

1 (Open court, defendant and jury present)

2 THE COURT: Thank you. Please be seated.

3 Good morning, ladies and gentlemen.

4 I think we're ready to continue. With

5 that, would the State proceed, please?

6 MR. BALLENGEE: Yes, Your Honor. The State

7 calls Dr. Merrill Hines to the stand.

8 THE COURT: Thank you.

9 MR. BALLENGEE: This witness has been
10 previously sworn, Your Honor.

11 THE COURT: Thank you.

12 **DR. MERRILL HINES,**

13 having been first duly sworn, testified as follows:

14 **DIRECT EXAMINATION**

15 **BY MR. BALLENGEE:**

16 Q. Dr. Hines, will you introduce yourself to the
17 jury?

18 A. My name is Dr. Merrill Hines.

19 Q. And for the record can you tell your first and
20 last name?

21 A. M-e-r-r-i-l-l. H-i-n-e-s.

22 Q. What do you do for a living?

23 A. I'm an assistant medical examiner at the Harris
24 County Institute of Forensic Sciences.

25 Q. And as an assistant medical examiner, what

1 exactly does that entail?

2 A. I'm trained as a forensic pathologist to
3 perform autopsies and external examinations of deceased
4 persons to determine the cause and manner of death.

5 Q. How long have you worked for the Harris County
6 Institute of Forensic Sciences?

7 A. Nearly eight years.

8 Q. And is all eight years of that as an assistant
9 medical examiner?

10 A. Yes.

11 Q. What training -- well, what kind of education
12 did you have to receive in order to become an assistant
13 medical examiner?

14 A. Following four years of medical school, I
15 completed a five-year residency in anatomic and clinical
16 pathology and a one-year fellowship in forensic
17 pathology.

18 Q. Where did you go to medical school?

19 A. Louisiana State University in New Orleans.

20 Q. And just to be clear, what degree did you get
21 again?

22 A. A doctorate of medicine.

23 Q. Did you focus on any specific area in medical
24 school?

25 A. No.

1 Q. After medical school, what did you do?

2 A. A five-year residency in pathology.

3 Q. And did you receive any additional training
4 after that?

5 A. Yes. A one-year fellowship in forensic
6 pathology.

7 Q. Where was that one-year fellowship?

8 A. Albuquerque, New Mexico.

9 Q. And what, I guess, organization in Albuquerque?

10 A. The office of the medical investigator, which
11 is affiliated with the University of New Mexico.

12 Q. You talked a little bit about forensic
13 pathology. And what exactly is forensic pathology?

14 A. Forensic pathology is the utilization of
15 medical, specifically pathology knowledge, which is the
16 study of disease and/or injuries, to determine the cause
17 and manner of death as well as the mechanism of death
18 and any injuries that may be present on a deceased
19 person that we examine. These observations are made
20 with the purpose of providing information to legal
21 proceedings specifically and to generate death
22 certificates which are used by public health entities.

23 Q. During your time in New Mexico as well as in
24 Harris County, about how many autopsies have you
25 performed?

1 A. I would estimate on the order of 2,000.

2 Q. Have you testified in court before as an expert
3 in forensic pathology?

4 A. Yes.

5 Q. Have you testified on few or on many occasions?

6 A. Many.

7 Q. Have you testified solely in criminal trials or
8 also in civil trials?

9 A. Criminal and civil.

10 Q. Is there -- what is the process when a -- I
11 guess, when a body arrives at the Harris County
12 Institute of Forensic Sciences, what is the process of
13 an autopsy being, I guess, executed?

14 A. When a case is received at the office, it is
15 assigned a unique medical-legal identification number.
16 And the body is photographed. In our morning meeting,
17 the case is reviewed by a group of pathologists and
18 assigned to a specific pathologist for an examination,
19 either an external examination or a complete autopsy.

