

IN THE CIRCUIT COURT OF THE
NINTH JUDICIAL CIRCUIT, IN AND
FOR ORANGE COUNTY, FLORIDA
CRIMINAL JUSTICE DIVISION

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STATE OF FLORIDA,

Plaintiff,

vs.

WILLIAM T. ZEIGLER, JR.

Defendant.

CASE NO.: 48-1998-CF-5355-A-O

DIVISION NO.: 10

MOTION FOR DNA TESTING HEARING

BEFORE

THE HONORABLE REGINALD K. WHITEHEAD

In the Orange County Courthouse
425 North Orange Avenue
Orlando, Florida 32801
Courtroom 10B
March 31, 2016
Jean Dexter, RPR, CRR

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1 take care of before proceeding?

2 **MR. TRACEY:** I don't think so, Your Honor.

3 **THE COURT:** Okay.

4 **MR. NUNNELLEY:** Only other than excluding expert --
5 not invoking the ruling as to the expert witnesses. I
6 don't think we had any lay witnesses.

7 **THE COURT:** Counsel?

8 **MR. TRACEY:** That's acceptable to the defendant.

9 **THE COURT:** Okay. All right. You may proceed.

10 **MR. TRACEY:** Thank you, Your Honor.

11 This is a motion seeking the Court's approval for
12 modern technology DNA testing for five categories of
13 evidence. It's a very limited and very focused motion
14 seeking specific testing on specific items that are
15 sitting in the vault downstairs in this building from
16 the scene of the crime in 1976.

17 And while it's a limited and focused motion,
18 Your Honor, this is probably the most momentous time in
19 the history of this case. And the reason for that is
20 that this motion using modern DNA technology can finally
21 resolve what has been at issue for nearly the last 40
22 years.

23 Unlike so many of the postconviction proceedings
24 that take place, this is not about a procedural issue,
25 some defect in the process, some sentencing question.

1 This is about the most fundamental issue that the courts
2 deal with and that is whether a defendant is guilty or
3 innocent. And it's about using technology to answer
4 that question that was not available in 1976 when the
5 original investigation of this crime took place. And it
6 wasn't available in 2001 when this Court granted DNA
7 testing of certain of the evidence.

8 The technology that will be used, if Your Honor
9 grants this motion, is breakthrough technology that will
10 find the source of blood and other DNA evidence that
11 could never be found before.

12 You'll hear today from
13 Mr. Stephen [sic] Eikelenboom. Mr. Eikelenboom is one
14 of the world's leading experts in DNA technology. He
15 regularly has been an expert witness on a variety of
16 different kinds of DNA technology, as well as crime
17 scene reconstruction and blood splatter analysis.

18 Mr. Eikelenboom, for the most part, doesn't testify
19 for defendants or for the prosecution. For the most
20 part, Mr. Eikelenboom, as you'll hear, is appointed by
21 the court. Under the Dutch procedure, the court has the
22 right to engage an expert, and that's what
23 Mr. Eikelenboom has done most of his career. And his
24 job is not to argue for one side or the other. It's to
25 find the truth. Mr. Eikelenboom wants to find the truth

1 here. That's why he's involved. That's why he's in
2 this courtroom today. And he will give some very
3 important testimony.

4 His testimony will be, if you allow him to do this
5 testing, he will determine whether Mr. Zeigler killed
6 Perry Edwards and the other victims. If the testing
7 comes out one way, he's going to be able to testify that
8 Mr. Zeigler did not commit these crimes. But
9 importantly, if it comes out another way, he's confident
10 that he's going to be able -- that he will testify that
11 Mr. Zeigler did commit the crimes. You'll hear him tell
12 you that today and you'll hear exactly why.

13 You are going to hear another remarkable thing
14 today, Your Honor. The expert for the State, who
15 pursuant to Your Honor's order, we were able to take the
16 testimony of prior to this hearing, and that expert is
17 going to agree on most of the evidence that we're
18 requesting. That the testing that we're requesting is
19 likely to generate useful DNA evidence because, in
20 part --

21 **MR. NUNNELLEY:** Your Honor, I'm going to object. I
22 know it's opening statement, but Mr. Tracey is
23 testifying for a witness that may or may not be called
24 and he's overstating the substance and significance of
25 that witness' deposition testimony. This is not the

1 time for this.

2 **MR. TRACEY:** I'll leave --

3 **THE COURT:** You can go ahead and move forward.

4 I'll overrule.

5 **MR. TRACEY:** So that's why we're here, Your Honor.
6 We're here pursuant to a statute that the Florida
7 Legislature passed specifically for a situation like
8 this. The Florida Legislature said, "If there are
9 changes in DNA technology that allow the courts to
10 determine evidence that they couldn't determine under
11 old technology, we want them to have that evidence and
12 we want to do that testing."

13 **THE COURT:** What section of the statute is that?

14 **MR. TRACEY:** Statute 3.853. Rule 3.853. Sorry.

15 **THE COURT:** Okay. I was going to say, I never
16 heard of a statute called that before.

17 **MR. TRACEY:** There are three -- there are three
18 requirements that Rule 3.853 imposes in order to get
19 this testing. The first is that there is physical
20 evidence that may contain DNA evidence that still
21 exists. That issue is, I believe, on dispute.

22 Two, that the DNA tests would be admissible at
23 trial and are authentic. I believe that there will be
24 no dispute about that.

25 The only dispute is on the third element of the

1 rule, and the third element of the rule is that we have
2 to show that there is a reasonable probability that the
3 DNA evidence, when it is produced, would have resulted
4 in reasonable doubt about the defendant's guilt.

5 So we don't have to show, Your Honor, that this
6 evidence would prove Mr. Zeigler not guilty. I believe
7 it will. But under the rule, we don't have to prove
8 that. All we have to prove is that there is a
9 reasonable probability that it would have raised
10 reasonable doubt in the minds of the jury.

11 And we also don't have to show that someone else
12 committed the crime. It's just reasonable doubt. And
13 the defendant is entitled to that.

14 And in considering this motion, Your Honor must
15 accept the allegations of the motion as true. So the
16 Court must accept that if the evidence is tested, it
17 will have the results that we suggest.

18 And then the Court is required to consider whether
19 those results would have a reasonable probability of an
20 acquittal. And in doing that -- and this is really
21 critical. In doing that, the Court is required to
22 consider all of the evidence in the case. The Supreme
23 Court has said that the court is, quote, "Required to
24 consider the cumulative effect of all of the evidence
25 that has been presented during the defendant's

1 postconviction proceeding."

2 That's the *Hildwin* case. And we've got -- we've
3 presented a lot of evidence during these postconviction
4 proceedings, and I'm going to talk about some of them
5 this morning so that Your Honor can consider the
6 potential DNA results in the light of the evidence that
7 exists.

8 And what we submit, Your Honor, is that the
9 evidence pointing to Mr. Zeigler's guilt is weak. It is
10 entirely circumstantial. It is contradictory. And much
11 of it is questionable evidence.

12 You might -- I think every one of us would want to
13 think that since someone has been in jail, on death row
14 for 40 years, well, that shows that there must be a lot
15 of evidence supporting him being there because why would
16 he be there for 40 years?

17 I'm going to ask Your Honor not to have that
18 perspective until we finish these proceedings because
19 the fact is, when you look at it as a whole, the
20 evidence is flimsy. What is the evidence? The crime
21 scene was the Zeigler furniture store Christmas Eve,
22 1975.

23 **MR. NUNNELLEY:** Your Honor, again, I'm going to
24 object to retrying the case. We're here for the purpose
25 and sole purpose of determining whether DNA testing is

1 or is not going to be conducted. We are not here to
2 retry the guilt stage of this case from 1976. I object
3 to this.

4 **MR. TRACEY:** May I be heard?

5 **THE COURT:** Go ahead.

6 **MR. TRACEY:** This is absolutely critical for the
7 Court's consideration on this motion because the Court
8 has to decide whether, in light of all of the evidence,
9 this DNA evidence would make a difference. That's a
10 critical element of this.

11 If Mr. Nunnelley is willing to concede that if we
12 show that DNA evidence can produce results, that you
13 don't have to decide whether it would be significant in
14 light of all the evidence, I can skip this. But,
15 otherwise, this is absolutely critical to what you have
16 to decide.

17 **THE COURT:** Well, it may be critical, and at some
18 point, I'll make that determination, but really, I would
19 rather just hear the facts that you are going to present
20 which is testimony today. I'm assuming you can make the
21 argument that you are going to present this at the time
22 and getting ready to make your argument because you are
23 kind of starting to argue the case. And I don't want to
24 hear argument. I want to hear facts at this point.

25 **MR. TRACEY:** So the facts -- the facts start

1 with --

2 **THE COURT:** I guess I'm sustaining the objection.
3 I forgot to say that part.

4 **MR. TRACEY:** Thank you, Your Honor.

5 The facts are that there are -- that there's a
6 significant amount of bloody clothing and other evidence
7 from the scene of the crime. And we believe that modern
8 technology DNA testing will determine significant
9 evidence from that evidence. And I will start with the
10 shirt that Mr. Zeigler was wearing on the night of the
11 crime which, again, is downstairs in the vault. And at
12 the trial, the blood spatter expert looked at that shirt
13 and said, "Hey, there is a lot of blood on that." They
14 tested it for what type of blood it was. It was A blood
15 and they theorized that that was Perry Edwards's blood
16 put there.

17 **MR. NUNNELLEY:** Your Honor, that is an absolute
18 misrepresentation of the facts from trial. Again,
19 Mr. Tracey is an eloquent attorney, I admit that, but
20 this is argument for a jury. It is not appropriate for
21 a 3.853 motion. We're here to put on evidence and we've
22 been going this long and we haven't heard the first bit
23 of evidence other than what Mr. Tracey says it's going
24 to show. He's not the expert. He's got an expert
25 sitting back in the gallery and it's time to put him on

1 the stand and let him opine whatever it is he's going to
2 say.

3 **THE COURT:** Response.

4 **MR. TRACEY:** Your Honor, I'll summarize what
5 Mr. Eikelenboom is going to say.

6 **THE COURT:** Sustain the objection.

7 **MR. TRACEY:** Sorry?

8 **THE COURT:** Sustain the objection.

9 **MR. TRACEY:** Thank you.

10 What Mr. Eikelenboom will testify about the Zeigler
11 T-shirt is that with modern DNA testing, which he will
12 describe, he can determine whether there is any blood of
13 Mr. Edwards on the shirt of Tommy Zeigler. The
14 significance of that, which he will testify to, is that
15 the evidence shows that Mr. Edwards was brutally beaten,
16 that there was blood spray around his body, and no one
17 could have beat him and not gotten his blood on the
18 shirt.

19 So it's time to find out for sure and finally
20 whether there is any blood of Perry Edwards on that
21 shirt and Mr. Eikelenboom can do it.

22 Second, Eunice Zeigler was shot and killed with a
23 single shot from the back. The State has -- has stated
24 and conceded and argued that there are bloodstains under
25 Ms. Zeigler's coat, which were placed there after her

1 death by someone who moved her body. Mr. Eikelenboom
2 will testify that in 1976 there was no way to find out
3 who did that and no way to find out whose blood was on
4 it because it's A blood and there were three people with
5 A blood in the room. Today we can find out two things.
6 One, whose blood that is. We know it's not
7 Mr. Zeigler's because he was Type O. Whose blood is
8 that? And, second, we are very likely to be able to
9 figure out from touch DNA who put that blood there.
10 That would be very significant to this case. Third,
11 Perry Edwards. Perry Edwards's clothing and
12 fingernails, according to Mr. Eikelenboom, should be
13 tested for DNA evidence. It will show who he struggled
14 with on the night of the crime. The fingernails is
15 standard, of course.

16 And lastly, Mr. Eikelenboom will recommend that the
17 guns that were used on the night of the crime be tested
18 for DNA on the interior of the guns because there is a
19 dispute as to who owned those guns, and DNA that is left
20 on the inside of the guns may well show who owned and
21 handled them.

22 So the only -- the only issue that the State has
23 raised about this or the most significant issue that the
24 State has raised about this is that the -- because of
25 the prior DNA testing, the current request is barred by

1 collateral estoppel. And I would like to ask my
2 colleague, Mr. Michaeli, to address that for Your Honor.

3 **MR. MICHAELI:** Good morning, Your Honor.

4 **THE COURT:** Good morning.

5 **MR. MICHAELI:** I'll be very brief. As Mr. Tracey
6 mentioned a moment ago, the State has raised only one
7 objection to the defendant's motion and that objection
8 is that the motion is barred by collateral estoppel.
9 The State does not argue, nor can it, that the motion is
10 barred by res judicata, which is a significantly broader
11 doctrine, or by a successive motion bar. And the reason
12 it hasn't argued that is because the Florida Supreme
13 Court ruled in this very case. The res judicata does
14 not apply to the 3.853 motion, and there is no res
15 judicata or successive motion bar.

16 The difference between the two is critical in this
17 case. Collateral estoppel applies only to issues where
18 the identical issue has been previously presented and
19 decided by the courts. Identical issue.

20 Res judicata is broader. It applies -- and this,
21 Your Honor, by the way, comes from the Florida Supreme
22 Court's decision in *State vs. McBride* which is at 848
23 So.2d 287 from 2003. Res judicata applies to an issue
24 that was previously presented and decided but also to
25 issues that were not previously presented but could have

1 been. And that doctrine is not available on 3.853. So
2 the only question --

3 **MR. NUNNELLEY:** Your Honor, again, I'm going to
4 object. This is argument. This is not an opening
5 statement. This is a closing argument.

6 **MR. MICHAELI:** May I respond?

7 **THE COURT:** Go ahead.

8 **MR. MICHAELI:** The only thing I would like to
9 describe for the Court at this time is the way the
10 specific facts the Court will hear momentarily relate to
11 collateral estoppel.

12 **THE COURT:** I'll sustain the objection to what you
13 said so far, but you can go ahead and address what you
14 just said as far as the facts are concerned.

15 **MR. MICHAELI:** Thank you, Your Honor.

16 So what's different about this motion? What has
17 not been previously litigated and decided? Three
18 things.

19 First, this motion asks to test an entirely new
20 category of evidence. It's never before been tested in
21 this case because it couldn't have been. Touch DNA.
22 Skin cells transferred from victims to attackers in the
23 course of a struggle. There's never been a request in
24 this case to test touch DNA before because we didn't
25 have the technology to do it, and today we do.

1 That issue has never been presented, never been
2 decided. There can't be a collateral bar, a collateral
3 estoppel bar, to raising those issues in this motion.

4 The second is the use of a significantly more
5 powerful type of test kit mini-STR. Mini-STR works on
6 the very type of evidence the Florida Supreme Court has
7 previously said in this case gave rise to concerns about
8 the efficacy of testing and that is degraded or old
9 evidence. Old evidence was difficult to test using
10 prior technology. Today's technology can test it and
11 get perfect clear DNA profiles. The new form of testing
12 technology, the defendant has never asked to use it in
13 this case, never been decided by the courts because it
14 didn't exist.

15 The third type of testing technology is called
16 Y-STR. Y-STR also was never before requested, never
17 before decided in this case. Y-STR works in a very
18 simple way. Women have only two X-chromosomes. Men
19 have an X-chromosome and a Y-chromosome.

20 **MR. NUNNELLEY:** Your Honor, again, it's moving into
21 argument or perhaps expert testimony from Mr. Michaeli,
22 and I object.

23 **MR. MICHAELI:** I'll move on.

24 **THE COURT:** He's telling me what he believes the
25 evidence is going to be, so I'll overrule the objection

1 at this point.

2 Go ahead.

3 **MR. MICHAELI:** Thank you, Your Honor.

4 What the Court will hear shortly from the experts
5 and from both experts, by the way, is that this testing
6 technology makes it possible to separate out a mixed
7 sample. It filters out all the female DNA leaving only
8 the male DNA to be tested. That's critical in this case
9 because the Florida Supreme Court has previously held
10 that another reason testing would not necessarily yield
11 probative results is that the samples could be mixed.
12 Technology has solved that problem as well.

13 The third aspect of this motion that is different
14 from any motion that's previously been in the case is
15 that this motion seeks a broader range of testing on
16 certain objects. The last time the motion for DNA
17 testing was before the courts in this case, this Court
18 and the Florida Supreme Court said that the absence of
19 finding Perry Edwards's blood on the selected spots on
20 Mr. Zeigler's shirt wouldn't show that Mr. Zeigler
21 didn't murder Mr. Edwards because the blood could be
22 someplace else on the shirt. This testing motion seeks
23 to test all the spots on the shirt and also seeks to use
24 an additional technique called taping that let's you
25 literally test the entire garment.

1 And what Your Honor will hear is that both experts
2 agree if you do that and you still don't find
3 Mr. Edwards's blood DNA or skin cell DNA --

4 **MR. NUNNELLEY:** Objection. Argumentive.

5 **THE COURT:** You're getting ready to argue, so I'll
6 sustain the objection. You are just about starting to
7 argue. I got the facts as you told them.

8 **MR. MICHAELI:** Thank you, Your Honor.

9 Those are the issues in the case. Those are the
10 reasons why prior motions are different from this
11 motion, why collateral estoppel can apply to this motion
12 and why, in fact, this motion should be granted.

13 Thank you, Your Honor.

14 **THE COURT:** Okay. State.

15 **MR. NUNNELLEY:** Very briefly and just to get to
16 some of the high points.

17 The Court is not required to accept the averments
18 in the motion as true any longer. That is the standard
19 that gets us to a hearing. That is where we are today,
20 I think. And if this were the law as the defense
21 suggests, there would be no need for us to be here to
22 put on evidence to allow the Court to decide whether or
23 not the claims in the motion are viable or not. It's
24 their motion. They have to prove it at this point.

25 They can't come in and say, "Oh, well, the

1 averments we pled are true." Not anymore. That gets
2 them here, but it doesn't get them in the end zone.

3 Secondly, they selected the *Hildwin* case. *Hildwin*
4 is a 3.851 proceeding. It's a 3.851 decision. It does
5 not control this case. In fact, it has little or
6 nothing to do with anything at all before this Court,
7 and only tangentially is related because it was a DNA
8 case. And, again, the reason I know this is because I
9 was counsel of record in that case.

10 With respect to what the testing will show or not
11 show, the evidence, will be what it is. The evidence, I
12 suspect, in some cases will be speculative. I
13 suspect -- I expect there to be evidence that the
14 authenticity or the (5)(b) component of Rule 3.853 is
15 very much debatable. And I suspect that there will be
16 evidence and testimony to suggest that (5)(c) is also
17 very much debatable and not nearly so clear as the
18 defense would have the Court believe.

19 With that, the State is ready to proceed with the
20 defense's case.

21 **THE COURT:** Call your first witness.

22 **MR. TRACEY:** Defense calls Mr. Richard Eikelenboom.

23 **COURT DEPUTY:** Face the clerk and raise your right
24 hand.

25 **RICHARD EIKELENBOOM**

1 was called as a witness and, having first been duly sworn,
2 testified as follows:

3 THE COURT: You may proceed.

4 MR. TRACEY: Thank you.

5 DIRECT EXAMINATION

6 BY MR. TRACEY:

7 Q Good morning, Mr. Eikelenboom. Thank you for
8 coming. Would you state your name and residence address for
9 the record, please.

10 A I'm Richard Eikelenboom. And currently living in
11 Colorado, Conifer, 32976 Edward Drive.

12 Q And what is your current occupation?

13 A I'm a forensic scientist.

14 Q And --

15 THE COURT: Just for the court reporter's sake and
16 mine too, could you spell your name, sir?

17 THE WITNESS: It is Richard, R-i-c-h-r- -- a-r-d,
18 Richard. Eikelenboom is E-i-k-e-l-e-n, for Niko,
19 b-o-o-m for Maria.

