

STATE OF MICHIGAN

WASHTENAW COUNTY CIRCUIT COURT

In The Matter Of:

People v. Gary Leiterman
File No. 04-2017-FC

CRIMINAL JURY TRIAL CONTINUED

BEFORE HONORABLE DONALD E. SHELTON, JUDGE

Ann Arbor, Michigan-Thursday, July 21, 2005

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22	<u>WITNESS: Plaintiff</u>	
23	NONE	
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1 Ann Arbor, Michigan

2 Thursday, July 21, 2005 at 8:56 a.m.

3 THE LEGAL CLERK: Court is now in session. The

4 Honorable Donald E. Shelton presiding.

5 THE COURT: Please be seated. Good morning. The
6 record should reflect, I have met with counsel in chambers
7 have a preliminary discussion concerning possible instructions
8 in this case, at least at this point there appear to be no
9 issues regarding the instructions. Is that correct?

10 MR. HILLER: Yes, your Honor.

11 MR. GABRY: Yes, your Honor.

12 THE COURT: You'll have another opportunity to review
13 those when we get there. Okay, you indicated at the bench that
14 you had a motion, Mr. Gabry.

15 MR. GABRY: Yes, your Honor. Your Honor, if it would
16 please the Court, at this time I would ask the Court to direct
17 a verdict of acquittal in the case of People versus Gary
18 Leiterman. The Court is well aware of the standard on which
19 the Court must review the evidence. It is our contention that
20 a rational trial, in fact, in looking at the evidence
21 presented thus far by the prosecuting attorney would be unable
22 to find without a reasonable doubt the defendant, in fact, was
23 the person who committed the crime. We have heard testimony of
24 DNA evidence that, in the opinion of the Michigan State Police
25 Forensic scientist would have been on the panty hose of Jane

1 Mixer back in 1969. That is the only match that exists as it
2 pertains to the evidence on Ms. Mixer. There is additional
3 evidence of partial profiles of alleas that appear to be
4 consistent with some alleals that Mr. Leiterman shares, but no
5 match under the STR--PCR STR format. There has been testimony
6 of the WSTR on the stocking, however, as the Courts aware,
7 even in that particular situation, there's three--eight
8 alleals in which there were commonality, but there were three
9 that was no tests results that were able to connect to Mr.
10 Leiterman. There's no evidence that he posed the murder
11 weapon. There is nothing that ties him to the scene of--well,
12 ties him to Ms. Mixer other than DNA that they report to have
13 been on the pantyhose when her body was found. Dr. Milligan,
14 however, is clearly testified that they were unable to tell
15 when that DNA was placed on the --pantyhose. Whether it had
16 been in the movement of the body with contact with Ms. Mixer
17 that night or whether it had been at some earlier date in some
18 different, totally unrelated matter. The scientists from the
19 Michigan State Police lab are unable to indicate when and how
20 the circumstances under which the DNA came to be associated
21 with the pantyhose. In light of that and when coupled with
22 the fact that there is a more obvious, under the testimony
23 offered by the prosecutor, source of DNA, a source that
24 through their own investigation they are unable to link to Mr.
25 Leiterman, that being a four month eight year old boy. A four

1 month eight year old boy, who evidence shows resided in the
2 downtown Detroit area--

3 THE COURT: Four month?

4 MR. GABRY: Four year--

5 THE COURT: Four year, eight month old--

6 MR. GABRY: Four year eight month old boy. Sorry.

7 Thank you, your Honor. That resided in the Detroit area and
8 there's no connection that has been established by the
9 evidence to Ann Arbor or Ypsilanti or Jane Mixer, that he was
10 someone that was kept close by his mother and a series of
11 relatives. Under the testimony presented by the prosecutor,
12 his blood was found on Jane Mixer's hand. By the photograph
13 and it was testified to by Mr. Bennett, it's obvious, it's
14 apparent, it stuck out to him, so that he, in fact, removed
15 it. We have also presence through the testimony of the
16 Michigan State Police forensic scientists DNA associated with
17 other articles of clothing that has not been attributed to
18 anyone, that all of the exclusion--all of the individuals
19 tested for purposes of exclusion have, in fact, been excluded
20 as it pertained to DNA that was located in a mixture with Ms.
21 Mixer on, I believe, the jumper that she had on when her body
22 was found. In light of all of that, your Honor, I believe the
23 rational trial of fact is going to be unable to find without a
24 reasonable doubt that Mr. Leiterman was the killer of Jane
25 Mixer. Thank you.

1 THE COURT: Prosecutor.

2 MR. HILLER: Thank you, your Honor. As--as Mr. Gabry
3 pointed out, the standard, of course the Court is well aware
4 of it, is that the Court is to consider the evidence in a
5 light most favorable to the prosecutor and determine whether
6 or not a rational (INAUDIBLE) could impact on whether or not
7 the defendant is guilty of murder. I would submit that the
8 evidence that has been placed before the Court in light most
9 favorable to the prosecutor and even in a different light in
10 the case the defendant is, in fact, guilty of the murder of
11 Jane Mixer. We have his DNA on her pantyhose, full profile
12 single source match on three separate places. The odds of a
13 random match in a population are--on occasions alone, are one
14 in one hundred and seventy one point two trillion, I believe
15 is the number. That is certainly very strong evidence that, in
16 fact, the defendant was the one that killed Jane Mixer.
17 Furthermore, we have YSTR results on the ligature--on the end
18 of the ligature that is a match at all eight loci that the
19 laboratory in Virginia, Bode, was able to develop from the
20 ligature itself. There was nothing in those results that
21 searched to eliminate the defendant as the contributor of the
22 other three loci--or the other four loci, pardon me. Defense
23 counsel says that there is no evidence that the defendant
24 possessed the murder weapon, but there is evidence that he
25 possessed a weapon that could have fired the fatal bullet. All

1 of these things together, your Honor, John Ruelas' blood not
2 with standing, would certainly point to the fact that the
3 defendant is in fact the killer of Jane Mixer and I would ask
4 the Court to deny the defendants motion.

5 THE COURT: Counsel did correctly state the standard
6 and I have listened to the evidence and reviewed it in light
7 most favorable to the prosecution, as I am required to do at
8 the conclusion of the prosecution case. In this, there is
9 direct evidence which it believed by the jury, placed the
10 defendant at the scene of this murder, particularly in the
11 form of the DNA on the pantyhose and the sample as well, from
12 the stocking around the victim's neck. There is also some
13 circumstantial evidence relating to--that believed by jury
14 would place the defendant in the proximity --would place the
15 defendant with a weapon capable of inflicting the injuries
16 which resulted in this woman's death. Also, handwriting
17 testimony, which appears to be relevant to the date of her
18 death and the circumstances. Whether all of this evidence,
19 direct and circumstantial, proves beyond a reasonable doubt
20 that the defendant murdered Jane Mixer, is a question for the
21 jury and not for the Court. The evidence, direct and
22 circumstantial, is such that a jury could find beyond a
23 reasonable doubt that defendant Lieterman murdered Jane Mixer.
24 Motion is denied. Are you ready to proceed?

25 MR. GABRY: I am, your Honor.

1 THE COURT: Bring the jury. Let me just say counsel,
2 to reflect what we said in chambers, that at this point our
3 schedule is that you expect to conclude the defense case
4 today.

5 MR. GABRY: Yes, your Honor.

6 THE COURT: And we will have closing arguments and
7 instructions tomorrow morning.

8 THE LEGAL CLERK: All rise for the jury, please.

9 THE COURT: Please be seated. Good morning ladies and
10 gentlemen. Are you ready to proceed?

11 MR. GABRY: I am, your Honor.

12 THE COURT: Call your witness.

13 MR. GABRY: I will call Robert Kullman.

14 THE COURT: Sir, would you stop there, face the clerk
15 and raise your right hand.

16 THE COURT CLERK: Do you solemnly swear or affirm to
17 tell the truth, the whole truth and nothing but the truth?

18 MR. KULLMAN: Yes.

19 THE COURT CLERK: Have a seat right there.

20 MR. KULLMAN: Thank you.

21 THE COURT: Sir, state and spell both your first and
22 last names.

23 THE WITNESS: Yes, Robert D. Kullman, R-o-b-e-r-t,
24 middle initial is D, last name is K-u-l-l-m-a-n.

25 THE COURT: Thank you. Mr. Gabry.

1 MR. GABRY: Thank you.

2 ROBERT KULLMAN

3 DIRECT EXAMINATION

4 BY MR. GABRY:

5 Q Mr. Kullman are you presently employed?

6 A Yes. I am employed as a forensic document analyst with the
7 Spekean Forensic Laboratories in Okemos, Michigan.

8 Q How long have you worked with that organization?

9 A I have been affiliated with Spekean since--April 1996. I was a
10 part time employee at one point and then June of 1998, I
11 became a full time employee and have worked full time in that
12 capacity since.

13 Q Prior to becoming involved with Spekean Forensic Laboratories,
14 did you have a previous occupation?

15 A Yes, in the area of document examination, I was employed with
16 the Michigan State Police as a forensic document examiner. I
17 joined the Michigan State Police in March 1966, worked as
18 uniform officer until February of 1972. At that time I was
19 assigned to the crime laboratory, it was called, now it's the
20 forensic science division, at the Holland regional laboratory
21 and I completed my three year training program as a forensic
22 document examination in March of 1975; worked in the capacity
23 of a forensic document examiner for the Michigan State Police
24 until December of 1988.

25 Q When did this three year training period encompass?

1 A It was a full time training program were I trained under--
2 trained under--under document exam with the Michigan State
3 Police. The gentleman that was in charge of my training was
4 Detective Sergeant Herbert Balming at the Holland Laboratory.
5 I also trained with other examiners at the Michigan State
6 Police; Lieutenant Arthur Keibler, which was the chief
7 document examiner at the time. I also received some training
8 for Leonard Speakine which was a document examiner at the
9 State Police and eventually was the chief document examiner. I
10 also trained on some aspect of document examination with
11 Thomas Malcolm, who retired as the chief document examiner at
12 one point with the State Police. I had also--during that
13 training program I had received training from the United
14 States Secret Service. It was a three week training school in
15 the Washington D.C. area, dealing with aspects of document
16 examination, handwriting comparison of fraud, counterfeiting,
17 printing processes. I also received training from Georgetown
18 University--one week training school there dealing with fraud,
19 forfeiting detection, handwriting and also attend a one week
20 school conducted by the Federal Bureau of Investigation in
21 Washington D.C. dealing, again, with document examination,
22 fraud detection, forgery, handwriting examination. All these
23 training with the Secret Service, Georgetown and F.B.I. were
24 in the area of 70--1974 through possibly '76, or thereabouts.

- 1 Q Once you complete the three year training period under
2 supervision, is there any type of proficiency test or is it--
3 are you graded before you are allowed to do any independent
4 document analysis?
- 5 A Being graded, yes. I mean absolutely you are graded
6 continually. One, Lieutenant Olly would give me projects to
7 work on and then, of course, he would sit down after the fact
8 and go through--I would have to explain to him my findings, my
9 observations and then he would explain to me the weight I
10 should or should not put on various findings that I may have
11 had. It was like an apprenticeship training. The training that
12 I received through the other areas, you weren't tested per
13 say, other than, again, on a daily basis you would give your
14 input to the instructors and they would respond. All of those
15 schools: F.B.I., Secret Service and Georgetown, you would
16 receive, if you successfully completed, was a certificate of
17 completion that you successfully completed and they--the
18 Secret Service would send a letter to the director of the
19 State Police to tell him of the completion and that sort of
20 thing. But the actual training it was--yes, it was a continual
21 daily item were you were trained.
- 22 Q While a State Trooper and working at the crime lab, did you
23 have occasion to perform your own examinations--making
24 handwriting comparisons between known and unknown samples?

1 A That's the majority of what I did in the document unit was
2 handwriting. Probably eighty percent, eighty-five percent of
3 the work in the State Police and again, in the private
4 practice, probably in the neighborhood of eighty percent of
5 the work, has some form of handwriting comparison or
6 examination that's conducted, yes.

7 Q As a result of your examinations, what you've conducted, have
8 you had to testify in Court's here in the State of Michigan?

9 A Yes. I've testified here in the State of Michigan in Probate
10 Courts, Immiscible Courts, Circuit Courts, Federal Courts.
11 I've testified out of the State of Michigan in Courts, again,
12 dealing with handwriting, dealing with other factors but the
13 majority handwriting. I've testified--the first testimony that
14 I gave was in March of 1975. Since that particular time, I've
15 testified over 240 times. Out of that, in the neighborhood of
16 200, possibly more, would have been at jury trials.

17 Q And at each one of those cases you were qualified as an expert
18 witness for handwritten analysis and comparisons?

19 A Every time I have been asked by the Court to be recognized, I
20 have been recognized as an expert in the areas of document
21 examination, handwriting comparison and have been able to
22 testify to opinion testimony in each and every time that I was
23 ever offered as an expert.

24 Q Have these testimonies all been in criminal proceedings?

1 A No. When I was with the State Police, I believe I testified in
2 the neighborhood of 110, 111 times. I have the statistics in a
3 log, but I believe that it is in that neighborhood. Out of
4 that, two occasions were civil matters in which I had worked a
5 criminal matter and later it was a civil suit. So, I testify
6 in criminal matters with the State Police probably in the
7 neighborhood of 1008, 109 times. I've testified in private
8 practice in criminal cases, probably in the neighborhood of 15
9 maybe 20 times.

10 Q Have you ever not been qualified as an expert witness in this
11 field?

12 A Absolutely not.

13 MR. GABRY: Your Honor, at this time we would offer
14 Mr. Kullman as an expert witness and in handwriting analysis
15 and examination of handwriting comparisons.

16 THE COURT: Any objections?

17 MR. HILLER: No, I don't have objection, your Honor.

18 THE COURT: This witness's testimony will--opinion
19 testimony will be received in his area of expertise.

20 MR. GABRY: Thank you, your Honor.

21 BY MR. GABRY:

22 Q Mr. Kullman, I sought you out to ask you to perform a
23 particular kind of analysis, correct?

24 A Yes.

25 Q What?

1 A Hand writing comparison. You asked me to compare some known
2 writings of an individual with some question writing that
3 reportedly was on a phonebook. It was a photograph that I was
4 given--photograph of some writing of a name--two words:
5 "Muskegon" and "Mixer", but "Muskegon" is not spelled
6 correctly.

7 Q All right. Did you ever have an opportunity to exam the
8 original phonebook were this writing was made?

9 A I never seen the original phonebook, I've only seen two
10 photographs; One that appears to be a full sized photograph of
11 the phonebook. The second photograph is an enlargement of the
12 two words I talked about. "Muskegon" and "Mixer", that's all
13 I've seen.

14 Q Let me ask you before we go too much further, are there any
15 limitations in your ability to render an opinion when one is
16 relying on a photograph, even the quality of which you
17 received, which I believe is exhibit 50, I could be wrong?

18 A Yes, there is always a limitation if you don't have the
19 original writings to exam. A limitation, for instance, the
20 photograph is a good detail, good quality black and white
21 photograph. However, one of the things that I can't determine
22 from a photograph is direction of strokes. For instance, in
23 this particular photograph--in this particular questioned
24 writing there's an "I" dot. It's a long extended "I" dot. I
25 can't tell you from the photograph if the "I" dot starts and

1 moves upward and away from the base of the "I" or if the "I"
2 dot starts at the top and moves toward the base of the "I".
3 That's not determinable. There's underlining. I cannot
4 determine from a photograph--this particular photograph the
5 direction of the stroke. Does the underlining go from the
6 right to the left or does it go from the left to the right.
7 There's an intersection of one portion of the underlining with
8 a capital "M" on "Muskegon" at that intersection. With this
9 copy, I cannot determine if the underlining is before the
10 formation of the "M" or after the formation of the "M". I also
11 cannot determine if the underlining is with the same writing
12 instrument as the words. So, there are some things that you
13 cannot determine from a photograph. Again, it's a high quality
14 photograph but, that's--a couple of items--three items that
15 you cannot determine.

16 Q In addition to looking at the two photographs the--I guess,
17 the one to one scale and the enlargement--

18 A I don't know if it is one to one because there is no scale in
19 the photograph but, it's a smaller photograph than--it appears
20 to try to compass the entire size of the phonebook and then an
enlargement of this signature--writing area.

22 Q Thank you, sir. Let me show you exhibits 52 and 53 and I am
23 going to ask you to refer each to their own proper exhibit
24 number. Tell me, first of all, whether or not you--those are

1 the photographs, or at least copies of the photographs, you
2 viewed.

3 A Yes. These appear to be another print of the copies I used,
4 because I still have those give to me, but these appear to be
5 a production from the same negative, I would say.

6 Q Okay, so, from what we understand there was an original with a
7 negative somewhere and a number of copies have been made,
8 correct?

9 A I would say yes.

10 Q Because the ones that you were provided, you've maintained and
11 kept custody of?

12 A That's correct.

13 MR. HILLER: For the record, I'm sorry, 53 was not
14 admitted. We admitted 85 instead which is a different addition
15 to that photograph. I have no objection to admitting 53 at
16 this time, but I did want to put that on the record.

17 MR. GABRY: Then we move for 53, your Honor.

18 THE COURT: Plaintiff's exhibit--prosecution exhibit
19 53 is admitted.

20 BY MR. GABRY:

21 Q I am going to show you what's been marked as People's exhibit
22 85 and I'd ask whether or not you were ever provided with a
23 copy similar to that?

24 A A copy similar. This particular copy here, 85, as you can
25 visually see from 53, a different lightness to it. It is much

1 lighter than the exhibit 53, but obviously they're from the
2 same negative.

3 Q Did you receive other documents from the Michigan State
4 Police?

5 A Yes, I did.

6 Q Do you recall what you received?

7 A I received some log books. One dealt with a gun and one dealt
8 with ammunition. The log books were dated in the area of late
9 '60 through 1972. I also received an original composition book
10 --a small book, it was called a composition book. I will just
11 take a quick look here--

12 Q Do you have a folder--a case file relative to this particular
13 analysis before you?

14 A Yes, I do.

15 Q From time to time might it be necessary for you to review that
16 to refresh your memory?

17 A Yes, I have two files. One is a binder and the other file is
18 the copies that I kept of the documents I received and the
19 original of the photograph that I received as well as our
20 tracking evidence items. I also received 63--I'm sorry, not
21 63--

22 Q Mr. Kullman, let me interrupt for a minute.

23 A Yes.

24 Q I am going to hand you some exhibits that have already been
25 admitted. They are all numbered. I ask if you can possibly

1 look at these and tell me whether or not, within that body of
2 material, you find information that had been provided to you
3 by the State Police for purposes of you making your own
4 analysis.

5 A Okay. First of all, I was given the original of exhibit number
6 48. I examined this original. It is a one page sheet of
7 writing. It is pencil writing. I examined it at my laboratory.
8 It was brought to me by a Detective Schroeder of the Michigan
9 State Police. I also examined the original of People's exhibit
10 49, a composition book. I examined the original of People's
11 exhibit 47, it's a journal. At the top it says "Shells through
12 1970". I examined the original of People's exhibit 51; again,
13 it's a journal book. It says "Gun registered to 10 of '73". I
14 received an original of People's exhibit number 50, which is a
15 number of requests of writing signatures. I think there was a
16 total of 52 or 53, by memory. Actually they are all numbered.
17 Number 10--sheet number 10 had no writing on it. To my
18 recollection the rest of them did. I did not receive People's
19 exhibit 51, which is also marked People's exhibit 65. What I
20 did receive is a photocopy of a notebook that (INAUDIABLE). It
21 appears to be--

22 Q Please take a moment to look through that and make sure what
23 has been put together is what you recall reviewing via Xerox
24 copies that you were provided.

1 A Yes, this appears to be reproductions of that particular
2 photocopies that I had received. The face of the photocopies,
3 and I have--I still have the photocopies with me, but the face
4 of it says Solly on it, the writing appears to be the same.
5 The writing that's in People's exhibit marked 51 and 65.

6 Q Before we move on from 65 what--may clear--you never saw the
7 actual spiral notebook, is that correct?

8 A That's correct. If I could explain--Detective Schroeder
9 brought the packet of items to my office--to the laboratory.
10 We sat in the front conference room. Each packet was sealed--
11 as you can see these seals on them. Each packet was sealed. I
12 unsealed--and as you can see where it says evidence K5, that's
13 mine. I placed that back on after I opened it, examined it,
14 replaced it, sealed it with evidence tape and placed my
15 initials on it with the date, 6/30/05 at 11:40 a.m. Each
16 packet was opened because I needed to microscopically examine
17 it--the originals. I also needed to make photocopy
18 reproductions for my files for additional examination. After I
19 had completed and went through five packets, I went through
20 and marked each packet off with--on my notes I marked and
21 labeled--each packet has a labeling number that apparently if
22 from MSP Ypsilanti a tracking number. They all start with
23 these same numbers, 026-0007066-2004- and the last four digits
24 are specific to the particular item. This particular item,
25 Peoples exhibit 50, is 0027. So each of those numbers, 0029,

1 0028, 0021 and 0010, each of those items are listed in a
2 report by Thomas Riley from the Michigan State Police document
3 examination report. As I opened each, I labeled on his report
4 "A", "B", "C", "D" note that I did have these, I observed
5 them, I examined them. After completing the microscopic
6 examinations, after photocopying the pages of the original
7 documents, I returned to the conference room where the
8 detective was still waiting for me. All of the packaging
9 material was still there and I asked him if this was all the
10 known writings that Mr. Riley had had. He told me that was all
11 the writings they gave him. I reviewed the report again and
12 made an observation that the item that actually was an
13 original of this book was not included in these items, that it
14 was missing and that I needed to see the original of all of
15 the documents that were examined. The detective looked on the
16 table, looked in his car, looked outside of his car, came back
17 in, called the laboratory to try to speak with Lieutenant
18 Riley and apparently he was not there. He spoke with someone
19 that said they would fine this. The last--they would find this
20 document. A few days later--well I believe that same day,
21 later on that same day, I received a call that they couldn't
22 find this at this time that Lieutenant Riley was on vacation,
23 he would be back. A few days after that, I received a packet
24 obtaining the--a packet containing photocopy reproductions and
25 a computer disk that I did not have the capabilities of

1 reading the disk. We do not have that particular computer
2 program. I attempted to open the disk, I had our laboratory
3 director, who is a computer analyst try to open it and he said
4 we do not have that particular program, it's an expensive
5 program, we do not own it. So, I was unable to review the
6 original. I then received--July 15th, I received four computer
7 disks--now it contains names on this particular notebook. So,
8 again I was not able to open it. So I never did see computer
9 scanned versions and I never did see the original of this
10 particular notebook. I do know from talking with other people
11 who have suites in the location, that our particular suite is
12 that apparently a detective from the State Police conversed
13 the location the people in the suites and asked if they had
14 seen a particular packet somewhere.

15 Q Did you understand on those computer disks, it is not a
16 program that assist anyone in doing an analysis, it is just
17 duplications or reprints of the photographs?

18 A I would think that's all that was on there are scanned images,
19 I would suspect, of--reportedly of this notebook. I don't
20 know--

21 Q Is that how it was presented to you, because that is what they
22 were?

23 A Yes, they were presented to me as that, and I can actually
24 open the file to see and read the files. Each file is listed

1 as a certain page from an exhibit number, I believe it was
2 number 25 or 26 that last four digits.

3 Q Okay--

4 A So I could see that reportedly those were the files, but when
5 I attempted to open the file we do not have the program to
6 open each of those files.

7 Q Is there other material that you received and reviewed?

8 A I never seen People's exhibit 80.

9 Q What does 80 appear to be? What's the top page of 80?

10 A 80 appears to be a envelope, a mailing envelope. It's got a 5-
11 -ends in 2005. I don't know what the date is on it. I can't
12 read it. It is another reproduction. It's an envelope
13 addressed to Gary Leiterman, Washtenaw County Jail and the
14 address. It is from-the return label says Leiterman. It has an
15 address in Gables.

16 Q Gables?

17 A Gables, I'm sorry. And then there are letters inside. The
18 first letter is dated February 1, 2005. It is a two page,
19 appear to be, and it appears to be signed Solly, S-o-l-l-y.
20 These appear-

21 Q So, those were not presented-provided to you by the Michigan
22 State Police?

23 A No, they all--I am going through to see if I-no, I've never
24 seen the contents of People's exhibit 80. Exhibit number 79--

25 Q Do those also appear to be copies of Xeroxed letters?

- 1 A These are all Xeroxed copied of letters, drawings, newspaper
2 articles.
- 3 Q Is there a signature on any of those letters indicating the
4 name of an author?
- 5 A Well there is a return address on an envelope of G.E.
6 Leiterman from Hogback road in Ann Arbor.
- 7 Q Okay. Did you receive some copies of some letters from the
8 Michigan State Police?
- 9 A I did. I am not certain that it's any of these.
- 10 Q I understand. When did you receive copies of letters?
- 11 A Let me check. The evidence tracking I received some machine
12 copies of letters, July 19, 2005 at 10:30 a.m. from a
13 detective--from a young--I believe he was a detective, William
14 Jennings from the Michigan State Police.
- 15 Q July 19th, this Tuesday?
- 16 A Yes.
- 17 Q Did you review those letters that you received from the
18 Michigan State Police?
- 19 A Yes, I did. By the way, at that particular time, I also
20 received, with this, a laboratory report--a supplemental
21 report dated 7-18-05 and it's signed a Thomas P. Riley, State
22 Police Specialist, Special Document Unit, that I think
23 supposedly corresponded with these.
- 24 Q Does that report make reference to what you received?

1 A Makes reference to 31 copies and letters and envelopes. It
2 said, dated from March and April, 2005. I received 31 machine
3 copies, letters and envelopes. The majority of which are dated
4 in June. There is no year. I was apparently written from the
5 jail, so I guess the conclusion would be that they are
6 current. There's--there's a couple of them from March, there's
7 a couple of them from April, May and June. Whether these are
8 the same 31 pages that Detective Riley have, I am not certain
9 because his really say dates from March and April 2005. It
10 makes no mention of the June ones.

11 Q Let me ask you, as you are flipping through those, from here I
12 can see a lot of highlighted pink and different markings, were
13 those on them when you received them or are those markings
14 that you made in your analysis?