20 Once the examination itself begins,
21 additional photographs are taken of the body as they
22 were received in our office, disturbed as little as
23 possible from where they were transported. So, if
24 there's clothing, their clothing remains on and it's
25 minimally disturbed. Following the first series of

1 photographs and observations made by the pathologist in
2 the form of notes and diagrams, the body is disrobed and
3 cleaned and a second series of photographs are taken.
4 Again, along with observations by the pathologist of any
5 interesting or relevant findings, such as evidence of
6 disease or injuries, something of that nature. If the
7 examination is, indeed, a complete autopsy, following
8 that, the body is opened, the organs are viewed as they
9 lay in the body or inside you, and then they are removed
10 individually and additionally dissected, again, looking
11 for evidence of deceased or injury.

12 All the while, photographs are taken at the
13 discretion of the pathologist and tissue and fluid
14 samples are retained for possible laboratory analysis as
15 well as microscopic examination by the pathologist.

16 Q. Is every person that dies in Harris County,
17 Texas, are they transported to the Harris County IFS?

18 A. Absolutely not. In fact, the majority of the
19 deaths are non-reportable. We only investigate
20 reportable deaths, which in general would be any
21 nonnatural death, any unexpected or sudden deaths,
22 things of that nature. Most people die under the care
23 of a physician and their cause of death is known and
24 it's a natural death. And their physician is tasked
25 with the responsibility of certifying the death or

1 signing the death certificate.

2 Q. You spoke a minute ago about there was a
3 determination made at some point in the process whether
4 or not there is a full autopsy that's done. And how is
5 that determination made?

6 A. A minority of our cases, approximately
7 15 percent, do not require a full autopsy. Those are
8 cases where the cause and manner of death are clear
9 based on the circumstances or medical records. For
10 example, if an elderly person fell and fractured their
11 hip, remained in the hospital, and died, say, a week or
12 two following that, the cause of death or at least a
13 contributory cause of death, which would be the hip
14 fracture, is quite evident and documented adequately in
15 the medical record. Therefore, we would not need to
16 perform a complete autopsy on that individual. We would
17 just view them externally, make sure any injuries that
18 we see are consistent with the account of their fall and
19 injuries, and then certify the death as an accident
20 without actually performing an internal examination.

21 Q. What's the condition of the body generally when
22 it arrives?

23 A. It varies.

24 Q. Are they generally in pristine condition? Are
25 they generally clean?

1 MS. McLAUGHLIN: Objection. Calls for
2 speculation.

3 THE COURT: Restate it for me.

4 Q. (By Mr. Ballengee) Are the bodies that arrive,
5 are they generally clean?

6 MS. McLAUGHLIN: Your Honor, it's also
7 vague.

8 THE COURT: Also what?

9 MS. McLAUGHLIN: Vague.

10 THE COURT: Well, I'd say it is vague.

11 MR. BALLENGEE: I'll be more specific.

12 THE COURT: All right.

13 Q. (By Mr. Ballengee) When a body arrives at
14 Harris County IFS, does it sometimes have blood on it?

15 A. Yes.

16 Q. And do y'all clean the body at any point in the
17 autopsy process?

18 A. Yes. After the first series of photographs are
19 taken, we remove any clothing and clean the body.

20 Q. And prior to cleaning the body, do you examine
21 the body for any kind of trace evidence?

22 A. Yes. We examine all surfaces of the body and
23 any clothing that comes with the body. And depending on
24 the type of case that we are examining, we may examine
25 very closely or look very closely for the presence of

1 any material that could be of evidentiary value, such as
2 fibers or gunpowder particles, paint chips, things of
3 that nature.

4 Q. What do you do if you find some of those items?

5 A. Any and all of the evidence that we recover
6 during the course of an examination is sealed and placed
7 in an evidence room and signed in order to generate and
8 preserve the chain of custody.

9 Q. If there is an indication that a body might
10 have been involved in a shooting case, are there any
11 steps that you take to figure out whether or not that
12 person actually shot?

