have any role in putting together the
20 guidelines in May of 1992?

21 A No.

22 Q Did you have any subsequent role in formulating
23 guidelines?

24 A The standardization/calibration guidelines that
25 are approved by the ADA, I haven't seen the final copy of

1 those, but I was a member of that committee.

2 (Off the record.)

3 Q Are you applying any of the standards in the
4 1998 to your analysis here?

5 A No.

6 Q You've been giving exams here at -- you've been
7 at University of Florida since '80?

8 A Correct.

9 Q You've been giving exams to dental students
10 since then?

11 A Correct.

12 Q How many people grade your exams?

13 A Clinical evaluation, in the evaluation of
14 competency, we have two graders in our department grade
15 all our exams. Routine procedures, we have one grader
16 grade the exams.

17 I think because of the nature of the dental

18 school environment, the final result is high stakes, but
19 we have multiple looks at them. The reliability of
20 individual grades becomes balanced out by the number of
21 observations we have to get. Important observations, we
22 always have at least two examiners.

23 Q Now, in your report, the first one you wrote,
24 what should be done -- in your reference to item
25 number -- or 1A, what do the standards say that should be

1 done in terms of demonstrating that they're calibrated to
2 comport with standards?

3 A The standards indicate that calibrations should
4 be done after a thorough standardization exercise, that
5 calibration should be done as an independent objective
6 test that's scored independently and rated independently
7 and constructed to make sure that not only all the

8 components of the clinical examination are tested but
9 different levels of performances are able to be
10 differentiated by each of the graders.

11 Q What does rated independently mean?

12 A Not self graded.

13 Q Okay. What standard are you referring to in
14 item B which talks about post-examination analysis?

15 A APA '85, ADA, AADE 1992.

16 Q Your understanding is that post-exam analysis
17 is in here?

18 A Post-examination analysis is the foundation for
19 interrater agreement and, without that, you can't have
20 interrater agreement. Interrater agreement is a
21 critically important part of that document.

22 Q When you're talking about the interrater
23 agreement, are you talking about the interrater agreement
24 among candidates or among examiners?

25 A I'm not aware of any situation where candidates

1 rate, so I'd be talking about the interrater agreement
2 among graders.

3 Q And your understanding is that these guidelines
4 relate to the interrater agreement post exam?

5 A Right. The only way you can determine
6 interrater agreement or interrater correlation is actual
7 performance on the examination itself. And to determine
8 that, you have to have a post-exam analysis, a
9 comprehensive database of all grades given by all graders
10 at the examination process, and that's how you determine
11 interrater agreement.

12 Q Is it your understanding that SRTA does that?

13 A It's my understanding that they have the
14 capability to do it.

15 Q Okay. Now, we were talking about instances
16 where, in reference to item E -- I'm sorry, item 1C of
17 your report, you were mentioning instances of
18 independence that you had concerns over. I know you
19 can't put your hand on them, but tell me what you recall.
20 How many instances are there?

21 A The issue of -- some of the material I received
22 from the Ohio State University regards to CRDT reports
23 and interactions between CRDT's and NERB's indicated
24 there was some concern about that. That's the basis --
25 the basis for that, I thought the grade sheets and the

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1 makeup of the grade sheets almost encouraged that
2 process.

3 Q Did you see any -- I understand the CRDT's
4 reports being the documents that Frank Recker obtained
5 from CRDT's and that there are evaluations that CRDT's
6 prepared for the examiners to fill out after the first
7 CORE exam. Did you see any of those evaluations for any
8 of the sites that Dr. Baji took his three CORE exams?

9 A I'm not aware of that.

10 Q So, you have no opinion one way or other

11 whether any of those criticisms actually took place in
12 the sites that Dr. Baji took his tests?

13 A I have no evidence of that.

14 Q Okay. And no evidence meaning then you don't
15 have any opinions on that, correct?

16 A Correct.

17 Q The guidelines that we've been referring to
18 talks about the calibration, and a number of my questions
19 probably seemed sort of redundant to you because my
20 understanding of these guidelines were that they talk
21 about pretesting calibration. Can you show me where in
22 this document it talks about post-testing?

23 A On page thirteen -- would you like for me to
24 read it or do you just want to see it?

25 Q Just show me where you're referring to.

1 A (Witness complies.)

2 Q You're referring to the last paragraph of that

3 section, Analysis of Examination Results?