15 A Those are markings that I made. The items that are in pink are
16 intact inside the envelope as I received them, in the same
17 order and no markings on them, that I placed in the copies--
18 that I placed on the ones that I received. The items here are
19 markings that I have made during my examinations of the know
20 writings that are in question.

21 Q Then my question then is, did you use those copies of the
22 letters you received the 19th in formulating your opinion?

23 A Yes, I formulated an opinion so I did examine these items,
24 compare these particular reported known writings with the other
25 reported known writings that I had had to see if they were

1 consistent, if they integrated with each other or if they were
2 possibly two different writings or what the case may be. I did
3 the comparison first between the known and the reported
4 knowns. Then I used these--I was still very familiar with the
5 handwriting habits that were in question and the other knowns.
6 I placed the question enlargement signature above. I went
7 through these page by page, letter by letter, formation by
8 formation and did an examination and highlighted the items
9 that I compared.

10 Q All right. Sir, I don't want to go too far away from that
11 because at this time I want you to explain to the jury, when
12 you perform a handwriting analysis would you tell them what
13 you actually do, how you do it?

14 A The first step in a handwriting examination, is to exam the
15 question write (sic.). In this particular case it's the
16 writing of two words. You examine the question writing, you
17 are examining for if you can tell fluency, if you can tell--

18 Q What do you mean by fluency?

19 A Fluency: whether there is tapering at the beginning and ending
20 strokes. Whether there is pressure variation. Whether the
21 writing is written rapidly or slowly drawn. If it is not
22 fluent, usually it is very slow, possibly tremor, when it
23 stops, when it starts. There may be pen lifts. There may be
24 even pressure variation--no variation in the pressure, just
25 even hard pressure. That is what I am looking for, fluency--

1 fluency: tapering in the beginning, tapering in the ending
2 strokes and pressure within the writings. I then also exam
3 question in writing for handwriting habits, habits that may be
4 present. I look for any distortions of the-- habits that may
5 be distorted. I look for internal consistency within the
6 writing. I look for individual handwriting habits. Habits that
7 are present, consistent throughout the writing. After I take
8 the examination of the writing, I make my notes of items that
9 appear to be significant within the question. I then examine
10 all of the known writings. I do an examination between the
11 known writings. I am also looking for fluency, internal
12 consistency, possible distortions, significant handwriting
13 habits and agreements within the known writings. So I am
14 searching for that and I am also searching to see; are all of
15 these writings that they gave me consistent with each other,
16 or possibly are they writings of more than one person with
17 more than one writing style, the differences--that is what I
18 am looking at and also comparing--in this particular case I am
19 comparing known writings from the late '60's early '70's with
20 nearly consistent signature and possibly an address, with
21 writings that were reportedly done. I don't know because they
22 are not dated but were reportedly done sometime possibly in
23 the mid to late '60's early '70's to late '70's; the
24 compensation book.

1 Q And that reported because that was represented to you that--
2 that Mr. Riley had found an impression--had checked for
3 impressions and saw a date impressed in one of the pages?
4 A Yes, that's--and that would be an excellent method of trying
5 to date an undated document. To see if there are in
6 impressions in the document that may help you, either an
7 impression in a note that you can sometime date, or impression
8 of date information. It doesn't necessarily mean that it is
9 from that time period, because people can write previous
10 dates. I may, at times, write the date of March 28, 1966 on
11 documents, that is the date that I joined the State Police.
12 People ask me, and I may write it and it may be impressed.
13 That is not the date of the document, but it's a good method
14 in determining a date. So, I examined all of these documents
15 and tried to compare this writing from the past to some
16 writing from supposedly current or some writings that were
17 date to 2000, 2001, 2002 dates on them and some request
18 writings that we know are current writings, they were obtained
19 some time this year. Later on a comparison of these
20 photocopies--letters that were reportedly written from the
21 jail here within the last few months.
22 Q Time consuming process?
23 A Absolutely time consuming. But is something you have to due
24 because one of the items that I can tell you in my examination
25 of these--in my examination of the, for instance, photocopy

1 that I had of People's exhibit 61 and 65, my initial
2 examination lead me to believe and lead me to disregard the
3 first number of pages in this book as known writings because
4 they were significantly different writings. The letters that I
5 could compare with his known writings were just completely
6 different formations, completely different writing. I had to
7 make some contact to try to find out on that writing, but that
8 is an example of why you exam all of the known writings and
9 you compare it with each other. There is a possibility, in
10 cases, that someone may salt the known writings. They may say,
11 well this is known writing of "X" when it is the known writing
12 of "Y" or vis versa. Plus you want to become familiar with
13 what changes may have occurred in this persons writing. Did
14 their writing mature over time and make some changes, did it
15 change because of conditions, did it make some drastic change,
16 so that is why you are doing this comparison between the known
17 writings.

18 Q Okay. Can you go back to the question document itself? You
19 mentioned that it was two words---

20 A Yes.

21 Q --and we certainly hear "Muskegon" and that spelled properly
22 with an additional word "Mixer". When you exam that questioned
23 writing, what types of habits or-- what information are you
24 looking for that your going to draw from that, that you are

1 then going to compare what's been represented to you as
2 knowns?

3 A What I drew from this--let me--what I drew from this
4 specifically--and can I prep myself by saying "Muskegon" is
5 misspelled. It is misspelled according to the Muskegon in
6 Michigan but I believe it is spelled correctly for Wisconsin
7 or something to the effect, anyway, in Michigan it is not
8 spelled that way--this city in Michigan. What I am looking for--
9 what I looked for in this particular writings is; number one,
10 I look for the first letter that is written, the "M". By
11 examining the "M", I could tell that the "M" I could tell that
12 the "M" started at the baseline.

13 Q Okay. Let me stop you for a second. In preparation for
14 covering you analysis, did you prepare a document that
15 actually shows these words and you would be able to use that
16 to point out to the jury what you were looking at and what you
17 are referring to?

18 A Yes, I prepared an exhibit that has some examples and it has
19 the question and some examples that were present in the known
20 writing and consistent in the known writing.

21 Q And we previous had that marked as People's exhibit five--
22 Defendant's exhibit five, I believe.

23 A If I could check.

24 Q Would you please?

25 A Yes, it has a defendant's sticker, number five.

1 MR. GABRY: Your Honor, may I have—we would move for
2 exhibit-defendants exhibit five--

3 MR. HILLER: I have no objection, your Honor.

4 THE COURT: Why don't you put it right next to him
5 there? All right, can you see that? Go ahead, sir.

6 BY MR. GABRY:

7 Q Now, you were referring the fact that you had to look at the
8 question writing?

9 A Yes.

10 Q We are keeping the lights on; it's early morning, there is a
11 little—

12 THE COURT: For the record, five is admitted

13 MR. GABRY: Thank you, your Honor.

14 BY MR. GABRY:

15 Q There is a little bit of a glare here, so I am just going to
16 stand off to the side a little bit. Can you go ahead—you were
17 talking about your examination of the question writing looking
18 for patterns that you would then use to compare what was
19 reported to as known?

20 A Yes. It would be easier if I could stand and point.

21 THE COURT: You can stand where you are and point, go
22 ahead. Is that all right? I need you to stand in the box.
23 There you go.

24 THE WITNESS: First off, in the examination of the
25 question writing, as I stated, the first letter that is here

1 is the letter "M"—"M" is the first letter that you see and the
2 " " is the first letter in the second word "Mixer", so my
3 examination of the particular "M", you can determine that it is
4 starts down at the baseline—the starting point is the
5 baseline, moves up then back down. Very angular, very narrow,
6 both of them—angular, no approach stroke, an approach stoke,
7 by the way, would be any stroke before the body. So, if it was
8 an "M" it may be this stroke and then the body. An approach
9 stroke is anything before the body. For instance, an "I", if
10 an "I" has an approach stroke it would be something like this.

11 MR. HILLER: Your Honor, I just need to interrupt for
12 just a moment. Is than an erasable marker you are writing on
13 that with?

14 THE WITNESS: I don't know, it is a sharpie.

15 MR. HILLER: Your Honor, he is altering the—

16 THE COURT: Well, this is being used for
17 demonstrative purposes, I take it, just as the power points
18 were?

19 MR. GABRY: Yeah, it is.

20 THE COURT: All right, it's not going to go into the
21 jury anyhow. Go ahead.

22 THE WITNESS: Okay, so, the examination of this
23 looking for, are there initial strokes? Are there presence of
24 initial strokes is the question and the answer to that
25 absolutely not. The "M" starts at the baseline and moves up,

1 back down, up and then back down. Then I also examined, again,
2 the narrowness of the "M", the angularity of the "M". You can
3 see in these two "M's" they appear to be written by the same
4 person. I cannot say that for certain, but it is consistent
5 enough for me that I would say, yeah it's likely these are
6 written by the same person. However, if there is any variation
7 in there and that is normal in writing to have natural
8 variation--variation occur. This similar formation of the "M",
9 you can see the variation would be on the "M" in "Muskegon",
10 you can see the second hump much taller than the first hump,
11 the proportional difference. In the "Mixer", it is just the
12 opposite. The first peak is higher--taller than the second
13 peak. As you can see the baseline area of the first "M" in
14 "Mixer"--in "Muskegon" is fairly even with each other and the
15 "Mixer" is a definite step up. The variation of the center
16 stack--the center peak that goes down is much different
17 between these two. That is the sort of handwriting habit that
18 you are looking for. You then, making an observation that
19 anyone can make readily. There is no approach to it. There is
20 no approach to the--they both start up at the top. The
21 consistency between the "M", the "I" and, the "U", no approach
22 strokes, that is an important feature. Class characteristics--
23 here on the approach strokes are class characteristics.

24 BY MR. GABRY:

25 Q. What are class characteristics?

1 A Class characteristic is a characteristic that is expect to be
2 found in a large number of the population. It is a habit--it's
3 not a habit, it's a handwriting habit--it's a handwriting
4 style that may be present in millions and millions of people.
5 It is not significant when it is readable as a class
6 characteristic, it becomes very, very significant when the
7 class characteristic id different between one set of writings
8 and another set of writings. For instance, if someone does not
9 have an approach stroke for the "I", does not have an approach stroke for the
10 "U", does not have an approach stroke for the
11 "M" that is not significant because it is class
12 characteristic, but if someone always has an approach stroke
13 and it's not present it becomes extremely significant. It is a
14 different style of writing. The other item that I look for is
15 the formation in terms of the proportions of the "U", tall
16 narrow. It is a narrow movement, further angular down here.
17 Next letter, the "M"--the "S", the formation of it-it is a
18 looping formation. The "S" goes up away from the baseline goes
19 down and then makes a loop back. A movement with the wrist or
20 a movement with the arm back. A large--proportionally, this
21 particular loop utters about three fourths of a size of the
22 other letters and then the loop continues up and does not dip
23 towards the baseline, it continues up to make the formation
24 here. The formation of the "K" is a--in and of itself is a
25 rather unusual formation. It loops up away from the baseline,

1 comes back down, it moves to the right, it does not hook to
2 the right, it moves out to the right and makes this formation
3 very similar to this "S" that proceeded it. The bowl of the
4 "K" is very similar to the "S", it dips back and then up. The
5 staff--the left side of the staff makes a looping motion, a
6 very large motion. Again, when you check the proportion
7 between where the loop of the bowl is, with the overall
8 formation is like the "K", proportionally. It's a significant
9 partial.

10 Q Can you help me a minute?

11 A Yes.

12 Q The bowl of the letter--what do you mean when you say the bowl
13 of a letter?

14 A The bowl formation of a letter--the "K" would be--if it's a
15 bowl "K" if it makes a round portion, that would be the bowl.
16 Some "K's" don't have a bowl because it may be an angular "K".
17 So you would have sticks instead of bowls, lines instead of
18 bowls.

19 Q This is a bowl, b-o-w-l "K"?

20 A Yes, definitely. Pictorially it is rounded, it's the rounded
21 bowl of a "K". There is no pen lifts in it, it continues. It's
22 a movement--this entire writing of the "U", the "N" in the word
23 "Muskegon" does not appear to have pen lifts. It could
24 possibly have a stop here in this formation "G". The reason
25 why I say a stop is because, I can't see without the original,

1 but it appears as though as the connecting stroke of the "G"
2 goes up to form a bowl in this "E", before this peak--there is
3 a round circle there and it looks as though the line comes up,
4 there is a round circle and then the line ended and moved. The
5 round circle is consistent with the writing instrument
6 stopping. The heavier pressure pushed down and then boom. If it
7 is a ball instrument--if it was a liquid ball instrument, you
8 are going to have a larger drop. I can't tell you what type of
9 writing instrument was used, but it is writing instrument that
10 was obviously would have deposited some sort of peaks because
11 of the connecting strokes (INAUDIABLE). As I was going into
12 the formation of the "G", the "G" comes off of the "E" after
13 the "K", it makes a looped formation--a looped formation. Sort
14 of like the "I", right here, in the first part. It loops goes
15 off to the right and continues that loop down, again, to form
16 the bowl of the "G", it's slightly at the baseline and goes up
17 and then back down to make a very long--fairly long lower
18 extender. It is wide, as you can see all through this area
19 here there is a space. In the even the lower extender were
20 connected to the "I" or the "E" following, right up here, it
21 touches the bottom of the bowl. Is that significant? We don't
22 know until we examine the known writings, but it is a habit
23 that's in this spelling. Moving on to the "O" that follows
24 this "G" and sort of stops, as you can see that "O"--the
25 formation of the "O" is very similar to the formation of that

1 "G" it's a looping motion. It comes up away from the "E", it
2 makes again a loop, loops around up and away from the baseline
3 and hop, there is goes off to make the "N". There is no
4 extended connecting stroke. It merely comes up from the "O"
5 and then the "N" abruptly stops. (INAUDIABLE). Also,
6 reportable is the proportion between the "O" and the "N", as
7 you can see. The top of the "N" is basically at the top of the
8 "O". The bottom of the "N" is near the center of the "O". Is
9 this significant? We don't know until we compare with the
10 known writings. Moving right along with the "Mixer", a little
11 approach stroke to the "I", a curved "I" then slightly back
12 curve. The "I" dot--if you can call it a dot is very long
13 extended motion either go away from it or towards it. We don't
14 know which without the original. Angling directly above the
15 top of the "I" it goes directly away and I think it is a
16 continuation of that. It could be the dot was placed first and
17 then the "I", but I don't know. It is tall, slightly large.
18 Significant, we don't know. The "X" formation, there is a pen
19 lift after the first formation of the "X" going towards the
20 baseline. Unusual, no not at all, it happens--it is not
21 unusual at all. I say that because writing a thousand. The
22 majority that I've seen in my thirty plus years of being a
23 handwriting expert is that when an "X" is in the middle of a
24 letter or in the middle of a writing, very few people continue
25 on with the writing and then come back and cross the "X", some

1 do, but that would be more unusual than those who pick up the
2 pen and cross the "X" then continue. There is a pen lift as
3 you can see from the photograph there is a pen lift with a
4 slight drag going up to the right and then you have the cross
5 formation, the pen is then apparently lifted up and placed
6 back down for the "E-R" combination. That's a habit. Is it
7 significant, I don't know. It's tall, tilted, it's larger than
8 the "E" and again, it ends abruptly. When you have habits that
9 are occurring that seem to be repetitive--the more repetitive
10 they are the more significant they become. Is it significant
11 that it ends abruptly at the "N" and then again at the "R"--it
12 becomes more significant because it happens to both of them.
13 Is it significant that you have no approach stroke within four
14 letters, very significant. That's the way you do a handwriting
15 comparison. That's what I was examining. I was looking at the
16 underline-period--underlying--is it a habit, is it
17 significant, or is it class characteristic. Many, many people
18 wonder. The direction of the stroke could become very
19 significant. That could determine if the stroke goes up, left
20 to right or right to left. It could be very significant if it
21 does not agree with the known writings. It is not significant
22 if it agrees with the known writings. If it doesn't agree,
23 extremely significant. In this case, I couldn't tell you if it
24 goes left to right or right to left. I don't know if this--you
25 can see it comes from the right to left and flips up at the

1 end and goes this way—I can't tell you if the "M" is written
2 before the lining or if the lining is written (INAUDIBLE). I
3 can't even tell the same writemanship. There is not a while
4 lot I can tell you about the kind of writing other than it is
5 there, it would be significant if it never happened in the
6 known writing, it is not significant if it does.

7 Q Okay. So we move on to the side-by-side comparison now. If I
8 understand, one of the things you observe in handwriting is
9 class characteristics?

10 A Yes.

11 Q A pen lift with the "X" would be a good example of a class
12 characteristics?

13 A Yes, with no approach stroke for the "U" and the "I" that would
14 be a good example of a class characteristic.

15 Q What about pen pressures--movement of the pen, is that to be
16 considered one of the unique identifiers or is that a class
17 characteristic?

18 A That would likely fall in the group of class characteristics.
19 It could become a unique characteristic--if it is completely
20 different than the known writings, then it becomes unique, but
21 the majority of right handed people--the majority of right
22 handed people, they are writing in English, in the United
23 States. In foreign languages it may go the opposite direction.
24 So, the majority of right handed people are pulling the pen
25 towards the direction of the writing. What happens when they

1 pull the pen towards the direction of the writing is the
2 lighter pressure going up and the heavier pressure going down
3 because that is the direction that you are going. You heavier
4 pressure going up--I'm sorry, down in the right angular
5 direction. In the bowl strokes the movement going to have light
6 pressure coming down until you get down towards the, you might
7 want to say, eight o'clock, seven o'clock, six o'clock right
8 in that area towards the bottom portion. You are going to have
9 a heavier pressure with right handed people, generally,
10 because you have that pressure because you are pulling that
11 pen and then you lighten up as you go away from the writing.
12 Left handed people, generally, are pushing the pen in the
13 direction of the writing, so therefore they are pushing the
14 pen upward and then they are coming back it is a lighter
15 pressure variation. Going away, may be heavier, coming back
16 will be lighter. Same thing with right handed writers.
17 Pressure variation can be extremely significant if it is the
18 reverse—the opposite of what it is in the known writing. If it
19 agrees, it's a habit. Is it a significant habit? No, it is not
20 a significant habit.

21 Q So, now having had the time to look at the unique
22 characteristics of "Muskegon" "Mixer", you then began to do a
23 side-by-side comparison of the information provided to you by
24 the State Police reported to be Mr. Leiterman?

1 A At first I did an examination of the known writing, right. I
2 examined all of the known writings and I'm looking, again, at
3 the handwriting habits. The consistent, repetitive items are
4 included in this known writings. If they are consistent they
5 are habit--if they are consistent they are habit. Do you have
6 natural variation? Yes, everyone has variations. When I say
7 consistent, I mean the overall formation. You may have some
8 proportional difference, you may have some slight form of
9 indifference there, but that would be natural variations that
10 occur in the writings. You do not write the same every time,
11 but you have consistent repetitive handwriting habits. When I
12 went through the writing that was reported to be Mr.
13 Leiterman's, I found first off, in my opinion, that some of it
14 was not and some of it marked in this exhibit, 51-65, in the
15 first pages, where not consistent with his writing. In my
16 opinion they were not written by him. I did not use those as
17 known writing examples.

18 Q Did you get some information that Mr. Riley had?

19 A Yes, I received copies of his--of his notes.

20 Q It's been referred to as being originally believed to be a
21 sub-set of Mr. Leiterman's writing, those first pages in that
22 book. Would you agree with--with that interpretation of that
23 writing, that it would be a sub-set of Mr. Leiterman's
24 writing?

25 A No, it is completely different and I can give you an example.

1 Q Would you?

2 A In the writing in the first part of this Solly book, exhibits
3 51-65, there is a number of printed "M's" in there that are
4 completely different printed "M's". "M's" that you may find
5 similar to this kind of "M" here. Not exactly similar, but the
6 formation--the no approach strokes. Everyone of Mr.
7 Leiterman's--over 50, by the way--over 50 printed "M's" in all
8 of his known writings, he always--capital "M's" at least,
9 always has an initial stroke. The initial stroke starts upward
10 at the top, moves back down to the baseline and back up with
11 the first leg--the first staff of the "M" being higher than
12 hooks slightly over and makes a movement and is well
13 imbalanced writing. Completely different formation than what
14 was in this known writing. The formation and the bowl of the
15 "G's", different. The leg, the lower extender of the "G",
16 different. The cursive writing--intermittent cursive writing
17 that's in the first part of that book, has some approach
18 strokes, other ones no approach strokes, but the approach
19 stroke is very minimal if it has one. It is completely
20 different than the known writing that Mr. Riley gave me.

21 Q What would a sub-set of a writing be? What would that term
22 mean?

23 A The sub-set--when you are doing a document examination, a sub-
24 set may mean--okay, you have a particular writing style that
25 you write with. A sub-set would be where it's changes

1 slightly. You get some slight thing that you don't know that
2 you did there or that you do do, or vice versa. A sub-set is a
3 very dangerous thing to rely one because, number one, you
4 don't know if it is a sub-set--you don't know if it is a
5 subset or a different writer. In this particular case, it was
6 rather obvious from my initial examination of it that it is
7 not a sub-set of Mr. Leiterman's writing. The reason that I
8 say that is because it is written in 2000, 2001 and 2002. His
9 writing, his "M's", his "I's", his writings from 1972, I
10 believe--1969 his word "Michigan" and his "K"--his address
11 Reckhan, R-e-c-k-h-a-m-, I believe, the ending stroke of his
12 last name "N" absolutely agrees with the writings in this book
13 that is attributed to him--the last few pages. All of the other
14 writings that I had that were attributed to him, including the
15 writings from the jail that were attributed to him, they all
16 agree. If they agree and the other writing is different, that
17 would be a major step called a sub-set. You would be better
18 off to say, I am not going to use that. I'm going to find out
19 before I put any weight on this whatsoever--I am going to find
20 out, which is what I did. I found out.

21 Q That is when you contacted me?

22 A Absolutely. Now--I might point out this. The contact--the
23 contents of the first writing, that was someone who obviously
24 worked at a nursing facility, worked with elderly people.
25 That's what I asked you about.

1 Q Now, looking at all of the reported known writings that you
2 received from Mr. Leiterman, as it pertains to what is
3 available to you in "Muskegon", "Mixer", those characters, the
4 combination of those--of those letters, did you see any
5 consistent, repetitive habits in Mr. Leiterman's handwriting--
6 reported writing, that was inconsistant with "Muskegon",
7 "Mixer"?

8 A About everything was inconsistant with "Muskegon", "Mixer". I
9 can start with the capital "M". The capital "M" as you can see
10 in the lower part of my exhibit, I have some "M's", every
11 cursive capital "M". Over 60 cursive capital "M's" appear in
12 this known writing--over 60.

13 Q You counted them? You go through them and--

14 A I went through them, I highlighted them and I counted them.
15 The reason I did that is because they were consistent. They
16 were consistent, they were repetitive and I wanted to know how
17 many were there. I had read a report by Mr. Riley. I read his
18 opinion. I wanted to know how many were there. Consistent,
19 repetitive handwriting, as you can see down here in the
20 "Michigan" from one of these log books--I can tell you exactly
21 what page because I have it here, but it is from one of these
22 log books. I believe it was dated 1972, it might have been
23 dated 60 something--capital--capital "M" approach stroke, here
24 and the correspondence he wrote capital "M" approach stroke.
25 In all of the request writings that he wrote, capital "M"

1 approach stroke, a significant approach stroke. All of the
2 printed "M's" and then approach stroke, see here the "M" and
3 then the approach stroke, everyone of them. I have initial
4 capital--printed approach strokes, capital letters, over 60 of
5 them throughout this known writing, everyone consistent. Not
6 only are they consistent, with the approach stroke but they
7 are also consistent with the proportions. You can see, in this
8 particular letter, as this approach stroke--as this has an
9 approach stoke, this "M", you can see where the center leg is,
10 proportioned between the right side and the left side. The
11 right side is significantly wider--significantly wider. Is
12 that the case into question, absolutely not. Narrow, location
13 where the center staff is, the right and left leg, no. In
14 actuality the word "Mixer" balanced proportionally to the
15 left. The first part is wider and right. Is it different? It
16 is absolutely different. Again, I had writings from before, I
17 had writings reportedly from the composition book that has the
18 date in the '60's. I had writings from 2000, one, two and
19 three. I had writings from--early request writings from 2005,
20 writings from the jail just within the past couple of months.
21 Q Can I ask you here, when you look at these cursive "M's", and
22 cursive means handwriting--
23 A Yeap.
24 Q And there is a difference between cursive and printed?
25 A Yes, there is.