13 MS. McLAUGHLIN: Objection, Your Honor.
14 Vague question.

15 THE COURT: That's overruled.

16 A. All gunshot wound cases are at least partially
17 x-rayed prior to the performance of an autopsy and
18 gunshot residue collection or the attempt to collect any
19 gunshot residue that may be present on the hands is
20 undertaken. So, we used adhesive disks and tap them on
21 the decedent's hands in order to collect any residue
22 that may be present, even if there is no visible residue
23 on the hand. It's a matter of routine. Every gunshot
24 wound case we examine, we collect that sort of evidence.

25 Q. (By Mr. Ballengee) Now, after the body has been

1 examined for trace evidence and after it's been clean,
2 what's the next step that you take?

3 A. The second round of photographs and
4 observations, notes, etc., and then in the case of a
5 gunshot wound case, I would document the shape, size,
6 and the location of any gunshot wound, injuries such as
7 an entrance wound, exit wounds, any material around
8 either one of those wounds such as soot or gunshot -- or
9 gunpowder, unfired gunpowder, and possibly stippling,
10 which are small punctate abrasions caused by material
11 from the barrel of a gun.

12 Q. You said stippling. Is stippling present on
13 all gunshot wound cases?

14 A. No.

15 Q. What exactly is stippling?

16 A. Stippling is often a group of tiny abrasions
17 caused by particular material that is ejected from the
18 muzzle of a gun when it's fired. The material strikes
19 the skin of a living person and causes tiny dot-like
20 abrasions, which is generally red. And I say that
21 because stippling implies an injury sustained by a
22 living person. If you were to shoot a deceased person
23 or an inanimate object, there may, in fact, be small
24 defects on the surface of that target or person, but it
25 would not be stippling. So, stippling is little red

1 abrasions caused by material ejected from the muzzle of
2 a gun. This only occurs when the muzzle of the gun is
3 at a relatively close distance to the surface of the
4 skin. It is the typical finding in what we consider an
5 intermediate range of a gunshot wound. That would be an
6 inch, 2 or 3 possibly, up to 4 feet in distance. The
7 presence of stippling would indicate that the muzzle of
8 the gun was somewhere within that range of distance when
9 it was fired.

10 The absence of stippling, however, does not
11 indicate that the muzzle of the gun was not within that
12 range. To clarify, clothing can block those particles,
13 and, therefore, prevent stippling from occurring in
14 cases where the muzzle of the gun would have otherwise
15 been close enough to cause stippling. Similarly, hair
16 can block those particles or even intermediate targets,
17 such as a door or a wall or a window that somebody was
18 shot through.

19 So, without knowing those things that
20 occurred prior to me examining the body, I can't often
21 speculate as to what the absence of stippling means, but
22 when I see it, I can state that the muzzle of the gun
23 was within that few inches to a few feet range.

24 Q. Now, after you've completed the external exam,
25 do you do an internal exam?

1 A. Yes.

2 Q. Why do you do an internal exam?

3 A. To document the presence of natural disease and
4 any recent or remote injuries.

5 Q. What does the internal exam entail?

6 A. Examine the organs as they are position within
7 the body. In the case of gunshot wounds, examining any
8 defects or holes in the organs that would help me better
9 clarify the direction the bullet took through the body
10 and what organs were injured by the bullet, as well as
11 removing the organs and examining them individually.

12 Q. Is a toxicology examination done as well?

13 A. All cases that we examine are -- I should say
14 we recover specimens, usually fluids, from all cases
15 that we examine. Even external examinations, we at
16 least get some blood and fluid from the eye for the
17 potential use by the toxicology lab. We do not
18 necessarily run tests on all cases, but we do retain
19 samples.

20 Q. On May 2nd, 2010, did you conduct an autopsy on
21 the body of Tevin Williams?

22 A. Yes.

23 Q. Or excuse me --

24 A. I should say May 3rd is when I conducted the
25 exam.

1 Q. I wanted to clarify that as well. May 3rd.

2 What was the unique case number that was
3 assigned to Tevin Williams?

4 A. ML10, referring to the year 2010, 1293. So,
5 this case was the 1,293rd case of the year 2010 that we
6 examined.

7 Q. I'm showing you what's been previously marked
8 as State's Exhibit No. 48. Are you familiar with these
9 records (indicating)?