20 BY MR. TRACEY:

21 Q Mr. Eikelenboom, do you have -- who is your current
22 employer?

23 A I'm self-employed. We have our own company.

24 Q Let me go back and ask you some questions about
25 your background. Could you start with your university

1 education, please. What degrees do you have?

2 **A** I have a degree in biochemistry. Biochemistry is
3 what is used for working with DNA.

4 **Q** And to help you with dates, I would like to place
5 in front of you your CV.

6 **MR. TRACEY:** May I approach the witness,
7 Your Honor?

8 **THE COURT:** You may.

9 **BY MR. TRACEY:**

10 **Q** Mr. Eikelenboom, I'm placing before you what's been
11 marked by the court reporter [sic] as Defendant's Exhibit A
12 for identification. Can you identify that?

13 **A** Yes. This is my curriculum vitae.

14 **Q** Mr. Eikelenboom, what college did you get your
15 biochemistry degree from?

16 **A** It's --

17 **MR. NUNNELLEY:** We'll stipulate the CV into
18 evidence. Mr. Eikelenboom certainly has qualifications
19 beyond those of the man on the street and should be
20 allowed to render opinions. Just to move things along.

21 **THE COURT:** It's up to you.

22 **MR. TRACEY:** I will -- I'm going to tender the
23 expert, just so it's clear, on three subject matters.
24 One is DNA testing and analysis. The second is --

25 **THE COURT:** Let's do them one at a time.

1 State, any objection?

2 **MR. NUNNELLEY:** Not the DNA, Judge.

3 **MR. TRACEY:** Second is to the bloodstain analysis.

4 **MR. NUNNELLEY:** As to that, Your Honor, I'm not
5 sure I will stipulate to that. There's been no mention
6 of bloodstain analysis in the report. He has apparently
7 drawn no conclusions in the report. What was
8 represented to us is the sum total of his opinion and
9 conclusions, and I'm interested to hear what the third
10 category of expertise this man purportedly has.

11 **THE COURT:** I can't rule because I haven't heard
12 the facts yet.

13 **MR. TRACEY:** Right.

14 **THE COURT:** I guess you have to present some facts
15 on that first.

16 **MR. NUNNELLEY:** It might save some time if I know
17 what the third area is at this point.

18 **MR. TRACEY:** The third category is crime scene
19 reconstruction.

20 **MR. NUNNELLEY:** Not contained in the report,
21 Your Honor. I object to it.

22 **MR. TRACEY:** I'll proceed, Your Honor.

23 **BY MR. TRACEY:**

24 **Q** Mr. Eikelenboom, can you tell us briefly about your
25 work experience?

1 **A** I started working at the Netherlands Forensic
2 Institute, the National Lab in the Netherlands, which is all
3 homicide cases in the Netherlands. It is only one
4 laboratory. And I started there in 1993 in the Department of
5 Serology. This is pre-DNA age. It just started coming.
6 They were doing testing with DNA but it was not allowed in
7 court at that time. And then the DNA department or the
8 serology department do typing and protein typing at that
9 time, it started growing and it became the biology department
10 which was the DNA department. In 1994, we did -- in the
11 Netherlands, we did get DNA laws and we started with the
12 first DNA tests. And that was done in the biology department
13 which I worked on it in that stage. And I was -- I was
14 mainly involved in trace recovery, and later on, I started
15 working in DNA coordination. In the Netherlands, the DNA --

16 **THE COURT REPORTER:** The DNA . . .

17 **THE WITNESS:** -- investigation is separated into
18 different departments. So it starts, of course, with
19 the evidence, trace recovery. You have to find the DNA.
20 The second part is DNA extraction. Then you have the
21 amplification and then analysis. And then you have the
22 reporting officer who does the report to the courts.
23 And this is all done in different departments of the
24 biology department.

25 So I was specializing in trace recovery, finding

1 the DNA, and then later on, I became the Coordinator.

2 And that means I coordinated cases for the courts.

3 **BY MR. TRACEY:**

4 **Q** And in the course of doing that, did you
5 investigate crime scenes?

6 **A** Yes.

7 **Q** Sorry.

8 **A** I started the project where we wanted to have
9 science in the crime -- scene of a crime. A lot of cases
10 didn't get solved, and especially with DNA techniques which
11 are so sensitive, you cannot expect forensics or a
12 crime-scene officer to have all this knowledge about DNA and
13 all the techniques, especially with sampling. So I started
14 with a team of specialists who went to crime scenes and take
15 samples from, for instance, dead bodies, where you always
16 have a problem because there's so much DNA from the victim,
17 in order to also get DNA from a perpetrator. So I started
18 the project with that. I started the project with cold
19 cases.

20 **THE COURT REPORTER:** Cold cases?

21 **THE WITNESS:** Yes.

22 **BY MR. TRACEY:**

23 **Q** What's a cold case?

24 **A** A cold case is a case where there's still evidence
25 but it was never solved, and then the courts can reopen it or

1 district attorneys, and then they come -- they could come to
2 the National Lab with us and meet to review the evidence and
3 see if I would be able to find new evidence in the case.

4 And especially with the touch DNA, we started with
5 touch DNA early in 1997, and in 2000, we were using it in
6 nearly every cold case for finding DNA. If the perpetrator
7 didn't leave, for instance, semen or saliva or blood, then
8 you could still look for locations where the perpetrator
9 applied force on the victim. Like, for instance,
10 strangulation marks or clothing which was torn down. And
11 this has proved highly successful.

12 Q And after your period at the National Institute,
13 what was your next position of employment?

14 A In 2003, my wife started Independent Forensic
15 Services. So we had our own company in 2005. I joined them
16 and we build up our own DNA laboratory, and we accredited
17 that. And then we started doing the touch DNA which I did
18 for the National Lab until 2005. We started doing that on
19 our own.

20 Q And what is the -- what is the specific business of
21 Independent Forensic Services?

22 A Yeah. Because most laboratories can do
23 bloodstains, semen stains slides very easily, we kind of
24 specialized in the touch DNA because that was an area,
25 especially also in the United States, which was not very

1 commonly performed by national labs or state labs. So we
2 specialized even more than we did at the National Lab, and we
3 work mainly complex cases.

4 Q And over the course of your career, beginning with
5 the time that you were at the National Institute through
6 today, have you given testimony on DNA analysis?

7 A Yes.

8 Q And have you given testimony on blood spatter
9 analysis?

10 A Yes. I also, in 1999, I started doing training in
11 blood sample analysis to see if we could introduce this kind
12 of investigation for the courts. And then, as you can see in
13 my CV, I did a lot of training, and, in the end, after
14 finishing all this training, I introduced it to the Dutch
15 courts and the Dutch courts accepted it. So since then we
16 are using bloodstain pattern analysis as a field of
17 expertise.

18 Q And when you said you had training in it, were you
19 referring to the items under bloodstain pattern analysis
20 training on the first page of your CV?

21 A That's correct.

22 Q And have you also testified about crime-scene
23 reconstruction?

24 A Yeah. The bloodstain pattern analysis and
25 crime-scene reconstruction go very close together. Of

1 course, you can reconstruct. We started using it as a tool
2 to find the right DNA stains. If you have, for instance, in
3 this case, five injured people, of course, you don't want to
4 take a hundred stains for one victim, you want to be able
5 with the stains to find your victims as quick as possible.
6 So that's why we started out with that at the lab. But as we
7 did crime-scene investigation, it is also on the crime scene.
8 And then you want to find out, well, what really happened
9 here. And the bloodstain pattern analysis is a very good
10 tool for that, but so is the DNA, of course. You need to
11 know the source. So the combination of the bloodstain
12 pattern analysis and the DNA investigations is a fairly
13 strong, powerful tool in crime scene reconstruction.

14 Q Approximately -- over the course of that period of
15 time, approximately how many times did you testify as an
16 expert in those subjects?

17 A For the National Forensic Institute?

18 Q Let's start with in the Netherlands.

19 A In the Netherlands. When I was working in the
20 Netherlands for the National Forensic Institute, it was
21 about -- about 30 times.

22 Q Okay.

23 A And I'm still testifying today in Dutch courts and
24 that's about 85 times now.

25 Q And you've been recognized as an expert in each of

1 those cases?

2 **A** Every case, yes.

3 **Q** Have you ever been rejected as an expert?

4 **A** No.

5 **Q** Are the cases in which you've been recognized as an
6 expert listed on pages 7 through 9 of your CV?

7 **A** Yes, that's correct.

8 **Q** So that's approximately 85 cases?

9 **A** That's correct.

10 **Q** And have you also done teaching or training of
11 others in the area of bloodstain analysis?

12 **A** Yes. But not only bloodstain analysis, just a
13 forensic awareness course in the Netherlands. We have the
14 institute which trains prosecutors and judges. Prosecutors
15 are also magistrates to us. And so this institute can hire
16 teachers. And I did teach there for a long time when I was
17 living in the Netherlands. And other than that, I also teach
18 in the police academy.

19 **MR. TRACEY:** Based on that, Your Honor, I would
20 tender this witness as an expert in both DNA testing and
21 analysis, as well as crime-scene reconstruction and
22 bloodstain analysis. And he's testified, he's trained,
23 and he's recognized as an expert worldwide on these
24 subjects. And it's integral to what he's going to
25 testify to about here because the crime scene is the key

1 issue.

2 **THE COURT:** State?

3 **MR. NUNNELLEY:** No objection to his expertise, but
4 I will likely have objections to specific testimony as
5 it comes in.

6 **THE COURT:** You may proceed.

7 **MR. TRACEY:** Thank you, Your Honor.

8 **BY MR. TRACEY:**

9 **Q** I would like to start very briefly with a
10 background on DNA testing and then I'll move to the more
11 recent developments in DNA testing, if that's okay. We won't
12 spend a lot of time on this, but what I've put up behind
13 you -- unfortunately, I don't have it in front of you.
14 Actually, we can do this.

15 **MR. TRACEY:** May I approach?

16 **THE COURT:** You may approach.

17 You have the same thing there that you have on the
18 big screen?

19 **MR. TRACEY:** Yes.

20 **BY MR. TRACEY:**

21 **Q** Can you, please, describe briefly for the Court the
22 role of DNA technology in forensic investigations?

23 **A** Yeah. The DNA, of course, is extremely important
24 in finding out possible donors --

25 **MR. NUNNELLEY:** Your Honor, I realize he's an

1 expert. Perhaps if we could keep this question and
2 answer to some extent --

3 **THE COURT:** What's your objection?

4 **MR. NUNNELLEY:** Nonresponsive, narrative, and also
5 irrelevant, arguably, because we are already at the
6 point that the DNA evidence is admissible, usable. It's
7 been admissible since *Andrews*. I don't know that we
8 need a science lesson to get to the meat of the motion
9 we have before the Court.

10 **THE COURT:** I'll give you some leeway at this
11 point. Overrule the objection.

12 **MR. TRACEY:** Thank you, Your Honor.

13 **BY MR. TRACEY:**

14 **Q** I'm going to move quickly to what's important which
15 is new developments, but I think just to give us some very
16 brief basis so that we can discuss new developments, nothing
17 more than that.

18 **A** So what we see here is a cell and the pink area,
19 round area, that's the nucleus. That's the location where
20 the DNA is in which we're interested to find out whether or
21 not a person could have donated.

22 On the nucleus, there's the chromosomes, and we
23 don't amplify or we only look at certain locations on the
24 chromosomes, and we call it the target DNA. That's the
25 location of interest in order to identify different donors of

1 DNA.

2 Q Thank you.

3 And just briefly, what is the result of the DNA
4 test? Explain that.

5 A What we see here are called electropherograms. The
6 first on top is an allelic ladder. You can see it as kind of
7 a DNA measurement tool. On the left side, you see the number
8 100 and on the right, 260. That means the size of the DNA
9 fragment. The DNA peaks, or alleles as we call them, they
10 all have numbers under them. And in the red we see names of
11 the locations. So it would be 3 vWA and FGA are the
12 locations of the DNA which we investigate.

13 The sample which we see below, you see two peaks,
14 one from the mother and one from the father, and we can see
15 that these two peaks are different in size. One is 16
16 repeats and the other is 17. So we're able to distinguish.
17 And another person will have another kind of number. For
18 instance, 14 or 15 or 18.

19 So if you do enough of these locations, you get an
20 extreme amount of information which is making fairly strong
21 evidence if you have a full match, we call that, that a
22 certain person could have donated DNA material to a sample.

23 Q Thank you.

24 In your affidavit that you submitted in this
25 motion, you talked about some recent developments in DNA

1 technology. One of the things that you mentioned is
2 something called mini-STR testing. Could you -- could you
3 describe what that is, first of all?

4 Actually, before we get to that, you mentioned
5 touch DNA testing. Let's talk about that first. What is
6 touch DNA testing?

7 **A** Yeah. Touch DNA -- actually, it is what it says.
8 It's DNA which is transferred and, of course, we're
9 interested when we work for the lab where I'm working at now,
10 left by perpetrator on the victim and mainly by touch.

11 So it talks about skin cells, but most of the time
12 we talk about contact, physical contact, between the
13 perpetrator and the victim; and then we're interested in
14 finding out in crime-scene reconstruction how the perpetrator
15 had contact with his victim.

16 A very important feature from this touch DNA is
17 that the top -- if I touch this table, I leave my skin cells.
18 However, these cells I'm losing here on the table are kind of
19 dying cells, which are on the top of my hands, and those
20 cells are not really intact. Those --

21 **Q** Do you have a slide on this?

22 **A** So the upper layer does contain cells but not very
23 good material for DNA. And what we see in practice is that
24 you don't get good profiles, very partial profiles, maybe one
25 or two alleles from an old sample. If I apply force, then,

1 of course, I get into the deeper layers where you can see
2 already that the nucleus is inside there. So, for instance,
3 if I have strangulation, if I start pulling the cord on the
4 neck of the victim, I apply force to my hands as well. The
5 more force that I apply, the bigger chance that I will leave
6 these lower layers where we get DNA profiles from.

7 So a slight touch, the chance of getting a DNA
8 profile is very small, very remote, but if I apply force,
9 it's getting bigger.

10 Q Could you describe any other variables that affect
11 the results from touch DNA testing?

12 A Yeah. I'm showing you this slide. It's sometimes
13 called good or bad shedder. A good shedder is someone who,
14 if you touch something, you would leave a lot of DNA which
15 you could get an easy profiles. A bad shedder would be
16 someone that if you touch something you don't get any
17 results.

18 It may be easy to describe someone with a skin
19 disease is a very good shedder: Psoriasis.

20 **THE COURT REPORTER:** I'm sorry. Say that again.

21 **THE WITNESS:** Psoriasis.

22 **BY MR. TRACEY:**

23 Q Psoriasis?

24 A And people with a skin disease, of course, those
25 people tend to leave more DNA than a person with healthy

1 skin. Dandruff is a good source. So it just depends. So
2 good or bad shedder, some people shed more DNA than other
3 people. But also very important is long and short contact.
4 Well, if I touch this slightly and only just like a second, I
5 won't expect a DNA profile from this, especially because I'm
6 not a shedder. For instance, if I wear this shirt for two
7 days, yeah, there is a very good chance that you will find my
8 full profile on the neck of the shirt or maybe in the armpits
9 depending. And then the one which is very important in
10 solving crimes, of course, to determine contact is, if we
11 have strangulation marks, if we have location of the clothes
12 where someone was lifted up and moved, those are locations
13 which prove to be, in other cases, good location to find DNA
14 from persons who later get convicted.

15 Also, if you have a rough area, a rope or edges on
16 the table, the DNA will scrape off your hands much easier
17 than if it's very smooth. On the top of this table, for
18 instance. So it just makes it all, you know, important in
19 order to transfer the skin cells.

20 **Q** Okay. Let's move on to mini-STR testing. That's
21 something that you mentioned as a new technology in your
22 report. Could you describe for the Court in simple terms
23 what mini-STR testing is and what it's used for?

24 **A** Yeah. The mini-STRs, in a normal DNA profile, for
25 instance, used in 2001, they use certain fragments of DNA and

1 identify if they're the same and if they're a certain length.
2 Over time, this DNA tends to deteriorate a bit, or because of
3 humidity or UV light, and then this DNA breaks down. For
4 instance, burn victims. So you have those long fragments,
5 and as I said before, on the left side, it's shorter
6 fragments and to the right is longer. These long fragments
7 tend to break much easier. It makes sense. If you are
8 breaking down DNA, the longer fragment will break easier, for
9 being exposed to UV light, than the shorter fragment. The
10 mini-STRs are made so small that they're far less prone to
11 this degradation, deterioration of DNA.

12 Q And when was mini-STR technology developed?

13 A Around 2007.

14 Q And is mini-STR testing such that it can identify
15 the source of older and deteriorated blood that older methods
16 could not determine?

17 A Yes. This kit was especially made for that, for
18 deteriorated DNA. Bone samples are used very often. Old
19 bone samples, of course. The new ones would be easy to get
20 DNA from. But, yeah, older materials from cold cases. And
21 this kit is made specifically in combination with the
22 Identifiler. This is a section of locations because the
23 Minifiler kits we're talking about has only nine locations of
24 investigation.

25 Q Would you show the Court, please, how you find

1 evidence from Minifiler that you can't find from older
2 technologies?

3 **A** Yeah. So Identifilers, in circles, you see the
4 locations which are investigated. Two peaks means from the
5 homozygotes from the father and mother gave a different
6 allele to the child.

7 **THE COURT REPORTER:** I'm sorry, could you repeat
8 that? If you could slow down and repeat.

9 **THE WITNESS:** So in the circles, you see locations
10 of investigation. If you see two peaks in the circle,
11 it means that the father and the mother gave different
12 alleles to this donor of the DNA. If you see one peak
13 in the circle, it means a homozygote. So mother and
14 father gave the same allele to this donor.

15 **BY MR. TRACEY:**

16 **Q** And just to be clear, Identifiler, which you are
17 talking about now, is the older technology?

18 **A** The Identifiler process is a little bit older. The
19 Identifiler process is a newer technique than the
20 Profiler/COfiler used in 2001. So it's much more sensitive.
21 It's much more stable. It could work with degraded DNA,
22 bloodstains. You would expect quite good results with
23 Identifiler versus the Profiler/COfiler. And there where you
24 don't get results, the Minifiler, as I said, was made --

25 **Q** Excuse me just one second. Minifiler is the

1 mini-STR technology, correct?

2 **A** Yes.

3 **Q** Sorry. Go ahead.

4 **A** So the Minifiler investigated nine locations also
5 given in the circles here. And as I said before, they're
6 supposed to work together with this. So what we see on the
7 right side are the longer fragments on the Identifiler. So
8 those are the three -- four rows, and below we see the
9 Minifiler kit in the four lower rows. And what you can see
10 is that those fragments, which are present in the
11 Identifiler, are much shorter here than in the Identifiler.
12 And that means that you get a lot of information, or if you
13 get a partial profile which the Identifiler, which would lead
14 to, for instance, exclusion or not enough information to
15 identify a certain donor, if you combine it with the
16 Minifiler results, you could get a full profile.

17 And how does it work? Well, you see here, the
18 victim, which, of course, is a very logical donor of DNA
19 material, where you always have that, you find the victim
20 most of the time. But on the second row or the third row
21 here, you see the sample and the Identifiler results. You
22 can see in some of these blocks there is no result.

23 If you combine it with the results from the
24 Minifiler, then you can see at every location, which is on
25 the first row, you get a result. And what we also did, and

1 this is a real case, is that you can compare it to suspects,
2 and if you compare the results, we have a full match with a
3 suspect in the case.