1 Q And you showed some printed "M's" on there-

2 A Yes.

3 Q Would it be appropriate to look at a cursive and remove the
4 stroke to try to fit it into a pattern?

5 A Not in the examination of handwriting. The examination of
6 handwriting, you can't go ahead and start removing strokes and
7 saying, well now it fits, or you can't add strokes and say now
8 it fits. That would like me adding an approach stroke to the
9 "U" and saying, well now it fits, or taking away approach
10 strokes in the known writings and now it fits because it
11 doesn't have an approach stroke. Again, you can't do that.
12 Does it even fit--and I did that by the way, because it is
13 listed in Lieutenant Riley's notes, that if you remove that
14 proportionally, informatively it is similar to these
15 questioned "M's". I did it. I did it prior to receiving the
16 writings from the jail, because I didn't have those. I did it
17 with all the request writings. I did it with the historical
18 writings that were found with a capital "M". I took white out,
19 I photocopied them all, I enlarged them and I took whiteout
20 and I whited (sic.) them out, and I examined them. I am here
21 to tell you formatively, they don't look alike other than if
22 you removed the approach stroke it would appear as if it
23 started towards the bottom. Would that be similar? Well, yeah,
24 it starts at the bottom. But, the internal proportion, the
25 lifts, the spacing, does it agree, absolutely not. Does it

1 agree with this large retrace up here at the bottom, this
2 angularity at the top--I mean it starts at the top instead of
3 the bottom, absolutely not. It does not agree, it's different.
4 Q So as far as the "M's", both in "Muskegon" and in "Mixer" and
5 as it pertains to Mr. Leiterman's reported known writing, you
6 don't find any substantial similarities?
7 A Not a bit, no. There formatively and proportionately
8 different. They're narrower, they're taller, they don't have
9 an approach stroke, the base is different. That 'ought to just
10 about cover everything in the formation of that letter.
11 Q What was the next letter that you found significant--
12 A The next letter-moving right along. The next letter--the next
13 two letters are the "U" and the "I". Neither one, again, like
14 the "M", neither one have an approach stroke. So we will
15 concentrate on the "U". The approach stroke on the "U", it
16 doesn't exist. In my notes--I went though my notes. There are
17 over 50 initial letter "U's"; us, up, unusual, any letter that
18 starts with a "U". Everyone--everyone, from the earliest
19 writing to the most current writing has an approach stroke. It
20 is not just a minuet little movement, it's an approach stroke.
21 You can see it. You can see it on this exhibit. It's long, it
22 stretches, its there. I also have over 100 initial letter
23 "W's". Can I compare a "W" with a "U"? Not really, but I can
24 compare that first part because it is an approach stroke. It's
25 a similar type letter, the "U" and the "W", he makes them

1 similarly, it has a long approach stroke. Is it significant?
2 It becomes much more significant when I have over 50 approach
3 stroke "U's", over 100 approach stroke "W's" and not one of
4 them—not one does not have an approach stroke, and a well
5 pronounced approach stroke. It is very significant. Now, class
6 characteristic? Yes. Is the class characteristic in his
7 writing? Yes. He class characteristic puts them in. He puts
8 them in the majority of his "C's" that are first letter, the
9 majority of "G's" that are first letter, the majority of his
10 "A's" that are the first letter, he has an approach stroke.
11 His style writing is that he has an approach stroke. Sometime
12 he does it in the "C's", sometime he does it in the "A's", he
13 always does the "U", he always does in the "W", always does in
14 the "I", every time. "I's", 100--over 100 initial "I's". You
15 can see them in here. Are they a small minuet little approach
16 stroke? You can see them from where you are sitting. I can see
17 them very clear from here; very long prior to the formation of
18 that letter, very significant handwriting habit that is not in
19 the question writing.

20 Q I think I might have asked Mr. Riley about that and he pointed
21 out that the writing I was showing him was a more formalized
22 script and therefore since there was an approach stroke and a
23 more formalized script, it might not be in another form of
24 script. In your examination of Mr. Leiterman's writing, would

1 you agree with that or is it consistent in--in, I guess,
2 formal or less formal?

3 A None of the writing that I had of Mr. Leiterman, I would
4 classify as formal, with the exception of possibly and
5 exception of earlier writings in a notebook. They seem to be a
6 little slower written. A little more care in the writing. The
7 letters--the letters that he's writing, certainly are not what
8 you would call formal. Formal to the point--formal to-- some
9 are very misspelled. Some are very rapidly written. His
10 signature and his address cramped into this book, is that
11 formal? I would say, no that is not a formal type of writing.
12 So, did I find much formal type of writing here? The majority
13 of what I would classify, and I wouldn't call it formal
14 writing, I would call it more slowly more deliberate writing.
15 Yes, he has some. I have examples, by the way, of some right
16 here. The reason I have it out here is for the "I" dot, but
17 you can see it seems to move along at a little more consistent
18 basis. A little more formal, a little more slower if you want
19 to call it slower. The "I" dots are a little more dots. This
20 one here, the dot is a little more positioned above. So would
21 I say that there's a--the majority of this writing is formal?
22 No. Would I say the question writing is formal? No, I would
23 say no.

24 Q Is there any other distinctive differences between the "U" in
25 "Muskegon" and Mr. Leiterman's known writing?

1 A Yes. As you can see, I put some examples up. The "U" in the
2 question writing is taller and narrower--taller and narrower
3 which rings a bell. The "M", taller and narrower. The "U",
4 taller and narrower than what is occurring in all of his known
5 writings. His known-known writings, his "U's" are shorter, a
6 little wider, not tall and narrow. In the formation, the "S"
7 formation--we don't have an exhibit--on the exhibit, I don't
8 believe. There is an "S" here in "unusual". I didn't put many
9 "S's" up here but that is a difference that occurs. He makes
10 his "S's" often times, as you can see here, there is a hook
11 under. Sometimes he makes a slight loop. This "S" is tall,
12 upright. Proportionally the looping closing bottom in
13 connecting the next letter, proportionally covers about three
14 quarters the size of this letter. Mr. Leiterman's known
15 writing all the way through there. Proportionally the "S" does
16 not agree. The stand up part--there's time that the variation
17 where is he more upright with his "M's", more laid down, that
18 is variation; but is it narrow, no, doesn't happen in the
19 known writing. An extremely significant handwriting habit is
20 this "K". The reason I say it is extremely significant is
21 because it's completely different than his known writing
22 "K's". Over 100--over 100 "K's" that occur--internal "K's" that
23 intern (sic.). An internal letter that it is here in
24 "Muskegon" there's a letter to the left and letters to the
25 right so it's an internal letter opposed to a beginning letter

1 or an ending letter. Internal, over 100 of them. Is any of
2 those--does he ever come back and make this large loop bottom,
3 absolutely not. The closest he comes to it, the very closest,
4 is he makes an "O" but he hooks back and goes back. You think-
5 -and you try to write--if you're making a "K" and the bowl is
6 looped, it's a motion with your wrist or with your arm up and
7 to the left. If you're making a hook, it is a completely
8 different movement. It's here and back; completely different
9 movement of the wrist or arm depending on if you are a wrist
10 or arm mover. Is that fundamental difference? Movements of the
11 hand and arm, fundamental difference--significant fundamental
12 difference. Moving on to the "G". This "I" loop, this initial
13 part, this long extended lower extender where it comes back up
14 and actually touches the bowl of the loop. Does it ever happen
15 in the known writing? It never happens. You can look at every
16 internal "G" in this known writing, you've got over 300--over
17 300 internal "G's". Do they have this "I" shape? Some have a
18 little loop, not like this loop, not this big. Some have a
19 little loop. None ever, ever cross up here. As you can see in
20 my known writings and in the examples, they cross well below
21 the bowl--well below the bowl. How are the majority of them
22 made? It's called a cap. It comes over the top and then
23 retraces, or makes just a slight loop. This one is an
24 underhand movement to make a big loop. Not an overhand with a
25 possible loop, overhand as in some of his, with a backwards

1 loop, never happens. Over 300 "G's", not one of them comes up.
2 If it's natural variation, it's got to come up and do that.
3 It's got to come up and go beyond it, it's got to come up and
4 touch it. It's got to have some similar formation to be within
5 a range of a person's writing. In my opinion, the formation of
6 the "G", including the extender and the return of the
7 extender, internal "G's" it is out of their handwriting
8 exhibited in all of these known writings. We can move on to
9 the ending stroke of the "N", again, over 200 "N's"--the "N"
10 the letter, over 200 ending "N's". Some examples on here
11 (INAUDIABLE) move on to see his signature. His signature from
12 way back in the '70's and the '60's, how does it end? Long
13 extended stroke. How does "H's" end in Michigan? Long
14 extending stroke similar to an "N", long extending strokes
15 with no stop-no stop. Right here you can even see a stop, a
16 slight curvature, a little of whatever that writing instrument
17 was. The exact same thing occurs in the "R". As you can see,
18 every single one of his "R's", they go off. They may go off
19 slightly, some go off at an angle, but they go off to the
20 right. He is moving—he is writing--this thing, the writing
21 stopped down. With the formation of the "R", do you see that"
22 it's a similar formation. You can see here similar formation
23 in the (INAUDIABLE), is that unusual? No. It's a class
24 characteristic. It is unusual that you stop here? No, it's a
25 class characteristic. It is unusual that you go on? It's a

1 class characteristic. Is it unusual that the question and the
2 known don't agree, absolutely. That's what is unusual about
3 it. They do not agree. The "I", no approach stroke, it's long.
4 Does it happen in the question or in the known? Absolutely
5 not. Mr. Riley points out in his notes something to do with
6 "I" dots. Was there-is there "I" dots in here? Well over 600
7 "I" dots that occur in this known writing-- well over 600.
8 Here's a variation of them. As you can see it goes to the
9 right. As you can see this one moves off to the right. Some go
10 off to the right with a little hook, some with a check mark.
11 Do you ever have one-one that starts up here and moves away up
12 high and hooks to the right? Never, never. You've got
13 variation in the "I" dots, but does this particular one
14 exhibited in the variation? It isn't. Is it a significant
15 difference? It is now.

16 Q It is now because you didn't see it in the--

17 A It is now because we have over 100 "I" dots, I'm sorry, over
18 600 "I" dots in all his known writings from way back when here
19 in the '60's or '70's where he writes "Michigan" or he dots
20 his "I" in his address or he dots his "I" in his name, is it
21 there? It isn't there. His dots--his "I's" are not doted.
22 Would I normally say that an "I" dot is significant? No, I
23 wouldn't say an "I" dot is significant because generally they
24 are going to fall within the range of the writing and you
25 would see it within the range. Is this one significant? It

1 doesn't fall within the range, so suddenly it becomes
2 significant. Even to the point of this "K" that we talked
3 about. This "K" here is from an address back from, I believe,
4 1972, written address. That "K"--is that anywhere close to
5 this "K"? Absolutely not. Same thing we see later on in the
6 request of "K's". Later on in his request writings where he
7 makes a "K", it comes up, it makes a hook down and it goes off
8 to the right, it does not loop around.

9 Q Thank you. Any other distinctive similarities--distinctive
10 differences between Mr. Leiterman's writing that you were
11 presented with the 50-49 handwriting exemplars that you
12 received, where he tries--where he's asked to basically mimic
13 the writing on the original phonebook?

14 A Okay, the request writings integrates, it agrees with the
15 historical writings. It is written--you can compare the
16 request writing that he apparently did a request from someone
17 on a photocopy page to duplicate a phonebook that writing
18 agrees with his known writing.

19 Q Let me ask you--

20 A Does it agree with the questioned writing? No, it doesn't.

21 Q That's what I was going to ask you. One of the--one of the
22 factors as a handwriting analysis, one would look at, is when
23 one, particularly law enforcement, goes out and gets
24 handwriting exemplars, there's a number of writings that are
25 requested. You don't just say, would you write this once. You

1 are asked to write it a number of times. Are you able, first
2 of all, to form an opinion based on looking at Mr. Leiterman's
3 reported known writings, what Mr. Riley relied upon and then
4 the exemplars to determine whether or not he appears to try to
5 be deceptive or misleading in the writing of these exemplars
6 on the phonebook covers--disguises his handwriting in anyway?
7 A The writing on the phonebook covers, the requested writing
8 agrees with the historic writing--it agrees with it. So, is
9 that an attempt to disguise? An attempt to disguise,
10 generally, when you look at historical writings--that's why you
11 ask for both if you can--back in the State Police I always
12 said, get me some historical writings. They would bring in a
13 request writing and I would say, I need historical. I have to
14 know if this requested writing is his normal natural writing.
15 Does it agree with the historical writing that he wrote not
16 connected with this case? I don't want some booking card where
17 he was arrested on this charge from the jail. I want something
18 that he wrote related-not related to this case. So, that is
19 what you exam, this historical writing agrees with request
20 writing, the "G's". the "K's", the "M's" here in the
21 "Muskegon" that he writes cursively he, he has a connecting
22 stroke between the "M" and the "U". He's got a connecting
23 stroke between the "M" and the "I" in "Mixer". It agrees. That
24 is all I can say. It defiantly agrees. Does it show natural
25 variation? Certainly it shows natural variation. You can see

1 in the "Mixer" for instance, the "R" in "Mixer" in the lower
2 one kinds of tints and goes off. This one is sort of round
3 here and moves off to the right. This other one is sort of a
4 loop. So is that natural variation? Absolutely. Does it happen
5 in the historical writings? It absolutely does. Does it agree
6 with this particular "R"? The formation--the overall formation,
7 this temped formation does-- does not agree when it comes to
8 the ending of it and does not agree when it comes to the
9 proportion of the bottom of the connecting stroke of the "E"
10 and the extension of it down here, it doesn't agree.

11 Q Based on your examination of the historical writings as well
12 as the question writing, would you agree with the statement
13 made to the jury yesterday that there were no fundamental
14 differences between the historical writing and the question
15 writing?

16 A Absolutely not. A fundamental difference begins with, what is
17 the consistent repetitive handwriting habits of the person. If
18 his are consistent, if they are repetitive throughout--we
19 talked about hundreds, we didn't talk about five or six or ten
20 we talked about hundreds "U's", "W's", we talked about
21 hundreds "K's", "G's", we talked about hundreds--over--over
22 hundreds. If it doesn't agree, it doesn't agree. It doesn't
23 fit. It is a different writing style. Are there significant
24 fundamental differences? Fundamental difference, first of all,
25 it's a different style of writing. There is no approach

1 stroke. Fundamental difference; no tapering on the end. Is
2 that a fundamental difference? It is when you have this many
3 in the known. Fundamental difference: the proportion, the
4 formation with the internal consistency of this "K".
5 Different? Absolutely. The "G": fundamental difference; that
6 lower extender, where it returns, where it hits on the bowl,
7 where it doesn't hit on the bowl. Is that a fundamental
8 difference? In my opinion, that is a fundamental difference.
9 Is this "I" a fundamental difference--the "I' dot? I wouldn't
10 call it fundamental, it is different. I wouldn't call it a
11 fundamental difference but I would call it different only
12 because we have over 600 of them and it never occurs.
13 Fundamental difference; we've got a lot of them. We've got
14 one, two, three, four, five, six, seven, eight, nine--nine
15 minimal--nine minimum.

16 Q Okay. Is there anything that I neglected to cover that you
17 relied upon to formulate your opinion?

18 A No. Again, my opinion based on the question and all of the
19 knows--all of the knowns, not some of them, I looked at all of
20 them and I did a comparison with all of them, so that is where
21 I drive my opinion from.

22 Q And did you form an opinion?

23 A Yes, I did.

24 Q Can you explain to the jury what your opinion was?

- 1 A Yes. It is my opinion to a high degree of probability the
2 writing "Muskegon" "Mixer" and the known writing by Gary
3 Leiterman were not written by the same person.
- 4 Q Now when you use that terminology, where does that terminology
5 come from?
- 6 A Actually, the terminology comes from when I first was in my
7 training, cause that's the way we worded opinions. But the
8 formal terminology that is accepted now in the ASTM standards
9 basically on the guide for handwriting and the guide for
10 writing reports. It's been formalized, now, by the American
11 Society of Testing Materials. I've used those ranges of
12 opinion since 19--since my training. I was trained that way.
13 We had a nine point scale. I've used that nine point scale
14 since I first started authoring my own reports in 1975.
- 15 Q Now, that statement embodies a description, is that correct?
- 16 A There is a criteria used. I use a criteria to render an
17 opinion, certainly.
- 18 Q What are those criteria?
- 19 A The criteria for this particular opinion, there's a high
20 degree of probability this is not written by the same person,
21 is that I have, number one, ample questioned writing, I do.
22 Number two, ample amount quantity and quality known writing; I
23 have that--that I have substantial significant fundamental
24 differences that I may have some similarities, but I do not
25 have significant similarities. They may be class

1 characteristics similarities; however, because I am working
2 with a photograph, because I am unable to determine the
3 direction of stroke; number one of the "I" dot, number two of
4 the underlining, that is part of this opinion--highly
5 probable--basically you have some limitation and I have some
6 limitation, very little, but I have some. I also have a
7 limitation--I never saw original of exhibit 51 and 61. I saw a
8 machine copy. Do machine copied cause a limitation? Yes, they
9 do.

10 Q So, Mr. Kullman, had you had an opportunity to actually view
11 the actual phonebook, had that been preserved and had you had
12 an opportunity to view that, as well as had you had an
13 opportunity to view the actual writings contained in exhibits
14 51 slash 65, the notebook, would you have been able to give a
15 more conclusive opinion that Mr. Leiterman was not--

16 MR. HILLER: Objection. That calls for speculation.

17 THE COURT: Well, he can answer.

18 THE WITNESS: I'm not certain. I could give a more
19 conclusive opinion of the writing was written in the wrong
20 direction. If the "I" dot, for instance, under "Mixer" starts
21 at the top and moves down and if everyone of Mr. Leiterman's
22 start at the left and move to the right that would be a
23 fundamental difference. That would be something I could see
24 and say, yes, that's absolutely a fundamental difference. If
25 the underlining would have went from left to right in the

1 question and right to left in the known or vice versa,
2 certainly looking at those two factors in an original I would
3 be able to say that direction of writing is wrong. That adds
4 one more fundamental difference and if having had the
5 opportunity to examine the original, I would not limitations
6 placed on--but--so, certainly. I would--I don't know if the
7 opinion would have been different or not. I speculate it could
8 have been different.

9 Q The most--are there--you talked about the range of opinions?

10 A Yes.

11 Q I think you talked about nine. Where does strong probability
12 that he did not all through that fall--what would be the next
13 step towards certainty?

14 A If we--I will answer that by giving you the range of opinions
15 and I will call them out by number one through nine. Number
16 one the opinion is; it is my opinion that the question and the
17 known are by the same person. Number two; highly probable
18 question and known are by the same person. Number three;

19 probably question known by the same person. Number four; there
20 are indications question and known are from the same person.

21 Number five says I have no conclusion. I have a lot of
22 similarities, a lot of differences; I have no individual
23 characteristics I can lay my hat on. I have possibly limited
24 question, limited know. That's a no conclusion. Number six
25 says indications given. Indications say that you have a few

1 significant differences or you may have a lot of similarities
2 or you may have a lot of differences. Number six (sic.) says
3 you may have some significant differences, so you would have
4 an opinion probably not the same writing, but you may have a
5 lot of similarities. Number seven which say—I'm sorry, seven
6 which say probably not. Number eight would be highly probably
7 not, which is the opinion that I'm at. Basically that opinion
8 says some are significant--substantial significant
9 differences, some limitation, no significant similarities, but
10 I may have similarities and I may have some limitations.

11 Number nine would say, in my opinion the question and the
12 known were not written by the same person. The criteria for
13 that is that I have substantial significant differences, no
14 similarities but I have no limitations. My handwriting
15 examination was not limited to anything. That's the range of
16 opinions that we offer. The range of opinion that I am at with
17 this writing, is number eight, highly probable. The "Muskegon"
18 "Mixer" question writing and known writing reportable by Mr.
19 Leiterman, were not the same person.

20 Q Thank you, Mr. Kullman.

21 THE COURT: Cross examination.

22 MR. HILLER: Thank you, your Honor.

23 CROSS EXAMINATION

24 BY MR. HILLER

25 Q Good morning, Mr. Kullman.

1 A Good morning.

2 Q Mr. Kullman, how much are you getting paid to come here today
3 to testify?

4 A I'm--I get paid by an hourly rate. Our laboratory, on the
5 other hand, is billing by two hundred twenty-five dollars per
6 hour, plus mileage, plus I had to pay ten dollars to park--I
7 am paid by an hourly rate. My hourly rate is about thirty-
8 eight dollars, or somewhere in that neighborhood, an hour.

9 Q How many hours is your lab going to be billing for the work
10 that you have done?

11 A That I don't know. It's our--billings on a database--when I
12 work on a case, when I have conference calls, when I examine
13 items, I put it in a database. I can tell you that I left our
14 laboratory at 7:30 this morning, thinking I would need a
15 little extra time to get here, and I did, and I will be until
16 I get back--how ever long it takes me to get back. That will
17 go into the database and we will send a bill to the client.

18 Q From the time you started working on this project through now,
19 how much time do you have into it?

20 A I can only estimate--I can't even estimate accurately, but I
21 would have to say it's got to be about a dozen hours or so,
22 give or take. It might be more--twelve hours or so--it might be
23 more, I'm not certain.

24 Q Is twelve a conservative estimate?

1 A I don't know. I wish I could tell you. What happens is, when I
2 start working on it, I start logging my time and I may not
3 work on it all day, of course. I may work on it for only an
4 hour before something happens where I need to stop. I log off-
5 -I log on, I log off, so I don't know.

6 Q What's the difference between a class characteristic and a
7 habit?

8 A Again, a class characteristic is basically something that
9 falls in the area of taught writing. Class characteristic
10 could be something that is found throughout the general
11 populations of writers in the Western world here. They, again-
12 a class characteristic can become a significant individual
13 characteristic if it differs from the known writing. Class
14 characteristic can be present in the question; class
15 characteristic could be present in the know. If they agree, it
16 is not that significant because it is a class characteristic.
17 If they disagree it becomes very significant because it is
18 a class characteristic, a characteristic of writing style,
19 someone's writing style. If it clashes with the question, that
20 becomes big. If it agrees with the question, it doesn't--it is
21 not as significant. But--an individual characteristic is
22 something that deviates quit a bit from the taught handwriting
23 style, it deviates from--

1 Q My question, Mr. Kullman is what is the difference between a
2 class characteristic and a habit? You've used the term habit a
3 number of time.

4 A Right and that's why I'm pointing out--that's why I'm saying
5 an individual characteristic, a habit, could be something that
6 deviates from the normal writing style that you were taught,
7 the normal writing style that you would see. Again, a habit
8 can be a class characteristic. If you always make an approach
9 stroke to your "I", if you always make an approach strokes to
10 a "U", is you always make approach strokes to other letters,
11 it's a class characteristic, but it's a habit tat you have. If
12 you suddenly have some that you do and some that you don't,
13 then it's not a habit. If you have some "U's" that have an
14 approach stroke and some that don't that can become a habit
15 too, that's intermittent, but that's not as significant of an
16 item.

17 Q Early on Mr. Gabry asked you about your training, your
18 background, and he asked you if you were proficiency tested
19 when you were at the State Police and you told us about the
20 reviews that were done there. Are you proficiency tested now
21 that you are at Spakean labs?

22 A Yes.

23 Q How is that done?

24 A We have internal proficiency testing that we do. The
25 laboratory director sets up the test, gives it to the four

1 people that do handwriting and we conduct that and turn it
2 back to the laboratory director who knows the correct answer.

3 Q Is there any external proficiency that is conducted at Spakean
4 lab, any-any monitoring by outside agencies?

5 A Currently we don't have—we have currently not taken external
6 proficiency tests. That is something that is, again, in the
7 planning stage by the laboratory director. It's an expensive
8 proposition. We have not done it in the past. Whether we do it
9 in the future is up in the air yet. It depends on the monetary
10 costs.

11 Q is your lab accredited?

12 A No, it's not.

13 Q Mr. Kullman, can you tell me what circumstances can affect the
14 writing that you see on a questioned document or on known
15 writing.

16 A It can be affected by a number of things and isn't necessarily
17 affected, but it can be. I believe the question is, can be
18 affected. Your position may affect the writing. The writing
19 surface may affect the writing. The writing instrument may
20 affect the writing, whether you're standing, sitting, laying.
21 There are a lot of factors that could affect the writing; your
22 physical condition at that time could affect the writing, your
23 medications could affect the writing, legal or other wise
24 ingestion of drugs--alcohol could affect your writing, a
25 stress could affect your writing. There are a lot of factors

1 that could, we don't know I they absolutely do, some people
2 they do, some people they don't, so there are factors that
3 could affect the writing, absolutely.

4 Q Tell me what you know of the circumstances the words
5 "Muskegon" and "Mixer" were written on that 1968 Ann Arbor-
6 Ypsilanti telephone director.

7 A Only from what I've heard, is that what you mean?

8 Q What do you know--what--information do you have that helped you
9 make your opinion here today?

10 A The information that I had that helped me render my is the
11 material. I rendered my opinion on the photograph of the
12 question writing and all of the known writing. Information
13 that I was told, is that what you would like to know?

14 Q If you used it in your opinion, yes.

15 A I didn't use it in my opinion. My opinion is based on the
16 examination of the question--the handwriting habits that are
17 in the questions, the examination of the known--the
18 handwriting habits that are known, and the only other
19 information that I used was dates of the known writings--
20 attempting to get the dates of the known writings to
21 corresponded with--I was under the impression that the question
22 writing was written in 169 or that era.

23 Q You indicated that position can affect the way writing
24 appears?

25 A It can, yes.

1 Q The surface?

2 A Writing surface can.

3 Q Well, we're talking about position--

4 THE COURT: Just a moment. All right, let's go ahead.

5 BY MR. HILLER

6 Q Let's talk about position for a minute Mr. Kullman.

7 A Yes.

8 Q Would you agree that--for instance the difference that the
9 distance from which the writing surface, the document that's
10 being written on is from the person's shoulder say--in other
11 words if it's here at desk type to my shoulder as opposed to
12 here, desk height, that can make a difference in the writing,
13 isn't that true?

14 A It may. It may have an impact on your writing.

15 Q Similarly, if the space in which it is written is a relatively
16 confined space as opposed to a space where there is plenty of
17 room to have free movement of your arms, can that make a
18 difference?

19 A You mean space on the document where you are writing or space--
20 --your body--

21 Q Space--you are confined in a smaller space.

22 A I think it would depend on the space. Certainly if you were in
23 a space where your elbows were pressing, certainly that could
24 impact. If you're--but it depends again whether you're a wrist
25 writer or an arm writer. It could be impacted depending on

1 whether other people are there--there could be impacts to your
2 writing, absolutely. Confinement--if you're not actually
3 touching the confined areas, I don't know that it would have
4 an impact, but it could. Again, I don't know. It would depend
5 on the writer.

6 Q What about other restrictions on movement? If the movement of
7 your arm was restricted from its natural movement in writing,
8 would that make a difference in the writing?

9 A Again, nobody knows if it can make a difference--if it does
10 make a difference. What people know is that it can make a
11 difference. Things like that can impact the writing. Just like
12 writing on a small area or a large area can impact your
13 ability in the way you stretch out your proportions, your
14 connecting strokes and things like that. I can impact it, yes..

15 Q So for instance, if someone were cradling a phone between
16 their ear and shoulder while they're writing, that could make
17 a difference in the way the writing appears?

18 A I've written like that many times in the past and I would say
19 there's a possibility that it could. It could, yes.