10 A. Yes.

11 Q. And what are these records?

12 A. This is a copy of my autopsy report which
13 includes a toxicology report.

14 Q. And are these records kept in the ordinary
15 course of business for Harris County IFS?

16 A. Yes.

17 Q. Are they altered in any way?

18 A. No.

19 Q. Does Harris County Institute of Forensic
20 Sciences, do they maintain custody of these records?

21 A. Yes.

22 Q. And were these records made at or near the time
23 of the actual observations recorded in this record?

24 A. Yes.

25 Q. And were they made by somebody with actual

1 knowledge of the observations that were recorded there?

2 A. Yes.

3 MR. BALLENGEE: Your Honor, at this time
4 the State offers State's No. 48 into evidence. I'll
5 tender to opposing counsel for objection.

6 **(State's Exhibit No. 48 Offered)**

7 MS. McLAUGHLIN: No objection, Your Honor.

8 THE COURT: Thank you so much. State's 48
9 is admitted.

10 **(State's Exhibit No. 48 Admitted)**

11 MR. BALLENGEE: Permission to publish, Your
12 Honor?

13 THE COURT: Certainly.

14 Q. (By Mr. Ballengee) Now, Dr. Hines, can you see
15 that on your screen to your right?

16 A. Yes.

17 Q. The first page of State's 48, what is that?

18 A. That would be the title page of the report.

19 Q. And does it have your signature on that page?

20 A. Yes.

21 Q. And the signature of who else is on that page?

22 A. This is Dr. Sanchez, the chief medical examiner
23 of Harris County.

24 Q. Why does he sign this as well?

25 A. All homicides are reviewed and cosigned by

1 either the chief medical examiner or his designee, who
2 is normally the deputy chief medical examiner.

3 Q. Now, this second page of these records, what
4 does that page entail?

5 A. This is the first page of the actual body of
6 the report. And it begins with a brief history
7 documenting the circumstances as they were known to me
8 surrounding the death of this person. And then,
9 essentially, a paragraph indicating the authority under
10 which we perform these examinations. And it has a
11 description of the decedent's clothing and a general
12 description of the decedent, including height, weight,
13 hair color, eye color, things along that line.

14 Q. At the bottom, I believe the bottom three
15 paragraphs, what does that include?

16 A. Height, weight.

17 Q. What part of your examination is that?

18 A. It's called the external appearance.

19 Q. Is that what you were referring to earlier as
20 the external examination?

21 A. Yes.

22 Q. Is the external examination more involved than
23 that? You sounded like you hesitated.

24 A. Well, the external appearance section is a
25 common portion of the exam that's presented in both

1 external examinations and a full autopsy. And in a full
2 autopsy, there is a section called internal examination
3 and there are other sections dealing specifically with
4 injuries as well as evidence of medical intervention
5 and identifying marks and scars.

6 Q. I'm now showing you Page 3. Does that involve
7 the identifying marks and scars and also the medical
8 intervention?

9 A. Yes.

10 Q. On Page 3, does it also -- what does it discuss
11 in the bottom of the page?

12 A. So, under the heading of "evidence of
13 injuries," is a description of the gunshot wound
14 identifying this particular decedent.

15 Q. And what were your findings after this autopsy
16 on the evidence of injuries?

17 A. That a single perforating or
18 through-and-through gunshot wound was on the torso of
19 the decedent with the entrance wound being on the front
20 of the top of the chest and the exit being on the back
21 in the mid-back.