4 Q So in this case, if you use only the Identifiler,
5 which is available before 2007 --

6 MR. NUNNELLEY: Your Honor, if I may. I think we
7 need to make it clear for the record that this exhibit
8 has nothing whatsoever to do with any results obtained
9 in this case.

10 THE COURT: I mean, I'll give you a chance to
11 cross-examine.

12 MR. NUNNELLEY: Okay.

13 THE COURT: Go ahead.

14 BY MR. TRACEY:

15 Q So the use of the sample, of the Identifiler kit,
16 which was available before 2007, would that have resulted --
17 if it were used alone in this case, would have resulted in a
18 match?

19 A No.

20 Q And using the Minifiler technology, which is now
21 available, did it result in a match?

22 A It did.

23 Q And have you found that to be the case in your
24 daily experience? That Minifiler is finding matches where
25 Identifiler did not?

1 **A** Yes. And the combination as well. So you can
2 combine all the results in here. So, yeah, we find a lot, of
3 course, because we do so much touch DNA.

4 **Q** Let me go on to the other new technology that you
5 mentioned in your -- in your affidavit and that's Y-STR
6 testing. Can you describe --

7 **MR. NUNNELLEY:** Your Honor, again, I'm going to
8 object to this. The stipulation that we had before we
9 began this presentation, I did not object to this with
10 the understanding that this has nothing to do with the
11 case. My understanding was that would be made clear
12 that this is purely and simply a demonstrative aid, and
13 counsel has not made that clear. It's coming in where
14 it can be construed as results in this case. That's
15 what I'm concerned about.

16 **MR. TRACEY:** May I respond, Your Honor?

17 **THE COURT:** Go ahead.

18 **MR. TRACEY:** This is for illustrative purposes
19 only. These test results are not test results of
20 Mr. Zeigler's case.

21 **MR. NUNNELLEY:** With that I'm satisfied.

22 **THE COURT:** I'll overrule the objection at this
23 point. I kind of knew that already, but I assumed. Go
24 ahead.

25 **THE WITNESS:** So without so much DNA, we look at

1 the different chromosomes, and there's much more
2 locations you can investigate. With the Y-chromosome
3 DNA, we only look at the Y-chromosome, which we see on
4 the right down side corner. And because that is not
5 present in females, that it can be very helpful in
6 determining stains where there is a lot of single DNA.
7 We have a 90/10 percent rule, where if there is more
8 than 90 percent of your DNA in a sample, it's from your
9 victim, the perpetrator DNA can be there, but it won't
10 be detected because by the amplification steps, it just
11 doesn't get picked up anymore. So with female victims,
12 it would be enormously helpful if we can get rid of the
13 female DNA and just look at the male DNA only. So by
14 investigating the Y-chromosome we do that. There's no
15 amplification of the female DNA in that situation.

16 So it is the same feature outside as the inside of
17 the nucleus. It's only men. It's inherited from father
18 to son. And the father gives exact same copy to his son
19 barring mutations. And it also gives information about
20 racial backgrounds.

21 So we have the father in the square. He will give
22 the exact same copy to his sons, and the sons will give
23 the exact same copies to their sons again. And, again,
24 it will continue for generations, except for mutations,
25 of course. If something changes by disease or

1 something, otherwise, it will be the same.

2 **BY MR. TRACEY:**

3 **Q** And the use of Y-STR technology, what
4 specifically -- what kinds of cases is that specifically
5 useful for?

6 **A** Yeah. We use it a lot in rape/homicides, for
7 instance. Female victims, homicide of female victims, where
8 if we don't find semen, like in a cold case, semen is the
9 first thing to look for if it's a rape/homicide, but very
10 often it's not present. And then we start looking for touch
11 DNA because there was a lot of force applied on victims, a
12 lot of violence, and we look at those locations. And then we
13 also use the Y-STRs.

14 **Q** So is it helpful when they are mixed samples that
15 involve male and female individuals?

16 **A** Yes.

17 **Q** Okay. Let me now turn to the Zeigler matter,
18 specifically. Have you reviewed any documents or materials
19 in connection with the Zeigler case?

20 **A** Yes, I have.

21 **Q** Now, would you describe in general what you've
22 reviewed?

23 **A** Several reports. The bloodstain reports, DNA
24 report that I saw, and pictures of the crime scene, for
25 instance.

1 Q Did you review the 2001 DNA reports?

2 A Bloodstain reports.

3 Q Did you review the 2001 DNA testing results?

4 THE COURT: I didn't hear you. What was your
5 answer on that? I didn't understand what you said.

6 THE WITNESS: Sorry. Bloodstain reports.

7 MR. TRACEY: He looked at the bloodstains.

8 BY MR. TRACEY:

9 Q And did you look at the 2001 DNA testing results?

10 A Yes, I did.

11 Q And have you reviewed any of the physical evidence
12 in the Zeigler case?

13 A Yes. Yesterday we looked at the clothing of
14 Eunice Zeigler and some of the clothing of Mr. Zeigler
15 himself. And the guns.

16 Q And did you reach any conclusions, at least based
17 on what you saw at that time, about the storage conditions?

18 A Yes. The packages were open, were not sealed,
19 and --

20 Q What about the environment?

21 A Oh. The environment, yeah, air-conditioned room
22 and temperature was good for DNA.

23 Q And have you reached any conclusions based on what
24 you've seen and reviewed as to whether additional DNA testing
25 using modern technologies will provide valuable evidence with

1 regard to the guilt or innocence of Mr. Zeigler?

2 **A** Yes. What we saw on the clothing of Eunice
3 appeared to be what were still visible bloodstains, and also
4 very small specks which could be bloodstains created by
5 coming from the wound injury of the victim, back spatter.
6 And if that's present, then that's -- of course, that blood
7 could also come back to the shooter. So it appears who shot
8 this victim could have had this DNA on him. And then we also
9 saw some stains which appeared to be blood on the inside of
10 the coat, which could have been transferred by the
11 perpetrator, or handling the coat in one way. And, of
12 course, you can look for identification of those bloodstains.
13 And you can also look for DNA -- it's possible that the
14 person who did that had blood on his hands from the victim
15 and transferred it onto her own coat, but while doing that,
16 it can also transfer skin cells on the coat.

17 **Q** So you could determine both whose blood is on
18 Eunice Zeigler under her coat and potentially who put it
19 there?

20 **A** That's correct.

21 **Q** In your affidavit you also recommended DNA testing
22 for Mr. Zeigler's shirt. Could you describe for the Court
23 the reason that you would perform DNA testing on
24 Mr. Zeigler's shirt and what it would show in this case?

25 **A** Yeah. In order to find out what happened and if

1 Mr. Zeigler killed the victims, and especially with
2 Perry Edwards, looking at pictures and information at hand,
3 you could see that there was a fight. The bloodstain experts
4 describe a lot of projected stains around this victim. So
5 blood was flying around and this victim was also shot at
6 least two times from close range which gives you back
7 spatter.

8 Q Which victim are you talking about there? Which
9 victim are you talking about?

10 A Perry Edwards I'm talking about. So if you find
11 this victim, especially with physical contact, of course,
12 then you already know there will be transfer of DNA. If you
13 are close, yeah. That's why we actually did the touch DNA
14 for it. If you have close contact and you grab someone, then
15 there's transfer of DNA. If your victim is bleeding heavily,
16 of course, transfer of blood is also very likely. If you
17 beat the victim as understood from the reports and
18 information given to me, is that this victim had several
19 blows -- this is Perry Edwards we're talking about -- then if
20 I do that at the moment, administer these blow, I will get
21 blood on me, especially if I hit a blood source again over
22 and over again, then it's very difficult for me to evade
23 these stains. And the same even more with when I shoot
24 someone and it's at close range, there will be blood coming
25 back toward the shooter. You could expect that on the

1 shooter as well. If Mr. Zeigler was the shooter, I would
2 expect it on his clothing.

3 Q Let's pause for a moment on that back spatter point
4 that you just made. Can you describe for the Court how a
5 shooter at close range gets spatter on them?

6 A Yes. We have some pictures, I think.

7 Q Advance that.

8 A So this is an experiment, and what you can see here
9 is that it was a sponge that was filled with blood. And this
10 sponge was shot from the left side to the right side. So
11 this is entry from the left side -- left side. And what
12 happens then is that the bullet hits the sponge, and, of
13 course, with shootings, there is a lot of force and power in
14 the bullet because of the explosion which causes the bullet
15 to go away. What happens is you get forward spatter going to
16 the right but you also have spatter going backwards. We call
17 that back spatter. What you see here is the force on the
18 right side. On the left side you see back spatter. So it's
19 going back towards the target who is shooting. And, of
20 course, that's very important in the cases to find out if
21 somebody has that on them, well, then, you have some
22 explaining to do because it's -- well, it's difficult to
23 explain to you since you were not there or that you didn't
24 shoot the victim. Because of the high velocity of a bullet,
25 you also get very small stains. The more force you apply on

1 blood, the smaller the stain gets. You see the difference
2 between a beating blood spatter is a little bit bigger and
3 the spatter from a gunshot. Because it's much more force
4 applied than with a beating. And what you also see is that
5 you kind of get a type of misting. We call it misting also.
6 Misting of blood. At this stage, you won't see it on
7 clothing, especially on dark clothing which we saw some of
8 yesterday. It would be extremely difficult to find it. But
9 there's blood and there's a lot of DNA in there. So with
10 special techniques we can look for that as well, which was
11 very difficult in 2001. And especially if you look for very
12 small stains, then the Minifiler kit would be also very
13 helpful in determining the source of DNA from very small
14 bloodstains in shootings.

15 Q Do you know how far the shooter was from -- the gun
16 was from Mr. Edwards's head when he was shot?

17 A Yeah. Mr. McDonald described at very close range
18 from 3 inches to 6 inches, I think. And I'm not sure -- I
19 didn't see the pictures. You described the pictures to us
20 yesterday. But it was close range as far as -- the way you
21 described it to me. And that means that the closer you are,
22 the guns are not that big, so you know the distance of the
23 arm holding the gun. Yeah, it's not that far.

24 Q And under those circumstances, would you expect the
25 shooter to have backward spatter of blood of Mr. Edwards's on

1 him?

2 **A** Yes.

3 **Q** And would you also expect under the circumstances
4 that have been described, that if Mr. Edwards was beaten over
5 the head, that blood spatter from Mr. Edwards's head would be
6 on the killer?

7 **A** Yes. Given the information in this case and all
8 the blood around the victim and all the spatter, I believe
9 that.

10 **Q** If you were to perform modern technology DNA
11 testing on Mr. Zeigler's shirt, would you be able to tell
12 whether he was the shooter and the beater of Mr. Edwards?

13 **A** Yes.

14 **MR. NUNNELLEY:** Speculative, Your Honor. I object
15 to it. It's invading the province of the jury as well.

16 **MR. TRACEY:** Your Honor, he's just telling the
17 Court what the evidence is that he expects to come from
18 this testing and what it would show.

19 **THE COURT:** I'll overrule the objection.

20 **BY MR. TRACEY:**

21 **Q** And what kind of -- what kind of sampling -- how
22 would you sample the DNA from Mr. Zeigler's shirt in order to
23 ensure that if there is -- if there is Mr. Edwards's blood
24 there you are going to find it?

25 **A** Yes. Of course, if they're visible stains. And

1 what you could do a little bit different from 2001, you group
2 the stains in categories. Like, for instance, the right arm
3 where I saw already there was blood spatter on there, and
4 then go upper and just take representative stains from those
5 grouping of stains. If you shoot someone, I get, in this
6 situation, maybe hundreds, maybe thousands of stains there.
7 You don't need to take all those thousands of stains in order
8 to find out who is the donor of that blood. So that is one
9 of the possibilities. That you take several stains from
10 these locations and type whose blood that is, then you do it
11 from every pattern, if there is some wipes and transfer of
12 stains. So you take every different type of bloodstain
13 pattern, you take a sample from that. That's one approach
14 and the first approach I would choose to do. And then the
15 other approach is, if we really wanted to test everything,
16 which is very rare to do that -- actually, I've never seen a
17 case where we did that -- but another possibility, in order
18 to find out if a person donated some material on this
19 location, you could use the taping method which we call.
20 With the taping method, you get a very small tape and then
21 you start dipping the stuff. You put the tape on the garment
22 and then you move it very slowly until it's not adhesive
23 anymore, and then you type that DNA on the tape. And, of
24 course, if you have the whole area done, then you have --
25 well, you have DNA from this whole area investigated. So

1 that's a way where you can sample much bigger areas. We use
2 it a lot for brick marks where you see the hand but you don't
3 know how you are going to sample that. Then you take the
4 size of the hand, you tape the whole area and you do the same
5 over here, in this case maybe more for the blood then, tape
6 the whole area and see what kind of result you get from
7 there. And if Mr. Edwards was in there, then you would
8 expect to find it, especially if it's blood.

9 Q Okay. Let's turn to the other pieces of evidence.
10 We talked about Eunice's clothing and Mr. Zeigler's clothing.
11 I would like to talk about Perry Edwards's shirt coat and
12 sleeves which you also recommended testing. Would you
13 describe why and how you would do this testing?

14 A Yes. Given the information from the case and
15 actually, I think all the bloodstain experts agree there was
16 a fight between Mr. Edwards and one of the shooters or the
17 shooter. So the person who did this fight with Mr. Edwards,
18 you would expect to leave his DNA on that -- on that coat
19 during this -- during this fight. And then there's two
20 things where you can look. Maybe the perpetrator did get
21 injured so you can look for blood. You can also look for the
22 touch DNA.

23 Q The next area is Perry Edwards's fingernails.
24 Describe why you would recommend on that.

25 A I think it's a matter of experience. A lot of

1 state laboratories also do that automatically. Nowadays you
2 investigate the fingernails if there was a violent fight. I
3 think everybody assumes Mr. Perry Edwards was fighting for
4 his life. We see that often under the fingernails, we find
5 DNA of perpetrators. So in that sense, that could be very
6 helpful for the case.

7 Q And finally, the guns. You recommended DNA testing
8 on the interior of the guns. Describe that to the Court.

9 A Yes. Under normal circumstances, you would
10 investigate the guns also, the outside. What I saw from the
11 case, that the guns were used and were -- were handled
12 without gloves and that the jury handled. So the guns so on
13 the outside of the guns, I expect a lot of contamination, DNA
14 of other persons, and that would not be very helpful in the
15 case anymore. The inside of the guns, that's a different
16 story. I don't think a lot of people pull the inside out and
17 completely dismantle the guns. So what you could do, and we
18 have experience that you find DNA of persons cleaning the
19 guns on the inside parts of the gun, and that would be, in
20 this case, may be helpful.

21 Q Very good. Thank you, Mr. Eikelenboom.

22 MR. TRACEY: No further questions.

23 THE COURT: Before we do cross-examination, I'll
24 take about a ten-minute recess and give our court
25 reporter a break and we'll come back and do

1 cross-examination.

2 **MR. NUNNELLEY:** Very good.

3 (Brief recess from 12:14 PM to 12:21 PM.)

4 **THE COURT:** I'm not limiting -- you can have a
5 seat, sir.

6 I'm going to let you know that we are probably
7 going to stop at 12:45. If you can finish, fine, if you
8 don't --

9 **MR. NUNNELLEY:** I'm not sure I'm that fast.

10 **THE COURT:** Like I said, I'm giving you an idea of
11 when we're going to take the lunch break so we can all
12 have a lunch.

13 **MR. NUNNELLEY:** Very good.

14 Please the Court?

15 **THE COURT:** You may proceed.

16 **CROSS-EXAMINATION**

17 **BY MR. NUNNELLEY:**

18 **Q** You are being paid for your work in this case?

19 **A** Yes.

20 **Q** How much?

21 **A** For this work I get \$2,000.

22 **Q** Plus expenses, I'm assuming?

23 **A** Yes.

24 **Q** And you have a laboratory in Colorado. Where in
25 Colorado again?

1 **A** Conifer.

2 **Q** And Independent Forensic Services is the name of
3 it, right?

4 **A** That's correct.

5 **Q** Is that lab an ASCLD accredited lab?

6 **A** No.

7 **Q** Do you have any accreditations for that lab?

8 **A** No.

9 **Q** Okay. Now, sir, you've testified based on your CV
10 in a fair number of high-profile cases and some cases in the
11 United States, haven't they?

12 **A** That's correct.

13 **Q** You testified in the Timothy Masters/Peggy Hettrick
14 case, didn't you?

15 **A** That's correct.

16 **Q** When was that case?

17 **A** I think we started working on that case in 2006,
18 2007.

19 **Q** Okay. And you testified in Jonbenet Ramsey?

20 **A** We didn't testify. We worked for the police.

21 **Q** Okay. And when was that, sir?

22 **A** Also around that period, I think. I had just
23 arrived in the United States.

24 **Q** That was around 2008, 2006, '7, '8, along in there?

25 **A** We talked with the family. I'm not sure when

1 exactly it was.

2 Q Okay. And the Angela Michelle Wallace homicide,
3 you were involved in that case too?

4 A That's correct.

5 Q When was that case?

6 A That's still ongoing.

7 Q Still ongoing?

8 A Yes.

9 Q But you did some work in that case as far back as
10 2009, didn't you?

11 A That's correct.

12 Q You've done presentations on the Jonbenet Ramsey
13 case?

14 A No.

15 Q You haven't?

16 A I have held a presentation for the family with the
17 district attorneys and all the police officers investigating
18 that case, and I explained to them how we would approach that
19 case. And in that case, later on, the videotape that -- so
20 probably the videotape of that presentation. The team went
21 to Bode Technology for the DNA investigations.

22 Q Did you say Bode Technology?

23 A Yes, as far as I'm aware. So we didn't do the DNA
24 in that stage.

25 Q And you were in the Netherlands in the '90s,

1 weren't you?

2 **A** Excuse me?

3 **Q** You were in the Netherlands working as a forensic
4 scientist back in the 1990s, weren't you?

5 **A** Yes.

6 **Q** You were doing touch DNA back then, weren't you?

7 **A** That's correct.

8 **Q** Now, you said, Doctor, that you had seen some of
9 the evidence in this case. I believe you -- I'm sorry, not
10 doctor. You looked at the guns, didn't you?

11 **A** That's correct.

12 **Q** Which guns did you look at?

13 **A** In the end, I believe we all saw all the guns. So
14 it was a bag filled with guns, and I came out and I looked at
15 all the guns.

16 **Q** There are about eight of them, weren't there?

17 **A** Yes.

18 **Q** Which ones do you want to have DNA testing done on?

19 **A** Yeah, that's a good question. As I said, the
20 numbers were very unclear yesterday, but --

21 **Q** The numbers were what, sir?

22 **A** Unclear. So it was not exactly clear which gun
23 came from which location and which gun was owned by
24 Mr. Zeigler. So, of course, if Mr. Zeigler was the owner of
25 the gun, those guns, you would expect his DNA to be present.

1 So as described in the affidavit, it only makes sense to
2 investigate the guns which are not owned or not claimed to be
3 owned by Mr. Zeigler. And then we have to figure out which
4 guns they were, and I could not find that out yesterday.

5 Q You could not tell which guns were the ones you
6 wanted to have tested?

7 A No, not at this stage.

8 Q Now, sir, I know you have some military service.
9 I'm assuming you know the difference between a semiautomatic
10 handgun and a revolver?