20 Q You remember the days before cells phones, don't you?

21 A I called many, many times to my wife from a pay phone when I
22 was in the department, yes.

23 Q Is it your testimony that people don't write differently for
24 different purposes or at different times?

1 A No, no. People can have--absolutely variation within their
2 writing. Some people can have writing styles that are
3 different. Some people may have a formal style of writing,
4 where they are writing on formal documents--documents that are
5 formal in their mind. Contracts may be formal to some people--
6 other people--I don't imagine Donald Trump considers a
7 contract a formal thing. I would. I would write a little more
8 deliberately. Do my handwriting habits change? You're going to
9 get some variation in here because it is going to be a little
10 more deliberate and I want people to understand the spelling
11 of my name. If I am signing a report, if I'm signing a
12 paycheck, or other things, I may write it a lot more casually.
13 My last name, generally, doesn't get completely spelled out.
14 So, there are formal and non-formal writings. People have
15 that. Some people have various writing styles for whatever
16 reason.

17 Q And, would you agree that when you are writing and jotting a
18 quick note, to yourself especially, that your writing style
19 may be a little less formal than normal?

20 A Many, many people do. I've seen many, many people write
21 informal notes. They write so much better than I do. It
22 depends on the person, so it varies between people.

23 Q You mentioned stress as being a possible--having a possible
24 effect on writing. Can you explain the effect stress can have
25 on writing?

1 A Not really. I don't know that any one can explain stress. I
2 know writing is a mental and physical coordination. It's
3 between up here and your writing hand or foot, depending on
4 what you write with. It's a mental physical coordination
5 between the two. If one of those things is impacted in some
6 way, it can affect your writing. Do we know if it affects it
7 in everyone? No. Do we know how it affects it? No. There is no
8 study to tell us because it varies through out people or
9 individuals. But, can it affect your writing? Absolutely.
10 Maybe some people are not affected by it that is also true.

11 Q When you talk about stress, would you include nervousness as a
12 stressful state?

13 A If they are always nervous then probably not, that would be
14 their normal state. If suddenly people become nervous when
15 they are normally not, then again, I would think that would be
16 something that effects the mental or physical. It all depends,
17 because it is a combination of the two.

18 Q Now, looking at it from the other part, would excitement also
19 be a stressful situation that could cause a persons writing to
20 change?

21 A Again, I don't know. I'm sure, for some people, stress would
22 be extremely have an impact on their writing. For other's it
23 may not. There is no way of determining what factors will in
24 fact change writing or impact writing.

1 Q Let's talk for a minute about the situation with the materials
2 that you were provided by the State Police.

3 A Okay.

4 THE COURT: Excuse me, we are going to take our
5 morning break at this time.

6 MR. HILLER: Okay.

7 THE COURT: We will be in recess for fifteen minutes,
8 please go with Ms. Washington.

9 THE LEGAL CLERK: All rise, please.

10 (Court in recess at 10:52 a.m.)

11 (Court resumes at 11:12 a.m.)

12 THE LEGAL CLERK: All rise, please. The Washtenaw
13 County Trail Court is now back in session.

14 THE COURT: Bring in the jury.

15 MR. HILLER: If I do, I'll take care of it.

16 THE LEGAL CLERK: All rise for the jury, please.

17 THE COURT: Please be seated. Sir, I will remind you
18 that you are still under oath.

19 THE WITNESS: Yes, sir.

20 THE COURT: Continue your cross examination, please.

21 MR. HILLER: Thank you, your Honor.

22 CONTINUED CROSS EXAMINATION

23 BY MR. HILLER

24 Q Mr. Kullman, let's talk a little bit about the receipt of the
25 property from the State Police. Now, as I understand it

1 Detective Sergeant Schroeder brought some evidence to you and
2 the procedure that you followed was to sit down at a table,
3 correct?

4 A In our conference--when you walk in the front door, there is a
5 conference room and we sit there, yes.

6 Q Sergeant Schroeder was there?

7 A Yes.

8 Q You opened the package?

9 A Yes, I did.

10 Q You opened the--each of the sealed paper packets that were
11 carrying the evidence?

12 A Yes--sorry--yes, they were sealed when he brought them in and I
13 opened them, yes.

14 Q When you first opened the package, did you inventory the
15 contents of the package at that time?

16 A Absolutely.

17 Q How did you go about doing that?

18 A I looked at them--I looked at them with a copy of Lieutenant
19 Riley's report that I had and I--an example would be I opened
20 the document--before I opened it I looked at the routing number
21 then I opened it, looked at the document, viewed the MSP
22 Ypsilanti tag--the routing number for it and corresponded that
23 with Lieutenant Riley's report and I put a number on his
24 report, which ever one was "A", which would have been the
25 first one that I opened whatever one that was, and I wrote "A"

1 next to his number on his report. I did that with each and
2 every one of these documents. After I took them out of the
3 sealed item, I looked at them, I sat them and I looked at the
4 packet that I opened in another location on the table.

5 Q I though you had testified that you would--that you took a
6 piece of evidence out of the envelope, did your inspection,
7 made copied if you need to, checked it off the list and then
8 moved on. Is it your testimony now that you--the first thing
9 that you did was to inventory the contents of the package
10 before you did anything else?

11 A Oh yes. The first thing I did was open each pack--looked at
12 one packet, okay, reconciled it with the report, took it out,
13 opened it and set it in a stack, put this item down. Then I
14 went to the next one and the next one and the next one. After
15 I looked at them all, I actually, at that time, had a
16 microscope, a microscope stand and a light in the room and I
17 microscopically did some examinations. When I got done with my
18 microscopic examination I said, I have go to reproduce these
19 on a photocopy and make photocopies. Detective Schroeder said
20 go ahead, so I took the documents, left the plastic covers--
21 plastic packets they are in on the desk, went in to out
22 photocopy room, which is a different room. Sergeant Schroeder
23 stayed in the conference room. I went in and made my copies,
24 brought back my copies, brought back the originals. Inserted
25 the originals back into the packets--well, I may have done

1 something prior to that, but they were inserted back into the
2 packets to keep them in order, but then I asked him if this
3 was all the known writing that Lieutenant Riley had and he
4 said that was all the known writing that they had given him. I
5 said there has to be some more known writing. I mean, the
6 handwriting habits that I observed there didn't agree, there
7 has to be some more known writing. At that time I looked at
8 his report and said, wait a minute there is another item that
9 we don't have here and that is a book--70 some page--80 some
10 page book that says Solly on the front of it. I read the
11 number--the tracking number and I don't recall what it end in,
12 I believe it ends in 25 possibly--I can tell you. It ends in--
13 the tracking number ends in double 024. I said that particular
14 item is not here, I don't have it and my understanding from
15 Mr. Gabry was that I was going to have all of the original
16 documents that Lieutenant Riley had.

17 Q That clears up my misunderstanding that when you did your
18 original inventory you just didn't notice that that piece was
19 missing?

20 A No, I didn't notice that piece was missing until--and part of
21 why I didn't was because that particular piece of known
22 writing was the last piece on the first page of Lieutenant
23 Riley's report and I just didn't observe it--that it wasn't
24 there until I photocopied them and stated that there's got to
25 be more known writing here.

1 Q Now, you were provided with photocopies of--well, it's
2 actually the binder that is up there now, is that correct?
3 A I was supplied with photocopies that were reported to be
4 photocopies of exhibit 51-65. As I went through this exhibit,
5 I would say that I was--I'm confident that I was provided
6 photocopies of the material that was in here. I did not go
7 through every page, but I am confident that I was.
8 Q You didn't notice any--anything missing when you compared them
9 today?
10 A No, something out of order, but nothing missing.
11 Q Okay. Now, you were also provided, when you got those
12 photocopies, a DVD that contained or was reported to contain
13 images that are identical to what is in the book up there?
14 A Yes. When I attempted to open the DVD it was--I could bring up
15 the file, it showed me on the screen the files--actually I
16 couldn't, Roger Bullhouse could, but we brought it up on the
17 screen and he said here are the files. When you attempted to
18 open the files it said that you needed a program that we don't
19 have--a fairly expensive computer program that we do not have,
20 so I couldn't view what was on the DVD other than the file
21 names.
22 Q So, it was not a problem with the State Police not providing
23 you with the information, it was a problem with you being able
24 to access the information because you were missing something
25 you needed.

1 A I don't know. They didn't supply me with copies like this.

2 They didn't supply me with quality of a copy. They didn't

3 supply me with a disk that our program could not open. I am

4 not saying that is their fault, they obviously scanned it on a

5 program that they have, we don't have that program. I never

6 saw this quality of a reproduction of these items until today,

7 right here. Again, they are similar to the ones I have, but

8 you can't tell color, that sort of thing.

9 Q Do you know the name of the program that you were missing?

10 A I think it was--I'm not certain, I'm not a computer expert

11 but--I don't know.

12 Q Does Photoshop sound familiar?

13 A Photoshop sounds familiar to me. Again, Lieutenant Bullhouse

14 would be--I'm sorry Roger Bullhouse would be the person that

15 would know that.

16 Q Every office seems to have somebody who is the go-to person on

17 technology these days.

18 A Absolutely and he's--he's--he does that sort of work in the

19 laboratory for clients.

20 Q All right. Do you agree or disagree that it is proper for ma

21 documenter standpoint to use to content of the writing as a

22 way of establish the known or the presume quality of the

23 writing?

24 A I guess I don't know what you mean.

1 Q For instance, if you were to look at a piece of writing in-in-
2 it contained statement that would appear to be consistent with
3 what you know about a particular person, would it be
4 appropriate for you, as a document examiner, to say I am going
5 to treat this as known writing because I think this person
6 would have written something like this?

7 A No.

8 Q Now, that may be reasonable for someone to do that is not a
9 document examiner?

10 A I think it is reasonable that someone may read it and look at
11 it and say, that sounds like Bill. I don't know, but I would
12 think—especially if they knew some of Bills history and where
13 he went on vacation and where he worked and things like that,
14 I would think that it would be, but a document examiner needs
15 to have someone connect the writing with the person to use it
16 as known writing. You can you can use it as reported known
17 writing because someone is telling you, yes "X" "Y" and "Z"
18 reasons it's this person, but as a document examiner, I need
19 to have someway of connecting the writing—someone to connect
20 the writing and that's why I have all a lot of the times
21 talked about reported known writings.

22 Q You were a document examiner for the State Police for how
23 long?

1 A I was a document examiner for the State Police--I finished my
2 training in '75 and left the lab in December of '88, so--and I
3 had a three year training program.

4 Q Well, I'll give you the three years--

5 A Sixteen-sixteen over years.

6 Q During that time did you ever discuss the cases that you were
7 working on with the investigating officers to try to gain
8 information so that you would know what you had in front of
9 you?

10 A Generally you would discuss with the investigating offers
11 (sic.) the case. Usually you discuss it with them; how to
12 obtain known writings, how to collect them, how to preserve
13 them. So certainly you would discuss with investigating
14 officers.

15 Q If you were brought some writing that was reported to be
16 known writing found writing of a suspect or another
17 individual, you would talk with the officers to discover what
18 information they had that led them to believe this was known
19 writing?

20 A Absolutely, I mean I would say--you would say, did you get
21 this in as known writing. How did you get it? Where did you
22 get it? How do you connect it with the person? When we go to
23 Court, is the Court going to allow you to say there a connect
24 to allow you to use it. The prosecutor is going to want that,
25 I want it before I do my examination, yes.

1 Q Now, I noticed that you actually made photocopies of some of
2 the articles yourself for the comparison?

3 A Photocopies of these original documents?

4 Q Yes.

5 A Yes, I did. After I had examined--did the microscopic
6 examination of them, as I told the detective, I can examine
7 all these originals you may have to come back more than one
8 day. If I made copies of them, good quality copies, I will use
9 those. I know what the handwriting habits are microscopically
10 I need to see and I'll use those.

11 Q And you feel that you were provided with enough information
12 and the copies are sufficient that you can write an opinion,
13 is that correct?

14 A I felt the handwriting that I examined was of sufficient
15 quantity. I examined the originals--microscopically examined
16 the originals. The directs of strokes, formation, stops and
17 starts that may occur and then the photocopies that I made, I
18 felt were ample for me to look at the overall formations,
19 proportions, spacing that I needed because I'd already
20 examined microscopically the other items. I felt the known
21 writings--the reported known writings were adequate to do a
22 comparison.

23 Q I believe during your direct testimony you referred to the
24 question writing as writing in the mid to late '60's and I

1 believe you referred to it as a signature and possibly an
2 address?

3 A The questioned writing?

4 Q Yes.

5 A No, no. I never called it a signature and I never called it an
6 address. What I had stated, from my recollection and what I've
7 always called this is some writing of the word "Muskegon" and
8 the name "Mixer", if it's a name "Mixer". In other words there
9 are two words "Muskegon" "Mixer" and that's what I refer to
10 them as, writing.

11 Q So when you used the word signature, you were not referring to
12 the word "Mixer"?

13 A No, when I used the term signature, I was referring to the
14 signature on the known writing exhibit of Gary Leiterman.
15 There are some documents that reportedly contain his
16 signature.

17 Q okay.

18 A That's what I was talking about, signatures.

19 Q Is it your testimony that in the known writing of Gary
20 Leiterman that every time there is an "I" there is an approach
21 stroke?

22 A Absolutely every time. Well over one hundred, in all of the
23 known writings that I observed.

24 Q So would that be a habit of his?

1 A Yes, that would be a handwriting habit. It's a class
2 characteristic, but it's his writing style. His writing style
3 has approach strokes in the "I's", in the "U's", "W's". the
4 majority of the "A's" the "G's" that have the initial strokes,
5 many, many-majority if the lower case "C's" that are of a
6 first letter, all those have an approach stroke.

7 Q You consider that to be a highly significant finding?

8 A It's a highly significant finding that it's not in the
9 question. The question does not have approach strokes and the
10 knowns do. It's a different writing style.

11 Q And if there was even one example in the known writing of a--
12 an "I" without an approach stroke, for instance, that would
13 certainly reduce the significance of that finding?

14 A If there's an "I" it would likely tell me that it's possible
15 to be in the persons range but still it significant that it's
16 there. If I have over one hundred "I's" and one of them does
17 not have this full length approach stroke, it is something but
18 it is not as significant as the fact that all the rest do. It
19 certainly--I never observed it in the known writing. I fit
20 would be in the known writing then you may say, look this is
21 not significant because it is in the range, but it is still a
22 habit occurring in the known writing that doesn't occur
23 regularly.

24 Q But does occur?

1 A If it occurs--I did not see it in all of the ones that I
2 examined. I examined all of the known writings that I was
3 given. Some were photocopies and I can tell you in the
4 photocopies--this book, sometimes I don't know. In other
5 words, did it copy, did it not copy? I can't tell you, but I
6 saw remnants of approach stroke, generally a very noticeable
7 approach stroke in all of the writings.

8 Q The question was, if it does--if it--if a particular
9 characteristic shows up, even one time, in the known writing,
10 then that reduces the significance of the habit?

11 A To a degree--to a degree it would reduce the significance of
12 it because what you are saying is either it is in his range,
13 number one, or it's what they call accidental habits.
14 Accidental habits may happen. Are they repetitive? No,
15 accidental habits aren't repetitive. They could happen because
16 the pen didn't--If you were going to write the pen didn't make
17 inking it made have had an impression when you look at the
18 original. When you look at the original you may say it doesn't
19 have an approach stroke, when you microscopically look you may
20 see where the pen was laid down in the approach stroke but it
21 didn't ink for some reason, it didn't write. It would have
22 some significance to it, yes.

23 Q It is your testimony that that kind of accidental circumstance
24 could only happen once?

1 A No, accidental habits happen. Are they are a repetitive thing
2 that happens? No. If it's repetitive then it is not
3 accidental. Accidental habits, it's just like other types of
4 accidents, they happen periodically. Some people have car
5 accidents. Do they have more than one? Some people do, some
6 people don't. Accidental habits are things that often times
7 there is no explanation as to why it is like that.

8 Q Is it your testimony that if you find a characteristic in the
9 range of someone's known writing, that is if you find an
10 example or more than one example, but let's just talk about
11 one example to make it the most extreme case--if you find that
12 within their known writing you can nonetheless use that to use
13 the information about their more habitual writing to exclude
14 them?

15 A You can use the more consistent handwriting habits to say that
16 it is a significant habit that occurs. Say that I had a
17 hundred "I's" as I had and one of them does not have an
18 approach stroke and ninety-nine do, certainly it's a
19 significant thing because it's consistent in his writing. But,
20 do I put the same weight on it now? No, not if there is one
21 that doesn't have it. There is less weight. It goes to the
22 weight of the habit, so it would have less weight in my mind.
23 I would--instead of calling it a fundamental difference, I
24 would call it a significant difference. It's a difference, but
25 it does occur within the persons writing ability if it's his

1 known writing or a person's known writing. It is within their
2 writing ability.

3 Q If there were and "I" for instance, in Mr. Leiterman's known
4 writing that didn't have an approach stroke, would you still
5 be saying that it is highly probable that he would did not
6 make that writing on the phonebook?

7 A Yes, I would because I have a number; I believe I counted them
8 and I don't know what the number was, eight, nine, ten,
9 substantial significant difference. So now, if I had ten
10 before and now I have one, it is still a substantial
11 significant difference but now I do have one that's within the
12 range that has different weight. I still have nine fundamental
13 significant difference. The criteria that I use--criteria
14 generally accepted is that you have substantial significant
15 difference. Substantial to me, substantial to most people I
16 would think, if you have fifteen or sixteen letters in a name
17 and you have nine of them that are significantly different, I
18 think that would still be substantial. In my mind, that would
19 be.

20 Q Can you go ahead and just list for me--and you have already
21 spent some time explaining all of these, but can you go
22 through and give me a list of what characteristics you are
23 basing your opinion on?

24 A Yes. First off, we can start with the "M", the capital "M",
25 both in "Muskegon" and in the word "Mixer". The formation of

1 it--starting with no approach stroke, the formation of it
2 being tall and narrow, different than the formations of the
3 knowns; different proportions, different formation. No
4 approach stroke. Always an approach stroke in the known. The
5 "U" in "Muskegon", narrower and taller and no approach stroke
6 in the question. It is narrower and taller than the "U's"--
7 initial stroke--the initial letter "U's" in the known writing
8 and all the initial stroke "U's" in the known writing have an
9 approach stroke. The formation and the internal proportion of
10 the "S", the lower case "S"; the "S" in the known-in the
11 question is narrower than in the known. The loop portion is
12 proportionally covers a much larger portion of the letter,
13 about three fourths of the letter as compared to the known
14 where it generally doesn't loop much at all and if it does it
15 may look a third of the height of the letter instead of three
16 fourths of the letter. The formation and internal proportion
17 of the "K"; the proportion between staff and the loop bowl
18 portion of the "K", the formation of the bowl with, again,
19 the big loop that occurs in the approach stroke and the
20 connecting stroke and it goes on through. The formation and
21 internal proportion of the "G", the lower case "G" where you
22 have this rather large looping formation to begin with that
23 loops the first part of that. You have a bowl that is smaller
24 than in the known writing, generally smaller. The known
25 writing is elongated of the bowl of the "G". The lower

extender of the "G" in "Muskegon", the proportion of the size
of the bowl and the lower extender. In the internal proportion
of the lower extender being a little wider than what happens
all the way up--a little wider all the way up than what
happens in the known and the return position where the ending
stroke of the lower case "G" moves off to make the "E", that
portion--that return portion actually touches the bowl of the
"G". In the known writings every internal "G" is cut off well
below that bowl. The majority are well below at least the half
way point. So are skewed up the half way--known go the halfway
point where they get close to touching the bowl of the "G".
The "O" is a large loop. Not as significant as the other ones
there. The proportion between the size of the "O" and the
proportion of the size of the "N" in the word "Muskegon" "e-g-
o-n" is proportionally different than it is in the known
writings. The fact that the "N" ends abruptly, doesn't taper
off to the right, doesn't taper off to the left, doesn't
taper, it just stops. In all of the knowns it tapers off to
the right, in every known. We covered the "M" in "Mixer". The
"I" in "Mixer"; long and narrow coming down--the "I" stroke long
and narrow. The "I" starts at the top and goes down. No
approach stroke, no hint of an approach stroke, not even a
little one at the very top, the tip. It starts and it moves
down. The long "I" dot, it's up directly, up away from the
"I". Spatially it moves almost--when you measure that length

1 of the "I" dot it is moving up and away from the "I" before it
2 slightly hooks to the right. It is almost the same length as
3 the staff of the "I", never occurs in the known writing. The
4 abrupt ending on the "R" in "Mixer"--stops abruptly, does not
5 taper, doesn't move, that's another habit. Those are basically
6 the significant difference I've found; some fundamental
7 differences.

8 Q Which are the fundamental differences?

9 A Fundamental differences deal with the direction of the stroke.
10 The movement of the hand. A fundamental difference would be
11 were the hand moves differently. A fundamental difference
12 would be the looping--the looping portion of the "K". In all of
13 the knowns, it comes down and hooks back to the right. A
14 fundamental difference is a different movement of the writing
15 arm or hand, whatever you write with. Same with the "S"--
16 fundamental difference--a fundamental difference is the
17 looping portion, the capping portion on the "G". Those are
18 fundamental differences that occur.

19 Q You indicated that you have arrived at a conclusion--you
20 arrived at an opinion before you received the jail letters?

21 A That's correct.

22 Q Did you write a report?

23 A No.

24 Q Why didn't you write a report?

- 1 A My client didn't ask for a report. My client asked for a
2 verbal--of my opinion--I gave a verbal. If the client doesn't
3 ask for a report, we don't write it. It is a matter of
4 monetary. If I do a report in this particular case, because
5 you are talking about all of the writings that I had, you are
6 talking in the neighborhood of an hour and a half to two hours
7 of time billed a two twenty-five an hour. If the client would
8 have said give me a report we would have a typed a report and
9 prepared one.
- 10 Q Isn't there another reason why you don't do a reports?
- 11 A A client asked or doesn't ask that is the reason why I, in
12 private practice do or don't do a report. If a client wants a
13 report, we do it. If a client doesn't want a report, we don't
14 do it. They're the ones paying the bill. There is no other
15 reason to do or not to do a report except for the bill paying.
- 16 Q There--there was no writing report that I could have reviewed
17 before today?
- 18 A None that I prepared, no.
- 19 Q Do you write notes?
- 20 A Yeap.
- 21 Q Did you give those to Mr. Gabry?
- 22 A No. I showed him some of my notes when we had a meeting and we
23 discussed items, I never gave him a copy. He never asked for a
24 copy. If he wanted a copy, I would have given it to him.
- 25 Q I don't have any further questions, thank you.

1 THE COURT: Anything further, Mr. Gabry?

2 RE-DIRECT EXAMINATION

3 BY MR. GABRY

4 Q I just want to cover for a few minutes, when Mr. Hiller
5 started his questions he started talking about different
6 positions, different areas of confinement, all of the other
7 possible factors that may impact writing.

8 A Yes.

9 Q As I was that, the question that I had is, if we look at that
10 in the alternative, in other words, if certain factors were
11 given to you, would you be able to look at this question and
12 then this known would you be able to change certain factors in
13 this known to make it something it isn't?

14 A No, a document examiner—a forensic document examiner is
15 someone who examines the evidence. You don't draw conclusions
16 about what impacted the writing or may have impacted the
17 writing. You examine the question, you examine the knowns. You
18 may have differences between the question and the known and
19 you may say, I have differences, but I have this factor that's
20 a problem so therefore I can't render an opinion. One of those
21 differences may be, I have a question writing, for instance a
22 signature of somebody—I may have a question signature of a
23 person from 1984, all of my known writing may be from 2005. I
24 would have to tell my client, I can't do a comparison because
25 I don't know what they wrote like in 1984. Those are factors.

1 You don't say well okay, I can see the differences here
2 between the question and the known are because it's twenty
3 years later or I would see differences that would tell me that
4 as you get older you start adding connecting strokes or you
5 start taking them away or you start stopping abruptly. You
6 can't factor that in because nobody knows what happens. I've
7 seen writing of young people, I've seen writing of middle-age,
8 I've seen writing of elderly people. I've seen writing of
9 middle age and elderly that has changed drastically. Some
10 people's writing is consistent. I've seen people who write
11 have written consistently from the '40's right on up to the
12 '90's.

13 Q Would it be appropriate for document examiner to look at
14 questioned documents, look at knowns, and say, you know I
15 could make this known fit if I assume they couldn't have a
16 full arm motion? Can you--

17 A If a document examiner did that, in my opinion, they wouldn't
18 be creditable to their trait. They wouldn't be creditable to
19 the art or science, whatever you want to call it, to the
20 document examination. You can't add and delete things and say
21 I can do that because of this that or the other thing. Your
22 job as a document examiner is to examine the evidence. It's
23 similar to any forensic examiner. It's the job of a
24 fingerprint examiner to examine the evidence. It's not to say,
25 the fingerprints have ten points of identification in the

1 question and two that don't agree, so I'll white out those two
2 and say it's this person. You can't do that. You can't do that
3 with known writing and question writing. Either the evidence
4 is there and presents itself, or the evidence is not there and
5 does not present itself. If you have some--if the evidence
6 isn't there and you have some fabrication in your mind that if
7 I delete something or add something then it's going to fit,
8 your opinion should be no conclusion because they're not
9 there. You can't change the question and change the known to
10 fit the results you're shooting for. You need to independently
11 examine the evidence, render an opinion as I've done from 1975
12 to this day. I've told police officers, I've told prosecutors,
13 I've told clients; civil and criminal, I will examine the
14 evidence; I will give you the opinion. If it helps your case,
15 use it. If it hurts your case, that's up to you. But I am
16 going to tell you what the facts say. It's the same way—it
17 should be the same way for any document examiner.

18 Q Is that what you've done in this case; tell us what the facts
19 tell you?

20 A Absolutely. I have used the knowledge and experience I've had
21 in putting the weight on the handwriting habits, My training,
22 my experience to put the weight—what is a significant habit,
23 what is not a significant habit. I've put them together—I've
24 tried to demonstrate to the jury the findings that I've
25 observed. The reason I've rendered my opinion is based on

1 these significant and many fundamental differences between the
2 known writings.