22 Q. Were you able to determine the direction of
23 travel of the bullet?

24 A. Yes. Front to back and downward with a very
25 slight left-to-right direction.

1 Q. Now, is it possible that -- well, let me back
2 up. Is that a common trajectory that you see in
3 autopsies?

4 A. I would say no.

5 Q. Does it appear -- in what way is it not common?

6 A. Usually the path of the bullet is less vertical
7 than what I observed in this particular case.

8 Q. Now, what are the possibilities that could
9 exist for why that path might exist?

10 A. So, you have to keep in mind that all of my
11 measurements, descriptions, observations are made with
12 reference to the body in the anatomic position. That
13 position is a person standing straight up with their
14 palms facing forward and their arms at their side.
15 That's an artificial construct that we use for sake of
16 consistency when we perform these exams, but as you
17 know, people in life don't maintain the anatomic
18 position.

19 So, when I say that the bullet traveled
20 downward through the body, either the body was nearly in
21 the anatomic position, that is standing straight up and
22 the bullet traveled from up to down through the body.
23 However, if you imagine the body bending at the waist
24 and being bent over when the bullet passed through it,
25 then that same sort of trajectory or direction would be

1 achieved even though the bullet in this instance was not
2 traveling downward. It could have been traveling
3 parallel to the ground, but with the top of the body
4 bent and parallel to the ground.

5 Q. Dr. Hines, I'm showing you now Page 4. What
6 were your findings on Page 4 beginning with the internal
7 examination?

8 A. My internal examination generally does not
9 reference any injuries, or I should say the injuries I
10 observed. So, when I described my finding in the
11 internal examination, they are of organs and body
12 cavities without any description of the injuries. And
13 so, essentially, my internal examination demonstrated a
14 relatively healthy normal male.

15 Q. What injuries did you notice to the organs of
16 Tevin Williams?

17 A. The gunshot wound track included the chest
18 plate, the right lung, and the back of the chest, or the
19 back as it were, with a collection of blood on the right
20 side of the chest surrounding the right lung.

21 Q. I'm now showing you Page No. 7. What is on
22 Page No. 7 of your report?

23 A. This is a diagram I prepared to demonstrate the
24 relative locations of the entrance and exit components
25 of the gunshot wound.

1 Q. I'm showing what's been previously marked as
2 State's Exhibit Nos. 50, 51, 52, and 53, as well as
3 State's Exhibit No. 49. Do you recognize them
4 (indicating)?

5 A. Yes.

6 Q. And what do you recognize them to be?

7 A. They are photographs or copies of photographs
8 taken during the course of my autopsy examination.

9 Q. And are they fair and accurate depictions of
10 the autopsy that you performed on May 3rd of 2010?

11 A. Yes.

12 MR. BALLENGEE: Your Honor, at this time,
13 the State offers State's Exhibit No. 49 through 53 into
14 evidence, tendering to opposing counsel for objection.

15 **(State's Exhibit No. 49 through 53 Offered)**

16 MS. McLAUGHLIN: No objection, Your Honor.

17 THE COURT: Thank you.

18 State's 49 through 53 are admitted. You
19 may publish, if you wish.

20 **(State's Exhibit No. 49 through 53**

21 **Admitted)**

22 Q. (By Mr. Ballengee) We're not going to put them
23 on the overhead for everyone. We'll just hold them up
24 for the jury.

25 Dr. Hines, I'm showing you State's No. 49

1 and 50. If you could, describe for me what you see in
2 those photographs (indicating).

3 A. 49 depicts the decedent's face and upper chest.
4 And you can see an entrance gunshot wound near the base
5 of the neck. And 50 is a close-up of that same wound.

6 Q. And where on the diagram that you made is that
7 entrance wound?

8 A. (Indicating).

9 Q. I'm showing you what's been previously marked
10 as State's Exhibit Nos. 51 and 52. If you could
11 describe for me what you see in 51 and 52 (indicating).

12 A. These are photographs of the exit gunshot wound
13 on the decedent's back.

14 Q. And on that entrance wound, was there any
15 stippling or a close-range indication on the entrance
16 wound there?

17 A. No.

18 Q. And on 51 and 52, what is -- where is that on
19 the diagram?

20 A. (Indicating).

21 Q. For a bullet to exit the back of someone or a
22 person's body, would it have to have a great deal of
23 velocity?

24 A. It's a relative term. I'm not sure what you
25 mean by "a great deal."

1 Q. For a bullet -- well, let's see how I can
2 phrase this.

3 I'm also showing you State's Exhibit 53.
4 And if you would, describe for me the injury that you
5 observed in 53 (indicating).