4 A Uh-huh.

5 Q Is that a yes?

6 A Yes. Sorry.

7 Q Is that what NERB was supposed to conduct in

8 terms of post-examination analysis?

9 A If you look at the APA guidelines or APA

10 standards, there is a hurdle that you have to overcome.

11 Before you let anybody grade, you have to determine that

12 they have the ability at least during a simulation to

13 grade appropriately. Once you make that determination

14 and the examination is conducted, APA indicates that you

15 have to determine interrater reliability on the actual

16 exam itself.

17 Just because someone calibrates well does not

18 mean that they will grade well, and it's actually much

19 more important to evaluate interrater reliability on the

20 examination itself because that's when people are -- or

21 critical decisions are made about the careers of

22 individuals.

23 The only way you can make that determination is

24 to evaluate individual grades given and look at the
25 actual performance of graders on the exercise -- on the

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1 examination itself. Those determinations are the ones
2 that lead you to make modifications in the exam,
3 eliminate graders or decide that a particular grader
4 probably is okay in perio, but we don't want them grading
5 amalgam preps.

6 Q Are you aware of any post-analysis evaluation
7 that NERB does on-site or afterwards?

8 A I am -- there was a subjective evaluation of
9 comments and observations by key individuals in the
10 examination process, but it is my opinion that that does
11 not fulfill the requirement of post-exam analysis and
12 interrater agreement.

13 Q But you are aware that NERB at least does that

14 evaluation, right?

15 A Yes.

16 Q What other instances can you talk about where

17 their methods of gradings reduced exam reliability? I

18 mean, you mentioned the CRDT's evaluation sheets for Ohio

19 State and whatever other schools they comment about.

20 A I just think that the issue we spoke about, the

21 grading sheets and the difficulty of being able to

22 determine -- of determining if the rules were followed

23 with validation.

24 Q Anything else?

25 A I can't think of anything now.

1 Q How many instances do you recall seeing of

2 that?

3 A I evaluated four or five grade sheets and, on

4 two or three of them, I felt like that validation was --
5 the background or comments for validation were not
6 adequate.

7 Q At least the one we saw today, that wasn't one
8 that was -- that you were critical of?

9 A There was no circle I was critical of the fact
10 that it wasn't circled when there were differences.

11 Q Differences in the grading, but not in the
12 ultimate scoring, correct?

13 You're nodding your head. Is that a yes?

14 A I'm thinking.

15 Q Oh, sorry.

16 A There wasn't documented in a way that the
17 candidate -- or the grader manual indicated it should be
18 documented that the resolution had occurred.

19 Q Critical of the documentation, not of the
20 result?

21 A Right.

22 Q Any other instance where the procedures, the
23 grading procedures, did not come comport to standards or
24 protocols? I'm trying to understand what facts you're
25 basing your opinions on.

1 A No. No other instances.

2 Q Have you reached an opinion on the validity of
3 NERB's clinical exam?

4 A Yes.

5 Q And what is that opinion?

6 A It's invalid.

7 Q And what do you base that on?

8 A There's no data to support the validity of the
9 examination.

10 Q Anything else?

11 A Data's not there.

12 Q What data would you look for?

13 A At the first level and at a lower level, the
14 calibration -- the result of the calibration exercise and
15 a comprehensive database of all grades that were given in
16 the exam and evaluation of that database that relates to

17 interrater reliability.

18 Q Same thing that would go into reliability?

19 A Exactly.

20 Q Just so I understand, you're not critical of

21 what it purports to measure, you're just critical of how

22 it measures it?

23 A What it purports to measure seems to be within

24 the general testing community. The reliability of those

25 measurements and the absence of data to support

1 reliability at all is the -- raises the question of the

2 exam validity. It's not a content validity issue. It's

3 a validity based on the fact that, even if the content is

4 good, if you're trying to measure a foot with a wet

5 noodle, you're not going to be very accurate in measuring

6 that foot.

7 Until you demonstrate that your instrument is
8 more powerful than a wet noodle, you can't say whatever
9 you measure is accurate and, therefore, whatever you're
10 measuring you can't say is a valid measurement because
11 the instrument you're using in the measurement hasn't
12 been proved to measure anything.

13 Q Define validity for me.

14 A There are, unfortunately, about six or seven
15 definitions of validity. Validity as it relates to most
16 people in the testing community relates to a valid exam,
17 tests the skills and abilities, knowledges that are
18 necessary to begin the practice of dentistry, is
19 associated with content. There are other dimensions of
20 validity that are associated with other kinds of things.