3 Q And that's what you were retained to do, was to look at it and
4 tell me what you thought?

5 A Absolutely. I was retained to examine this and give you an
6 opinion or basically tell you what my thoughts were on this,
7 yes.

8 Q Mr. Hiller's questions about notes and reports; as a result of
9 attempting to obtain these notes, attempting to determine
10 what the opinion may have been based on that was provided to
11 us, have we had a luxury of significant period of time to
12 meet, to go over this in detail , to discuss further?

13 A Not what I would have preferred, no. Some of the known
14 writings I just got a couple of days ago. You and I met on one
15 occasion, after my first initial examination. We set and we
16 met in my office. I explained to you what my findings were. I
17 explained to you some of the reasons for my findings. I also
18 explained that I needed to get the originals of this notebook.
19 I explained to you that I would preferably like to get
20 Lieutenant Riley's notes because for the life of me I don't
21 know what he is basing this opinion on. I would like to know--

22 Q That's why you requested—that's why I tried to obtain those
23 notes, correct?

24 A Absolutely. If I would have examined this writing and
25 everything agreed, I wouldn't have told you I needed the

1 original of this notebook and I certainly wouldn't have had to
2 see anybodies notes, because my opinion would have been the
3 same. If it's the same, I don't nee to see what their basing
4 it on. I need to know because everything is different and I
5 need to know, in his notes--can his notes explain to me what
6 observations he made that he was able to render this opinion.
7 His notes couldn't tell me that, by the way, because what I
8 saw in the notes, I did not see similarities that he was
9 pointing to, to call similarities. Also, some of his notes had
10 similarities on a "K", similarities on a "U" that were not
11 known writing-reported known writing. They were known writing
12 of, I think--

13 Q If--

14 A --of Solly.

15 Q In the sub-set--what he called the sub-set.

16 A okay. Apparently it's-auh--yeah.

17 MR. GABRY: Thank you, nothing further, your Honor.

18 THE COURT: Further questions?

19 RE-CROSS EXAMINATION

20 BY MR. HILLER

21 Q You are not testifying that the reason you did not do a report
22 is because you didn't have time, right? The reason you didn't
23 do a report is because you weren't ask to.

24 Q The reason I didn't do a report is--there is one thing, I was
25 not asked to. Clients pay the bill by the hours I put in. They

don't pay for the opinions, they don't pay for how I examine or don't examine. They pay for the hours I put in. A report takes time, they pay for that. If the client would have asked for it, I would have prepared it and I would have billed him for whatever time it took me.

MR. HILLER: Okay. Nothing further.

THE COURT: You may step down, sir, you are excused.

THE WITNESS: I'm excused, thank you, your Honor.

(witness excused at 11:50 a.m.)

THE COURT: Call your next witness.

MR. GABRY: Thank you, your Honor, I will call Bruce

THE COURT: Face the clerk, raise your right hand and
be sworn.

THE COURT CLERK: Do you swear or affirm to tell the truth. the whole truth and nothing but the truth?

MR. BRUCE FINEKBEINER: I do.

(witness sworn at 11:51 a.m.)

THE COURT: Have a seat right here, sir. State and
spell both your first and last names, please.

THE WITNESS: My name is Bruce B-r-u-c-e E, for
Edward and Finkbeiner F-i-n-k-b-e-i-n-e-r.

THE COURT: Okay, Mr. Gabry.

MR. GABRY: Thank you.

BRUCE FINKBEINER

1 DIRECT EXAMINATION

2 BY MR. GABRY

3 Q Mr. Finkbeiner, could you introduce yourself to the jury by
4 way of, roughly, where you're living and what you do for a
5 living now?

6 A Right now I live in the Saline area in a little village called
7 Bridgewater. I am in real estate and I have been in the real
8 estate area for nineteen years. I'm originally from Saline,
9 graduated from Saline, graduated from Eastern. I've lived on
10 the East Coast and West Coast, ran a restaurant business and
11 then came back and got in real estate about nineteen years
12 ago.

13 Q Where you born in Saline?

14 A Yes, I was.

15 Q As you grew up; did you come to know a person by the name of
16 George Kenneth Harvey?

17 A Yes. George Kenneth Harvey was one of my best friends through
18 most of my early years.

19 Q As you got older and through high school, did you and Mr.
20 Harvey come together again in any kind of living arrangement
21 or--

22 A Yes, we did. I went my first year to Jackson and I think he
23 went to Eastern. The following year, I came back and I--now,
24 through my transcripts, I went to Washtenaw and that. Ken and

1 I lived together in '68--the fall of '68 and the spring of '69
2 in an apartment complex that was on Mansfield and Congress.
3 Q You and--I call him Ken--Mr. Harvey--
4 A Mr. Harvey.
5 Q You and Mr. Harvey were both the same age?
6 A Yes, we were.
7 Q In the fall of '68 and the spring of '69 you were living
8 where?
9 A On an apartment complex on Mansfield and South Congress.
10 Q And that would have been in what city?
11 A Ypsilanti.
12 Q Now, I realize that it is 36 years ago. I had a conversation
13 with you about trying to determine where you were living at
14 certain points in time, is that correct?
15 A This is correct.
16 Q Now in--after that conversation, did you do something yourself
17 to try to refresh your memory as to those locations?
18 A Yes, I did. The clarification came when I went and pulled my
19 transcripts from Eastern Michigan University. Pulling my
20 transcripts put together a better time frame for me and that's
21 when I came to. Originally when I first was questioned, I
22 thought it was a different time frame.
23 Q But now, when you look at your transcripts and you realize
24 where you were going to school, you're able to testify under
25 oath that until the--

1 MR. HILLER: Objection to the leading, your Honor.

2 MR. GABRY: All right.

3 BY MR. GABRY

4 Q Up until what time you lived at this apartment at Congress and
5 Mansfield?

6 A '68 and '69 and the foll-- do you want me to proceed the
7 following fall? The following fall I moved in with Ken's
8 cousin who is Gary Leiterman. I lived with Gary for a short
9 period of time.

10 Q So, that would have been the fall of 1969?

11 A Yes, I believe so.

12 Q Do you recall where this--where this place was, what this
13 place was?

14 A It was in Westfield-- I mean Westland and I know that I used
15 to take Michigan Ave. (sic.) and I can't remember all the
16 streets but it was in Westland because I worked at Plymouth
17 State Home and Training School and I used to take Newburg
18 across, I believe.

19 Q When you were living there--how did it come about that you
20 moved in with Mr. Leiterman?

21 A Through Ken--George Kenneth Harvey. Mr. Harvey and I were good
22 friends and Mr. Harvey and Mr. Leiterman are cousins and he
23 is--he gave us cheap rent.

24 Q At the time you were living--first of all, is the person you
25 know as Gary Earl Leiterman present in the Courtroom today?

1 A Yes, he is.

2 Q Would you point him out and describe what he has on for the
3 record, please?

4 A Right there.

5 Q Okay, the gentleman in the light blue shirt and the stripped
6 tie?

7 A Yes.

8 MR. GABRY: Your Honor, could the record reflect the
9 identification?

10 THE COURT: He did.

11 BY MR. GABRY

12 Q When you were living there, in Mr. Leiterman's house, do you
13 recall who else would have been living there?

14 A I know that Ken was living there. I am positive of that. It's
15 been suggested--I've heard that maybe Paul did too, but I
16 don't remember that.

17 Q Who's Paul?

18 A Paul--Paul Esper.

19 Q How is it that you know somebody by that name?

20 A I know Paul Esper because in '68 and '69, I believe we all
21 lived in that same apartment complex on Mansfield.

22 Q And you left that apartment complex to reside with Gary --

23 A I want to believe it was at the end of the summer of '69.

24 Q Do you remember where you spent the summer?

1 A I thought there, but I am not really clear on that. I worked
2 for my father who is a contractor out in Saline, and I don't
3 think I would be moving too far away from driving twenty miles
4 to work.

5 Q Okay. Would you have lived at home then?

6 A I could have. That is sort of vague. It's been a long, long
7 time.

8 Q When you were residing at the Leiterman house, your
9 recollection that Ken Harvey was there, you have no
10 recollection that Paul Esper was there?

11 A No, I really doesn't and I don't know why. It just doesn't
12 fit. I'm not saying he didn't, I just don't recollect it. At
13 that time, I worked and I had a friend that I would go and see
14 a lot at nights. She lived in Ypsilanti.

15 Q What were the sleeping arrangements or the room arrangements?

16 A I can't remember, I think we all had our own rooms. That was
17 my understanding.

18 Q Based on your rooms, you think all--

19 A Yeah.

20 Q That would mean, Mr. Leiterman, Mr. Harvey and yourself?

21 A Yes.

22 Q Do you remember who moved out first as it would pertain to
23 yourself and Mr. Harvey?

24 A I believe I probably did.

1 Q Do you ever recall there being some kind of a shooting range
2 set up in your home where you were living?

3 A No, I don't.

4 Q Do you remember if Mr. Leiterman had any animals while you
5 were residing in his home?

6 A Not that I can recollect.

7 Q Did you spend a lot of time with Mr. Leiterman?

8 A No, I did not.

9 Q Would you ever do anything outside of the home with him?

10 A Not to my recollection, but that I can recollect. I've been
11 asked that several times and I do not remember outside of the
12 home?

13 Q Do you remember anything about the housekeeping habits of the
14 men in the home?

15 A I don't think we were tremendously dirty, but I can't really--
16 so there weren't things always laying around, but we were
17 college kids.

18 MR. GABRY: Nothing further, your Honor.

19 THE COURT: Cross examination?

20 CROSS EXAMINATION

21 BY MR. HILLER

22 Q Good morning Mr. Finkbeiner.

23 A Good morning.

24 Q Now, Mr. Finkbeiner, how long have you known Ken Harvey before
25 you moved into Gary Leiterman's house?

1 A A lot of my life--most of my life.

2 Q Close friends?

3 A Very close friends.

4 Q Okay. Can you tell me about this house? What was the condition
5 when you moved in?

6 A I think it was relatively new at the time. That's what striked
7 (sic.) me, it was nice house. I can't visualize and I'm in
8 real estate and I can't visualize it more than--I think it
9 might have been a ranch, but then I remembered it having a
10 family room off the kitchen.

11 Q What about the lawn? Did it have a lawn?

12 A Yeah, I'm sure it was on a lawn. I don't know how big it was.
13 I can't recollect that.

14 Q Was the lawn in--that is was the lawn an established lawn when
15 you moved in?

16 A I believe so, but I'm--I can't say that for sure.

17 Q How long did you live there?

18 A Maybe three months.

19 Q How much was the rent?

20 A I think it was twenty-five--it was relatively cheap. I can't
21 remember the exact amount but I had been paying fifty dollars
22 the year before and I think it was cheaper than that.

23 Q So twenty five bucks a month and you stayed there for three
24 months, you say?

25 A Yeah, three or four months.

1 Q Why did you leave?

2 A I have a --I had a girlfriend in Ypsilanti and I was just more
3 comfortable living closer to that and going back to school. I
4 went back to school in the winter of '70 to Washtenaw and it
5 was closer.

6 Q You recall moving in, in the fall of 1969?

7 A It's a long time ago and I am not sure of the date. How I
8 transpired that it may have been that--my brother had
9 discharged from the service in '69 and we both went down to
10 the State Home and Training School and applied for a job and
11 he wasn't discharged until the middle of August or the end of
12 August.

13 Q Of '69?

14 A Right.

15 Q When you were living there was Mr. Harvey living there the
16 whole time--Ken Harvey?

17 A Yes.

18 Q The whole time?

19 A I believe so, I'm not positive. It's been a long, long time.

20 Q Do you--did you go to George Harvey's wedding?

21 A I believe so.

22 Q You believe so, you don't remember?

23 A No.

24 Q Did George Harvey get married while you guys were living
25 together?

1 A I know that he was dating Mary Anne. I don't know that they
2 got married while we were living together, I can't say he did
3 for sure, but it may have been.

4 Q Would you agree that George Harvey's wedding day would be more
5 significant to him than it is to you?

6 A Exactly.

7 Q Are you married, sir?

8 A Yes, I am.

9 Q How long have you been married?

10 A A little over fourteen years.

11 Q Do you know your anniversary date?

12 A Yes, I do.

13 Mr. HILLER: I don't have any further questions, thank
14 you.

15 THE COURT: Any further questions?

16 RE-DIRECT EXAMINATION

17 BY MR. GABRY:

18 Q I realize it was a long time ago, but do you remember where
19 you were on March 20, 1969?

20 MR. HILLER: Beyond the scope of cross, your Honor.

21 THE COURT: It is overruled, he can answer it.

22 THE WITNESS: No, I don't.

23 MR. GABRY: Nothing further, your Honor.

24 THE COURT: Anything further? You may step down, you
25 are excused, Mr. Finkbeiner.

1 THE WITNESS: Thank you.

2 (witness excused at 12:03 p.m.)

3 THE COURT: Call your next witness.

4 MR. GABRY: Thanks, your Honor.

5 THE COURT: Sir would you stop there, face this lady
6 and raise your right hand.

7 THE COURT CLERK: Do you swear or affirm to tell the
8 truth, the whole truth and nothing but the truth?

9 MR. MESSINGHAM: I do.

10 (witness sworn at 12:03 a.m.)

11 THE COURT: Have a seat right here, sir. Sir, state
12 and spell both your first and last name.

13 THE WITNESS: George, G-e-o-r-g-e , my middle name is
14 Edward, E-d-w-a-r-d and Messingham is M-e-s-s-i-n-g-h-a-m.

15 THE COURT: Okay. Mr. Gabry.

16 MR. GABRY: Thank you.

17 GEORGE MESSINGHAM

18 DIRECT EXAMINATION

19 BY MR. GABRY

20 Q Mr. Messingham, could you tell the jury what city, generally,
21 you reside in now?

22 A I live in Wayne Michigan and I've live there, and Westland,
23 Michigan, since I was born actually.

24 Q So, you were born in Wayne County?

25 A Yeah.

1 Q You grew up in the Wayne-Westland area?

2 A Yeah, it was Macon then--Macon Township back then.

3 Q Back in 1969, do you remember where you were living?

4 A I was living in Westland on Rickham--not Rickham but Highman.

5 Q Who was living there on Highman back in 1969?

6 A My wife--my first wife.

7 Q And her name was?

8 A Trudy--Trudy Cathleen Messingham.

9 Q Mr. Messingham, while you were living there in that area on

10 Highman in Westland, did you know someone by the name of Gary

11 Earl Leiterman?

12 A I certainly did.

13 Q Do you see Gary Leiterman present in the courtroom today?

14 A Yeah, he's right over there.

15 Q Can you describe what he has so the Court knows who you are

16 referring to.

17 A Describe what he has on?

18 Q Does he have a sports coat on?

19 A Yeah, it looks like it.

20 Q A tie?

21 A Yeah.

22 MR. GABRY: Your Honor, can the record reflect the

23 identification?

24 THE COURT: He did.

25 BY MR. GABRY

1 Q Mr. Messingham can you tell the jury how you got to know Gary
2 Earl Leiterman?

3 A Okay. We were--I was working at 3-M. I just got out of the
4 Navy early before that time and they hired Gary and we go to--
5 we worked the same shift and we started talking and I was a
6 hunter and he was a hunter and I needed a hunting partner so
7 we closer and closer, ya know, friends. We used to do things
8 after we got off our shift.

9 Q What kind of shift would you have been working then?

10 A We were mixing glues up--

11 Q What shift?

12 A Midnight shift.

13 Q The midnight shift?

14 A Yeah

15 Q Would you say that at that time you were already a hunter?

16 A Oh yeah, I hunted all my life.

17 Q What kind of hunting did you do?

18 A Deer hunting, pheasant, quail, crow--you name it, I hunted
19 them

20 Q Did you hunt with a hand gun?

21 A Oh yeah.

22 Q As well as long guns?

23 A Yeah. Back then you could have a handgun on you as long as it
24 was exposed.

1 Q At that point in time back when you met Gary Leiterman, how
2 long had you--were you married?

3 A Yeah, I was married then.

4 Q Do you know how long you would have been married then?

5 A I think I was married--let's see I was married in '65. I don't
6 even remember, I mean actually--I think I met Gary in '66. I
7 had only been married a short time, I think.

8 Q All right.

9 A To my recollection anyway.

10 Q Now, did there come a time where Mr. Leiterman moved close to
11 you?

12 A Yeah, he was renting somewhere and that did not stop us from
13 hunting all the time because he would come pick me up and we
14 would head out. After I bought the house over there, I think
15 maybe a year or two later, he bought one two streets over,
16 which made it real convenient because at that time we all had
17 our hunting dogs and we used to run out hunting dogs together
18 also, in the off season. We did the same thing every year. We
19 hunted. From crows to pheasant to deer, we did it with bow and
20 arrows, we did it with rifle. We did it with black powder too,
21 I think.

22 Q All right. Did you own a Ruger handgun?

23 A Yes, I owned two of them. One of them my wife has right now--
24 it's a 22 magnum and I have a 357 Ruger.

- 1 Q Are you aware of Mr. Leiterman purchasing a handgun similar to
2 either of those?
- 3 A Yeah, he bought a 22-magnum. He didn't--it was cheaper to
4 shoot those than the 357's. I think that's why he decided on
5 the 22 mag(sic.).
- 6 Q Would you see him use that handgun?
- 7 A Oh, yeah. I've seen him use it out in the woods. We shot--my
8 wife's dad had a place about three or four miles from us out
9 on Lily Road and we use to go out there and shoot all the
10 time.
- 11 Q Did you have occasion to visit with Mr. Leiterman after he
12 moved into his home on Rickham?
- 13 A Certainly, yeah.
- 14 Q Would he visit with you?
- 15 A Certainly.
- 16 Q Can you characterize for the jury, once he moved into the
17 house, how frequently you would see him at your home?
- 18 A Well I would say probably about three to four times a week.
19 Some weeks it would seem like every night, ya know. I mean we
20 were really right. I mean, ya know, we were chumming together.
21 He was kind of like my best friend at the time.
- 22 Q Did you eat dinner together?
- 23 A Oh many times.
- 24 Q Where did you eat dinner?
- 25 A I'm sorry.

1 Q Where?
2 A At my house.
3 Q Who would come over?
4 A Gary. He's always there for chow. It seemed like he would
5 always show up for chow.
6 Q Now, you mentioned that he had dogs.
7 A Right. In fact, he bought me one dog.
8 Q Had you ever been over his house when he had those dogs?
9 A Certainly, many times.
10 Q Where did he keep them?
11 A In the basement. If you're talking about the house on, I think
12 it was Rickham--North or South Rickham road, he kept them all
13 over. He would chain them up. In fact, the dog chewed up, a
14 lot of times, his shoes, his clothes. Gary just kind of let
15 them have the roam, ya know.
16 Q What about his car?
17 A I'm sorry.
18 Q What about his car, did the dog do anything to those?
19 A I remember one time in particular, his boss was flying in from
20 somewhere and he had a brand new Ford, if I remember right,
21 and he had left the damn dog in there, one of his hunting
22 dogs, and he actually chewed most of the passenger seat up.
23 His boss--he had to go pick up his boss with a company car at
24 the airport and he stopped over and I thought, Jesus, what are
25 you going to tell him?

1 Q All right. Do you recall Gary Leiterman ever setting up a
2 target range in his basement?

3 A No, I don't remember that. We could just hop in our cars,
4 drive three miles and shoot all that we wanted. Back then, ya
5 know,--actually we probably didn't even have to go that far.

6 Q That's all I have, thank you.

7 THE COURT: Cross examination.

8 CROSS EXAMINATION

9 BY MR. HILLER

10 Q Good morning.

11 A 'morning (sic.)

12 Q How long has it been since you've seen Gary Leiterman?

13 A I'm sorry.

14 Q How long has it been since you've seen Gary Leiterman?

15 A Well, I was just talking to a friend of ours that went
16 hunting--I think our last hunting trip and he said it was
17 around 1979 or 1980.

18 Q Is that what you remember or is that just what someone's told
19 you?

20 A Well, no--all four of us went up hunting and I have a real bad
21 time now with dates, ya know. Number one because I'm older and
22 I have a medical problem. I was in a coma and I've lost a lot
23 of that memory in my head.

24 Q It's been a long time though?

25 A Right.

1 Q How often would you go hunting with him?

2 A Well, first--I think bird season opened October 20th, we've
3 usually go squirrel hunting first and that opened September
4 15th --I remember these dates pretty good, and actually October
5 1st we'd start bow and arrow hunting also, When we went up
6 north we would take our handguns, rifles and also our bow and
7 arrows. But, of course you couldn't have the-- at that time
8 you could carry a handgun with your bow and arrow but you
9 can't anymore. So--uh-- we went probably-- we went every
10 weekend-- uh--every weekend that both of us could get away --
11 uh--

12 Q Just in the fall or did you hunt other times of the year too?

13 A Well we hunted rabbit--no we hunted rabbit--we both had shot
14 guns, double barrel shot guns. I think he had a double barrel.
15 I know I gave him--I made him a single barrel and I know he
16 had that. I shouldn't say that I know he had a double barrel.

17 Q You made him a single barrel?

18 A Yeah, I customized it. I shaped it, checked it, sawed off the
19 barrel and we used tat for rabbit.

20 Q You have to forgive me, I'm not a hunter. When you do hunt
21 rabbit?

22 A When? Well I think the season opens up September--October 20th
23 'till March--March 31st, something like that. We would get out
24 any time we could, usually it was after a snow, was the best

1 time. If I was work or he wasn't doing something, we would
2 hunt. We hunted a lot.

3 Q What other things did you hunt? You hunted rabbit, you hunted
4 deer with a bow--

5 A Squirrel--

6 Q When do you hunt squirrel?

7 A Beg your pardon.

8 Q When do you hunt squirrel, what time of year?

9 A Same time as you do with pheasant--small game. I think they
10 start--wait a minute, I take that back. Squirrel hunting stats
11 September 15th and pheasant is October 20th. So, that kept us
12 pretty busy. In between those time we would take our bows up
13 and would go bow and arrow hunting for deer.

14 Q Anything else you hunted?

15 A Yeah we hunted crows in the summer, I remember. I remember
16 cutting my arm setting up decoys. Well--that's about--we
17 hunted--wait a minute we hunted fox one time.

18 Q What time a year would you hunt fox?

19 A Got me on there. I think it was a special season for it but I
20 can't remember that one. In fact, Gary had a fox. We stopped
21 hunting fox because Gary had one as a pet.

22 Q I'm sorry, tell me that again. Gary had a pet fox?

23 A A fox. Yeah, he had a fox there for a while as a pet. I don't
24 remember where he got it but after that we stopped hunting fox
25 because he had it as a pup--like a dog.

1 Q How long did he have a fox?

2 A Well, hell, I couldn't tell you that. For quite a while--he
3 got pretty big, the fox did, he matured and I remember he had
4 a kennel in the back built up and then one day he took it and
5 released it out in the wild.

6 Q But, he did have a kennel at his house?

7 A It was a make shift one. It seems like it wasn't a real spiffy
8 one. It was made out of chicken wire. That's about all I
9 remember.

10 Q Do you recall if he ever had a kennel out back with a poured
11 cement floor?

12 A He might have, but I don't remember.

13 Q You don't remember?

14 A No.

15 Q When you met Gary, you were working at 3-M?

16 A Right.

17 Q How long were you working at 3-M?

18 A Probably a year, I would say. No more. I went to work at
19 DuPont's and when I had my '66 corvette, so I figure probably
20 a year.

21 Q So that was '66?

22 A '65 or '66. I think Gary had just got out of the service. I
23 was already out. I had been out a year and a half, two years.
24 It is hard for me to remember that. I just don't remember--it
25 just don't come to my mind.

1 Q Did you guys hit it off pretty quit--did he start working at
2 3-M after or was it before?

3 A It was after me. I was a steward and union steward when he
4 came aboard. I remember that because he was late a lot.

5 Q The two of you kind of hit it off because of your mutual
6 interests, is that it?

7 A I didn't hear that last part.

8 Q The two of you hit it off because of your mutual interests?

9 A Yes, I would say so. I think he got me going on the bow and
10 arrow business, and I did on the hunting.

11 Q Was it all hunting or did you fish?

12 A Oh yeah we fished. He got to be a real good fisherman, a trout
13 fisherman. In fact, I remember him going up north to the Au
14 Sable and staying there some where for a week as a guide--a
15 guide that taught him how to fish with a fly rod. We fished in
16 creeks in stuff. We had our own little secret spots in some of
17 the creeks up north. I had an aluminum boat at the time and we
18 fished the lakes in this area.

19 Q More hunting than fishing?

20 A I think we had more interests in the summer. I mean, there was
21 more to do. I really couldn't answer that. We never--I never
22 really counted the times. We were pretty busy every year. I
23 was the only one married and I remember we did a lot of
24 hunting and fishing that's all. I've done it all my life.

25 Q Did you have anything to do with the murder of Jane Mixer?

1 A I'm sorry, I didn't hear you again.

2 Q Did you have anything to do with the murder of Jane Mixer.

3 A Certainly not.

4 MR. HILLER: No further questions.

5 THE COURT: Any further questions, Mr. Gabry?

6 MR. GABRY: No, your Honor.

7 THE COURT: You may step down, you're excused sir.

8 THE WITNESS: All right.

9 (witness excused at 12:22 p.m.)

10 THE COURT: Any further witnesses before your next
11 break?

12 MR. GABRY: We have one, your Honor.

13 THE COURT: Call them.

14 MR. GABRY: Your Honor, we call Trudy Messingham.

15 THE COURT: Please walk up here to the clerk ma'am,
16 and raise your right hand. There you go.

17 THE COURT CLERK: Do you swear or affirm to tell the
18 truth, the whole truth and nothing but the truth?

19 MS. MESSINGHAM: I do.

20 (witness sworn at 12:23 a.m.)