6 A. It's a photograph of the right lung with the
7 wound track pictured as areas of red-purple
8 discoloration and an otherwise pink lung.

9 Q. How are you able to tell that the wound on
10 Tevin Williams' chest is the entry wound?

11 A. Entrance wounds have characteristics that
12 differ from exit wounds, at least typical
13 characteristics. Namely, the presence of an abrasion
14 along the edge or margin of the hole produced by the
15 bullet. And this is a function of the way the bullet is
16 facing as it penetrates the skin. Exit wounds do not
17 have this feature usually. And in some instances, soot
18 or stippling is present. That's also an indication of
19 an entrance versus an exit wound.

20 In this particular instance, the entrance
21 wound did demonstrate a very characteristic area of
22 abrasion and the wound on the back had no abrasions.

23 Q. Do you -- does every body that you perform an
24 autopsy on, does it have an exit wound?

25 A. No.

1 Q. Why would a body -- why would a body not have
2 an exit wound?

3 A. In some instances, the gunshot wound is a
4 penetrating versus perforating gunshot wound. So, the
5 bullet does not exit the body in all instances.

6 Q. So, in instances where a bullet does not exit
7 the body, would the bullet in that situation have more
8 or less energy than a bullet that did, in fact, exit the
9 body?

10 A. Assuming the bullet in question had the same
11 wound track and contacted the same components of the
12 body, that is to say let's say both bullets did not
13 strike bone as they passed through the body, then, yes,
14 they -- a perforating bullet would have more energy than
15 a penetrating bullet.

16 Q. Now, you said that the -- there was a
17 toxicology report that was done. What were the results
18 of that toxicology report?

19 A. So, our lab tested for the presence of
20 different kinds of alcohol, including ethanol, which is
21 the type of alcohol that most people think of as
22 alcohol, drinking alcohol, as well as stimulants
23 including amphetamines, cocaine, and PCP. We did not
24 find evidence of any of those substances.

25 Q. You described that the chest cavity filled with

1 blood in this situation, correct?

2 A. Yes.

3 Q. What would that -- what would begin to happen
4 to a body as the chest cavity filled with blood?

5 A. The individual's blood pressure would drop and
6 their ability to breathe would be progressively
7 comprised because the accumulation of blood around the
8 lung would present a full expansion of that lung. And
9 the more blood that accumulated around the lung, the
10 less it would be able to expand, and, therefore,
11 function as a lung.

12 Q. When it expands or -- when -- excuse me. When
13 the lung was being constricted like that, what would be,
14 I guess, the -- what would that feel like to the person
15 that was experiencing this?

16 MS. McLAUGHLIN: Object to speculation.

17 THE COURT: If you believe you have the
18 expertise to answer that question, you may do so.

19 A. It would be manifest as difficulty to breathe
20 or dyspnea.

21 Q. (By Mr. Ballengee) Based on your autopsy, do
22 you have an opinion about what the cause of death to
23 Tevin Williams was?

24 A. Yes.

25 Q. And what do you believe the cause of death was?

1 A. Gunshot wound of the chest.

2 Q. And how did you classify this death?

3 A. You mean the manner?

4 Q. Yes, the manner.

5 A. Homicide.

6 MR. BALLENGEE: Pass the witness.

7 THE COURT: Thank you.

8 From the defense, please.

9 MS. McLAUGHLIN: Thank you, Your Honor.

10 **CROSS-EXAMINATION**

11 **BY MS. McLAUGHLIN:**

12 Q. Good morning, Dr. Hines.

13 A. Good morning.

14 Q. Nice to see you again. If you recall, we
15 previously met regarding this case.

16 A. Yes.

17 Q. And, Dr. Hines, I wanted to start out by
18 discussing gunshot residue with you. Isn't it true
19 there are many factors that play a role in the amount of
20 gunshot residue that may be deposited or collected from
21 hands?