11 A That's correct.

12 Q The majority of the firearms are revolvers, aren't
13 they?

14 A That's correct.

15 Q The revolvers have an orange zip tie through the
16 barrel, don't they?

17 A That's correct.

18 Q Do you know when that was put there?

19 A No.

20 Q Do you know who put it there?

21 A I assume police officers or clerks from the court,
22 but I don't know.

23 Q Whoever put that orange zip tie in those revolvers
24 had to touch them, didn't he?

25 A Yes.

1 Q And leave touch DNA presumably, correct?

2 A If this person did not wear gloves, then you would
3 expect transfer of DNA.

4 Q Do you know if those guns were test-fired at the
5 crime lab?

6 A I saw some reports from the FBI about gunshot
7 residue. I didn't see reports of test-firing, but that's
8 possible.

9 Q That would be another layer of an incident that
10 could either add touch DNA or destroy it, wouldn't it?

11 A Yeah. If you fire a gun, of course, heat is
12 produced and that makes it more difficult to get results.
13 But that's also the reason why we -- in Holland, we do this a
14 lot on guns. We use like Minifiler or low copy DNA even.

15 Q Do you know whether or not the guns were cleaned
16 after having been test-fired at the crime lab?

17 A I don't know that.

18 Q That would destroy any touch DNA if that happened,
19 wouldn't it?

20 A Yeah. It depends on the way it's cleaned, of
21 course, and what kind of material is used. So to come back
22 to your question, firing a firearm is not good for DNA, but
23 in practice, we find -- often we find shells on crime scenes
24 and we are still able to get DNA from those. Not all of
25 them. The chances, of course, are diminished if you have a

1 cartridge, the chance of getting DNA is better than if it's a
2 fired cartridge, but, still, there are cases, situations
3 where we will be able to find DNA on that. And it's the same
4 for a cleaning. We only need a very small amount of DNA
5 nowadays to get a profile. So if they put them in a chloride
6 bath, yeah, then the DNA would be gone. But if you clean --
7 it depends on the way they clean the gun if they are able to
8 completely get rid of this DNA.

9 Q Do you know whether or not the guns were processed
10 for fingerprints?

11 A I don't know that.

12 Q So then you don't know how they were processed for
13 fingerprints because you don't know if it was done?

14 A No.

15 Q That could also affect the survival of any touch
16 DNA after 41 years, couldn't it?

17 A Yes. Using chemicals and, of course, you can
18 imagine that if you use chemicals for -- in working with
19 fingerprints, it is not good for DNA. But we also quite a
20 bit when I worked at the national lab, I had a project with
21 the fingerprint department in order to see if we can get DNA
22 from fingerprints which were already lifted or were already
23 treated with all kinds of chemicals. And in my opinion, it
24 does not help, the chemicals. It makes it more difficult to
25 get DNA, but, on the other hand, we have very sensitive

1 methods, and sometimes we can also see if fingerprinting,
2 like dusting, that you have kind of a cover on it, but you
3 still have the DNA under there. So it won't help the DNA.
4 The DNA will not get better, but sometimes it's possible to
5 get DNA from those as well.

6 Q Now, sir, you said you wanted to test the
7 inner-workings or the interior of the guns?

8 A Yes.

9 Q I'm assuming that you do not mean to disassemble
10 the firearms. Is that a fair assumption?

11 A Well, I actually would disassemble the guns.

12 Q You do?

13 A What you see is that the outside were touched. I
14 think -- I saw a documentary and stuff that people were
15 touching these guns on the outside. The outside is
16 contaminated. Not even -- I don't think they were forcefully
17 touched but there were a lot of people who touched the guns.
18 And even though I already explained that you don't leave a
19 lot of DNA, but you will leave some DNA. So if you have the
20 outside of the gun and ten people touched it and they all
21 leave, like, one or two alleles, almost a full profile but
22 only of ten people, which you cannot discriminate in between,
23 you can't make one good sample of that. You don't get a good
24 result. That's why I said the outside I don't see getting
25 the information that you can get useful results. Some part

1 of the inner side, if you really clean it there. For
2 instance, there's kind of a mechanism to -- if you talk about
3 the revolvers to roll around, how you call it, the revolving
4 part in the gun where the cartridge goes in, if you clean it
5 and you cover with your hands the sharp edge, if you go along
6 that, then you can leave some DNA there. So that would be a
7 part which I would be interested in. And I don't think that
8 the jury members or other persons would contaminate it very
9 easily or would touch that. They don't have a reason to do
10 that.

11 Q So your testimony is that the jurors when the guns
12 went back to the jury room would not have touched the front
13 of the cylinder of those. Is that your testimony?

14 A No. Some of the inside parts where there's the
15 mechanism to rotate it, that it is unlikely or less likely
16 they would have touched that. I could imagine they touched
17 all the outer parts.

18 Q That part of the firearm that is the most exposed
19 from the heat and blast from being discharged?

20 A The barrel gets the most, so I'm talking about the
21 rotating device, more in the back. But, of course -- and
22 there are pictures and videos of that. That there will be
23 heat exposure there. So DNA will deteriorate in that
24 situation as well.

25 Q There will actually be fire expelled from the front

1 and the back of the revolver cylinder when it's fired, won't
2 there, sir?

3 **A** So what you see very often is the fire mostly come
4 out of the muzzle, most of it, because the cartridge, if it's
5 open, pull it there, it will fire and then this way the --
6 what you call it? We call it a trommel. It's -- well, the
7 rotating --

8 **Q** The cylinder?

9 **A** Cylinder.

10 **Q** Does that help?

11 **A** The cylinder will also have fire, direct fire from
12 the -- from the cartridge. So, yeah, that's the location
13 where DNA will deteriorate quite a bit.

14 **Q** Incinerated probably, wouldn't it?

15 **A** Yeah. DNA would break down on that.

16 **Q** Okay. Now, you wanted to do testing, you said, on
17 Mr. Zig- -- yeah, Mr. Zeigler's shirt?

18 **A** That's correct.

19 **Q** Now, before we get there, let me ask you this.
20 Have you read the transcript of Mr. Zeigler's trial in 1976?

21 **A** No. I've read some information. I have read some
22 transcripts but limited, very limited.

23 **Q** I'm going to get there. Stay with me here, sir.

24 **A** Sorry.

25 **Q** You have not read the transcript of the 1976 guilt

1 phase trial, have you?

2 **A** No.

3 **Q** Have you read any transcripts that talk about the
4 evidence against Mr. Zeigler in the form of testimony of
5 witnesses?

6 **A** I know some -- I've seen a documentary. I have a
7 video. Somebody sent the video to me. So I saw a
8 documentary about the case. And I actually don't have
9 transcripts about what persons said at the jury trial.

10 **Q** Okay. So the sum total of your knowledge about the
11 facts of the crime comes from a documentary that you watched
12 on television or on video?

13 **A** On video, yeah. And then based on bloodstain
14 pattern. Basically, the scientific reports.

15 **Q** Okay. I'm not to those reports yet, sir. Hang on.
16 What was the name of the documentary you saw on video?

17 **A** I don't know the name. Just a video.

18 **Q** Do you know who produced this documentary?

19 **A** No.

20 **Q** Do you know anything about the factual basis of
21 that documentary?

22 **A** No.

23 **MR. NUNNELLEY:** Your Honor, at this point, I'm
24 going to object to this witness' testimony and move that
25 be stricken for lack of any credible factual basis. I

1 cannot cross-examine him about his knowledge of the
2 facts of the case when he claims to have that knowledge
3 from something that I don't even know what it was. I'll
4 object to it and ask that his testimony be stricken in
5 its entirety.

6 **THE COURT:** Response.

7 **MR. TRACEY:** Your Honor, the witness' testimony has
8 been clear that with respect to the scientific issues,
9 he read the original reports. With respect to the
10 underlying evidence in the case, he's not here to
11 testify about the testimony in the case. It's not
12 his -- it's not his area of expertise. He's not relying
13 on it. His sole area of expertise is crime
14 reconstruction, blood spatter, and DNA, and for that he
15 has read -- he has specifically told us what he has
16 relied on. So the fact he saw a video doesn't undermine
17 that scientific testimony at all.

18 **THE COURT:** Response.

19 **MR. NUNNELLEY:** Your Honor, he's offered and said
20 that he can offer opinions about guilt and innocence of
21 Mr. Zeigler. That cannot be based, surely, upon the
22 scientific aspect of this case alone. It has to be
23 based on something else. If it's not, then we have a
24 whole separate problem. But if he's relying upon that
25 kind of extra record unsubstantiated and unreviewable

1 evidence, I object to his testimony.

2 **THE COURT:** I'll overrule the objection at this
3 point.

4 **MR. NUNNELLEY:** Thank you, sir.

5 **BY MR. NUNNELLEY:**

6 **Q** Now, so you have no first-hand factual knowledge of
7 the case, do you?

8 **A** No.

9 **Q** But I believe you said in direct examination that
10 if Perry Edwards's blood is not on Mr. Zeigler's shirt, then
11 Mr. Zeigler is innocent. Do you recall that?

12 **A** No. I don't believe that I said it like that. But
13 if Mr. Zeigler shot Mr. Edwards from close range, and given
14 the pictures and the evidence and the reports of the other
15 experts, you would expect blood to come towards him. For
16 instance, on the cuff on Mr. Zeigler, you can see small
17 projected stains. So if these small projected stains come
18 from Mr. Edwards, that would give strong support for the
19 hypothesis that he shot Mr. Edwards, and I would believe so.

20 **Q** It is your belief that you are going to be able to
21 find back spatter blood on Mr. Zeigler's shirt after 41
22 years?

23 **A** Well, I didn't look at the shirt because I didn't
24 want to contaminate the shirt even more, but I looked at the
25 pictures and there's a lot of pictures of Mr. Zeigler's

1 shirt. And you can see quite a bit of blood spatter on the
2 shirt still. After 40 years, yeah, I'm pretty sure we will
3 get DNA from the bloodstains. Blood spatter, of course, are
4 very important in this case because there's always force
5 applied on blood spatter. So blood spatter has more
6 incriminating value than, for instance, transfer stain. But
7 if we have these very small, minute stains and they all come
8 back to Mr. Edwards and we have it on the left cuff or right
9 cuff, then the conclusion would be extremely strong support
10 for the hypothesis that he shot Mr. Edwards. And I would
11 only base that based on the technical evidence of the DNA and
12 the blood sampling and the blood pattern. The previous
13 testimony couldn't influence that anyway.

14 Q What kind of personal protective equipment were you
15 wearing yesterday when you looked at the evidence in this
16 case, sir?

17 A Gloves.

18 Q Were you wearing a mask?

19 A No.

20 Q Were you wearing a hat?

21 A No. That's a problem in this case. That nobody
22 seemed to wear protective clothing, so there will be issues
23 with contamination and small amounts of touch DNA left by all
24 kinds of people.

25 Q Do you know whether or not anyone at the crime

1 scene was wearing protective clothing?

2 **A** We don't have pictures of so much people on the
3 crime scene, but very probably they were not.

4 **Q** Do you know where Mr. Zeigler's clothes were
5 recovered by law enforcement from?

6 **A** I believe it was the hospital.

7 **Q** Do you know how they were handled at the hospital?

8 **A** No.

9 **Q** Do you know where they were in the hospital?

10 **A** No.

11 **MR. NUNNELLEY:** Judge, actually, this might be a
12 good stopping point, a logical breaking point in my
13 cross if the Court wants to go ahead and go to lunch
14 right now.

15 **THE COURT:** That's fine with me. We'll take a
16 recess.

17 Let's see. We'll come back at 2:00. We'll be in
18 recess until 2:00 o'clock.

19 **MR. NUNNELLEY:** Thank you, Judge.

20 (There was a lunch recess from 12:40 PM to
21 2:07 PM.)

22 **THE COURT:** The witness can come back up to the
23 stand.

24 **THE WITNESS:** Thank you very much.

25 **THE COURT:** You can have a seat, sir.

1 You may proceed.

2 **MR. NUNNELLEY:** Please the Court.

3 **THE COURT:** Yes, sir.

4 **BY MR. NUNNELLEY:**

5 **Q** Now, sir, I will try not to repeat myself from what
6 we did before. Touch DNA -- when you talk about touch DNA,
7 that is not a particular DNA kit or anything else, is it?

8 **A** That's correct. Touch DNA is DNA which is
9 transferred. So it falls in the category as trace recovery
10 biological cell material.

11 **Q** And it's examined with the traditional DNA kit,
12 right?

13 **A** Well, that depends. The kits you can always
14 choose. And with touch DNA, you could possibly look at low
15 copy, an extra sensitive kit, where we amplify the DNA a
16 little bit more, and for now, the standard kit we use is
17 Identifiler Plus and the Minifiler.

18 **Q** Okay. But those can be used for anything in
19 addition to touch DNA, right?

20 **A** Yes. Those are DNA kits. The Minifiler kit is so
21 sensitive that if you have fresh bloodstains or semen stains,
22 that would not be the kit of use.

23 **Q** And the sensitivity of a Minifiler is -- Minifiler
24 is a trade name, right?

25 **A** Yes.

1 Q The sensitivity of a Minifiler kit is such that you
2 can get some kind of hard to interpret results, isn't it?

3 A Well, if you put too much DNA in it, because it's
4 so sensitive, you amplify so much DNA, so, like, a good semen
5 stain or a good bloodstain, that the peaks we saw can be
6 extremely high. So you don't want to use it for good DNA.
7 You would use it specifically for broken down DNA, burnt
8 bones, touch DNA.

9 Q You said that you had looked at a picture of
10 Mr. Zeigler's shirt.

11 A That's correct.

12 Q Do you know when that photograph was taken?

13 A No.

14 Q You said, sir, that you would expect to find
15 genetic material on the various items that you've identified?

16 A That's correct.

17 Q Can you point me to any authoritative work that
18 supports the notion that you would expect to find genetic
19 material on these items after 41 years?

20 A Well, I have a lot of case samples of old cases
21 where you -- after 40 years, you still will be able to find
22 blood. And for the cases like Tim Masters was in '86 --

23 **THE COURT REPORTER:** What was the name?

24 **THE WITNESS:** Tim Masters's case was '86. And
25 we're not interested in the blood in that case, between

1 the touch DNA. In that touch DNA, we actually did a
2 profile that just showed we did get a full profile. So
3 for the blood in this case, I would not expect any
4 problems to detect that. Touch DNA, of course, is
5 always more difficult.

6 **BY MR. NUNNELLEY:**

7 **Q** Can you give us anything other than in the form of
8 a probability? Other than just that you would expect to
9 find, can you give us a percentage, perhaps?

10 **A** No. Then you need specific data. So, no, I don't
11 have specific data and amounts or percentages of cases.

12 **Q** In your affidavit, you said you relied on
13 descriptions of the evidence. Do you recall that?

14 **A** Yeah. Descriptions given in the reports from the
15 forensic bloodstain experts.

16 **Q** Okay. So that's the source of that information?

17 **A** Yes. And the pictures I used and the DNA report.

18 **Q** Okay. Do you know what the sequence of events of
19 the four murders committed by Mr. Zeigler were?

20 **A** No.

21 **Q** Do you know what time the first murder took place?

22 **A** No.

23 **Q** Do you know when the next murder took place?

24 **A** No.

25 **Q** Do you know how much -- you do understand that

1 there's a gap between the first set of shots that were heard
2 and the second set, or do you know that?

3 A No, I don't know that.

4 Q You did not know that?

5 A I hear you saying it. I know it now, if that's
6 correct.

7 Q You had no knowledge of that beforehand?

8 A No.

9 Q So you don't know what Mr. Zeigler may have been
10 doing between the first murder and the second --

11 A No.

12 Q -- do you?

13 You said, sir, that the State's theory, I believe
14 is the way you put it, was that Mr. Zeigler held
15 Perry Edwards in a headlock. Do you recall that from your
16 affidavit?

17 A Yes, that's what I -- that's what I heard.

18 Q Who told you that?

19 A I think it was in the documentary. And what I also
20 understood from the DNA investigation is that that hypothesis
21 is what they investigated.

22 Q Who established the hypothesis that was
23 investigated by the prior DNA testing?

24 A The DNA testing for -- the DNA testing in 2001 you
25 are talking about?

1 Q I guess.

2 A I think it was the defense.

3 Q Have you -- you've already said -- you have already
4 told us that you did not read the transcripts of the trial?

5 A No.

6 Q So you can't show me in the record of the case
7 where there is any evidence to suggest that Perry Edwards was
8 held in a headlock, can you?

9 A No.

10 Q If you have incorrect information about the facts
11 of the case, would that affect your opinions that you've
12 testified to here today?

13 A Well, if we get the investigation, of course, I
14 always do my own investigation. And in Holland, we're not
15 used to getting directions from either defense or
16 prosecution. So in that sense, the courts give me a court
17 order and says you have to do truth finding, and sometimes
18 the defense or prosecutor can ask specific questions or give
19 hypothesis. That's what I work with. But I also -- in this
20 case would just follow the evidence and start doing analysis
21 on the bloodstains, if I get the evidence and look at it and
22 analyze those. And based on that, I would do a thorough
23 investigation on, well, bloodstain patterns all over the
24 shirt, and in the end, probably the taping method where we
25 just sample -- do on the shirts different samples.

1 Q Are you aware that fingernail scrapings were taken
2 from Charles Mays?

3 A No. But I assume that's done with all the victims.

4 Q But the only one that's important to you is
5 Perry Edwards's fingernails?

6 A Well, we can investigate Charles Mays's fingernails
7 as well if that's of interest.

8 Q Sir, can you -- let me ask it this way. The way
9 evidence is stored --

10 A Uh-huh.

11 Q -- can affect how long DNA remains viable on that
12 evidence, can't it?

13 A Yes. Under bad conditions, for instance, outside
14 in the rain or in very humid warm conditions, DNA can
15 deteriorate. So the conditions are important. If you store
16 it in a room which is air-conditioned and, like, around
17 65 degrees, that's going to be perfect for DNA.

18 Q Do you know how long the evidence in this case has
19 been in the evidence vault in this courthouse?

20 A No.

21 Q Do you know how it was stored before it came to
22 this courthouse?

23 A No.

24 Q Do you know where it was before it came to this
25 courthouse?

1 **A** No.

2 **Q** Of course, you don't know who handled it before it
3 came to this courthouse, either, do you?

4 **A** That's correct.

5 **Q** Absence of evidence is not evidence of absence, is
6 it, sir?

7 **A** Yeah. In the end, I think that's a quote and
8 depends on the investigation. Normally, I would agree with
9 the DNA. If you test everything, that theory is not really
10 relevant anymore. If you test everything and you know every
11 location which is, of course, a tremendous amount of work to
12 do, thousands of bloodstains which are probably present on
13 the clothing of Mr. Zeigler. But if you tested everything,
14 then you would know whether or not somebody donated cell
15 material there.

16 **Q** But you have already said that's not what you are
17 proposing to do.

18 **A** Well, the taping method is coming close to that, so
19 you would get information from it.

20 **Q** How big of an area would you use with the taping
21 method?

22 **A** As I said before, it depends. What we normally do
23 with taping and, of course, you can adjust the size of the
24 tape is like a hand size. So, yeah. And then whatever is
25 needed to get the hand size and then go up through the whole

1 clothing that you have, the whole clothing. So it's a lot of
2 samples.

3 Q And as I'm understanding, then, if you take a piece
4 of tape, which I assume is some kind of special tape -- or is
5 it?

6 A Yeah, it's a special tape we use. And that's, of
7 course, sterilized in a UV light and made DNA free, and then
8 you can use it in order to collect DNA.

9 Q And this would be touch DNA that you are --

10 A Touch DNA. But, of course, it will pick up
11 everything. Blood. So, yeah, all the DNA which is on the
12 garment will be picked up, touch DNA. Loose cells, of
13 course, is a little bit easier than, like, blood which is
14 fluid and embedded in the garment. But still, it will pick
15 up the blood as well.

16 Q And then you would use this or you process this
17 with a Minifiler kit?

18 A It would depend. If there is large amounts, the
19 taping, especially if you tape bloody areas, there will be a
20 large amount of blood on there, on the tape, then. Of
21 course, if you use Minifiler, you get great big results than
22 if you just use the Identifiler first. And if you get bad
23 results, you can start using the Minifiler.