21 A valid exam is an exam that has the proper
22 content, but it's also an exam that has a reliable way of
23 measuring performance. So, an exam that can't be proved
24 to be reliable can have content validity, but cannot be
25 considered a valid exam in the global sense.

1 So, my criticism of NERB exam validity has to
2 do not with content but the inability to demonstrate that
3 clinical performance is measured in an accurate,
4 reproducible way.

5 Q Is it your opinion that you cannot have a
6 reliable exam without interrater reliability?

7 A That is my opinion.

8 Q And that you cannot have a reliable exam
9 without this computer database of information?

10 A You can't demonstrate it's reliable without it.

11 Q That's not my question. My question is, can
12 you have a reliable exam without this database you're
13 referring to?

14 MR. RECKER: Objection to the extent it calls
15 for pure speculation.

16 A Repeat the question because I want to make sure
17 I answer this one correctly.

18 (Thereupon, the question referred to was read
19 by the court reporter.)

20 A My answer is, yes, you could have a reliable
21 exam, but you could prove it to no one.

22 Q Let me refer you to your second report or your
23 supplemental report. Why did you write a supplemental
24 report?

25 A The exam -- or the data from SRTA had become

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1 available. When I wrote my report in January, I had no
2 SRTA data to look at. I think there were issues with the
3 changing case that, as I got the SRTA information, I
4 decided that maybe I needed to say a little bit more.

5 Q Any other reasons?

6 A I think maybe there was a conversation with
7 Dr. Recker that, you know, what does the SRTA information
8 seem to indicate on this case.

9 Q Any other reasons other than just SRTA related?

10 A Can't think of any.

11 Q Who's Gloria Griffis?

12 A Gloria is -- see what this says. I don't know
13 who Gloria Griffis is.

14 Q Where did you have this notarized?

15 A I don't recollect where this was notarized.

16 Q I mean, did you sign this and someone then
17 stamp it in front of you?

18 A I don't remember. I can remember the first one
19 I did have stamped at the college. I'm not sure when
20 this one was done.

21 Q In the second paragraph, you talk about
22 multiple factors could relate to an individual's passing
23 or failing. You see that?

24 A Okay.

25 Q Can you identify those factors for me?

1 A Measurement errors. Measurement errors
2 associated with lack of examiner calibration, measurement
3 errors associated with difference in patient difficulty
4 on the exam. Measurement errors can be related to a lot
5 of things, nervousness of the candidate, situations where
6 the candidate's under increased pressure because of the
7 examination, they already bought their office or
8 something like that, so they've got the payments but they
9 don't have a license, stress of the examination site,
10 things like wearing a special name tag. All those things
11 can affect the factors that relate to the examination.

12 Q Anything else?

13 A I'm sure there's a long laundry list. I
14 can't --

15 Q Well, this is my opportunity to ask you about
16 that laundry list.

17 A That's what comes to mind at this moment.

18 Q Do you know or are you aware of Dr. Baji's
19 scores on the SRTA exam?

20 A I'm generally aware that he passed the
21 examination.

22 Q Do you know that he scored -- or he was

23 deficient in amalgam prep and amalgam restoration of the
24 SRTA exam?
25 MR. RECKER: Objection.

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1 A I'm not -- I didn't review that specific
2 component of his performance.

3 Q Did you know that Dr. Baji had a 2.3 -- roughly
4 a 2.3 grade point average in college?

5 MR. RECKER: Objection.

6 A No, I did not know that.

7 Q Did you know that he was asked to leave after
8 his first year of dental school?

9 MR. RECKER: Just continuing objections to the
10 relevancy.

11 A No, I did not know that.

12 Q Did you know that he had a 2.25 GPA after

13 dental school?

14 A No, I did not know that.

15 Q That he graduated fifty-two out of fifty-two?

16 A No, I did not know that.

17 Q Did you know that he flunked his national board
18 part two the first time he took it?

19 A No, I did not know that.

20 Q Do you know that he scored less than fifty
21 percent on his operative dentistry of the national board?

22 A No, I did not know that.

23 Q Do you know that, on every time he took the
24 NERB exam, he flunked the same part, amalgam prep and
25 amalgam restoration?

1 A I was aware that he failed that repeatedly.

2 MR. RECKER: Objection to the extent that you

3 just said something that wasn't accurate, amalgam
4 prep and amalgam restoration.