22 A. Yes.

23 Q. And what are some of those factors?

24 A. An individual that has no detectable gunshot
25 residue on their hands may not have handled or fired a

1 gun. That's one explanation. Another explanation would
2 be that individual washed or wiped their hands.

3 Q. And so, Dr. Hines, there is no guarantee that
4 you would find particles on the hands of somebody that
5 did, in fact, fire a gun?

6 A. That's right.

7 Q. And to further clarify, you never really say or
8 articulate that they did fire a firearm as well just
9 based on residue? It's only that they were in an
10 environment with residue?

11 A. That's correct.

12 Q. And a person that tested negative for gunshot
13 residue on their hands may, under some circumstances,
14 have actually fired a firearm?

15 A. Correct.

16 Q. In this autopsy, you tested the decedent's
17 shirt for gunshot residue as well?

18 A. I don't know.

19 Q. And let's see. Did you test the shirt for
20 stippling?

21 A. Stippling only occurs on the skin of living
22 people.

23 Q. And was there any stippling found on this
24 particular decedent?

25 A. No.

1 Q. And that can be an indication, as you
2 previously testified, that this was not a close-range
3 shot, correct?

4 A. That's right. It could be an indication that
5 this was not an intermediary shot. So, a shot within a
6 few inches to a few feet.

7 Q. And based on your diagram on the overhead, the
8 entrance wound would indicate the bullet was traveling
9 from left to right and then in a downward motion?

10 A. So, the predominant directions were front to
11 back and downward with a very slight left to right.

12 Q. And it's that motion that gives you a
13 reasonable inference of what the bullet was doing?

14 A. Again, I can't tell what the bullet was doing
15 other than as it passed through the body.

16 Q. But that it was traveling primarily downward?

17 A. In relation to the body, yes.

18 Q. And in this diagram, how far below the entrance
19 wound is the exit wound?

20 A. The exit wound is 7 inches below the entrance
21 wound.

22 Q. Would you be able to say ballpark that's about
23 a 45-degree angle?

24 A. I think that's a reasonable estimate.

25 Q. And you testified a minute ago that typically

1 gunshot wounds are more vertical -- or are less
2 vertical?

3 A. That's right. The majority of gunshot wounds I
4 have observed have had more of a horizontal component to
5 their direction through the body than this one.

6 Q. And, Dr. Hines, I just want to offer a
7 hypothetical. If you hypothetically have a decedent
8 that's standing when he is shot, it could be argued that
9 a bullet had been shot in the air at an angle?

10 A. In this instance with this particular direction
11 through the body?

12 Q. Yes, sir.

13 A. Yes.

14 Q. And would it be further helpful if we knew the
15 exact distance between the gun and the body?

16 A. I think that would provide additional
17 information to try and answer that question, yes.

18 Q. I'm just going to turn State's Exhibit 48 back
19 to the cover. On the cover of the autopsy, Doctor, you
20 testified part of your job is to determine cause and
21 manner of death, correct?

22 A. Yes.

23 Q. And, again, what is the manner of death in this
24 autopsy?

25 A. Homicide.

1 Q. And isn't it true that homicide doesn't mean
2 anybody is guilty, it's just a manner of death?

3 A. That's right. The definition of homicide as it
4 relates to my work is death at the hands of another
5 person. It does not imply the intent or guilt of the
6 person that caused an individual's death.

7 Q. And not all homicides are murder, correct?

8 A. That's correct.

9 Q. And an example of that could be that a police
10 officer is not guilty of murder if he were to shoot a
11 civilian in self-defense?

12 A. Correct.

13 Q. And another example, some tragic car accidents
14 even could be homicides but not murder?

15 A. As a matter of convention, we classify motor
16 vehicle accidents as accidents.

17 MS. McLAUGHLIN: Pass the witness, Your
18 Honor.

19 THE COURT: Thank you.

20 Any redirect?

21 MR. BALLENGEE: Yes, Your Honor.

22 THE COURT: Please continue.

23 **REDIRECT EXAMINATION**

24 **BY MR. BALLENGEE:**

25 Q. When you received the complainant's body, were

1 his hands bagged at that point?