24 Q But you can't tell whose DNA from one person to
25 another it is when you do that, can you?

1 **A** During the sampling we don't, but that's why we do
2 the DNA profiling. And then after you get a profile, you are
3 starting to deconvolute. If it's a mixture, if it's a
4 straightforward match, a bloodstain from one person, you get
5 a full profile of that one person. If it's a DNA mixture,
6 then you have to work with the mixture and start to see if
7 you can determine who is the donator or who the different
8 persons are who donated some material to the sample.

9 **Q** So you would -- so what you are saying is you would
10 theoretically get DNA from anybody who touched that spot on
11 that garment over the last 40 years?

12 **A** No. As I said before, if you touch something, you
13 will leave your DNA. There is no doubt about it.

14 **Q** Okay. Let me stop you right there. If I put my
15 hand on top of where you just put your hand and you use the
16 taping method, you are going to get my DNA and yours, aren't
17 you?

18 **A** Yeah.

19 **Q** And then you would have to distinguish between the
20 two, right?

21 **A** Yes. And as I said before, the problem is only if
22 you are not a big shedder and I'm not a big shedder, that
23 would probably get a very, very poor result. So if I apply
24 force or I use blood, of course, if I use blood and you put
25 your hand on top of that, you will only find my blood in the

1 DNA profile. We don't see your couple of cells which you
2 leave during your transfer. If you talk about mixture of
3 touch DNA on touch DNA, then you would expect in this
4 situation a very, very poor result, maybe a couple of peaks,
5 alleles, and, yeah, not very useful to help the court to make
6 a decision or the jury to make a decision who is the donor.
7 If you apply force, then it's a different story.

8 So if you lift the body up by the coat, for
9 instance, then you leave much more cells, as I explained in
10 the Powerpoint, than just a single touch. So the jury -- we
11 have this problem a lot, especially in the United States.
12 The jury touches evidence and we have to -- in the Masters
13 case, we had to investigate that material, and still, the
14 person, who was not Tim Masters, the most, we think, was
15 responsible for the homicide, donated much more than any of
16 the jurors.

17 **Q** So are you suggesting that we're going to have to
18 go back and get DNA profiles from all of the jurors in this
19 case in order to be able to eliminate them as potential DNA
20 donors?

21 **A** No. Because what I expect is that we won't be able
22 to identify all these donors of jurors. All the people who
23 just slightly touch the evidence, they will leave some DNA,
24 but I won't be able to identify them because I only get a
25 couple peaks. The ones I'm really interested in are the ones

1 who applied force, drag the body with force from the crime
2 scene to a different location, or -- well, fighting and
3 holding arms and hands together. And, of course, the persons
4 who left blood on the clothing of the victims or vice versa
5 on the clothes of the perpetrator.

6 Q Even assuming you can find DNA from anybody, going
7 back 41 years, there's no way to know whether someone who
8 touched the item later destroyed the DNA left by someone who
9 had touched it previously, is there?

10 A Destroy? What happens with the DNA, of course, is
11 that, as you explained before, if I put my hand here, leave a
12 couple alleles, well, let's assume that we apply force. So I
13 apply force on this location by strangulating a person with a
14 cord. And you do the same handling. You are handling the
15 same, with force. Then your DNA will be on top of that. So
16 we will get a mixture probably from yours and my DNA. In both
17 situations you would expect reasonable profiles.

18 Q Do you know whether or not Mr. Zeigler was wearing
19 the same clothes that he was wearing when he killed
20 Charles Mays that he was wearing when he killed
21 Perry Edwards?

22 A I don't know which clothing. We have the clothing,
23 we seen the clothing in the pictures, and there were heavy
24 bloodstains. There was a lot of projected stains on there.

25 Q Do you know whether or not Mr. Zeigler had the

1 opportunity to change clothes between the time he killed
2 Charles Mays and when he killed Perry Edwards?

3 **A** I don't know that.

4 **Q** Would that not affect your assessment of the case?

5 **A** Well, the investigation we propose is for testing
6 this clothing in the assumption that he was wearing this
7 during the incident. And while there is a lot of blood on
8 there, so that there was at least that he was present in a
9 violent incident, if his clothing were present during a
10 violent incident is pretty clear to me. If it was present
11 during all of it and as a result of the victims, I don't
12 know.

13 **Q** Are you aware of this evidence? Mr. Zeigler was
14 wearing a raincoat and rubber gloves at some point in time
15 during this process?

16 **A** No.

17 **Q** That would affect your investigation too, wouldn't
18 it?

19 **A** Well, if you wear all kinds of protective clothing,
20 of course, the clothing under that will be protected. That's
21 why we wear protective clothing during investigations.

22 **Q** I think we call that a forensic counter measure
23 now, don't we?

24 **A** Yes.

25 **Q** There is a very high likelihood of DNA from third

1 parties on these items that are in evidence, isn't there?

2 **A** Third parties?

3 **Q** By third parties I mean persons unrelated to the
4 case.

5 **A** Yes.

6 **Q** You can't be certain at this point in time when you
7 sit here that the DNA -- whatever DNA may survive in the
8 evidence in storage downstairs hasn't been compromised in
9 some way over the past decades, can you?

10 **A** That's how we define compromised. I expect
11 contamination in this case. From what I've seen, people were
12 not wearing gloves, evidence being in the hands of the jury
13 members. So I do expect contamination, yes. Did these
14 people apply a lot of force on it and did these people leave
15 blood on these items? I don't think so. The chance is very
16 small.

17 So the problem for the blood, I don't see so much
18 in this case because they were able to identify blood of the
19 victim, of the victims, and of Mr. Zeigler himself in 2001.
20 What I understand yesterday is that at least from 2001 until
21 now, it has been stored in this court and under very good
22 conditions, air-conditioning, dry, pretty cold conditions.
23 So I don't expect that there would be any problem for us to
24 determine the source of blood on these clothing or items of
25 clothing. Touch DNA, of course, is a little bit more

1 difficult. We will get DNA off some of these jurors who were
2 handling it, but as I said before, what we find in other
3 cases, all in America that we did, is that we find
4 contamination, people not involved in any way with the crime,
5 but we are also able to still find underlying major donors
6 with full profiles in suspected cases.

7 Q Were you wearing a mask when you were looking at
8 the evidence yesterday?

9 A No.

10 Q Who else was in the room with you?

11 A My wife and two attorneys. And I let my wife
12 handle the clothing specifically. So I didn't touch the
13 clothing. And I stayed away a certain distance from it. So
14 the Y-chromosome DNA will not be transferred in that sense.

15 Q Was anybody talking during the course of the
16 evidence?

17 A Yes.

18 Q And no one was wearing a mask?

19 A No.

20 Q You have been working with touch DNA, I believe,
21 since 1997, you said?

22 A Yes. That's when we started for the first time in
23 a case.

24 Q Okay. And that was in the Netherlands?

25 A That's correct.

1 Q And you came to this country, I think you said,
2 2005?

3 A No. We started working in this country, I think it
4 was 2006, and that was the Tim Masters case. That was the
5 first case. We didn't live here then.

6 Q Okay. Okay. It doesn't really matter. You were
7 working DNA in the United States in 2006, weren't you?

8 A Yes. We were, yeah.

9 Q You were doing touch DNA in this country in 2006,
10 weren't you?

11 A Yes.

12 Q You were doing Minifiler in this country, weren't
13 you?

14 A The Tim Masters case took some time. I think
15 almost two years. And I'm not -- I don't know the exact
16 dates, but in 2007, the Minifiler came on the market, so we
17 started using that kit straight away when it came on the
18 market. We validated it as one of the first laboratories in
19 the world, I think. And we used in it cases and it was quite
20 successful. The profile you saw was on the Tim Masters case.

21 Q That was the Minifiler profile?

22 A Minifiler combined with Identifiler.

23 Q Produced in 2007?

24 A Yes.

25 Q What about Y-STR? That's been around for a while

1 too, right?

2 **A** Yes. Actually, I think a laboratory in the
3 Netherlands started with that. So it's been in existence for
4 quite a while. But it took some time before the real
5 commercial kits came on the market. So I think that was also
6 after 2001. So it was already there, but it's very, very
7 basic forms like singleplex systems that you only test one
8 Y-chromosome marker. It's not helpful in the case because
9 there are so many people that have the same DNA profile, you
10 want -- you want to test a lot of loci, locations in the DNA,
11 in the Y-chromosome, in order to distinguish between
12 different males. If you only test one or two loci
13 Y-chromosomes of the DNA, you end up having a lot of men
14 having the same two loci. So what we do now, we have a
15 23-plex system where we investigate 23 locations of the
16 Y-chromosome over a long time. And that was certainly not
17 possible in 2001.

18 **Q** Did you read any of the testimony from the 2011
19 hearing in this matter?

20 **A** No.

21 **MR. NUNNELLEY:** Judge, if I could have a moment to
22 consult, I believe I'm through with most of it.

23 **THE COURT:** Yes, sir.

24 **MR. NUNNELLEY:** Just a couple more, Judge?

25 **THE COURT:** Yes, sir.

1 **BY MR. NUNNELLEY:**

2 **Q** Sir, do you know if Mr. Zeigler even had any
3 scratches on him?

4 **A** What I know is that he was injured due to a bullet
5 wound into the stomach. And I don't know if he had scratches
6 on him.

7 **Q** Do you know if maybe he had hugged his wife
8 sometime that evening and left DNA on her coat?

9 **A** No, that's possible, of course. What we see very
10 often, also with fingernail scrapings, a good point to make
11 is that it's very common for persons who are married to have
12 each other's DNA under their fingernails. So you always --
13 that's what this case is all about. You always have to take
14 everything into consideration. If you find Mr. Zeigler under
15 the fingernails of Mrs. Zeigler, that would not prove that he
16 killed her. And same with the coat. If you help your wife
17 in a coat, of course, it's also about touch. A slight touch
18 would not leave as much DNA as grabbing her, but, still, with
19 partners of each other, you have to be careful. What would
20 be interesting, though, is if you find someone else, of
21 course, on that coat.

22 **Q** So what you're saying is that what you propose to
23 go hunting for is going to be something we can't interpret
24 until you've already done it. Is that what you are telling
25 us?

1 **A** No. Some of it within the partners occurs. You
2 can expect, if you do the fingernails of Mrs. Zeigler, that
3 there would be DNA in there for Mr. Zeigler. That's not
4 uncommon. We see that quite a lot. So in that sense, the
5 criminalistic value for or against Mr. Zeigler would not be
6 that high. If you find someone else's, that person has to do
7 some explaining. In that sense, it could be helpful. And,
8 of course, as I said, with the projected stains, bloodstains,
9 those have a high criminalistic value. Mr. Zeigler has some
10 explaining to do if he has bloodstains or projected stains,
11 blood spatter, on his cuffs or on his clothing from
12 Mr. Perry Edwards, or from his wife, therefore, that would
13 matter as well.

14 **Q** And in your opinion, the fact that -- if it
15 showed -- if the testing showed no DNA from either
16 Mr. Edwards or Mrs. Zeigler on Zeigler's clothes, that fact
17 standing alone to you establishes innocence; is that what
18 you're saying?

19 **A** Of course, the judges make the decision whether or
20 not someone is innocent or guilty, and in this system, I
21 think, it's the jury that makes the decision. So that's not
22 up to me. As I said, the evidence, if you have very small
23 back spatter on your clothing, that's highly incriminating,
24 and that would give very strong support for the hypothesis
25 that you shot someone, for instance. Otherwise, how do you

1 get these extremely small stains on yourself? So if you find
2 very small blood spatter of his wife or of Mr. Perry Edwards,
3 that would be highly incriminating for him. If we don't find
4 them, it works also the other way around, then there's not
5 much to report for the hypothesis that he did shoot him.
6 Because if we take all the information which we have now into
7 account, then you know the shooter is not far from the
8 victims. With Perry Edwards, there was a fight. I don't
9 think any of the experts -- I read the bloodstain experts --
10 there was fighting. So they were fighting. So there is
11 transfer and there is also very, very likely transfer of
12 blood.

13 So, yeah, the person who has the blood on him has
14 some explaining to do. And if it's not there, then you
15 can -- then you can question yourself, of course, well, was
16 this the right person? Was this the person who did the
17 fighting or maybe someone else was there? And then the third
18 process, of course, we can go, do we find DNA consistently
19 like we do in other cases of an unknown donor on these
20 victims or on different locations?

21 For instance, Mr. Perry Edwards's clothing. That's
22 what do in a lot of homicide cases is we look at who do we
23 find back -- in the Netherlands we find back suspects, and
24 also, in some American cases we find other persons where the
25 person is incarcerated. I can't change the DNA. It's either

1 there or it's not there. And it either matches the suspect
2 or it doesn't match. If you find a third person not being
3 Mr. Zeigler on the clothing, then, of course, you want to
4 know what the role of the third person could be.

5 Q And how are you going -- how do you propose to
6 distinguish between whether that third person is what in your
7 scenario you assuming to be the real killer is not a court
8 clerk, a deputy, a bailiff, crime-scene investigator, a
9 defense attorney, or prosecutor?

10 A Well, I assumed that the persons you mentioned,
11 none of them left blood on these clothing or any of the
12 items. So if you start out with the blood, the blood, of
13 course, is a highly -- of a high criminalistic value because
14 it only comes free if you are injured under normal
15 circumstances. If there is blood from an unknown source,
16 that would be, well, highly exculpatory. And if it's
17 Mr. Zeigler's blood on the victims or victims' blood on
18 Mr. Zeigler, that would be highly incriminating. With the
19 touch DNA it is a little bit more difficult, but as I said,
20 we would go for locations where we find smears of blood,
21 where the victim either was touched with some force. And in
22 that situation, you get better touch DNA profiles in that
23 sense. If you get several of those, then you can start
24 saying maybe some other persons of interest we can compare
25 the profile.

1 Q Were Mr. Zeigler's clothes removed from him or were
2 they cut off of him?

3 A I don't know. I think the trousers were still
4 intact. I don't know about the shirt.

5 Q You don't know how those items were treated after
6 they were removed from Mr. Zeigler's body, do you?

7 A No.

8 Q Y-STR was well established in 2007, wasn't it?

9 A Yes.

10 Q Minifiler was well established along with that
11 about then too, wasn't it?

12 A In 2007?

13 Q Yes.

14 A No. The Minifiler, as I said, we were one of the
15 first laboratories to use it in casework, I think. There
16 might be other labs I don't know of, but I know that in the
17 Netherlands nobody used it at that time. But we validated it
18 extremely quickly. So I think Minifiler was established with
19 other laboratories. I know the CBI, the Colorado state
20 laboratory, is using the same kit as we did. So when did
21 they start it? 2009? If you said Minifiler was well
22 established in 2009, '10, but a lot of laboratories in the
23 United States still don't use it. So the kit is used by a
24 lot of laboratories worldwide. United Kingdom, the
25 Netherlands, other labs used, I think. And then some of the

1 state labs in the United States are also using these kits. I
2 know the laboratory in Colorado at least. Yeah. And I think
3 the longer this kit is available on the market, the more
4 laboratories will start using it because of the good results.

5 Q But you've been using it yourself before 2007,
6 haven't you?

7 A Around 2007. I don't know exactly. If you want to
8 know, I can ask our coworker when we validated the kit. But
9 before we used it, we validated it and then used it in the
10 Tim Masters case.

11 Q And touch DNA as a process has been around for a
12 long time, hasn't it?

13 A Well, actually, a long time, but as I said, we
14 started with that for the first time in one case in 1997.
15 I'm aware of an article at that same time from an Australian,
16 a Dutch person who wrote about touch DNA or contact DNA.
17 Well, then it took some time because the results were very
18 poor. United Kingdom and Germany and Holland were the ones
19 who started it. The United States didn't start it at that
20 time. So -- and it wasn't actually made because we used a
21 method I didn't describe here, the low copy method. The DNA
22 kits in 2000 were not that sensitive, and in order to get
23 good results or get enough results to do interpretation, we
24 amplified more than the standard. It was something which was
25 done on a regular basis, especially in complex cases, cold

1 cases, child homicides, that is outside in the Netherlands
2 and the United Kingdom, Germany a bit. And the extra
3 amplification, what we're talking about, gives you some
4 problems with interpretation because your work is so
5 sensitive that you get more artifacts under standard
6 conditions.

7 So in the United States, the FBI more or less
8 decided that they would not use that method of low copy
9 number DNA. So extra amplification that meant. And because
10 they didn't do that, they were not able to do the touch DNA.
11 So I think the touch DNA actually started off in the United
12 States also after we did the Tim Masters case.

13 **Q** And that's 2008?

14 **A** Something like that. Clearly in that case, the DNA
15 was the reason for the acquittal of Tim Masters. And I think
16 pretty soon after that, the Colorado Bureau of Investigation
17 started doing touch DNA as well. I believe in New York they
18 were starting it. So I think it started off kind of in the
19 United States --

20 **Q** And --

21 **A** -- as far as I know.

22 **Q** -- you started it up, didn't you?

23 **A** I think we were the first ones to use touch DNA in
24 the United States courts, yes.

25 **Q** In 2008?

1 **A** I think so.

2 **MR. NUNNELLEY:** No further questions.

3 **THE WITNESS:** Maybe I'm wrong.

4 **THE COURT:** Any redirect questions?

5 **MR. TRACEY:** Yes, Your Honor. Briefly.

6 **THE COURT:** You may proceed.

7 **REDIRECT EXAMINATION**

8 **BY MR. TRACEY:**

9 **Q** You were asked some questions about your laboratory
10 in Colorado and whether it was accredited. Is it accredited
11 by any international organizations?

12 **A** The laboratory in Colorado is not, but we have a
13 laboratory in the Netherlands, and all our cases, especially
14 the DNA part, are performed in the Netherlands because that's
15 accredited by the Dutch Board of Accreditation which is a
16 member of IAB which is International Accreditation Board
17 which also covers ASCLD, for instance.

18 **Q** Is that the leading accreditation, international
19 accreditation?

20 **A** Yes, IAB is the leading board.

21 **Q** You were asked some questions about a video that
22 you watched. Did you rely on any of the statements that were
23 in that video in reaching your conclusions with regard to the
24 validity of testing by DNA in this case?

25 **A** No. I use it to get information or to get an

1 overall view of the case. I know in a documentary not
2 everything you see is true. The nice thing about DNA and
3 blood sample analysis is that you always verify the results
4 by the DNA. So what I actually do in cases, I always follow
5 my DNA results.

6 **MR. NUNNELLEY:** Objection. Nonresponsive.

7 **THE COURT:** I'll sustain the objection.

8 **BY MR. TRACEY:**

9 **Q** If you are permitted to do DNA testing, will you
10 rely in any way on that video in reaching your conclusions?

11 **A** No. It doesn't matter. The investigation I use --

12 **MR. NUNNELLEY:** Nonresponsive.

13 **THE COURT:** I think he answered the question.

14 **BY MR. TRACEY:**

15 **Q** Let me repeat the question. The question is, if
16 DNA testing is ordered, will you rely in any way on that
17 video in reaching your conclusions on the analysis of the
18 DNA?

19 **A** No.

20 **Q** You were asked some questions about the quote that
21 Mr. Nunnelley used, "The absence of evidence is not evidence
22 of absence." Do you recall that?

23 **A** Yes.

24 **Q** I want to ask you this. Let's focus on the back
25 spatter evidence that you are looking for. Am I correct that

1 that back splatter evidence would in your mind show whether
2 someone shot a victim at close range?

3 **A** Yes. If you find it, then actually the only
4 explanation you have for that, if you have very small stains,
5 then, yeah, that's the only reason, or there are some
6 high-speed machinery. In this case we have a lot of gun
7 violence and, yeah, the high-speed mechanism in this case is
8 the bullet entering the head of one of the victims or the
9 body of one of the victims which can cause back spatter.