5 Q Amalgam prep and amalgam -- what's it called?
6 Finish, completion? Restoration, I think, is what it was
7 referred to. You were aware of that?

8 A I was aware that he had failed his amalgam
9 preparation on numerous -- at least several times.

10 Q Do you know that he flunked his written exam on
11 three of the four times he took it?

12 A I have not seen or followed his written exam.
13 No, I did not know that.

14 Q Were you aware that, on every one of the times
15 he took the NERB exam, four different examiners evaluated
16 him on the amalgam phase of the exam?

17 Two or four, I'm sorry. Two or four. It could
18 have been anywhere between two or four evaluated his
19 amalgam work.

20 A As you say that, my interpretation is that two
21 people evaluated the amalgam preparation and two people
22 evaluated the amalgam restoration. So, two different
23 procedures that are graded independently. So, he had two
24 procedures evaluated by two people two different times,
25 but those procedures are not one procedure; they're two

1 different procedures.

2 Q Let me just show you his scores then on the
3 Southern Regional, just to show you that, in the amalgam
4 prep and the amalgam finish, the eight and the ten is out
5 of fifteen for both of those. Were you aware that he had
6 those scores on those two particular tests?

7 A I didn't evaluate any of his specific scores.

8 Q Of all the criticisms that you've rendered here
9 today and in your reports, do you think any of those
10 caused Dr. Baji to flunk these exams, the NERB exams?

11 MR. RECKER: Objection as to form.

12 A I feel like the process was not strong enough
13 to reliably tell me if anybody reliably passed or failed
14 the exam.

15 Q I want to know if you have an opinion regarding

16 Dr. Baji and whether these four tests that he took with
17 NERB caused him to flunk -- whether the deficiencies
18 you've noted in the four exams caused him to flunk those
19 exams?

20 MR. RECKER: Objection, calls for pure
21 speculation.

22 Q If you have an opinion, you have an opinion.
23 If you don't have an opinion, then you don't have an
24 opinion.

25 A I don't have an opinion. I was not able to

1 evaluate his individual performances. My opinions as
2 stated in the material that we have here in front of us
3 are associated with how the exam is conducted and how the
4 data is collected.

5 Q Just so we're clear, your evaluation and

6 opinions are on the NERB process in general; you have
7 some instances of concern on the grading sheets which led
8 to that general concern, but you're not going to offer
9 any opinions on whether any of these criticisms relate --
10 or directly relate to Dr. Baji's failures?

11 MR. RECKER: Objection to the extent that what
12 you're asking him contradicts what he said in his
13 report.

14 A The fact that the exam, in my opinion, the exam
15 is invalid and unreliable, whatever Dr. Baji did I can't
16 make a determination on because the instrument I am using
17 to look at his performance I can't rely on. So, whether
18 he passed or failed is an issue that's hard for me to
19 address. What I'm addressing is the instrument doesn't
20 give me the information to decide one way or another.

21 Q Right, and that's all I want to know for the
22 record, whether you have an opinion one way or other, and
23 your answer is no, you don't have an opinion one way or
24 other, correct?

25 MR. RECKER: I'm not sure that's what he

1 answered. The answer stands, whatever it was.

2 A I'm comfortable saying that the instrument used
3 was not appropriate for me to make a decision one way or
4 another.

5 Q Fine. Do you anticipate or are you expecting
6 to do any more work between now and whenever this thing
7 goes to trial?

8 A No.

9 Q Have you been asked to do any more follow-up
10 work?

11 A No.

12 Q If you do perform any follow-up analysis, I ask
13 that you provide me with copies of anything that you
14 provide plaintiff's counsel, okay?

15 A (Witness nods head affirmatively.)

16 MR. HANNA: That's all the questions I have.

17 (Thereupon, the witness elected to read and

18 sign the deposition; whereupon, the witness was

19 excused and the deposition adjourned at 4:00 p.m.)

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1 CERTIFICATE OF OATH

2 STATE OF FLORIDA
3 COUNTY OF ALACHUA

4

5 I, the undersigned authority, certify that
6 FRANK J. COURTS, D.D.S., Ph.D., personally appeared
7 before me and was duly sworn.

8

9 WITNESS my hand and official seal this 15th day
10 of July 1999.

11

12

KAREN L. BIERY
RPR and NOTARY PUBLIC