21 THE COURT: Have a seat there. State and spell your
22 first and last names.

23 THE WITNESS: Trudy Messingham, T-r-u-d-y M-e-s-s-i-
24 n-g-h-a-m.

25 THE COURT: Okay. Mr. Gabry.

1 MR. GABRY: Thank you, your Honor.

2 TRUDY MESSINGHAM

3 DIRECT EXAMINATION

4 BY MR. GABRY

5 Q Ma'am, would you please introduce yourself to the jury and
6 tell them what you do?

7 A I am a research secretary at the University of Michigan.

8 Q How long have you been there?

9 A About thirteen years.

10 Q What city do you live in?

11 A In Westland, Michigan.

12 Q How long have you live in Westland?

13 A All my life--61 years.

14 Q How long have you lived in your present location?

15 A Since 1965.

16 Q And what was that--what is that?

17 A The address? 38203 Highman.

18 Q And that is in Westland, Michigan?

19 A Correct.

20 Q Do you have a house there, an apartment or what?

21 A A house?

22 Q A single family house? Back when you moved into that house who
23 did you move in with?

24 A My husband George E. Messingham.

1 Q The gentleman that just walked out of the courtroom and you
2 two passed, that was--

3 A Correct.

4 Q --that was your husband at the time?

5 A Correct.

6 Q And you two are no longer married?

7 A Correct.

8 Q And you two have been divorced how long?

9 A Since 1993.

10 Q Do you remember where you were living prior to moving to the
11 house on Highman?

12 A We lived in a n apartment on Wayne Road in Wayne, Michigan. I
13 think the address was 5290.

14 Q At some point in time did you come to know a person by the
15 name of Gary Earl Leiterman?

16 A Yes, I did.

17 Q Do you see the person that you know by that name present in
18 the courtroom?

19 A I do.

20 Q Would you point him out and describe what he has on for the
21 Court?

22 A A blue tie.

23 MR. GABRY: Your Honor, could the record reflect the
24 identification?

25 THE COURT: She did.

1 BY MR. GABRY

2 Q How did you get to know this man?

3 A Gary was a friend of my husbands and they had gone to school
4 together and through that association they had worked together
5 and Gary also bought a house two streets over from where we
6 bought our house, so we were neighbors.

7 Q Did you know Gary before he bought the house?

8 A Yes, I did.

9 Q How is it that he ended up moving two streets away from you?

10 MR. HILLER: Your Honor, I am not sure if that would
11 call for hearsay.

12 MR. GABRY: If you know.

13 THE COURT: I will let her answer.

14 THE WITNESS: I would think that it--my thought is
15 that he thought it was a good deal at the time. He wanted to
16 get a house that was a nice location and he had friends a
17 couple streets over--

18 BY MR. GABRY

19 Q Those friends were?

20 A My husband and myself.

21 Q There's been some evidence submitted indicating that a
22 mortgage occurred December 2, 1968 when Mr. Leiterman
23 purchased the house on Rickham. Would that be consistent with
24 your memory?

25 A Yes.

1 Q And so then after the months following when he moved in --the
2 following January, February, March, April, throughout 1969,
3 did you have contact with Mr. Leiterman?
4 A Yes, I did.
5 Q How frequently might you have contact with him, after he moved
6 into the house and he was two streets away.
7 A Actually quite frequently. Him being a bachelor, he would hang
8 out at our house. I used to kid him that if I were cooking and
9 he smelled food, he would head over to our house.
10 Q Was he a frequent guest for dinner?
11 A Yes, he was a frequent guest for dinner.
12 Q After dinner would he remain around the home?
13 A Yes. We would sit and talk. You know, he--we would just sit
14 and gab about everything.
15 Q You indicated also--he and your husband had an interest in
16 hunting?
17 A Yes.
18 Q Would you hunt with them at all?
19 A I never hunted with them, no.
20 Q Did you own a gun?
21 A Yes, I did.
22 Q What kind of gun did you own?
23 A I had a 22-Ruger single six.
24 Q Why did you have a gun?

1 A Well, I --when I first married my husband, we would hunt up
2 north and it was a good deal, when you were hunting up north,
3 to have a side arm also.

4 Q So, it was for that purpose that you bought it and you
5 registered it--your husband registered it and--now, we know
6 about hunting but did Mr. Leiterman have any other hobbies
7 that you were aware of back in 1969?

8 A The ones that come, I guess most to my know--my mind was he
9 was a nature lover. He used to like to go out to the woods. He
10 would take photos of trees and beautiful scenery and so on.

11 Q What would he do with those photo's?

12 A I don't know what he would do with them specifically. I know
13 he would always bring them over and show us.

14 Q These would be landscape scenes?

15 A Landscape scenes, you know, juts beautiful things.

16 Q During the early part of 1969, as that year wound on, would
17 you see Gary on, I don't know, every other day, every third
18 day, how often would you see Gary?

19 A In 1969?

20 Q After he moved in--

21 A Oh, after he moved in.

22 Q The first year in his house.

23 A We saw him pretty frequently. I would say at least a couple
24 times a week.

1 Q Did you ever notice a change in his mood or demeanor that
2 stuck out to you as being unusual or of concern?

3 A No.

4 Q When Mr. Leiterman would hang out at your house after dinner,
5 what kinds of things were topics of discussion?

6 A Everything. Things like his work. He would talk about--at that
7 time he worked with my husband--I believe he still worked with
8 my husband in 1969. Ya know, they would just talk about work
9 things. We would discuss books that he had read and I had
10 read.

11 Q He read a lot?

12 MR. HILLER: Objection, hearsay.

13 BY MR. GABRY

14 Q Did you discuss a lot of books with him?

15 A I discussed books with him.

16 Q Did there come a time when Mr. Leiterman moved away from the
17 neighborhood?

18 A Yes.

19 Q Do you remember roughly when that was? If you don't recall
20 that's fine.

21 A I would say maybe '73, '74.

22 Q Is that what you remember? Okay. Did you remain in contact
23 with him after he moved away? Do you know if he was ever
24 married.

1 A He--when he married Solly it was, I think, '75. I was probably
2 in '75.

3 Q So he was married?

4 A Yes.

5 Q Is married?

6 A Is married.

7 Q Do they have any children?

8 A They have adopted children.

9 MR. GABRY: That's all I have, your Honor.

10 THE COURT: Cross examination.

11 CROSS EXAMINATION

12 BY MR. HILLER

13 Q Good morning Ms. Messingham, how are you? Ms. Messingham, how
14 clear of a memory do you have of Gary Leiterman's moods in
15 1969?

16 A Only what I saw when he was around me. I can't speak for
17 anything other than that.

18 Q You have a clear recollection of what kind of mood he was in
19 when you would see him?

20 A Pretty much.

21 Q Are there specific instances of him being in a particular mood
22 that you can remember?

23 A As much as I can remember Gary was always in a friendly
24 generally mood.

25 Q So you're kind of generalizing about how he usually was?

1 A Yeah.

2 Q Is it your testimony that he was never angry, upset, sad?

3 A I couldn't testify to all that. I can only testify to, as I
4 just did, how I observed him.

5 Q And you're basing that upon your general recollection of him?

6 A When he was at our house--

7 Q Not specific instances you can recall?

8 A He was basically the same all the time, as I recall.

9 : MR. HILLER: Nothing further.

10 THE COURT: Any further questions, Mr. Gabry?

11 MR. GABRY: I could hear that last answer. I don't
12 know if the jury could hear.

13 THE COURT: She said, not that I recall.

14 MR. GABRY: Okay, nothing further, your Honor.

15 THE COURT: Thank you, you may step down, you are
16 excused.

17 THE WITNESS: Am I excused, thank you.

18 (witness excused at 12:34 a.m.)

19 THE COURT: We are going to break for lunch ladies
20 and gentleman. We will be in recess until two o'clock. Again,
21 you are free to go anywhere you would like for lunch, but
22 please be careful about my instruction of not being in contact
23 with any of the participants. Please go with Ms. Washington.

24 THE LEGAL CLERK: All rise, please.

25 (Court in recess at 12:35 p.m.)

1 (Court reconvenes at 2:12 p.m.)

2 THE LEGAL CLERK: The Honorable Donald E. Shelton
3 presiding.

4 THE COURT: Bring the jury.

5 THE BLLIFF: Can I have you attention. Make sure your
6 cell phones and pagers are off, please.

7 THE LEGAL CLERK: All rise for the jury, please.

8 THE COURT: Please be seated. Call your next witness.

9 MR. GABRY: Thank you, your Honor, we call Dan Krane.

10 THE COURT: Sir, raise your right hand, face the
11 clerk and be sworn.

12 THE COURT CLERK: Do you solemnly swear or affirm to
13 tell the truth, the whole truth and nothing but the truth?

14 MR. KRANE: I do.

15 (witness sworn at 2:13 p.m.)

16 THE COURT CLERK: Have a seat right up there.

17 THE COURT: State and spell your first and last
18 names.

19 THE WITNESS: My first name is Dan D-a-n and my last
20 name is Krane, K-r-a-n-e.

21 THE COURT: All right, Mr. Gabry.

22 DAN KRANE

23 DIRECT EXAMINATION

24 BY MR. GABRY

1 Q Sir, could you please introduce yourself to the jury by way of
2 telling them your present position or occupation?

3 A Yes. I am an associate professor of biological sciences at
4 Wright State University in Dayton, Ohio.

5 Q How long have you held that position as an associate
6 professor?

7 A Well, I've been a faculty member at Wright State University
8 since the fall of 1993. Initially as an assistant professor
9 and then it was four or five years after that I go promoted as
10 an associate professor.

11 Q What are your job responsibilities in what fields do you deal
12 with as an associate professor at Wright State?

13 A Well, Wright State--the faculty at Wright State are unionized
14 actually and so we have contracts that very meticulously spell
15 out our responsibilities to some extent. My responsibilities,
16 essentially, fall into three categories. About forty percent
17 of my time is supposed to be devoted to teaching, instructing
18 undergrad as well as graduate students in a variety of
19 different courses. Over the years I have been the person who
20 has taught most of the introductory freshman biology course
21 that we have for our incoming freshman biology majors. Very
22 large class of over four hundred students each time it's
23 offered, typically. I've also routinely taught, and in fact,
24 just this morning gave a lecture in the sophomore level
25 molecular genetics course. It is basically a course about the

regulation of gene expression that is also required of our
biology majors. Then I have taught a variety of additional
courses in the junior, senior and often the graduate level as
well. Sometimes in the area of population genetics, sometimes
molecular evolution; a variety of--bioinformatics is another
topic I taught some courses in as well, so, forty percent of
my time is supposed to be associated with teaching.

Approximately fifty percent is dedicated to research;
supervising the work that is done by my graduate students and
undergraduates working in my research laboratory as well as my
own, in a variety of areas, typically involving molecular
biology techniques as well as aspects of either population
genetics or molecular evolution, in a broader sense, perhaps
bioinformatics. There's an expectation that that research will
be documented in publications. In an university town like Ann
Arbor, you've probably heard the expression "publish or
perish" that definitely applies in my context as well. The
remaining ten percent is supposed to be devoted towards
service activities. It's a fairly broad defined category. It
includes giving talks to other institutions, giving talks to
community groups and such and for all intensive purposes, I
think, talks to groups such as this; to juries and attorneys
and judges, at least on occasions.

Q In what fields?

1 A Well, when I've been called to testify--actually I--actually I
2 haven't paid particularly close attention to exactly what
3 fields, but generally speaking I have been qualified as an
4 expert in the past in areas of molecular biology, population
5 genetics, statistics, forensic DNA analysis, things of that
6 nature.

7 Q What kind of--what kind of educational background do you have
8 that, first of all, enables you to obtain a position at Wright
9 State?

10 A Well, I'll begin with my undergraduate education. I have a
11 bachelor of science degree from John Carroll University,
12 excuse me, just outside of Cleveland, Ohio where I had a
13 double major in biology and chemistry. From there I went on to
14 work on a Ph.D. from Penn State University in State College,
15 Pennsylvania. After completing that work, I did some post
16 doctoral studies, fairly common in the area that I was
17 studying in. My Ph.D. is from a bio-chemistry program in a
18 cell and molecular biology department. The Post-doctorate work
19 that I did first was at Washington University in St. Louis in
20 the genetics department of the medical school there. From
21 there, went on to do some more post-doctorate work in the
22 department of organism genetic biology at Harvard in
23 Cambridge, Massachusetts. In finishing that work, I accepted a
24 faculty position at Wright State.

1 Q As it pertains to your education and your research interests,
2 your background in molecular biology relates to DNA --the
3 chemical substance DNA in what fashion? Are you associated at
4 all with the study of, what I will refer to as DNA and you can
5 use, the appropriate term, I guess.

6 A Well, I think, in fairly general terms, I see molecular
7 biology as a rather unusual discipline compared to other
8 disciplines like astronomy or physics. Molecular biology isn't
9 so much defined by the questions being asked in the
10 discipline, but rather by the tools that are used to answer a
11 variety of questions that are of general importance to the
12 study of biology. Again, unlike physics, it is not so much the
13 nature of the questions that defines the discipline, it is the
14 fact that biologists use a certain set of tools. It is a
15 rather small number of tools that are at our disposal to
16 extract DNA molecules, and other biological molecules, but
17 particularly DNA molecules. Perhaps only five or six
18 distinctly different techniques or tools we have at our
19 disposal. Molecular biologists are people who routinely use
20 some or all of those techniques. Through the course of my
21 training, I've more or less had an apprenticeship in using all
22 of those techniques. Through the course of the research that I
23 supervise and partake in now as a faculty member, we utilize
24 those techniques as well.

25 Q Have you engaged in the study of DNA--the forensic use of DNA?

1 A Well, I would say that all of the research that I have been
2 involved with and certainly those things that have been
3 published in peer reviewed journals are things that involve
4 molecular biology. Many of them are specifically involved with
5 molecular biology aspects of forensic DNA testing.

6 Q Can you give the jury an idea of the publications you've been
7 involved in that pertain to DNA, DNA analysis, molecular
8 biology as it pertains to DNA?

9 A There are a fair number. I don't have the precise count that
10 come to mind at the present time. Approximately forty times
11 that I've had work that I've been involved in published in
12 peer reviewed journals? The most recently accepted paper might
13 help answer our question directly. I was a paper that
14 approximately just two or three weeks ago, we received word
15 had been accepted for publication in a journal called The
16 Journal of Forensic Science. This particular paper describes
17 work that we've done that addresses some of the problems and
18 the issues associated with interpreting DNA profiles in mixed
19 samples; where there's more--where's there more than one
20 contributor to an evidentiary sample there's a special set of
21 problems that arise and I think it's generally accepted--it is
22 generally accepted that the interpretation of mixed samples is
23 challenging. The research that we've done has helped focus and
24 answer some of those challenges and help solve some of those
25 challenges associated with that. Again, the work that is

related to that in helping solve some of those problems will
be appearing, as I understand, in the November issue of The
Journal of Forensic Science. I've published different things
in The Journal of Forensic Science. I've published a variety
of things in other journals, but the forensic ones tend to be
in that particular journal, The Journal of Forensic Science.

Q What distinguishes the forensic ones from your other
publications?

A Well, again, I see molecular biology as a set of tools and we
use those tools to answer a variety of, I think, without
apology, interesting questions. The forensic questions are
certainly interesting, but we answer a variety of other
questions as well. I've received a fair amount of funding from
the Environmental Protection Agency, for instance, to explore
the changes in the genetic diversity in naturally occurring
populations of organisms as a response to exposure to stressor
and population and such. For instance, we found that the
genetic diversity of organisms like crayfish in streams for
instance, is directly correlated to the extent in which they
had not been exposed to pollutants in the past ten to twenty
years of living in a particular stream. That is a work that
was published in a journal whose abbreviation is STAC, its
The Society of Toxicology and Analytical Chemistry, there
journal. In the process of doing that particular study, there
was a fair amount of molecular biology as well as population

1 genetics that needed to be done; DNA extractions, PCR
2 amplification, gel electrophoresis to establish DNA profiles.
3 in this instance of crayfish and the population genetic
4 studies to determine if there were significant changes in the
5 genetic diversity to the population of these organisms to
6 another.

7 Q You had an occasion to study the interaction of human DNA--I
8 know you talked about crayfish, but there are studies also
9 involve the study of human DNA?

10 A Yes. Some of my publications are exclusively involving human
11 DNA. I think it would be fair to say, those that are published
12 in The Journal of Forensic Science, again, are fairly
13 explicitly and specifically about human DNA, but there have
14 been other studies that I've published that are not in The
15 Journal of Forensic Science that are exclusively about human
16 DNA markers.

17 Q Have you published articles dealing with degradation,
18 inhibition of forensic DNA samples--STR DNA?

19 A We have a manuscript that is currently under review about that
20 particular topic. It has been submitted once, we had received
21 some reviewers comments and have submitted a revised version
22 for consideration.

23 Q Dr. Krane, in addition to your publications, have you put on
24 presentation dealing with forensic DNA profiling and the
25 science behind forensic DNA profiling?

1 A Yes and fairly routinely actually, many time a year for man
2 years now.

3 Q For what types of groups and in front of what forums?

4 A A variety of different kinds of groups. I often get invited to
5 give seminars at other Universities and typically the audience
6 at the other Universities are other academintions (sic) such
7 as myself, students that are attending that university as well
8 as faculty and graduate students that are working there. In
9 addition to that, I've fairly frequently called upon by groups
10 of attorneys to--and investigators to give talks about how it
11 is that DNA testing works and some of the strengths and
12 weakness of the methodology in the forensic setting.

13 Q As a result of your background in molecular biology, have you
14 been qualified as a witness in Court of this country to
15 testify as to DNA and the forensic use of DNA, both its
16 analysis and its interpretation from particular samples?

17 A Yes, on many occasions. I don't recall the specific number,
18 but it is approximately fifty time prior to my involvement
19 with this case.

20 Q Dr. Krane, I understand that you do not conduct forensic--you
21 don't take in evidence and then perform DNA analysis on the
22 evidence, is that accurate?

23 A That is a correct statement. I--I have a research laboratory
24 and we do not handle evidentiary samples from case work. I am
25 also president and CEO of a small consulting company that

1 helps attorneys better understand--and typically defense
2 attorneys, better understand DAN testing evidence. In those
3 incidences where those consulting companies come into play, we
4 don't do any testing of evidentiary samples. What we do
5 instead, is we look at the results that have been generated
6 by, typically state laboratories or government laboratories
7 like the FBI, and look to see if there maybe some alternative
8 interpretations and simple to see if the work seems to be done
9 correctly and interpreted correctly and then to help attorneys
10 and in some instance judges and jury's understand what those
11 testing results mean.

12 Q In addition to your testimony, have you been called upon by
13 other governmental agencies to assist in examination or
14 involvement in, I guess, investigations into DNA
15 contaminations for example?

16 A Well, I guess, yes. There have been a number of occasions
17 where prosecutors have asked of my assistance in the same way
18 I typically assist defense attorneys in understanding issues
19 associated with casework. There's also a nearly completed, but
20 still ongoing, a very long-term coroners request out of the
21 State of Victoria in Australia that the solicitors working on
22 behalf of the coroner asked me to assist with, essentially
23 working with the government. It a fairly interesting--it's a
24 fairly interesting inquest, in the sense that there was a
25 murder of a toddler whose body was found approximately six

1 months after his death with two blood stains on his clothing.
2 Testing was done on the blood stains and found to be
3 consistent of DNA profile of a woman and yet nonetheless a
4 defendant--charges were brought upon a defendant who was a man
5 and ultimately he was found not guilty. Subsequently DNA tests
6 against databases found a match of DNA that matched the blood
7 stains on the victim and an investigation was done on the
8 individual that match and it was determined that that
9 individual, by all account every one excepts could not be
10 involved with this particular murder of the child. She is a
11 mentally handicapped woman who is under supervision in an
12 institution in another part of the continent of Australia, so
13 everybody accept that she couldn't have been involved in the
14 crime. The coroner in the State of Victoria saw this as an
15 opportunity for an inquest because she wasn't the source of
16 the material and really it only left two alternative
17 explanations. That either it was--

18 MR. HILLER: Your Honor--

19 MR. GABRY: We'll--we'll

20 MR. HILLER: --I'm going to object. This is very far
21 a field at this point.

22 THE COURT: Move on.

23 BY MR. GABRY

1 Q Stop there. In addition to that involvement have you recently
2 been contacted by the State of Virginia to participate in some
3 forum there?

4 A I just, on Monday of this week, I received a phone call from
5 the Governors office from the commonwealth of Virginia and was
6 asked if I would be willing to serve as a founding member of
7 what they had just legislated into action there, a scientific
8 committee to oversea and to assist their division of public
9 safety which in turn, oversees their DNA testing laboratories.
10 Again, with the purpose--my understand and with reading the
11 legislation associated with it, is to assist the laboratory in
12 the very best, the most, current and the most reliable
13 techniques in make the most robust interpretations. As of this
14 week, I understand effect immediate, as of Monday, I'm a
15 member of that governmental body.

16 Q Dr. have you had occasions to testify as to the properties of
17 DNA that would deal with the ability of DNA to transfer from
18 one source to another source?

19 A Well, I am certainly familiar with a substantial amount of
20 literature on the idea of DNA transfer, and I have also at
21 least been indirectly involved in a study that looked into the
22 physical nature of transferring DNA from one article to
23 another, both primary as well as secondary transfer.

24 MR. GABRY: Your Honor, at this time, I offer Dr.
25 Krane for Voir Dire. I would move and ask the Court to qualify

1 him as an expert in molecular biology on reference DNA under
2 the topics that we've discussed.

3 THE COURT: Any objection not previously stated?

4 MR. HILLER: Can I Voir Dire, your Honor?

5 THE COURT: Briefly.

6 VOIR DIRE OF DAN KRANE

7 BY MR. HILLER

8 Q Dr. Krane, you've indicated that you've published in The
9 Journal of Forensic Science, how many articles?

10 A There is one that has been accepted recently, there are
11 several that are in review, there is a letter or a short
12 commentary that was published earlier this year and technical
13 notes or research paper that was published, I believe was the
14 prior year. I think you could count that as three--at least on
15 three occasions.

16 Q The one that you're counting as being published is the one
17 that has been accepted but isn't yet published, and then a
18 letter--is that kind of like a letter to the editor, that sort
19 of thing?

20 A It is a peer reviewed letter, but it was a letter, yes, to the
21 editor.

22 Q And then a technical note. How is that different than an
23 article?

24 A It's essentially the matter of length. The number of pages it
25 spans within the journal is the primary difference. They

1 undergo the same review process. It's just, again, the matter
2 of length. The journal might make a distinct differentiation
3 depending on the number of figures and tables.

4 Q You also indicated that you have testified on a number of
5 occasions for prosecutors--

6 A I don't--

7 Q --can you tell me what that number is?

8 A I don't believe I said that --I don't believe that I said I
9 testified for the prosecution, I said I had consulted with
10 prosecutors and I have on one occasion at the request of a
11 government agency of the prosecutors office.

12 Q Where was that?

13 A Pensacola, Florida.

14 Q How long ago?

15 A Off the top of my head--I would gladly refer to my CV on that
16 topic, but my recollection is that is was approximately four
17 years ago. It certainly wasn't more than six and I don't think
18 it was as recent as three, if that helps.

19 Q The--on the topic of transfer of DNA, you indicated that
20 you've had some indirect involvement in one study. Without
21 going into the particulars of the study, what was--what were
22 the particulars of your involvement with that study?

23 A Let me--it--it was associated with a particular case in which
24 I ended up testify as an expert as well as number of other
25 individuals had. Approximately three years ago in Boston, a

1 friend and a colleague, Mark Taylor, who has a DNA testing
2 laboratory in California, conducted a study that was fairly
3 specifically linked to the--to the defense theory of how some
4 DNA evidence became associated with evidentiary material in
5 that particular case. Mark and I discussed that how it is that
6 that experiment might be set up. Mark and the people working
7 with in his laboratory then performed the experiment
8 physically, touching each other and objects and ten doing the
9 DNA testing to see if DNA profiles appeared and were being
10 transfer. Then I assisted him in interpreting those results
11 and ended up--well, conveying the testing--some of the results
12 of that testing to the jury during the course of my testimony
13 in that case. Mark Taylor also testified in that case
14 immediately after me and testified very specifically about his
15 study in that case.

16 Q Your name doesn't appear in that report of that test, does it?

17 A My understanding--my understanding is that he is the sole
18 signer or signatory of that particular report, that he
19 prepared for that particular case.

20 Q So, that's no, your name doesn't appear on it.

21 A I don't believe that it does.

22 Q You haven't done any experiments yourself with respect to
23 transfer DNA?

24 A Again, I would say that I had input and I had assisted Mark
25 Taylor in the experiment design--

1 Q Did you understand my questions?

2 A Guess not.

3 Q Have you done any experiment yourself on the transfer of DNA?

4 A I think that perhaps is doing the experiments--

5 Q No, the issue is that--

6 THE COURT: Stop, stop. You are not going to do this.

7 Let him answer the question, and then I'll rule if he's
8 answering it fairly. Let's go.

9 MR. HILLER: Thank you, your Honor.

10 THE WITNESS: I think that if we have a disagreement
11 or a misunderstanding her about what we both mean by doing the
12 experiment. I have not physically done the DNA testing on
13 samples where transfer may have been involved, but, again, I
14 have assisted with the design. In my line of work, the
15 intellectual contribution with examining the experiment and
16 then interpreting the results, still falls within the
17 perfew(sic.) of doing the experiment. Even thought I've
18 accepted your position that I have not physically been present
19 when the transferred occurred or when the testing was run
20 through the machines to generate results.

21 THE COURT: The answers responsive, go ahead.

22 BY MR. HILLER

23 Q Are we talking about more than that one experiment?

24 A No.

1 Q What other kinds of research--what kinds of research is going
2 on in your lab now?

3 A I am going to try to hard to give a short answer to your
4 questions. If you would like me to expand or clarify I would
5 be happy to. It's a fairly broad range of research topics that
6 I am--the people working with me are engaged with at the
7 present time. A number of them, I would say, fall into the
8 category of bioinformatics, which is essentially using
9 computers and computer science approaches to analyze and
10 interpret large amounts of data, specifically biological data.
11 Some of the work is also being done in the area of population
12 genetic issues as they pertain to an environmental impact.
13 Others are as they pertain to how molecules change over the
14 course of time, evolutionary types of studies. The
15 bioinformatics studies, some of them pertain to molecular
16 evolution issues, but the bulk of them pertain to the analysis
17 and the interpretation of forensic DNA testing results.