10 **Q** And remind me, how close was the gun to the head of
11 Mr. Perry Edwards according to Herbert McDonald?

12 **A** I think it was 3 inches to 6 inches.

13 **Q** Okay.

14 **A** So that's more than enough. Close enough to get
15 back spatter.

16 **Q** And if there is no back spatter on the cuff of
17 Mr. Zeigler, can you conclude that there is an absence of
18 evidence and that means there is no evidence of it?

19 **MR. NUNNELLEY:** I believe that invades the province
20 of the finder of fact.

21 **MR. TRACEY:** I'll rephrase, Your Honor.

22 **BY MR. TRACEY:**

23 **Q** Can you reach a conclusion based on the absence of
24 back splatter on Mr. Zeigler's shirt as to whether he shot
25 Mr. Perry at close range?

1 **A** Yes. We have -- of course, we have very small
2 spatter there and, of course, if I get the evidence, I have
3 to investigate, especially small ones. But I already saw on
4 the pictures that there's spatter there. There's force
5 applied. There is blood on there which force was applied to.
6 And, of course, it's very interesting to know who is the
7 donor of that source. And if not Mr. Edwards, then, yeah,
8 there is no support for the hypothesis that he shot
9 Mr. Edwards.

10 **Q** You were asked some questions about what the affect
11 of touching the evidence by the jurors, the court personnel,
12 and the prosecutors. Would you expect any of that touching
13 to affect your conclusions with respect to that potential
14 back spatter evidence?

15 **A** No. The blood -- there's another slide for that.
16 But the blood is such a good source of DNA compared to touch
17 DNA that it would always overrule, or how you say, it's like
18 so much more DNA in blood than in touch DNA. Touch DNA will
19 not kind of cover the back spatter or bloodstains on the
20 clothing. The bloodstains is different from touch DNA.

21 **Q** And finally, you were asked some questions about
22 the possibility of unknown persons' DNA being on these
23 articles of clothing. Has there been any developments in the
24 databases and the ability to search for unknown DNA?

25 **A** Databases have been around a very long time.

1 Actually, the FBI started one of the most used database
2 CODIS. That's researching people. If you have an unknown
3 stain, you can search in the database.

4 Another part of the investigation is the
5 deconvolution of mixtures, especially for touch DNA. And
6 then use programs to calculate statistical values for certain
7 profiles so that you can see what the different donors are.
8 So in that sense, there's quite some new techniques and new
9 programs, computer programs, which can deal with complex
10 mixtures.

11 Q And when have those -- when were those programs for
12 determining different sources from mixed sources developed?

13 A Yeah, different -- different stages. Of course, in
14 America, you have Lab Retriever and TrueAllele which is used
15 in courts, I think.

16 THE COURT REPORTER: Can you say those again?

17 THE WITNESS: Lab Retriever and TrueAllele. Those
18 are programs used to calculate complex mixtures. And in
19 Europe, of course, we also have some programs, and
20 Australia, that are also used where you can put highly
21 complex mixtures in there with artifacts or allele
22 profile. So it calculates with complex mixtures. Those
23 programs were not available ten years ago.

24 MR. TRACEY: Just one moment, Your Honor.

25 No further questions, Your Honor.

1 **MR. NUNNELLEY:** Very, very briefly.

2 **FURTHER RECROSS EXAMINATION**

3 **BY MR. NUNNELLEY:**

4 **Q** Now, sir, it's been known for many years that
5 high-velocity impact from a projectile fired out of a gun
6 produces back spatter, hadn't it?

7 **A** Yes, sir.

8 **Q** That's not news?

9 **A** No.

10 **Q** That was known back in the '70s and probably before
11 that, right?

12 **A** Well, I'm not sure if it was widely known in the
13 '70s, but Herbert McDonald was one of the founders in blood
14 pattern analysis in America thinking the more modern ways. I
15 didn't see it described in his report, to be honest. So I'm
16 not exactly sure when this was introduced as a phenomenon
17 well known. But it would have been known, I think.

18 **Q** Well before 2001, though, wasn't it?

19 **A** Yes, of course.

20 **MR. NUNNELLEY:** No further questions.

21 **THE COURT:** Thank you. You may step down.

22 (The witness stepped down.)

23 **THE COURT:** Defense may call their next witness.

24 **MR. TRACEY:** We have no further witnesses,

25 Your Honor.

1 **THE COURT:** State?

2 **MR. NUNNELLEY:** No witnesses.

3 **THE COURT:** Okay.

4 **MR. TRACEY:** May I being heard on that,
5 Your Honor?

6 **THE COURT:** On them calling a witness?

7 **MR. TRACEY:** We may now -- we may now be calling a
8 witness, your Honor. We were expecting Mr. Baer would
9 be testifying, and we're prepared to call him as a
10 witness. We would be prepared for Mr. Nunnelley to ask
11 him questions first, if he likes, but we would ask him
12 questions.

13 **MR. NUNNELLEY:** He rested. I'm not going to be
14 forced to put a witness on by this man. He rested his
15 case.

16 **THE COURT:** You are saying you want to call him?

17 **MR. TRACEY:** I want to call his expert, yes,
18 Your Honor. He's sitting in the courtroom. We would
19 like to hear his testimony.

20 **MR. NUNNELLEY:** But he's rested his case. There's
21 no basis, no need, no good cause for him to reopen his
22 case at this point.

23 **MR. TRACEY:** The good cause is that we asked
24 Mr. Nunnelley who he was going to call as a witness
25 here. We took his deposition. And we just learned for

1 the first time he wasn't calling him. That's the good
2 cause. We're going to move to reopen our case and we
3 would like to take the testimony of Mr. Baer. We
4 believe it will bear witness to the truth in this case.

5 **THE COURT:** Any response from the State?

6 **MR. NUNNELLEY:** The fact they took Mr. Baer's
7 deposition and assumed that I was going to call him as a
8 witness is not good cause for them to reopen their case.
9 They rested their case. They thought I was going to do
10 something that I decided not to do. That is not my
11 fault. It is not the Court's fault. It is not good
12 cause to reopen the case that they expected me to do
13 something that I didn't do.

14 I'm not required to call a witness unless I want to
15 and I don't want to.

16 **MR. TRACEY:** I agree that Mr. Nunnelley doesn't
17 have to call the witness, but the witness is here. He's
18 got relevant evidence and we would like to have his
19 testimony. And we would like to have him testify right
20 now.

21 **THE COURT:** I think the State already eluded a
22 little bit, hinted around he may or may not be calling
23 this witness. So I don't know this is the first time
24 you learned this. He just decided at this point he's
25 going to do that.

1 I'm going to go ahead and allow you to reopen the
2 case and call the witness.

3 **MR. TRACEY:** Thank you, Your Honor.

4 **THE COURT:** I guess -- what's his name?

5 **MR. MICHAELI:** Your Honor, the defense calls the
6 State's expert, Dave Baer.

7 **MR. NUNNELLEY:** I believe it's their expert since
8 they're calling him.

9 **DAVID BAER**

10 **was called as a witness and, having first been duly sworn,**
11 **testified as follows:**

12 **DIRECT EXAMINATION**

13 **BY MR. MICHAELI:**

14 **Q** Good afternoon, Mr. Baer.

15 **A** Good afternoon.

16 **Q** State your name and occupation for the record.

17 **A** My name is David Baer, spelled B-a-e-r. I'm
18 currently a retired senior crime laboratory analyst from the
19 Florida Department of Law Enforcement.

20 **Q** Have you been asked by either side in this case,
21 the defense or the prosecution, to do any work in connection
22 with the defendant's motion for DNA testing?

23 **A** I was asked to review some motions and responses to
24 motions for DNA testing and look at DNA laboratory work from
25 2001. And I also just took a look at some items of clothing

1 a couple weeks ago, but I haven't done any actual analysis.

2 Q Who asked you to do those things?

3 A Mr. Nunnelley.

4 Q Mr. Nunnelley, the assistant state attorney?

5 A That's correct.

6 Q When did you begin your work on this case?

7 A I was first contacted in November of 2015.

8 Q What were you asked to do?

9 A Pardon?

10 Q What were you asked to do?

11 A Review the motions for additional DNA testing and
12 the response to the motion. And I was sent some other
13 documents as far as past court rulings and a DNA laboratory
14 report. And I was never actually looking at items of
15 evidence up until I examined a few a few weeks ago.

16 Q You examined physical pieces of evidence a few
17 weeks ago, you said?

18 A Yes. Just observed them. I didn't do any testing.

19 Q Where did you examine those items of evidence?

20 A That was downstairs in the clerk of court's office
21 in this courthouse.

22 Q What items of evidence did you examine?

23 A I looked at what was represented as a shirt from
24 Mr. Zeigler and two revolvers, I believe.

25 Q Who asked you to do that, if anyone?

1 **A** Mr. Nunnelley.

2 **Q** And did you form any opinions about the information
3 that you reviewed or the evidence that you examined in this
4 case?

5 **A** There was, I think, a suggestion that on the shirt
6 of Mr. Zeigler that every stain be tested, which I thought
7 was absurd. As I heard earlier, like, that's not something
8 that's ever done. I suggested maybe check some additional
9 stains, if necessary, but not every stain.

10 If there's a theory of the case that there's
11 spatter or back spatter on this item from any particular
12 occurrence, it's not going to be one drop. You should be
13 able to find it by some random testing.

14 **Q** Mr. Baer, thank you. We'll come back to that in a
15 moment.

16 I would like to just discuss briefly your
17 background. You mentioned you're retired. What was your
18 profession prior to retiring?

19 **A** As a senior crime laboratory analyst in the
20 serology or biology DNA section of the FDLE Crime Laboratory
21 here in Orlando.

22 **Q** How long did you work in that crime lab?

23 **A** Between there and the previous location in Sanford,
24 over 35 years.

25 **Q** What were your areas of expertise?

1 **A** Biology -- well, before DNA, biology, which would
2 be identification of body fluids, stains, and originally ABO
3 and enzyme types, and later I did RFLP testing and PCR and
4 STR based testing for DNA.

5 **Q** Now, you are not an expert in mini STR testing; is
6 that correct?

7 **A** No. I've never used it.

8 **Q** And you are not an expert in Y-STR testing; is that
9 correct?

10 **A** I've never used that, either.

11 **Q** Okay. And finally, you are not an expert in using
12 mini-STR testing on touch DNA; is that correct?

13 **A** No.

14 **Q** Are you familiar generally with those technologies
15 in the DNA world?

16 **A** Yes.

17 **MR. MICHAELI:** I would like to show the witness a
18 copy of his CV which has been previously provided to us.

19 May I approach, Your Honor?

20 **THE COURT:** Yes, you may.

21 **BY MR. MICHAELI:**

22 **Q** Mr. Baer, I'm handing you a document marked for
23 identification as Exhibit B.

24 Mr. Baer, are you familiar with this document?

25 **A** I am.

1 Q What is it?

2 A It's my CV or curriculum vitae.

3 Q Your current CV?

4 A Yes. But I think the date on the bottom of it is
5 wrong. I didn't update that.

6 Q The date on the bottom is wrong?

7 A No.

8 Q Which date are you referring to?

9 A As revised 4/16/2014. I actually revised it after
10 that and I didn't change the date.

11 Q Understood. But otherwise, this is, to your
12 knowledge, your current curriculum vitae?

13 A Yes.

14 MR. MICHAELI: Defense would move this document be
15 admitted into evidence.

16 MR. NUNNELLEY: No objection.

17 THE COURT: Be moved into evidence at this time and
18 let the clerk mark it.

19 MR. MICHAELI: Thank you.

20 Just very briefly?

21 THE COURT: I would like the clerk to mark it first
22 before we go further.

23 MR. MICHAELI: May I approach?

24 THE COURT: Sure.

25 MR. MICHAELI: (Document tendered.)

1 **THE CLERK:** Defense Exhibit 1.

2 (Defendant's Exhibit No. 1 was received in
3 evidence.)

4 **BY MR. MICHAELI:**

5 **Q** Mr. Baer, the document I've handed you which has
6 now been marked Defense Exhibit 1 is your current curriculum
7 vitae. Can you describe for the Court briefly your training
8 in DNA testing and technologies?

9 **A** In DNA testing, in 1989, I attended the FBI's first
10 four-week class in Quantico in the RFLP technique. This was
11 part of the FBI's program to establish procedure that can be
12 duplicated in crime laboratories around the country. I also
13 attended training in PCR. It's call HLA-DQ alpha typing in
14 the early '90s in California. And I had STR testing in our
15 laboratory beginning around 2000.

16 **Q** Is it fair to say that you have obtained -- that
17 you have attended a large number of training seminars and
18 programs regarding DNA --

19 **A** Yes.

20 **Q** -- in the years in which you worked with DNA?

21 **A** Yes.

22 **Q** Have you testified previously about DNA in a case?

23 **A** Yes.

24 **Q** How many times?

25 **A** In DNA, that's probably including RFLP and the

1 DQ alpha, maybe a hundred times.

2 Q And have you testified in any of those cases that
3 you found DNA on an article of clothing?

4 A Certainly.

5 Q And have you testified that you have not found DNA
6 on an article of clothing?

7 A Specifically if I testified I didn't find it, I
8 don't recall.

9 MR. MICHAELI: I would like to refresh the witness'
10 recollection with a copy of his deposition transcript.
11 May I approach?

12 THE COURT: Has it been filed, the deposition, the
13 transcript?

14 MR. MICHAELI: It has not. We took this deposition
15 just last week.

16 THE COURT: You may approach.
17 Does the State have a copy of it?

18 MR. NUNNELLEY: No.

19 MR. MICHAELI: (Document tendered.)

20 MR. NUNNELLEY: This is improper procedure for
21 refreshing his recollection, Your Honor. I object.

22 THE COURT: Response?

23 MR. MICHAELI: There's nothing improper about
24 asking the witness if the transcript which was his
25 deposition refreshes his recollection about something

1 he's already testified he doesn't recall.

2 **THE COURT:** Well, let me see -- I don't know what
3 questions you are going to ask yet. So far I'll
4 overrule the objection up to this point. We'll go from
5 there.

6 **MR. MICHAELI:** Thank you.

7 **BY MR. MICHAELI:**

8 **Q** Mr. Baer, I would like you to turn -- bear with me
9 for a moment -- to page 14 of the document that I just handed
10 you. Have you seen that document, by the way?

11 **A** I had it e-mailed to me yesterday and actually
12 hadn't read it yet. Fourteen of the small pages?

13 **Q** Yes.

14 **A** All right.

15 **Q** Do you see in that document where you were asked
16 whether you've ever testified in a case that an individual's
17 DNA was not found on an article of clothing?

18 **A** I think I'm on the wrong page. I'm looking at
19 page 14 on the upper right corner of the small pages. Or are
20 you talking about the actual page 14?

21 **Q** Page 14 in the small --

22 **A** This is about the blood spatter report. Are we
23 looking at the same thing?

24 **MR. NUNNELLEY:** Your Honor, I'm going to object to
25 this. This isn't even close to what the question was.

1 It has nothing to do with what Mr. Baer was being asked
2 about.

3 **THE COURT:** Page 14, right? I'm just reading the
4 whole page. Let me read the page. Based on what I'm
5 reading, I'm going to sustain the State's objection.
6 This is not -- I thought you were going to refresh his
7 memory.

8 **MR. MICHAELI:** Your Honor, if I may. I'll ask my
9 colleagues to see if they can track down the correct
10 page. I apologize. I seem to have the wrong page
11 number in my notes. Let me move on if the Court will
12 permit.

13 **THE COURT:** Okay.

14 **BY MR. MICHAELI:**

15 **Q** Mr. Baer, are you familiar generally with a type of
16 testing kit known as mini-STR?

17 **A** Minifiler.

18 **Q** Minifiler?

19 **A** Yes.

20 **Q** Is Minifiler a type of mini-STR kit?

21 **A** Minifiler is a brand name.

22 **Q** For a mini-STR kit?

23 **A** Yes.

24 **Q** Brand name?

25 **A** Yes.

1 Q Is it correct to say that the Minifiler kit is
2 designed to work on degraded DNA?

3 A Primarily, yes.

4 Q How does it do that?

5 A If you have an Identifiler kit, which would be the
6 standard kit, it amplifies relatively larger stretches of
7 DNA, up to maybe 400 base pairs. Whereas when they
8 designed the Minifiler, primers for the PCR test, they
9 actually go in closer to the region of interest so that the
10 fragments it amplifies don't have to be as large, so that if
11 there is degradation, there is a better chance of finding an
12 intact region of this DNA. Where if you have the larger
13 regions, there is degradation of environment or damage
14 otherwise, and you might not get amplification. Because to
15 amplify the region, you have to have the whole intact region.
16 So if you are looking at smaller areas, there's less chance
17 of it being broken.

18 Q The type of testing kit that was widely in use in
19 the United States in 2000, what was that? What was that
20 called?

21 A That was probably Profiler and COfiler. Profiler
22 Plus and COfiler.

23 Q And what would happen if you tested DNA using
24 Profiler/COfiler, the kit available in 2001, and you were
25 testing degraded DNA?

1 **A** You might get partial results. You might get no
2 results. You might see kind of a sloping effect. As the DNA
3 fragments get larger, their quantity decreases because the
4 larger the fragment, the more likely to be degraded and not
5 get results.

6 **Q** And the Minifiler kit solves that degradation
7 problem?

8 **A** It can.

9 **Q** Is there any research on how much more effective
10 Minifiler is on degraded DNA than profiler and Cofiler or any
11 non-mini-STR kit?

12 **A** I'm sure there is research. I don't have anything
13 at my fingertips.

14 **Q** Have you seen any such research?

15 **A** I have probably seen the papers. Exactly what they
16 said at this time, I don't recall; but my guess would be is
17 that it is more -- does get better results with degraded DNA
18 using a Minifiler kit.

19 **Q** Let's talk for a moment about Y-STR. Tell the
20 Court about what Y-STR testing is.

21 **A** Yes. In human DNA, you have what are called the
22 autosomal chromosomes and then you have the sex chromosomes,
23 the X and the Y. If you are a male, you have X and Y. If
24 you are female, you have two Xs. So if you have, say, in a
25 sexual assault case where there is a lot of vaginal fluid and

1 very little sperm or no sperm in case somebody had a
2 vasectomy, you can't do the usual what's called deferential
3 extraction where you can separate the sperm DNA from the
4 vaginal fluid. So in this case, you would have a mixture.
5 And if you have large amounts of female DNA, you would not
6 see the -- not necessarily see the male DNA because it just
7 kind of gets swamped out by the female or never even
8 amplified because of the amount of female. So by just
9 testing for Y-chromosome DNA, it only works on the
10 Y-chromosome, so you might be able to amplify markers
11 specific just to the male contributor to the mixture.

12 Q Now, I believe you testified you've never actually
13 done any Y-STR testing; is that correct?

14 A No. At least up to now it was never used in the
15 Orlando laboratory.

16 Q Not used at all in the Orlando laboratory?

17 A No. We began doing it, I believe, in our
18 Jacksonville and Tampa labs. If we had any cases that needed
19 Y-STR, we would send it to that lab.

20 Q Mini-STR. You testified you've never used
21 mini-STR. Is that type of testing kit used in your lab?

22 A Not in Orlando. I believe it's used in the
23 Tallahassee lab.

24 Q You've had occasion in the past to send evidence
25 that you had tested using non-Minifiler to another lab for

1 Minifiler testing; is that correct?

2 **A** If you're referring to the case I discussed at the
3 deposition, there was a homicide from 1979 where I had done
4 some testing on it with RFLP and DQ alpha and later with STR.
5 I originally did ABO and enzyme testing on it. That was sent
6 to a private lab, not by me directly, where they did some
7 mini-STR testing in addition to Identifiler testing, and they
8 were able to get some results which corresponded to some of
9 the results I had found earlier.

10 **Q** Isn't it correct they were able to obtain results
11 using the mini-STR kit that you were not able to get using
12 your own kits?

13 **MR. NUNNELLEY:** Objection. Leading.

14 **THE COURT:** Sustained.

15 **THE WITNESS:** I don't have that report.

16 **THE COURT:** You've got to let him ask another
17 question.

18 **MR. MICHAELI:** I'll rephrase, Your Honor.

19 **BY MR. MICHAELI:**

20 **Q** Mr. Baer, let me direct your attention to these
21 pages and hopefully correct pages, 68 and 69 of the
22 deposition transcript, that I handed to you.

23 **A** All right.

24 **Q** Would you review those two pages?

25 **MR. NUNNELLEY:** Objection. If this is refreshing

1 his recollection, it's improper. If it's an attempt for
2 impeachment, it's also improper, and I object.

3 **THE COURT:** Any response?

4 **MR. MICHAELI:** There's nothing improper about
5 refreshing the witness' recollection of an event that
6 has occurred some time in the past.

7 **THE COURT:** Well, I never heard him say he didn't
8 remember something. I'll sustain the objection at this
9 point.

10 **BY MR. MICHAELI:**

11 **Q** Mr. Baer, do you recall specifically whether
12 mini-STR testing in the 1979 case that you mentioned produced
13 results you weren't able to obtain without it?

14 **A** I don't recall the specifics of the results. It
15 was five years ago that I last saw that. There was an item
16 which was found outside of the house which it did get a
17 profile which I never actually tested that item, so I might
18 have not gotten those results myself. I don't know. There
19 was also some blood in the house which I did RFLP testing on
20 it, and I think when I tried STR testing some years later, I
21 did not get a result. So I don't remember if they went back
22 and tested that and got results that were consistent with
23 anything else I had found or not. Again, I would have to see
24 their reports and my old reports to sort it out.

25 **Q** Thank you.

1 Let's move to DNA databases. Are there any
2 databases of DNA profiles in the United States?

3 **A** Yes.

4 **Q** What's the biggest one?

5 **A** Well, there's two kinds of databases. There's
6 what's called the convicted offender database and then there
7 is also population databases. If you're referring to a
8 convicted offender database, that's CODIS, which is the
9 national database of samples from convicted offenders, some
10 arrestees, and also crime scene samples which is administered
11 by the FBI.

12 **Q** How do DNA profiles get into the CODIS database?

13 **A** Okay. Under CODIS are also every state, and Puerto
14 Rico, and the Army labs, and the District of Columbia have
15 their own local databases which are fed up to the national
16 database on a regular basis. So generally --

17 **MR. NUNNELLEY:** Your Honor, I'm going to object to
18 this line of questioning. It's irrelevant to the
19 proceedings before the Court. The CODIS database, how
20 it works, and what goes into it has nothing to do with
21 whether or not whether Mr. Zeigler's motion for testing
22 gets granted or not. It's irrelevant.

23 **MR. MICHAELI:** Your Honor, the testimony is
24 directly relevant to an issue in this case which is
25 whether obtaining a profile from an unknown person today

1 be fed into a database and matched to an actual donor.
2 That's something that was not possible in the past.

3 **THE COURT:** Anything else?

4 **MR. NUNNELLEY:** If I may. Yes, Your Honor. That
5 is an issue to steps down the road. We aren't there
6 yet. There are enough -- there are multiple issues
7 surrounding the submission of a profile to the CODIS
8 database that are outside the scope of this hearing. It
9 presupposes the Court is going to grant the motion,
10 first of all, and unless and until some DNA testing is
11 done and we have something to even consider submitting
12 to CODIS, it's wholly irrelevant to these proceedings.

13 It's premature perhaps is what I'm saying, if they
14 are allowed to do further DNA testing. If they are not
15 allowed to do further DNA testing, it becomes moot. If
16 they are allowed to do further DNA testing, it is a
17 bridge we can cross at the appropriate time with the
18 appropriate witnesses and the appropriate personnel to
19 address the submittability, if you will, of a DNA
20 profile to the CODIS system. It's not appropriate at
21 this point.

22 **MR. MICHAELI:** If I may respond briefly to that
23 with two quick points. The first is, Mr. Nunnelley
24 asked Mr. Eikelenboom a great many questions about
25 whether there would be additional DNA on pieces of

1 evidence in this case and whether it would be possible
2 to identify DNA that was found on these garments.

3 The second is -- and this can be a very brief line
4 of questioning -- the only line of questioning I would
5 like to ask this witness about the CODIS database is
6 whether it has grown substantially in size and,
7 therefore, in usefulness in matching results that are
8 found to a potential source.

9 **THE COURT:** I'll overrule the objection.

10 **MR. MICHAELI:** Thank you, Your Honor.

11 **BY MR. MICHAELI:**

12 **Q** Mr. Baer, do you know about how many DNA profiles
13 were in the CODIS database 15 years ago?

14 **A** Fifteen years ago, maybe under a million.

15 **Q** And about how many DNA profiles are in the database
16 today?

17 **A** I'd say probably 14 to 15 million. It was over
18 13 million a year ago.

19 **Q** And is the size of that database growing rapidly?

20 **A** Yes.

21 **Q** Now, Mr. Baer, you started testifying a short while
22 ago about conclusions that you have drawn based on your
23 review of documents and your physical inspection of evidence
24 in this case. Can you tell me specifically what conclusions
25 you drew about the testing the defense has proposed on

1 Mr. Zeigler's shirt?

2 **A** Just examining the shirt itself, which I did
3 downstairs, it seemed like most of the shirt itself had blood
4 on it, either smears or drops. So as far as finding areas
5 for just touch DNA, I think there's very limited areas that
6 would not have blood mixed in with it. So whether you would
7 actually get any results, I don't know. Also, just based on
8 what we were doing back in the '70s, we were not even wearing
9 gloves when we were examining items of evidence at that time
10 because we weren't worried about sensitivity. And then
11 before AIDS came around, we weren't worried about biohazards.
12 So what the FBI did at that time, I don't know, because they
13 did all the original testing, but things were a lot different
14 back in the '70s as far as how evidence was handled. So who
15 knows who might have touched it in the laboratory.

16 **Q** I believe you testified that you identified
17 locations on the shirt that you thought should be tested,
18 additional locations; is that correct?

19 **A** Yeah. I saw where some cuttings had been taken
20 from the shirts, and I don't know if that was for the Labcorp
21 testing back in 2001 or before then. So there was some other
22 stains away from those which -- maybe a half dozen, I don't
23 remember exactly -- which I thought might be reasonable to
24 test if testing was going to be done.

25 **Q** Do you have a view on how much blood would be

1 likely transferred to a perpetrator's shirt if the
2 perpetrator shot the victim at close range and beat the
3 victim?

4 **A** If they were shooting close range and beating them,
5 I would assume there would be quite a bit of transferred
6 blood.

7 **Q** Any reason to think it would be hard to find that
8 blood today?

9 **A** No.

10 **Q** And what opinions, if any, do you have on the
11 significance of not finding that blood?

12 Let me rephrase.

13 How could Tommy Zeigler have shot Perry Edwards at
14 close range, beaten him, without getting Perry Edwards's DNA
15 on his shirt in large quantities?

16 **MR. NUNNELLEY:** I believe that invades the province
17 of the fact finder. It's improper and it's also
18 argumentive.

19 **MR. MICHAELI:** Your Honor, the witness has
20 testified in over a hundred DNA cases, and based on his
21 experience as an expert for the State, how, if it is,
22 that is possible, as an expert.

23 **MR. NUNNELLEY:** It invades the province of the fact
24 finder.

25 **THE COURT:** I'll overrule the objection.

1 **THE WITNESS:** If that was the item of clothing he
2 had on at the time and there wasn't anything on top of
3 it, you would expect there to be transferred blood back
4 to him.

5 **BY MR. MICHAELI:**

6 **Q** Can you think sitting here today of any way
7 Tommy Zeigler could have shot Perry Edwards at close range
8 and beaten him without getting a significant quantity of
9 Perry Edwards's DNA on his clothing?

10 **MR. NUNNELLEY:** Asked and answered.

11 **THE COURT:** I'm going to sustain the objection.

12 **BY MR. MICHAELI:**

13 **Q** Are you aware that the defense in this case has
14 asked to test bloodstains on Eunice Zeigler's clothing?

15 **A** Yes.

16 **Q** And do you have any opinions about whether in your
17 experience the defense's request to test that evidence is
18 reasonable?

19 **A** I don't think it was very specific on how much --
20 how many stains or what stains to test, but if they want to
21 go with the possibility that there could be some male DNA
22 masked with hers, I see no problem with that.

23 **Q** Are you aware the defense has asked to test the
24 swabs or samples of Perry Edwards's fingernails?

25 **A** Yes.

1 Q Do you have any opinion on whether that request for
2 testing is reasonable?

3 A I have no real problem with it. I guess as a
4 scientist, my viewpoint is to let's get more data if we can.
5 It's just a question of when do you stop.

6 Q Is that a type of testing that would be commonly
7 done in a case where there was a violent struggle?

8 A Might be. Usually, say, if there is a sexual
9 assault case, that would be the last thing that we would look
10 at if we didn't find anything anywhere else that might go to
11 the fingernail scrapings, but those cases sometimes that's
12 the only evidence you get.

13 Q And can you do the testing on fingernail scrapings
14 using the Minifiler kit?

15 A You could. I'm not sure what kind of result you
16 would get with that because you are probably going to have a
17 lot of DNA from the person whose fingernails they were, so
18 they might blow out the results. So, again, I have no
19 experience using that. It's one of those things that I would
20 have to try it and see what you get.

21 Q Now, just to be clear, you've never actually done
22 testing of fingernail samples using a Minifiler kit?

23 A Not Minifiler, no.

24 **MR. MICHAELI:** Your Honor, if I may have a moment
25 with counsel?

1 **THE COURT:** Yes, sir.

2 **MR. MICHAELI:** Thank you, Your Honor. Thank you,
3 Mr. Baer.

4 No further questions.

5 **THE COURT:** Cross-examination, please.

6 **MR. NUNNELLEY:** Judge, as a housekeeping matter,
7 I'm not sure what exhibit the CV of Mr. Baer was marked
8 as.

9 **THE COURT:** I believe the clerk announced it as
10 Defense Exhibit 1. Am I correct?

11 **THE CLERK:** Yes, sir.

12 **MR. NUNNELLEY:** That means we have two Defense 1's?

13 **THE COURT:** They didn't move the other one in.

14 **MR. NUNNELLEY:** They didn't move the other one in.
15 I stand corrected.

16 **THE COURT:** They marked it for identification but
17 they didn't move it in.

18 **MR. NUNNELLEY:** Okay.

19 **CROSS-EXAMINATION**

20 **BY MR. NUNNELLEY:**

21 **Q** Now, Mr. Baer, you have been involved in forensic
22 serology DNA typing, ABO blood group typing, and other such
23 work for FDLE and, I guess, its predecessor agency for a long
24 time, haven't you?

25 **A** It was always FDLE.

1 Q Always FDLE?

2 A Right, as far as when I was there.

3 Q Okay. You're familiar with what touch DNA is,
4 right?

5 A Yes.

6 Q Touch DNA is not a particular process of testing
7 DNA but, rather, a process of collecting something to be
8 tested for DNA; is that right?

9 A Yes.

10 Q Now, mini-STR, Minifiler, is -- or Minifiler is a
11 trade name, isn't it?

12 A Yes.

13 Q That's for the mini-STR process, correct?

14 A That's the Life Technologies Company's kit.

15 Q Okay. And Y-STR is another sort of DNA testing
16 that can be done, isn't it?

17 A Yes.

18 Q Do you know based upon your, you know, work,
19 training, experience, education, when touch DNA began to be
20 used?

21 A I don't know that it was always, like, oh, here
22 we're going to start doing this. Hey, can you see if there
23 is any DNA on this screwdriver handle or whatever? We
24 probably just went ahead and tried it. Because there was
25 nothing in our procedures to say you couldn't do it, so we

1 would try it and see if we got a result.

2 Now, there are variations on touch DNA where you
3 might not use what are called low copy number techniques
4 which maybe involve additional amplification cycles or
5 increase injection time or post-amplification filtration. He
6 did not specifically do any of those except for increase
7 injection time. But then we would also have a different
8 interpretation of our results for something like that.

9 So, again, as far as it being a different
10 technique, it really isn't. It's just trying to get DNA from
11 where you don't actually see a bloodstain or semen stain.

12 Q Okay. Would that have been something that was, I
13 guess, in the pipeline or mainstream, so to speak, in 2011?

14 A Definitely.

15 Q What about mini-STR, Minifiler? When -- let me do
16 it this way. Minifiler was available in 2011?

17 A Yes.

18 Q Y-STR was available in 2011, wasn't it?

19 A Yes.

20 Q Now, when you reviewed the evidence with me, we
21 were wearing gloves, weren't we?

22 A Yes.

23 Q But not wearing masks?

24 A No. I was kind of nervous about it.

25 Q Okay. Do you -- are you familiar -- I don't know

1 the answer to this question. Are you familiar with the
2 evidence storage facilities in Orange County before this
3 courthouse opened?

4 **A** I just remember sometimes seeing in some of the
5 waiting rooms a vault in the wall and saying, "Oh, yeah,
6 that's where the court clerk stores evidence." What was
7 actually in there, I don't know.

8 **Q** You don't know about the suitability or
9 unsuitability for preserving biological samples?

10 **A** No.

11 **Q** Would it be fair to say that there's a high
12 likelihood that the evidence in this case that has been in
13 the custody of the clerk for, well, since 1976 and before
14 that, I suppose, in the custody law enforcement, has a high
15 likelihood of being contaminated with other foreign DNA?

16 **A** It's a possibility. I wouldn't say high or low,
17 but it's always a possibility.

18 **Q** There's no way to quantify it, is there?

19 **A** No.

20 **Q** And whether or not interpretability results of DNA
21 results can be obtained is something that's also
22 unquantifiable, isn't it?

23 **A** That's correct.

24 **Q** Of course, there is no way to know who has handled
25 the evidence, is there?

1 **A** In the laboratory, they might have records. As far
2 as a jury or at the crime scene, I don't know. Probably not.

3 **Q** You could conceivably find DNA from anyone who has
4 even been close to the evidence, couldn't you?

5 **A** In theory.

6 **Q** There's no way to tell, is there?

7 **A** No. It's one of those things where once you
8 actually test it and have some way of interpreting the
9 findings, say, if you know who might be there, it would just
10 be a guess.

11 **Q** And at this point, it wouldn't be possible to say
12 that any DNA found on the items of clothing or the guns or
13 any other thing to be tested is or is not definitively linked
14 to the crime, is it?

15 **A** That's correct.

16 **Q** Now, you were the -- you were the CODIS
17 administrator for the local -- the local lab for a number of
18 years, were you not?

19 **A** I was.

20 **Q** And there are very specific criteria for the
21 submission of DNA profiles into the CODIS database, aren't
22 there?

23 **A** That's correct.

24 **Q** You testified that you had, in looking at the shirt
25 that was Mr. Zeigler's at the time of the murders or murder,

1 anyway, you don't know how the stains that were tested for
2 DNA got selected, do you?

3 A No.

4 Q There would be no reason that you know of that
5 even, you know, as late as 2008, '9, '10, '11, along in
6 there, additional areas of that shirt could not have been
7 tested, is there?

8 A No. You can always choose more stains.

9 Q And touch DNA was available then, wasn't it?

10 A Should be.

11 Q 2011?

12 A Yes. I don't know if Labcorp specifically would
13 have done that.

14 Q 2011?

15 A No reason why it wouldn't have been in 2011 if it
16 was requested.

17 Q So it could have been asked for at that point in
18 time, couldn't it?

19 A It could have been. Depending on the lab doing it,
20 might or might not do it.

21 Q There's no reason that Eunice Zeigler's clothes
22 couldn't have been tested in 2001?

23 A No.

24 Q And you've reviewed the motion that sets out a
25 laundry list of items that testing is sought for, haven't

1 you?

2 **A** The current request?

3 **Q** Yes.

4 **A** Yes.

5 **Q** Is there anything requested in there that could not
6 have been done in 2011?

7 **A** I don't think so, no.

8 **Q** No reason that could not have been requested in
9 2011, is there?

10 **A** No.

11 **MR. NUNNELLEY:** If I could have just a moment,
12 Your Honor?

13 **THE COURT:** Yes, sir.

14 **MR. NUNNELLEY:** No further questions, Your Honor.

15 **MR. TRACEY:** Just one moment, Your Honor.

16 No further questions, Your Honor.

17 **THE COURT:** Thank you, sir. You may step down.

18 We will take about a 15-minute recess and come back
19 and finish up.

20 (The witness stepped down.)

21 (Brief recess from 3:36 PM to 3:55 PM.)

22 **THE COURT:** Is there anything else from the
23 defense?

24 **MR. TRACEY:** Nothing further, Your Honor.

25 **THE COURT:** State?

1 **MR. NUNNELLEY:** Nothing further, Your Honor.

2 **THE COURT:** The defense may proceed with their
3 argument.

4 **MR. MICHAELI:** Thank you, Your Honor.
5 Good afternoon.

6 **THE COURT:** Good afternoon.

7 **MR. MICHAELI:** Your Honor, the motion before the
8 Court today seeks extremely modest relief. The evidence
9 that we are proposing to test is right here in this
10 building and it's available for inspection. All that
11 we're asking is to take that evidence and rather than
12 just look at it, have an expert do DNA testing using
13 cutting edge technology to see what the evidence shows.
14 Nothing more.

15 This is not a request for significant relief.
16 We're not asking to set aside a conviction or stay an
17 execution. All that we're asking is to look at the
18 evidence using modern tools and see what that evidence
19 shows. Why is that critical in this case?

20 Well, as Your Honor heard from both the State's
21 expert and the defense's, this is the unusual case where
22 the experts agree that the testing can show whether
23 Tommy Zeigler killed Perry Edwards. And there may be
24 argument about how certain that is, but it's important
25 to bear in mind the standard that applies under Rule

1 3.83 motion. The standard is a reasonable probability
2 of an acquittal. That means a reasonable probability of
3 reasonable doubt and nothing more.

4 I think the Court has heard a lot of evidence today
5 that if this testing is done in its comprehensively
6 designed fashion on items of evidence like Mr. Zeigler's
7 shirt, there is none of Perry Edwards's DNA, touch DNA,
8 or blood DNA anywhere on the garment. Tommy Zeigler
9 didn't murder Perry Edwards. That's very -- it's hard
10 to think of a more critical issue to this case. That is
11 the very crime that he sits in jail convicted of
12 committing. It goes way beyond reasonable doubt. It
13 approaches certainty of innocence. And it's an
14 incredible thing.

15 Technology has improved to the point that we can do
16 that on 40-year-old clothing. That's what technology
17 has done. Your Honor heard that from both witnesses
18 today.

19 What kinds of technology are we talking about?
20 Well, in prior motions for DNA testing, both this Court
21 and the Florida Supreme Court have expressed doubts
22 about the probative value of testing things like
23 Mr. Zeigler's shirt because there were issues in the
24 past with the ability to pick up degraded evidence.
25 There were also issues with the significance of doing

1 small samples of bloodstains. And there were issues of
2 mixed samples. But technology has totally changed that
3 picture.

4 Today there are tools that specifically address
5 each of those things. There are techniques and tools
6 and technologies available that make it possible to take
7 garments of clothing, like Mr. Zeigler's shirt, and find
8 out definitively whether they ever contained
9 Mr. Edwards's DNA. That is a critical issue in this
10 case and the facts on it are undisputed.