18 MR. HILLER: Your Honor, I am unclear as to exactly
19 what it is that Dr. Krane is being offered as an expert for.
20 To the extent that he is being offered as an expert in the
21 field of transfer, I don't think he has sufficient
22 qualifications. He's read some articles and he suggested study
23 that he then later read.

1 THE COURT: In accordance to the previous hearing and
2 ruling in this case, I am going to allow the witness to offer
3 expert testimony as previously outlined.

4 MR. GABRY: Thank you, your Honor.

5 CONTINUED DIRECT EXAMINATION

6 BY MR. GABRY

7 Q Dr. Krane, you have been working with me and I have had a
8 number of questions for you relative to the case of People vs.
9 Gary Earl Leiterman, is that correct?

10 A Yes, that's correct.

11 Q As a result of my reaching out to you for assistance, we've
12 had an opportunity to obtain information from the Michigan
13 State Police as it pertained to their testing done in the case
14 of Gary Leiterman, is that correct?

15 A Yes, it is.

16 Q That testing also included the testing completed by Dr.
17 Stephan Milligan as it pertained to the analysis of the blood
18 sample scrapped off the hand of the victim and his findings
19 relative to a profile match to a--at the time four year eight
20 month old boy named John Ruelas, correct?

21 A Yes.

22 Q You've had an opportunity to review the discovery material,
23 the material provided by the Michigan State Police lab, is
24 that correct?

25 A Yes.

1 Q I guess the first question I have is, it has been eluded that
2 the DNA was thirty-six years old, and starting from that
3 point, as far as the science behind DNA, is that an accurate
4 statement that can be made by an analyst or a scientist who is
5 examining an evidentiary sample?

6 A From what is gleamed from forensic DNA testing--from the DNA
7 profile itself is absolutely unequivocally unfounded. It is
8 not possible to attach any sort of time frame to the age of
9 the sample, simple based on DNA testing as it is done today.

10 Q Why not?

11 A Well, --

12 Q Having the tools available.

13 A It is simply not the nature of the way these tests are
14 preformed. A one thousand year old DNA sample from a human
15 being can very easily give precisely a DNA profile that has
16 precisely the same appearance as the DNA profile that is
17 collected from any of the jurors right now. There is not
18 necessarily going to be anything about the nature of the
19 profile itself, that would allow us to distinguish which of
20 those two samples were one thousand years old and which one
21 was freshly generated, let along thirty-six years old.

22 Q Dr. we heard a lot in which various DNA samples were
23 identified by scientist of the Michigan State Police as being
24 degraded or challenges samples. Would not that terminology
25 date the DNA?

1 A There is a vague position of the idea of degradation to
2 suggest that a sample may be older than another. I could
3 explain--DNA is a chemical. There is nothing particularly
4 magical about this chemical. It interacts with other chemicals
5 the same way that other chemicals do. What makes DNA special
6 is that it is a chemical that stores information. But, the
7 older--the longer a chemical has been around, the more it's
8 been exposed to the environment, the more likely it is to have
9 accumulated damage with having interacted with other
10 chemicals. When that damage accrues and accumulates on a DNA
11 molecule, there is a pattern that can be observed on
12 electropherograms which is essentially the thing that's looked
13 at to determine a DNA profile. A pattern emerges in which the
14 largest pieces of DNA give the weakest signal simply because
15 of a large molecule they provide more opportunities--they are
16 a bigger target for damaging chemicals to interact with. So,
17 degraded DNA is accepted as DNA that has more damage to larger
18 molecules than to smaller molecules and we tend to see less
19 signal strength for larger pieces of DNA than for smaller
20 pieces of DNA. Again, the older a DNA molecule is and the
21 longer it has been removed from the body the more
22 opportunities there has been for damage to be accumulated and
23 once it is removed from the body, the less--well, there is no
24 opportunity for that damage to be repaired. The things thought
25 is, again, a thousand year old DNA sample can easily have

1 avoided any contact with chemicals that would cause it to be
2 degraded. By the same token and example drawn from one of the
3 jurors, myself or you can, in the matter of minutes, be
4 exposed to an environment; ultraviolet light for instance,
5 sunlight, bacteria, any of a number of things in a matter of
6 minutes can cause that same extent of degradation that's
7 observed in--or that wasn't observed in the thousand year old
8 sample. The factors that contribute to how heavily a DNA
9 sample has been degraded are just so large in number and so
10 variable and so hard to control, that we often see freshly
11 drawn samples that give the appearance of being degraded, that
12 we know are not very old. At the same time, you can get a DNA
13 profile off of Butch Cassidy and the Sundance kits from nail
14 bags that are over a hundred years old from train robberies
15 they were involved with. The whole problem of attaching an age
16 to a sample by looking at a pattern of smaller signals for
17 large fragments of DNA relative to small fragments is made
18 virtually un-resolvable when you add in the fact that another
19 factor--a competition idea, called inhibition; give precisely
20 the same appearance on these electropherograms. It's virtually
21 impossible to distinguish between a degraded sample and a
22 sample where there has been an inhibitor present.
23 Q Can you explain what you mean by--does that have something
24 also to do with the chemical processes in extracting or
25 analyzing the DNA?

1 MR. HILLER: Your Honor, I am going to object to the
2 leading nature of the questions.

3 THE COURT: Let the doctor testify. Go ahead, you can
4 answer that.

5 THE WITNESS: Thank you. I think briefly, yes.

6 Degradation is--essentially we are talking about a problem
7 with damage to the DNA. Because of damage to the DNA, it is
8 difficult for the PCR step that the molecular biologists use.
9 It is difficulty for that PCR step to amplify up to the signal
10 that we're looking for. Inhibition isn't talking so much about
11 damage to the DNA as chemicals that are making it hard for the
12 enzymes we use for PCR to do that amplification. In both cases
13 you get the same effect. Big pieces of DNA don't get amplified
14 as much as small pieces do. In the first instance, big pieces
15 accumulated more damage. In the second instance it is because
16 the enzymes need more time to work on the big pieces of DNA
17 rather than the small pieces and we've put something into the
18 mix that is slowing the down or preventing them from getting
19 their job done. Two fairly different things, root causes, yet
20 give rise--manifesting in the same way in the underlining DNA
21 profiles that get generated.

22 Q So by looking at the tools that we have available to us right
23 now, that are in place in the forensic labs across the
24 country, we're not able to differentiate between the two?

1 A Effectively, that's correct. It is not possible to reliable
2 distinguish between degradation and inhibition and it further
3 is not really possible to attach some sort of date or age to a
4 particular DNA sample.

5 Q Can you address for the jury, the question is how--how does
6 one acquire--how do we shed DNA and what fashions might DNA
7 end up on you?

8 A I think the way to begin answering a question like that is to
9 makes sure that it is clear that essentially every cell in our
10 body has a perfect copy of our gene. A total of all of our
11 material. There are some exceptions, red blood cells for
12 instance don't have nuclei and therefore don't have DNA
13 associated with them, but for all intensive purposes every
14 cell carries that DNA signature that is uniquely our own. Our
15 bodies are made up of billions of cells. For a big fellow like
16 me or maybe like yourself, maybe trillions of cells. Such
17 that, we shed these molecules casually without knowing all the
18 time. A single fingerprint, such as what I just left on the
19 witness stand here probably has left behind many dozens, if
20 not many hundreds of my cells. Anyone of which is
21 theoretically--and it turns out in practice is sufficient to
22 generate a DNA profile that would demonstrate that my DNA was
23 present. I think with that understanding, certainly is a
24 fingerprint can leave a DNA profile behind, a handshake has a
25 potential to transfer DNA from myself to you such that if we

1 swabbed your hand after you shook my hand there is a
2 reasonable expectation that we will also find not just your
3 DNA but also my DNA.

4 Q That is because we are talking about what?

5 A Well for the most part skin cells. It could be anything. I
6 could be cells associate with saliva. For instance if I had
7 sneezed and then shook your hand, it may not be good social
8 etiquette, but it is a good means of transferring my cells to
9 you and not necessarily just skin cells.

10 Q So a sneeze would convey--so the cells within that, I guess,
11 sneeze--I am not sure what you call it--

12 A Squitam is the best word. I am not sure what to call it
13 either, but yes, the saliva that is ejected during the sneeze
14 certainly has an abundant amount of DNA associated with it
15 because there is a very large number of cells there, so that
16 is a very effective way of getting DNA from me onto you or
17 other surfaces.

18 Q Let's talk about other surfaces. Does DNA, as a chemical
19 substance have sufficient life or substance to sit in
20 particular location and then being absorbed by someone coming
21 into contact with it? Say for example that, that finger print
22 you left?

23 A Yes, well, I think--it's my understanding that the current
24 record holder for the oldest DNA molecule from a primate, a
25 human, that has been obtained is from a Neanderthal, from a

1 tooth of a primate that has not been around for tens of
2 thousands of years. I think that speaks for the fact that DNA
3 is actually very stable molecule under the right
4 circumstances. But, even under the poor circumstances, not the
5 best of circumstances, my applying DNA to a coffee cup, for
6 instance, me holding a hold and then you holding a cup; that
7 can also effectively transfer my DNA to you by way of the
8 intermediary coffee cup.

9 Q Public restroom, could that be a source of transfer DNA?

10 A Toilet seats has a lot of stigma associated with it, but
11 nonetheless, there is some foundation to it in the area of
12 molecular biology. We leave behind on the surface of the
13 toilets seats out DNA and others who use that same toilet seat
14 have a good potential to pick up our DNA, at the same time,
15 they leave some of their own behind.

16 Q Doctor, can DNA be transferred from one inanimate object--an
17 non-human object to another non-human object?

18 A Well do I have an example in mind? Well, I suppose the answers
19 yes.

20 Q All right. Let's look at this particular case. There has been
21 evidence elected that a DANN profile matching the DNA profile
22 of Gary Leiterman was found on certain location of some
23 pantyhose on the victims Jane Mixer. There's also been some
24 testimony that there's partial profiles that do not excluded
25 Mr. Leiterman were found on a towel. The towel was apparently

resting along one of the areas, at least close to or
consistent to where Dr. Milligan identified cuttings of the
DNA profile. Would a situation with that one object coming in
contact with the DNA on a pantyhose, allow for the cells to
also cling to or be absorbed onto or be found on the towel?

A Definitely yes. That could very easily be the case. That small
amounts on the towel that you are describing could have been --
--could have originated on the pantyhose and simple could have
gotten on that towel through the pantyhose.

Q Now, doctor, you've had occasion to look at the statistics
that were provided by the Michigan State Police on the towel,
did you find--could you characterize those based on your
experience and research?

A Yes, the specific statistical calculation that was preformed
for the towel sample is one that is called Combined
Probability pf Exclusion. It differs from the statistical
formula or the approach that was used for the pantyhose which
is an unmixed sample, which is apparently--which looks as if
it is Gary Leiterman's DNA to the exclusion of others. The
combined probability of exclusion is essential saying, what
fraction of the population could be excluded as a contributor
to this sample. Typically, almost invariable is invoked in
the case or interpreting a mixed sample. I mentioned earlier
already, the interpretation of mixed samples is unarguable
difficult, challenging, it is complicated. The statistics that

1 get generated talk about --essentially translate to the chance
2 of a coincidental match, reflect the challenges. Combined
3 probability of exclusion simply says what fraction of the
4 population might be excluded. The particular number that the
5 Michigan State Police generated by applying that CPE
6 calculation to that towel sample, my recollection is, one in--
7 only one in forty individuals selected could not be excluded
8 as a potential contributor. It is a very unimpressive number
9 compared to the number generated to the random match
10 probability of the pantyhose sample where it is like one in
11 may trillions. One in forty individuals could not be excluded,
12 many that thirty-nine out of forty could. There is some
13 potential useful information there but it is not whether near
14 the same magnitude, in any sense, of how impressive the
15 numbers would be for a single source sample. Further, I--this
16 seems to me to be the time to mention--I also do have some
17 question about how reliably the CPE calculation was done on
18 that towel sample. There is an alleal present in the testing
19 results that is neither Mr. Leiterman's nor the victims and
20 yet--even though it is present in the testing lab results,
21 they neglect to say they would not exclude individuals--the
22 way they do their calculations, they say just that they would
23 excluded individuals even if they has that particular alleal,
24 and that's not right, it's--I think a correct use of the CPE

1 calculated a number of one in forty instead I think it should
2 be more like one in ten could not be excluded.

3 Q You mentioned something, and I guess in my mind I am wondering
4 about it, you talked about shaking hands and having two
5 peoples DNA. This is a situation in which we are dealing with
6 a pair of woman's pantyhose on Ms. Mixer and then were removed
7 later that day at the autopsy. In the test results as they
8 pertained to those locations on the pantyhose, based on the
9 testimony of Dr. Milligan, there was no evidence or indication
10 of any profile associated with Jane Mixer in those three
11 complete matches. I know that there was a mixture sample. But
12 as to those three, I think you referred to them as A-1, B, and
13 C, is there some reason we would not have seen DNA from the
14 lady that was wearing the pantyhose?

15 A I think that--you raise an interesting question, I think it is
16 a very reasonable expectation that the wearer of an article of
17 clothing would be a contributor. My DNA is all over the shirt
18 that I am wearing. If you were to spit upon my shirt and we
19 did DNA testing on my--in the region where you had spat upon
20 my shirt, it may be the case that we may only see your DNA
21 profile because there was so much more of your DNA relative to
22 mine. But, it would be a fairly--if you were to spit on my
23 shirt collar or on my shirt that I have a lot of intimate
24 clothing with, it would actually become hard for you to
25 transfer enough of your DNA to my shirt to overwhelm the

1 signal that comes from my DNA profile. I think it's unusual or
2 expect that we might find someone else's DNA to the exclusion
3 of all others on a pair of pantyhose. It is not completely
4 bizarre, but it is somewhat unusual that the wearer of an
5 article of clothing would have left behind a sufficient amount
6 of material where their DNA profile to be seen in, perhaps, in
7 addition to some body else's.

8 Q Can I ask you, is there any way that the tools of science
9 right now allow us to tell whether or not Jane Mixer actually
10 had those pantyhose on when the DNA profile was deposited on
11 the?

12 A I think very generally speaking it is worth while to bear in
13 mind that the presence of a DAN profile almost invariably
14 tells us nothing about the time frame or the circumstances
15 under which that DNA became associated with an article. If you
16 are asking if Jane Mixer was wearing the pantyhose when Gary
17 Leiterman's DNA profile became associated with it, the tests
18 themselves aren't capable of answering that.

19 Q Okay. Now, along the same line that we were referring to the
20 towel. There has been testimony that at the autopsy, the head
21 of the crime lab team had worn some latex gloves in the
22 collection of the evidence from Ms. Mixer's body, which as it
23 privies to my questions, dealt with not only the removal of
24 the pantyhose but also the removal of a stocking ligature that
25 was around her neck and the packaging and the maintaining of

1 that evidence. We've hear testimony that present day protocols
2 fro DNA examination stress removal of gloves when one is
3 dealing with one--one evidentiary sample and then changing
4 gloves before dealing with another evidentiary sample. Is that
5 what you understand?

6 A It certainly is common practice and it is reasonable practice
7 in light of the way that DNA could be transferred.

8 Q Going back to what happened at the autopsy, is it a potential
9 for DNA to be transferred from a person having contact with
10 the pantyhose and that same person, with gloves, having
11 contact with the stocking?

12 A Certainly quit possible. That type of cross contamination is
13 explicitly guarded against today, now that we are using very
14 sensitive means of identification of these DNA profiles where
15 a single cell could be conceivably sufficient to give a DNA
16 profile. But, thirty or forty years ago it was hard to imagine
17 that some tiny amount of cross contamination with a few cells
18 might compromise the evidence sample. Again, thirty to forty
19 years ago, that might have been hard to imagine. Today that is
20 fully appreciated and realized such that most coroners offices
21 do as you suggested; change gloves from handling one sample to
22 another, from packaging one sample to another sample, and
23 similarly the labs that do testing also go to great lengths to
24 change gloves for the same reasons and the same times.

1 Q This might be the time to ask--you familiarized yourself with
2 studies in this field, and I believe that I asked Sara
3 Thivault, another scientist from the Michigan State Police
4 about this topic and she had some knowledge of it. Have
5 studies been done and papers been published relative to DNA to
6 innocently to be transferred from one medium or one piece of
7 evidence--one object to another object?

8 A Well there have been a number of studies that have appeared in
9 the peer reviewed literature that specifically addressed this
10 idea of transfer. Not just--well virtually all of forensic DNA
11 testing is predicated on the idea of primary transfer, that an
12 individual can directly leave some of their DNA behind on an
13 article. There had been a number of studies that have since
14 gone on to investigate and suggests the reality of secondary
15 and even tricetary transfer, where my contact with an article
16 followed by somebody else's same contact with that article can
17 result in my DNA profile appearing on that secondary item, the
18 other individual in this example. So, there have been a number
19 of studies going back as long as 1997, as I believe appeared
20 in The Journal of Nature and there have, again, been a number
21 of follow-up studies in the peer reviewed literature.

22 Q Do you recall the particular study that I asked Ms. Thivault
23 about relative to the transference of DNA and I believe sperm
24 cell, when the particular article that had the DNA on it was

1 either being--I believe it was being washed and then washed
2 with other objects that did not have DNA before they went in?

3 A I am familiar with a study performed by the Royal Canadian
4 Mounted Police published in a Canadian forensic science
5 journal consistent with what you are suggesting. They had a
6 semen stained pair of underwear that they laundered in the
7 company of other articles of clothing that did not have semen
8 associated with them and then subsequent DNA testing after the
9 laundering had been completed revealed the DNA profile of the
10 semen donor effectively on all the other articles of clothing
11 on the rest of the batch of laundry.

12 Q Now, doctor, you had an opportunity to review the material
13 provided by the Michigan State Police, as to the medium in
14 which the type of cells were discovered, based on your
15 testimony, on Ms. Mixer, were those DNA cells associated with
16 blood or with semen? I am pertaining to the pantyhose only.

17 A The laboratories conclusion was that it was neither blood nor
18 semen.

19 Q Would they have been consistent with a buckle sample?

20 A Buckle, being the cheek type of sample, yes.

21 Q Would they have been consistent with the type of cells--you
22 used spit, but not wanting to spit on you--sneeze on you--that
23 type of cell?

24 A Again, given that the material that you are transferring in a
25 sneeze would neither show up as a positive for the blood test

1 or the semen test, yes it could appear that that could have
2 been the source of material.

3 Q I want to turn away to another area and then Mr. Hiller has
4 some questions. You're familiar with the conclusion of Dr.
5 Milligan that some blood scrapped off of John Ruelas--off of
6 Jane Mixer, came back to a person by the name of John Ruelas?

7 A Yes, I am familiar with that.

8 Q You've also had an opportunity to review the discovery, the
9 data, analysis of those samples, is that correct?

10 A I have had the opportunity to review that data that underlines
11 the conclusion that John Ruelas' DNA is associated with that
12 hand stain, but I have not seen other testing results
13 associated with Mr. Ruelas.

14 Q By that, you are referring to testing done in relative
15 homicide investigation involving himself and his mother?

16 A Specifically, but, more generally any other investigation
17 beside that, specifically associated with this case and Jane
18 Mixer.

19 Q In looking at the data from the State Police, did you notice
20 anything in that data that would be indicative of any form of
21 contamination occurring in the testing procedure involving
22 Gary Leiterman, Jane Mixer, the evidence and John Ruelas?

23 A There's nothing in the test results themselves that indicates
24 contamination has occurred. There are centuries, if you will,
25 that are run at the same time as testing results are being

1 performed. Three controls in particular serve as sort of a
2 century. A positive control, where a DNA profile is attempted
3 to be generated from a sample from a known DNA profile, a
4 negative control where there should be no DNA profile present
5 and a reagent length which is similar to but comes a little
6 bit further in the process, than the negative controls do.
7 None of those controls give a clear indication of
8 contamination having occurred.

9 Q Given that, do you--do you believe that you can assert to the
10 jury that there was no contamination occurring in this
11 testing?

12 A Not with certainty, no. I mean with the centuries, that's
13 their job to suggest to us when contamination--when these
14 centuries have told us that contamination has occurred we can
15 be confident that contamination has occurred. But, the
16 converse isn't necessarily true. When the centuries fail to
17 tell us--when the centuries tell us that there is no
18 contamination, that doesn't necessarily mean there has not
19 been contamination, just that the centuries failed to detect
20 that contamination.

21 Q Do you think there is a potential for contamination based on
22 the evidence that you've seen in this case?

23 A I do.

24 Q How many opportunities are there for error in this type of
25 forensic testing?
26

1
2 A As you might imagine, this is a fairly complicated technical
3 process and in practice it turns out to be a very repetitious
4 processes. In the end, there are many opportunities for cross
5 contamination of samples to occur.

6 Q Would one of them be the profile of analysis?

7 MR. HILLER: Objection to leading.

8 THE COURT: That is overruled?

9 BY MR. GABRY

10 Q Would one of them be an interpretation error?

11 A Would one of what be?

12 Q In this case, did you see any interpretation errors?

13 A Well, as I allude to before, I noticed perhaps a mistake in
14 the CPE calculation was performed. Generally speaking, I am in
15 agreement with the testing laboratory in that Mr. Ruelas' DNA
16 is associated with the sample taken from Jane Mixer's hand,
17 Mr. Leiterman's is associated with the pantyhose sample and
18 that Ms. Mixer's and Mr. Leiterman's DNA in varying
19 proportions are associated with other samples that were
20 tested; the towel, the other cuttings of the pantyhose and the
21 ligature stocking that you eluded to. In those other instances
22 whether there are mixtures, the case is much less compelling
23 that it was Mr. Leiterman's DNA we're observing, it's just
24 her, amongst a very large number of the population, can't be
25 excluded as a possible contributor. In the instance of the
26 pantyhose where his DNA appears alone, I agree with the

1 interpretation that the alleals that are observed there are
2 consistent with Mr. Leiterman's.

3 Q Given that, on what do you base your belief that contamination
4 is still viable. I mean, what are the facts and circumstances
5 that you reviewed causes you to be concerned?

6 A I have some concern at the very least because of the
7 remarkable coincidence, the improbability of a four year old--
8 very simply, Mr. Ruelas' DNA being present for the purposes of
9 DNA in a murder investigation coincidentally, in the very same
10 laboratory within days of the evidence samples of Ms. Mixer's
11 DNA profile being tested, coincidentally being tested for a
12 murder investigation, but this one being thirty-six years old.
13 It just strikes me as a very remarkable coincidence, not
14 necessarily an impossible coincidence but a remarkable
15 coincidence that Mr. Ruelas's DNA would happen to be in the
16 same DNA testing laboratory within days, perhaps even on the
17 same day--I am not certain on the says with the material that
18 I have been provided--with Ms. Mixer's evidentiary samples
19 were being tested. Knowing how it is how a DNA transfer can
20 occur, knowing how little material needs to be transferred,
21 seeing that it is only Mr. Ruelas' DNA is present as opposed
22 to a mixture of his DNA and Ms. Mixer's DNA in that one
23 particular sample, certainly seems to be a very improbable
24 coincidence to me that contamination had not occurred. Again,
25 I will grant you that when you look at the centuries the

centuries are failing to tell us unequivocally that contamination has occurred.

Q That coincidence was added to by the fact that Mr. Leiterman's DNA from the buckle sample was also in the laboratory?

A My understanding of this is there's another compounding coincidence that Mr. Leiterman's DNA was also present in the same laboratory, the same building, the same time that these other murder investigations; the Mixer investigation and the Ruelas murder investigation were being conducted.

10 MR. GABRY: Thank you, your Honor.

THE COURT: Cross examination.

CROSS EXAMINATION

13 BY MR. HILLER

14 Q Good afternoon again, Dr. Krane.

15 A Good afternoon to you.

16 Q Dr. Krane, you indicated that your laboratory at Wright State
17 and your company, and that's called Forensic Bioinformatics
18 Systems Incorporated?

19 A Not quite, forensic bioinformatics is what we do business as.
20 Technically we are incorporated as Forensic Bioinformatics
21 Services.

22 Q That--that--you don't do any actual, let's call it casework.
23 You don't process evidence you don't handle evidence, correct?

24 A I am comfortable in agreeing that we do not process or handle
25 evidence, in any way or any time.

1 Q Have you ever worked in a government forensic laboratory?

2 A Well, again, at least as of Monday of this week, I understand

3 that I am an employee of the commonwealth of Virginia to

4 oversee and to supervise some of the working done by forensic

5 laboratories, but again, I have not personally done the

6 handling of evidence that we've just discussed a moment ago.

7 Q You've ever been trained to do that?

8 A In a general sense. Again, the tool of molecular biology apply

9 and I've certainly reviewed a large number of operating

10 procedures and protocols from laboratories around the county

11 and around the world. I have not taken a specific class called

12 extract--forensic extraction of evidence samples.

13 Q You've never worked in a private laboratory that has done

14 forensic DNA testing, either, have you?

15 A Correct.

16 Q You indicated to Mr. Gabry that talking to juries such as this

17 counts the ten percent of your work at Wright State that is

18 supposed to be public service area?

19 A Yes.

20 Q Are you also getting paid to be here?

21 A In this instance, yes. Not always, but in this instance, yes.

22 Q How much are you being paid?

23 A Well, it is not so much that I, directly, am being paid, but

24 my consulting company, Forensic Bioinformatics will bill at

1 the rate of three hundred dollars an hour, not to exceed three
2 thousand dollars a day.

3 Q Did you also get paid for all the work that you did to get
4 ready for today, the consultations that you had with Mr. Gabry
5 and so forth.

6 A To some extent yes. There will be bills submitted for that
7 work.

8 Q Your companies going to bill him?

9 A Yes.

10 Q When we talk about the company, you are at least a part owner
11 of that company?

12 A Yes.

13 Q What is the percentage ownership you have in the company?

14 A I am a bad business man; I don't know the specific answer
15 right off the top of my head. My recollection is that it's
16 between thirty-five and forty percent.