11 Now, State went to some length to try to say the
12 evidence could have been contaminated because people
13 might have added their DNA to these garments by handling
14 them in various fashions, and there are a few reports
15 that we hope the Court will bear in mind in considering
16 that line of argument.

17 The first is, we know that this evidence yields
18 good DNA profiles because it was already tested 15 years
19 ago using old technology and it got perfectly good DNA
20 profiles. There was no reason to think that testing it
21 today using much more sensitive equipment and techniques
22 would yield worse results. In fact, the experts say the
23 results would be as good or better. They also said
24 based on what they know as experts in their field that,
25 number one, if Perry Edwards were murdered by being

1 beaten and shot as he was, had to have been significant
2 transfer of Perry Edwards's genetic material onto his
3 jacket. It had to have occurred. There is no other way
4 to do it. When he pulled the trigger on a gun at close
5 range, that back spatter happens instantaneously.
6 There's no ability to withdraw your hand and avoid it.
7 It sprayed directly at you.

8 Now, it's small droplets, but today's technology,
9 you heard from the experts, can pick it up. This is how
10 modern cases are often prosecuted, and if it's not
11 there, that's extremely significant evidence in this
12 case. Similar things apply to the blood on Ms. Eunice
13 Zeigler's body. That blood is Type A blood. The
14 defendant has Type O blood. It cannot be the
15 defendant's blood.

16 Whose blood is on the victim? How did it get
17 there? Those are critically important issues and
18 today's testing can tell us the answers to those
19 questions. These are answers that we have never had
20 before in this case.

21 Now, it's important to bear in mind when you think
22 about the probative value of these types of testing,
23 that the original case against Mr. Zeigler didn't have
24 the benefit of DNA technology. It didn't exist at the
25 time. It was based largely on circumstantial evidence.

1 If the case were going to trial today, it would be
2 based largely on physical evidence. It's also important
3 to bear in mind that there was difficulty getting a
4 conviction in the first place in this case. So it would
5 not take much to rise to the level of showing reasonable
6 doubt, given the totality of the circumstances and the
7 cumulative weight of evidence in the case.

8 And let me just illustrate that because there's a
9 balancing test here. If you had a situation where there
10 was a videotape showing a defendant committing a murder
11 and the defendant comes into court and says, "I want DNA
12 testing," you need really strong, powerful probative
13 value to that testing to outweigh the existing evidence
14 of guilt. But this case is very difficult. This is an
15 extremely bizarre narrative and the story that leads to
16 the theory of the defendant's guilt, it's a case that
17 never had a coherent motive.

18 The story was that the defendant murdered his wife
19 for life insurance money, but the facts show he was a
20 wealthy man. The amount of life insurance money was
21 modest. He didn't need the money. And that's just one
22 victim. Why murder her parents? No motive there. Why
23 does a man with no criminal record, no history of
24 violence suddenly become a mass murderer for money he
25 doesn't need? It doesn't make it impossible, but it

1 makes it unlikely.

2 There was testimony from witnesses but those
3 witnesses were impeached and then have continued in the
4 case of Felton Thomas to impeach themselves by changing
5 their story.

6 **MR. NUNNELLEY:** Your Honor, again, that is not
7 proper for this proceeding. That is an argument for
8 another day and another motion in another courtroom.

9 **MR. MICHAELI:** May I respond?

10 **THE COURT:** Yes.

11 **MR. MICHAELI:** These issues are relevant to the
12 balancing test the Court has to conduct in weighing the
13 significance, the probative value of the requested
14 testing, and they're supported by evidence that the
15 defense put in as exhibits to its motion for testing.

16 **THE COURT:** I will sustain the State's objection.

17 **MR. MICHAELI:** Now, the State went to great lengths
18 to talk about how Mr. Zeigler could have asked for some
19 of the things he's requested here today in 2011.

20 First of all, the last time Mr. Zeigler asked for
21 DNA testing was, I believe, 2009, not 2011. So that
22 line of questioning doesn't shed any light on whether he
23 could have asked for things in 2009. But more
24 importantly, it's completely irrelevant to the issues
25 before the Court today because there is no res judicata

1 bar to a motion for DNA testing. The Florida Supreme
2 Court has been clear on that. This is what the Florida
3 Supreme Court said in this very case in 2013. Quote,
4 "We agree with Zeigler that his motion for
5 postconviction DNA testing was not barred because it was
6 successive." They go on to note, quote, "The
7 possibility of additional DNA testing," which they say
8 is evident from the rule itself, Rule 3.853. Other
9 courts have come to the same conclusion.

10 In the case of *Ochala vs. State*, 93 So.3d 1167,
11 First District Court of Appeal, in 2012, the Court held,
12 quote, "The doctrine of res judicata does not bar a
13 second motion under Rule 3.853 because the rule allows
14 for the filing of a motion," quote, "at any time,"
15 closed quote.

16 So there is no question whether Mr. Zeigler could
17 have asked for this testing in the past doesn't matter.
18 The only thing that does matter, only argument that the
19 State has raised is whether he did, in fact, ask for
20 these types of tests in the past. That goes to
21 collateral estoppel. And the undisputed facts establish
22 that he did not.

23 Mr. Zeigler never asked to have touch DNA tested in
24 this case. As Your Honor heard, touch DNA is a science
25 that has been evolving quite rapidly only in the last

1 few years, particularly touch DNA testing using mini-STR
2 technology. That technology was first released in 2007.
3 But it's still not used by the State's lab today. Nor
4 is Y-STR testing. They don't have it yet. These are
5 technologies that are new and different and important
6 and in significant ways from the technologies that were
7 used in the past.

8 With respect to the State's claim that the evidence
9 might be contaminated, there's absolutely no reason and
10 no evidence in the record to support a conclusion that
11 evidence that was perfectly testable in 2001 and has
12 been stored in this very building under cool, dry,
13 air-conditioned conditions wouldn't remain equally as
14 available for testing today, if not more so, because
15 today's technology is so much more sensitive.

16 So all the discussion about how hospital employees
17 in 1975 might have handled Mr. Zeigler's shirt is really
18 beside the point. We know that the shirt has fully
19 available genetic material on it. We know that there is
20 no reason to believe that handling the garment would
21 take the blood off of it. The blood has already been
22 found on the shirt. Some of it is visibly evident. We
23 know that a large quantity of blood and skin cell DNA
24 had to have been transferred from Perry Edwards to his
25 killer. That's what both experts have said. There's no

1 other way to commit that crime, and that there is --
2 there would be no difficulty finding it, even after all
3 these years, if it is there. And if it's not there,
4 that Mr. Zeigler couldn't have committed that crime.

5 One of the technologies the defendant has asked for
6 is Y-STR testing. Your Honor heard testimony about
7 Y-STR testing is so significant in this case. You have
8 bloodstains on Eunice Ziegler. There is one stain on
9 the side of her shoe. Now, if these stains come from
10 Eunice Zeigler herself, Y-STR testing makes it possible
11 to completely eliminate all of her DNA in the sample
12 leaving only the skin cell DNA of her attacker or the
13 person who put that blood on her. That is a radical new
14 type of technology. Nobody has ever asked to use it in
15 this case before, so there can't be a collateral
16 estoppel bar.

17 The same is true for Mr. Edwards's clothing and for
18 his fingernails. The evidence shows Mr. Edwards fought
19 for his life. The testimony you heard today told you
20 that when you fight for your life, you transfer your
21 attacker's DNA onto your clothing. There's no reason
22 not to test that clothing as well. If Mr. Zeigler's DNA
23 is all over Mr. Edwards, then that may lead to one
24 conclusion, but if it's not, if there isn't a drop of
25 Mr. Zeigler's DNA on Perry Edwards's clothing or

1 underneath his fingernails, that's very significant
2 evidence that Zeigler didn't beat him to death. That
3 the man that Perry Edwards struggled with when he fought
4 for his life was not Tommy Zeigler but rather someone
5 else, someone else who may be alive and at large today.

6 Now, in the past when you got DNA profiles from
7 people who weren't on your short list of suspects, there
8 wasn't a lot you could do about that. Today there is.

9 Now there is a database with millions and millions
10 of profiles in it and you can very easily submit
11 information and see who it matches. So even if you find
12 somebody who is not one of the parties most closely
13 involved in this case, you have the ability today to
14 figure out whether somebody else, who is in that
15 database, was at this scene and involved in these
16 crimes. Nobody's been able to do that before because
17 these databases didn't exist in their current form.

18 You heard the testimony of the State's expert. The
19 population of the CODIS database jumped from 1 million
20 to 15 million. That's a huge increase.

21 In a lot of ways, Your Honor, this motion, the
22 technology that has progressed and that is at the heart
23 of this motion is like discovering a videotape of the
24 crimes, and the question that we've placed before the
25 Court is simply should we play the tape. It's right

1 here in the building. It's in the basement. The State
2 has argued, "Well, if you play the tape, the angle might
3 not be good. It might be a fuzzy image." Well, the
4 only way to know that is to play the tape. Those aren't
5 reasons not to look. Those are arguments that can be
6 raised later about what you might find. But this man is
7 sitting on death row for his life. The Florida
8 Legislature has given him a right to seek DNA testing
9 because it is so powerful, and what he asks this Court
10 today is simply to allow him at no cost to the State.
11 There is no request for the State to pay for this
12 testing, no prejudice to any party, not delaying
13 anything. The evidence is sitting there. The defendant
14 is sitting there. Nothing else is happening in this
15 case. And while nothing else is happening in this case,
16 let him test that evidence and see what it shows.

17 Thank you, Your Honor.

18 **MR. NUNNELLEY:** May it please the Court?

19 **THE COURT:** You may proceed.

20 **MR. NUNNELLEY:** It may be like a videotape, but the
21 defense over the course of the years of this case with
22 their ever-changing theories about what the DNA evidence
23 is going to show have shown that they want to be the
24 sole person producing and directing that videotape.

25 The Florida Supreme Court in its last opinion in

1 this case issued February 21, 2013 said, and I quote --
2 and Jean I apologize; it's a long one -- specifically in
3 his current motions, Zeigler argues that, "One
4 additional testing of his shirts will show that Perry's
5 blood is not on his clothing and, therefore, he was not
6 the assailant." We have that here. "Additional testing
7 on Mays's clothing will reveal Perry's blood which
8 demonstrates that Mays was the actual perpetrator. We
9 have abandoned that part of it. Number three.
10 Additional testing on Zeigler's shirts will show whether
11 the blood spatter on them is really from Mays. However,
12 we, the Florida Supreme Court, previously addressed
13 these claims and held that the absence of Perry's and
14 the presence of Mays's blood on Zeigler's clothing did
15 not establish that Zeigler was not the perpetrator."
16 Citing back to the 967 So.2d opinion in the Zeigler
17 case.

18 "Likewise, we held that the presence of Perry's
19 blood on Mays's clothing did not establish that Mays was
20 the perpetrator rather than a victim. Thus, we have
21 already decided these same issues against Zeigler."

22 That was the second time the Florida Supreme Court
23 decided those issues against Mr. Zeigler, and that time
24 they said, accordingly, "Zeigler's claims are barred by
25 collateral estoppel and we affirm the circuit court's

1 denial for postconviction DNA testing."

2 They went on addressing the merits in the
3 alternative, pointing out that the bloodstain expert in
4 2011 testified that he had examined Mays's clothing used
5 did not believe additional testing needed to be
6 performed. Actually, that's a part of what Mr. Kish
7 said in the 2011 December hearing we had up here where
8 Mr. Kish testified that, "Well, yeah, there is no reason
9 we can't test this spot, this spot, this spot. I just
10 pick these."

11 The Florida Supreme Court concluded by saying,
12 "Zeigler has failed to explain how further testing on
13 his shirts and the discovery of more of Mays's blood on
14 his shirt will give rise to a reasonable probability of
15 acquittal or a lesser sentence for the prior testing
16 already determined that Mays's blood is on Zeigler's
17 shirt, and we found this was not exculpatory."

18 If that is not res judicata, I do not know what it
19 is.

20 The court went on to say, "Zeigler completely fails
21 to address how DNA testing of Perry's clothing -- tie,
22 tie clip, and fingernails -- and Eunice Zeigler's
23 clothing will exonerate him or mitigate his sentence."

24 Despite the protestations of Mr. Zeigler, the
25 Florida Supreme Court has already passed all of these

1 issues. What we have here is no more than a serial
2 attempt to come back in again for the fifth time and ask
3 for DNA testing that could have been asked for in the
4 prior proceeding but wasn't for reasons unknown to the
5 State.

6 The defense is trying to say that there is no res
7 judicata bar so they can't evade the collateral
8 estoppel, that precludes them from conducting serial
9 testing. This claim is estopped. This sort of serial
10 testing is inappropriate, and the Florida Supreme Court
11 has said so, not in general but in this case. I would
12 note, ironically, Mr. Zeigler despite all of the
13 discussion of Perry Edwards and Perry Edwards's money is
14 not under death sentence for Perry Edwards. That was a
15 second-degree murder conviction.

16 The Florida Supreme Court gave Mr. Zeigler the
17 benefit of the doubt about what the DNA testing would
18 show construed it in the way most favorable to him every
19 single time the issue went before them, and Mr. Zeigler
20 still lost. Nothing has changed now other than we now
21 have touch DNA, mini-STR and Y-STR that they didn't
22 bother to ask for the last time they were here.

23 There was no reason they couldn't have asked for
24 that testing then. I don't know why they didn't, but
25 they didn't. And that is the end of the story. This is

1 collateral -- the claim is collaterally estopped. The
2 issues have already been decided by the Florida Supreme
3 Court, and we do not need under any reasonable system to
4 go back for yet a fifth time. This is the same motion
5 dressed up, fluffed up, and adding some phrases and
6 terms that was filed before and rejected by the Court.
7 They could have brought this before and they didn't.

8 As to the authenticity of the DNA, its
9 admissibility is questionable. There is a possibility
10 of contamination. This Court would have to make a
11 finding that it would be -- that it is authentic and
12 would be admissible, and based on the testimony here
13 today, I don't believe that finding can be made, given
14 that the evidence has been in the vault since the trial
15 in 1976, I guess, when it was brought back from
16 Jacksonville. Whenever it -- whenever it got back to
17 Orlando to -- I guess that was before I was practicing
18 law. I don't know where it went then. It came over
19 here, what, 1996, I guess, when this courthouse opened?
20 I assume it was moved along about that time. I don't
21 know that for a fact. I don't know who touched it.
22 Nobody has any idea. We do know that law enforcement
23 lab personnel did not use the kind of personal
24 protective equipment that is used now because of DNA
25 procedures that are available. They weren't available

1 in 1976. That's just the way it is.

2 At the end of the day, the defense is asking for a
3 do-over of the 2009 through '11 proceeding when you
4 really get right down to it. There is no reason this
5 testing couldn't have been asked for before. It is
6 collaterally estopped at this point, and contrary to
7 what Mr. Eikelenboom said, absence of evidence is not
8 absence of evidence of absence in this case. Negative
9 result means nothing more or less in this case given all
10 of the facts, the time between the first series of --
11 the first series of gunshots that we know was at 7:24
12 because that's when the clock stopped, literally when a
13 bullet went through it, which was corroborated by a
14 witness who was passing by and heard gunshots. And then
15 the second series of shots that came after 9:00 o'clock,
16 shortly before the call to Judge Vandevender's residence
17 which was I believe around 9:30. Certainly ample time
18 for Mr. Zeigler to have changed clothes. And there is
19 that little issue of the missing raincoat and the rubber
20 gloves that were -- that were never seen again after the
21 murders.

22 For those reasons, State would ask to deny the
23 motion for DNA testing.

24 **THE COURT:** Brief response.

25 **MR. MICHAELI:** Your Honor, the State just told you

1 the types of testing the defendant requests today have
2 not been requested before in this case. Mr. Nunnelley
3 argues it could have been. The evidence actually shows
4 otherwise. But it's irrelevant. They weren't. And,
5 therefore, collateral estoppel does not apply. That is
6 the only conclusion that can be reached under Supreme
7 Court precedent in this state.

8 What the State is talking about is res judicata.
9 You didn't ask for it but you could have. It's not
10 available under Rule 3.853. That's not the way the rule
11 is set up. The rule allows you to make a successive
12 motion for DNA testing as long as you haven't made the
13 exact same motion before. And there is no question here
14 the defense has not made the request for these type of
15 tests in the past. This is the first time it is making
16 that request.

17 Now, Mr. Nunnelley referred to the decision of the
18 Florida Supreme Court which actually references the
19 decision they issued in 1995, I believe, about what it
20 would mean in a 1995 world if you did DNA tests using
21 the technology available at that time and you didn't
22 find Perry Edwards's DNA on Mr. Zeigler's shirt.

23 In 2016, we face a completely different scenario
24 whereas the Court heard from both the State's expert and
25 the defense's expert that today's testing is so

1 sensitive that if you kill somebody in the manner Perry
2 Edwards was killed, you have to have their DNA on your
3 clothing and it has to be findable. You can't miss it.
4 If you do proper tests, you can't miss it. Particularly
5 the over-the-top testing that the defendant is asking
6 for.

7 So the issue that the Florida Supreme Court dealt
8 with in the past is different from the issue the
9 defense's motion raises today. That motion considered
10 what the significance would be of not finding
11 Perry Edwards's DNA using old technology, technology
12 that the Florida Supreme Court noted could miss things
13 due to degradation of evidence, to miss things, and a
14 situation in which your findings would be constrained by
15 not having tested more than a few spots on the shirt.

16 This situation proposes far more comprehensive
17 testing using far more sensitive technology that the
18 experts say is sufficient to answer that critical
19 question. Did Mr. Zeigler indeed shoot Mr. Edwards or
20 not?

21 So that prior finding is rooted in the technologies
22 available at the time and those technologies have
23 changed. It's a new question. It's a new question
24 that's been answered in the same way by both experts
25 today.

1 Mr. Nunnelley talks about a raincoat. There's no
2 evidence in the record before the Court of any raincoat
3 or of any change of clothing. That's pure speculation
4 on the part of the State.

5 **MR. NUNNELLEY:** Your Honor, I would challenge
6 Mr. Michaeli to point out where it's not in the record.
7 I'll provide the Court later, tomorrow, with the record
8 cite to the raincoat evidence. It's there.

9 **MR. MICHAELI:** My point, Your Honor, is simply that
10 in the State's response and the defense's motion, when
11 we claim that certain things occurred, we supported
12 those claims with all the underlying sources. The State
13 filed a response. There is nothing in that response or
14 in the evidence that's been presented today about any
15 raincoat. That evidence is not in the current record in
16 this motion. That's my point.

17 Nothing further, Your Honor.

18 **THE COURT:** Okay. I will reserve ruling at this
19 time and do a written order in the case.

20 **MR. NUNNELLEY:** Thank you, Your Honor.

21 **MR. TRACEY:** Thank you, Your Honor.

22 (The proceedings adjourned at 4:25 p.m.)

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C E R T I F I C A T E

STATE OF FLORIDA:

COUNTY OF ORANGE:

I, Jean Dexter, CRR, RPR, Official Court Reporter of the Ninth Judicial Circuit of Florida, do hereby certify, pursuant to Florida Rules of Judicial Administration 2.535(h)(3), that I was authorized to and did report in stenographic shorthand the foregoing proceedings, and that thereafter my stenographic shorthand notes were transcribed to typewritten form by the process of computer-aided transcription, and that the foregoing pages contain a true and correct transcription of my shorthand notes taken therein.

WITNESS my hand this ____ day of _____ 2016, in the City of Orlando, County of Orange, State of Florida.



Jean Dexter, RPR, CRR