17 Q You're the founder of the company isn't that correct?

18 A One of several founders, but yes.

19 Q If on your web site you were listed as the founder of the
20 company, you wouldn't argue with that, would you?

21 A No, that is a fair assessment. I certainly have been involved
22 since the inception.

23 Q You talked a little bit with Mr. Gabry about degradation and
24 inhibition?

25 A Yes.

- 1 Q Talking now specifically about the three single source
2 profiles on the pantyhose that are identified as Mr.
3 Leiterman's DNA profile. Is there any thing that you have seen
4 to make you believe that the results of those tests have been
5 damaged in any way be degradation?
6 A Not totally comfortable with the re-phrasing of your question,
7 but I understand your meaning. I will grant you that there is
8 an indication of either degradation or inhibition of those
9 samples.
10 Q However, they are good strong results, correct?
11 A They are interpreted correctly as being consistent with Mr.
12 Leiterman.
13 Q You indicated that--I believe you said that there was some
14 foundation in the field of molecular biology before the notion
15 the DNA could be transferred from a toilet seat?
16 A I think that was just used as an example, I don't think I was
17 referring to something in the peer review literature. I am not
18 aware of a specific study that addressed toilet seat DNA
19 transfer for forensic purposes, at least.
20 Q You've also said that you found it unusual that Jane Mixer's
21 DNA does not appear in the single source profiles off the
22 pantyhose that match Mr. Leiterman's, correct?
23 A I believe I said that I found it unusual that I do not--that
24 we do not observe her DNA either with the single source sample

1 on the pantyhose and the single source sample from the blood
2 stain on the hand.

3 Q Now, are you aware of any study's that have been done
4 regarding DNA--the wearers DNA profile having been found on
5 pantyhose?

6 A I--I have reviewed and am familiar with at least one study
7 but, I do not recall the specifics of the reference but I am
8 aware of at least one study that specifically focused--or
9 amongst several loci--involve DNA associated with pantyhose
10 samples.

11 Q Is it your testimony that you would expect the wearers DNA to
12 be detectable on pantyhose in every instance no matter where
13 you sample the pantyhose?

14 A That is not my testimony. I would be happy to explain if you
15 would like.

16 Q Just a moment please. DNA--when we talk about DNA there are
17 different kind of cells in the body, correct?

18 A Yes.

19 Q Also, correct me if I am wrong, other than red blood cells,
20 DNA can be found in every cell in the body?

21 A I mentioned red blood cells as one notable exception to that
22 pyridine that DNA is in every cell. There are other
23 exceptions, but certainly the norm is, cells associated with
24 our body have our DNA as part of them.

25 Q Skin cells in particular?

1 A Not necessarily in particular, but certainly would be included
2 in the list of those that would have DNA associated with them.
3 Q Do people shed skin cells at a consistent rate? Does everybody
4 shed them the same?
5 A You're essentially asking now about the explanation that I
6 volunteered a moment ago. The short answer is; studies that
7 have been done to address that have suggested that the amount
8 of DNA shed by one individual is not necessarily the same as
9 the amount shed from another. Further, the amount can change
10 from one point in time to another from one individual to
11 another. A number of factors that, I think we can imagine, the
12 literature suggest come into play. One is how recently you
13 have washed your hands. If you have washed your hands in the
14 last half hour, you are less likely, just as a starting
15 principle, to be shedding as much DNA as someone who hasn't
16 washed their hands for several hours. Another potential matter
17 might be how recently, how vigorously and how often you touch
18 your face. Many individuals will touch their mouth and their
19 nose. Saliva is a very good source of DNA and if you are in
20 the habit, or just by coincidence have touched your hand to
21 your face, even if you have washed your hands within a matter
22 of minutes, you can have a fairly large number of DAN present
23 that can be transferred over. Underlining all of that is
24 simply the observation that some people tend to be sluffers
25 (sic.) as it's called and others are not and they may shed

skin cells more readily than others do. There is a number of things that can make this an uncertain science about how much material can be transferred from skin.

Q We don't know, for instance, if Jane Mixer was a sluffer(sic.) or not? By sluffer(sic.) we mean someone who is predisposed to shed a lot of skin cells?

A No basis to draw that conclusion whatsoever.

Q If she were not a sluffer (sic.) it would be less likely that her DNN would be on the pantyhose, correct?

A Correct.

Q If she had showered recently, that would also make it less likely that her DNA would be on the pantyhose?

A I agree that it would tend to make it less likely.

Q If she were a non sluffer (sic.) who had showered recently, she would be even less likely to leave her DNA behind on the pantyhose, correct?

A Yes, the reasoning is sound.

Q The fact is, Dr. Krane, that Jane Mixer's DNA does not show up, no matter how Gary Leiterman's DNA got onto those pantyhose, her DNA does not show up there.

A Well, let me just be very clear. There are pantyhose cuttings where we do observe her DNA profile fairly vigorously and something that might potentially be Mr. Leiterman's. There are parts of those pantyhose cuttings where we do see what may very well be her DNA. But, with respect to the single source

1 sample or samples that appear to be just Mr. Leiterman's DNA,
2 there is no indication of her DNA being present. It is
3 possible that it is present that the single from it has just
4 been swabbed out by the strength of who ever contributed Mr.
5 Leiterman's DNA. I think we can probably presume that it is
6 his DNA, so it is possible that it is there but there is no
7 indication of it from the DNA results. The same applies for
8 the hand sample.

9 Q And--

10 A Not quit the same in that it is Mr. Ruelas' DNA that is
11 present there as opposed to Mr. Literman's.

12 Q Would you accept the premise that those pantyhose were taken
13 off her dead body?

14 A I am not in any position to contradict that--that is my
15 understanding. Frankly, I am sure that you and that jury are
16 in a better position to access that than I, in light of the
17 materials that I've reviewed.

18 Q You talked to Mr. Gabry about the article and you said it was
19 from 1997 in regards to the sperm cells in the washing
20 machine?

21 A I don't believe that one was fro '97. My recollection is that
22 came subsequently, but there was a nature paper published by
23 people in the Victoria State forensic science center
24 coincidentally, the same laboratory that I alluded to at the
25 very beginning of my testimony that they had done a study--my

1 recollection is that the title is " DNA Fingerprints from
2 Fingerprints",

3 Q With respect to the sperm cell study that you talked about in
4 some detail--biologically are sperm cells different than other
5 cells in the body?

6 A It is fair to say that every cell type is different or we
7 wouldn't call it a special cell type, but there is--there are
8 distinguishing features of sperm cells relative to others.

9 Amongst there is ,generally speaking, the tough protein coat
10 that is associated with sperm serves well to protect the DNA
11 inside of sperm heads. Serves better to protect the DNA inside
12 of sperm heads than the--the protective material associated
13 with skin cells.

14 Q Sperm cells are tougher?

15 A In a matter of speaking, yes.

16 Q Sperm cells--the purpose of sperm cells is to exist outside of
17 the host body?

18 A I think that is fair to say, yes.

19 Q Sperm cells have their own source of energy. They are able to
20 loco mote?

21 A That is not distinctive to sperm cells, but they are, yes.

22 Q Is the fact that they loco mote outside the host body, is that
23 in fact, unique?

24 A That is not strictly unique but that is certainly something
25 that's characteristic that sets sperm cells apart from other

1 cells. White blood cells for instance, are expected to do the
2 same thing outside our body, patrolling the outer surface.
3 But, again, that is one of the things that make sperm cells
4 different from other cells.
5 Q And for sperm cells to do nature's job, that have to exist in
6 a fairly hostile environment, correct?
7 A Fair to say, yes.
8 Q Chemically speaking?
9 A Maybe this is a point of clarification, this study that we
10 have been talking about from the Royal Canadian Mounted
11 Police, my understanding was this was a dried sperm sample.
12 There weren't sperm cells that were freshly deposited and
13 alive and moving around.
14 Q But presumably, their tough exterior would still be there?
15 A Presumably, yes.
16 Q Do you think it's fair to draw conclusions about skins cells
17 for instance or cells from the buckle area of the cheek based
18 upon what sperm cells do in a washing machine?
19 A Not necessarily, but again, that's one specific study of
20 approaching that does, that I can point you to that talked
21 more specifically about epithelia or skin cells as opposed to
22 sperm cells.
23 Q You talked to Mr. Leiterman (sic.) about buckle cells--so
24 called because--is it all of the interior of the mouth

1 referred to as the buckle region or is it just the inside of
2 the cheek?

3 A I believe that is a bit outside my area of expertise, but my
4 understanding is that when you are talking about a buckle
5 sample, you are talking about a cheek swab effectively.

6 Q Okay. You talked to Mr. Gabry about the fact that Leiterman's-
7 -I don't remember what you said, buckle the sample or buckle
8 swab was in the lab. Do you recall what your terminology was?

9 A I don't recall either, just that his DNA was present for
10 purposes of DNA testing within the lab. It happens that it was
11 DNA associated with a buckle swab.

12 Q What's FTA paper?

13 A It's a kind of paper to which DNA can be transferred and
14 stored, I a sense.

15 Q Do you agree that that is a very stable way of storing DNA?

16 A In the dry, in the dark, FTA paper suffices quit well as a
17 mean of storing DNA for the purposes of testing.

18 Q In fact, isn't FTA paper designed to bind the DNA to the
19 paper?

20 A There is some element of that, but if we are talking about DNA
21 associated with cells, much of that--if we stipulate that we
22 are talking about DNA associated with cells, the paper--the
23 surface of the paper itself never actually comes in contact
24 with the DNA, but DNA that is scrapped from the cells might

- 1 have a greater tendency to stick to the paper than to other
2 objects.
- 3 Q Do you use FTA paper in your lab?
- 4 A No, we have no had occasion to do so.
- 5 Q Have you had any experience with FTA paper?
- 6 A I think it's safe to say no.
- 7 Q Are you--do you know what COTIS is?
- 8 A I do, yes.
- 9 Q Are you familiar with the procedures and protocols implemented
10 by the Michigan State Police Lansing laboratory in respect to
11 the COTIS unit?
- 12 A I have become familiar with them, yes.
- 13 Q So you're aware that the COTIS samples are stored separately
14 than the evidentiary samples?
- 15 A That is my understanding.
- 16 Q Separate room?
- 17 A Yes.
- 18 Q Are you also aware that when the COTIS samples are received,
19 they are sent directly to the COTIS unit before the envelope
20 that they are contained in is opened?
- 21 A With in the same building, yes, with the rest of the DNA
22 testing facilities.
- 23 Q Have you studies at all the facilities--the facility itself?
- 24 A I have not been physically present at the facility.

1 Q Are you aware anything about the ventilation system that they
2 have there?

3 A Not directly. I've heard some descriptions of it as it's been
4 characterized in testimony here. Again, I have not
5 specifically reviewed it.

6 Q With respect to the literature on secondary and triceray
7 transfer that you have reviewed, do any of those articles
8 reflect that when this phenomenon has been observed it has
9 been observed in results of high numbers of cells?

10 A I take it you mean high numbers of cells being transferred?

11 Q Yes.

12 A I don't know that the studies speak very specifically about
13 the number of cells that are being transferred, I know that--I
14 can't recall any of them that speak to the number of cells and
15 to those that do quantitate the number of DNA associated with
16 the samples do not specifically distinguish between transfer
17 DNA and DNA that may have been associated with somebody who it
18 was transferred to. Certainly the general expectation at the
19 starting point would be to suggest there would be less of my
20 DNA upon your hand if we shook hands than your DNA.

21 Q Would agree that fourteen hundred cells worth of DNA is a lot
22 of DNA for a forensic sample?

23 A For the purposes of forensic testing, that is an appreciable
24 amount of DNA. That's a robust--a substantial amount to
25 perform DNA profile experiments upon.

1 Q Are you aware of any studies that have documented a transfer
2 of DNA along an order such as that in terms of secondary
3 transfer?

4 A I don't recall the specifics; again, I wouldn't find it
5 surprising if there were comparable amounts of DNA in
6 secondary transfer. Again, many of--a specific transfer study
7 that I'm recalling really didn't do a very good job
8 distinguishing between DNA transferred and DNA that was
9 already resident on the surface it was being transferred to.
10 In that instance, its possible that the transferred amount of
11 material, where the quantification was an issue, it is
12 possible that the amount of transferred material is in a par
13 with what you are talking about that would come with the
14 amount of fourteen hundred cells.

15 Q You're basing that statement on what?

16 A Well, again, this is based upon my recollection of that
17 specific paper it's--Dr. Carl Lad is one of the authors and he
18 is a member of the Connecticut State Police, published in The
19 Journal of Forensic Science my recollection is that it was
20 published in the late 1990's.

21 Q Dr. Krane let me show you (INAUDIBLE) and see if this is the
22 article you are referring to?

23 A It is.

24 MR. HILLER: If I could have a moment ,your Honor,

THE COURT: Let's take a brief recess while you are doing that and then we can come back after you've read that. Please go with Ms. Washington.

THE LEGAL CLERK: All rise please.

(Court in recesses at 3:46 p.m.)

(Court reconvenes at 3:59 p.m.)

THE LEGAL CLERK: All rise please. The Washenaw County Trial Court is now back in session.

THE COURT: Bring the jury.

THE LEGAL CLERK: All rise for the jury, please.

THE COURT: Please be seated. I remind you that you
under oath.

THE WITNESS: Thank you.

THE COURT: Prosecutor.

THE COURT: Prosecutor.

THE COURT: Prosecutor.

MR. HILLER: Thank you, your Honor.

BY MR. HILLER

Q Dr. Krane, referring back to the article by Carl Lad that you've identified and that you were sighting to earlier--

A Yes.

Q In that study, they looked at transfer on various objects; lab door, handles, telephone mouth piece, freezer door handles, briefcase handles, closet door handles, file cabinet handles, computer keyboards, computer mouse, coffee cups, steering wheels for primary transfer and then for secondary transfer;

- 1 handled coffee cups and coffee cup handlers, that is the
2 person who handled the coffee cup, I would assume.
- 3 A In a sense, you've missed one, a handshake. I think they also
4 examined handshakes as well.
- 5 Q They write on page 127, second column last paragraph:
6 "with respect to secondary transfer peaks above--
7 first of all let me back up. They used a peak threshold of 75
8 RFU's, is that correct?
- 9 A Well, maybe if I could back up a bit further, you said page
10 127 it is 1221, but--
- 11 Q I'm sorry, my copy is probably not as good as yours.
- 12 A They did use--for the purposes of this study they utilized a
13 threshold of 75 RFU's.
- 14 Q And that is fifty percent of the threshold--the reporting
15 threshold that the State Police use?
- 16 A I don't think that is a fair comparison. They are using a
17 different typing system than the Michigan State Police use.
18 The Michigan State Police are using a genetic analyzer called
19 a--a 310, but the study used in this--the genetic analyzer
20 used in this study is a 377 and the sensitivities of the two
21 platforms are significantly different.
- 22 Q Nonetheless in the second column on page 1221, is it?
- 23 A Yes.
- 24 Q They write:

1 "with respect to secondary transfer, peaks above
2 background peaks (15-20 RFU'S) from the second individual
3 were no detected for most STR amplification. On occasion,
4 minor peaks, below 75 RFU, from the second individual are
5 observed however, these instances a drop put was routine.
6 The complete secondary profile was never detected even if
7 the data was analyzed in the 50-75 RFU range.

8 Did I read that correctly?

9 A You did.

10 Q And then on the next page, is it not also true that they
11 write:

12 "our data indicate that they primary transfer of DNA
13 is possible but detecting the interpretable genotypes is
14 not assured. Secondary transfer is not observed under our
15 experimental conditions, therefore our data do not
16 support the inference that the interpretation of DNA
17 profiles from case samples could be compromised from
18 secondary transfer."

19 A That's the last paragraph of their paper, yes.

20 Q Dr. Krane, thank you. I don't have any further questions.

21 A My pleasure.

22 THE COURT: Any further questions, Mr. Gabry?

23 MR. GABRY: Thank you.

24 RE-DIRECT EXAMINATION

25 BY MR. GABRY

1 Q Regarding that paper, are you familiar with the author of that
2 paper?

3 A There are a number of authors--

4 Q Mr. Lad?

5 A Dr. Lad, yes. He is the first author and I am personally
6 familiar with two of the five authors on that paper.

7 Q Did you discuss that paper with Dr. Lad?

8 A I have had occasion to talk to Dr. Lad about it, yes.

9 Q As to the points that Mr. Hiller just made or that he read to
10 you from that paper, does that change your opinion for the
11 ability for DNA to transfer from object to object?

12 A No, my opinion incorporates insights from this paper as well
13 as others as well as Dr. Lads.

14 Q Could you point them out to the jury? What in that paper do
15 you incorporate?

16 A There are a number of things. I think it's important to point
17 out the last sentence of the abstract also has some important
18 information that characterizes the nature of the study. If I
19 can read it, it says:

20 "Our data do not support the conclusion that
21 secondary transfer will compromise DNA transfer results
22 under typical forensic conditions."

23 I think it's particularly important to draw attention to their
24 feel--their feeling of necessity to include the word "typical"
25 in this. Again, in a typical case, secondary transfer may not

1 be an important issue and in some cases it may. I would also
2 point out that when they're talking about amounts of DNA that
3 they've detected, they are talking about average values and I
4 know from talking to Dr. Lad that some of these averages
5 included--

6 MR. HILLER: I am going to object to hearsay.

7 MR. GABRY: Goes to his opinion, your Honor.

8 THE COURT: Well, that is not why I am going to
9 hear it. It is relevant to the cross examination of this
10 article so I am going to allow it.

11 THE WITNESS: My point is quit simply that the
12 average values and the average value doesn't necessarily
13 capture the extreme value. In some instances there may very
14 well be, and I happen to know that there were some extreme
15 values that had quit a bit of DNA that was transferred.
16 Further, these are averages based on only six replicates.
17 That's a relatively small number and it difficult then to
18 apply this universally based on a sample size of six for these
19 analysis.

20 BY MR. GABRY

21 Q Now that, paper was generated as a result to a response to
22 another article that was published in 1997, is that correct?

23 A The 1997 paper is one that I have referred to at least a few
24 times today and it was published in The Journal Nature and
 this paper was inspired by that 1997 nature paper that is in

fact titles "DNA fingerprints from Fingerprints." If I could--
there have been subsequent studies to this one, that the '97
nature paper has inspired and has been influenced by this
paper which go on and continue to explore secondary, even
triceray transfer.

Q Has science ruled out the ability to rule out the ability for
secondary even triceray transfer?

A Certainly not.

Q Mr. Hiller also spoke with you in some length about the robust
nature of the DNA referring to the--I believe he was referring
to the pantyhose sample, I am not trying to miss speak myself,
if I'm incorrect please correct me. I think he was referring
to the single profile samples being robust in some fashion. Is
there any significance to the quantification or the amount
when the DNA is being extracted and tested for purposes of
evidentiary value?

A My recollection is that when there is talk about strength of
signal or robustness--it was not specifically stated but it
was in the context of the electropharagram peaks, the
underlining data in which the DNA profile was derived. In the
single source samples, both from the pantyhose and the blood
stain on the hand, there is a strong signal. There is a
relatively large amount of DNA that appears to be present, but
there's --there's perhaps a mixing a matching of things going
on here. There was also some talk of, I believe it was some

1 fourteen hundred cells being present in some contents. That
2 assessment doesn't come from the electrophograms. That
3 assessment comes from a separate prior experiment that is done
4 to determine how much DNA is associateD with a sample, a
5 quantification experiment. There is a quantification step that
6 is performed typically to determine how much material should
7 be used for subsequent analysis and amplification in
8 interpretation steps. There is a certain target window of
9 amount of DNA that those steps work best with. A
10 quantification step is performed to get a feel for how much
11 DNA is associated with a sample so that it can be concentrated
12 or diluted appropriately so it will work well for the
13 subsequent steps. That quantification step is by no means s
14 intended to say anything about the source of material. It
15 simple says there is human DNA present. It doesn't say whose
16 DNA but a certain amount of DNA is present. Further, that
17 particular quantification step is not sensitive to the--it is
18 not as sensitive to the degradation phenomenon that is
19 problematic for the subsequent steps. Further it is not at all
20 sensitive--well, perhaps just very a little bit sensitive to
21 the inhibition issues that can prove to be very problematic to
22 the subsequent amplification steps. It is quit possible for us
23 to get mixed messages or inconsistent messages from that
24 quantification step relative to what we see to the down stream
25 DNA profiling steps.

1 Q So if there was testimony by Dr. Milligan that in the
2 quantification step, as to say for example one--I think it was
3 the very first cutting A from the pantyhose and we talked
4 about the nanograms and he equated it to five thousand human
5 cells, based on the type of testing that was being done, do
6 you attribute all five thousand of those cells to the single
7 cell profile donor that is identified.

8 A Not necessarily. Again, when you consider that that
9 quantification step is not affected by degradation to the
10 extent that the identification steps are, and when you
11 consider that the quantification step is not affected by the
12 inhibitors in the same sense that the amplification step is,
13 so it may be that there is a mixture of more than one persons
14 DNA there.

15 Q Why would that mixture not show up in the subsequent testing?

16 A Well, one scenario would be that there was a large amount of
17 degraded DNA from one individual present which cause the
18 quantification step to report that there is a lot of DNA
19 present. At the same time, there is a small amount of DNA
20 associated with a secondary contributor that didn't contribute
21 much to the quantification estimate, but again, was suitable
22 for the amplification and the giving rise to the single of
23 whose DNA was present. It's--again, these are separate tests,
24 and the answers that these tests are providing are addressing
25 related, but disconnected issues.

1 Q And then the strength of the signal as a result of the
2 Xeroxing of the PCR process of recopying the DNA that was
3 identified.

4 A I think that it is important to be clear that there are
5 essentially two signals that we are talking about. A signal
6 that is detected from the quantification step and the a
7 different signal that is detected in the amplification step.
8 The robust signals that you eluded to before are ones
9 associated with the amplification step and there is a separate
10 strong signal associated with the quantification step.

11 Q Okay. Thank you.

12 THE COURT: Further questions, prosecutor?

13 RE-CROSS EXAMINATION

14 BY MR. HILLER

15 Q Dr. Krane, would you agree or disagree that the presence of a
16 lot of a persons cell makes it less likely that this was
17 secondary transfer as opposed to primary transfer?

18 A As a general principle I would agree, but I think it's
19 important that that it is in generalities. That is not
20 necessarily always going to be the case. A secondary transfer-
21 -it's been demonstrated that secondary transfers can result in
22 a large amount of material being transferred. Larger than
23 what's present on another individuals surface.

24 Q Where was that documented?

1 A The study that I am recalling was one performed by Mark
2 Taylor. My recollection is that it has not been published in
3 the peer reviewed literature, but from talking with him about
4 a study, I am aware of at least one instance. In fact, my
5 recollection is that in the report that you mentioned earlier
6 for the--that particular trial that you had made a point that
7 he had signed it and I had not, my recollection is that there
8 is some mention that specific point in the contents of that
9 report.

10 Q This is Mark Taylor who, I think, you identified him as a
11 (INAUDIBLE)

12 A I characterized him as a friend and colleague, yes.

13 Q I believe you indicated that that was an unpublished report,
14 it has not been peer reviewed?

15 A Correct.

16 Q Is that the only study that you can point to, sir?

17 A Point to for what purpose?

18 Q For the purpose that we were just discussing, the purpose of
19 showing that secondary transfer can result in large amounts of
20 DNA being transferred.

21 A The only one that comes to mind.

22 Q That was done--that was a commissioned study, shall we say?

23 A I suppose that is fair to say, yes.

24 Q Done for the purpose of the defense in a case that was tried
25 in Boston?

1 A In the Boston area, yes.

2 Q What was the verdict in that case?

3 MR. GABRY: Objection your Honor as to relevance.

4 THE COURT: Sustained.

5 MR. HILLER: Nothing further.

6 MR. GABRY: No further questions.

7 THE COURT: You may step down, sir. You may be
8 excused.

9 THE WITNESS: Thank you, your Honor.

10 (witness excused at 4:17 p.m.)

11 THE COURT: Mr. Gabry.

12 MR. GABRY: Thank you, your Honor, the People--the
13 People --Mr. Leiterman rests his case.

14 THE COURT: Do you have any further evidence,
15 prosecutor?

16 MR. HILLER: Your Honor, the People rests and
17 rebuttal.

18 THE COURT: Ladies and gentleman, the evidence in
19 this case has been concluded. What remains are the closing
20 arguments of the attorney's, my instructions to you on the law
21 and the deliberations. You have not heard the closing
22 arguments and more importantly you have not heard my
23 instructions on the law. Don't begin your deliberations; don't
24 reach any conclusions until you do. We are going to adjourn
25 for the evening. We will come back tomorrow morning at eight

1 o'clock and begin with the closing arguments of the attorneys
2 and my instructions and then your deliberations. It has been a
3 long two weeks. Please be very careful tonight about following
4 my instructions so that we don't have any difficulties in
5 concluding the case. Do you have any questions about my
6 instructions? You are excused until eight a.m. tomorrow
7 morning.

8 THE LEGAL CLERK: All rise please.

9 MR. GABRY: Your Honor, may we approach?

10 THE COURT: Yes. Please be seated.

11 (Bench conference at 4:19 p.m.)

12 (Court resumes at 4:19 p.m.)

13 THE COURT: Please be seated. Mr. Leiterman, you
14 understand that you have the absolute right to testify or not
15 to testify in this case.

16 MR. LEITERMAN: I understand, your Honor.

17 THE COURT: Have you spoken with your attorney about
18 this? MR. LEITERMAN: I have.

19 THE COURT: Are you satisfied that the decision that
20 you and he have made together not to testify is in your best
21 interest?

22 MR. LEITERMAN: Yes.

23 THE COURT: Thank you. We're adjourned until eight
24 o'clock.

25 MR. GABRY: Thank you, your Honor.

1 THE COURT BALIFF: All rise.

2 (Court in recess at 4:19 p.m.)

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1 STATE OF MICHIGAN)
2 COUNTY OF WASHTENAW)

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5 I certify that this transcript, consisting of 185 pages, is a
6 complete, true, and correct transcript to the best of my ability,
7 of the proceedings held in this case on Thursday, July 21, 2005
8 before the Honorable Donald E. Shelton, Circuit Court Judge.

9
10 DATED: November 29, 2005

11 _____
12 Amy White (CER 7307)

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