2 A. Most likely. I would have to look at a
3 photograph.

4 Q. If you were able to look at the rest of the
5 photographs that were taken that day, would it refresh
6 your recollection?

7 A. Yes.

8 Q. Okay (indicating).

9 A. Yes. The decedent's hands were bagged.

10 Q. And did you perform GSR or gunshot residue
11 testing before cleaning the body?

12 A. Yes.

13 Q. Now, Dr. Hines, have you ever done any sort of
14 research on bullet trajectory?

15 A. I've had some basic training in it and I have
16 performed some individual readings as well.

17 Q. And if a bullet was fired straight up into --
18 or straight up into the air at a 90-degree angle, what
19 would be the result of the bullet when it came down or
20 how would it come down? Excuse me.

21 A. If a bullet was fired straight into the air, it
22 would fall back to the Earth at terminal velocity.
23 Terminal velocity varies on the type of bullet. It's
24 based on the weight and shape of the bullet, but in
25 general, the bullet would fall much slower than they

1 initially go up. And, certainly, much more slowly than
2 they leave the barrel of the gun.

3 Q. Do they still travel with spin or what happens
4 to the bullet when it's coming down?

5 A. In some instances, they can maintain their spin
6 and they would, therefore, fall base first. In some
7 instances, they begin to tumble and fall even more
8 slowly.

9 Q. When we're talking about a bullet that is
10 falling at terminal velocity, is that the type of bullet
11 falling at that point that would puncture -- that would
12 have an entrance wound and an exit wound?

13 A. No.

14 Q. About how long would it take before -- from the
15 point where a bullet was fired to the point where it
16 came down, about how long would it take before it
17 actually came back to the ground?

18 A. If it was fired straight up in the air?

19 Q. Yes.

20 A. It would depend on the type of bullet and
21 ammunition.

22 Q. Would it be over 30 seconds?

23 A. You'd have to tell me the type of bullet.

24 Q. Would it if it was a 9-millimeter bullet?

25 A. I'd have to reference this book. I don't have

1 that knowledge --

2 Q. That's fine.

3 A. -- handy.

4 MS. McLAUGHLIN: Objection, Your Honor. He
5 is not on the stand testifying to ballistics, as an
6 expert in ballistics.

7 MR. BALLENGEE: He is testifying as an
8 expert in the human body and whether or not the angle
9 that the gun was fired would --

10 THE COURT: Once again, if this witness
11 believes he has the expertise to answer your questions,
12 I will allow him to do so. If he does not or feels
13 uncomfortable with that question, he certainly should
14 let us know that. Okay? Thank you so much.

15 Q. (By Mr. Ballengee) Dr. Hines, do you feel
16 comfortable testifying based on my question?

17 A. I feel comfortable answering your question in
18 the manner that it was asked, referring to a bullet shot
19 straight up into the air, a 9-millimeter bullet.

20 Q. Okay.

21 (Pause)

22 A. A 9-millimeter bullet would rise and fall for a
23 total of anywhere from 26 to a little over 30 seconds.

24 MR. BALLENGEE: Pass the witness, Your
25 Honor.

1 MS. McLAUGHLIN: Thank you, Your Honor.

2 **RECROSS-EXAMINATION**

3 **BY MS. McLAUGHLIN:**

4 Q. Just briefly, Dr. Hines. Regarding this
5 hypothetical that the State is giving you about the
6 velocity, that is if you fire straight up in the air,
7 correct?

8 A. Correct.

9 Q. And that would not apply if you fired at a
10 lower angle; is that correct?

11 A. Correct.

12 MS. McLAUGHLIN: Pass the witness, Your
13 Honor.

14 **REDIRECT EXAMINATION**

15 **BY MR. BALLENGEE:**

16 Q. If you fired at a lower angle, would it
17 increase the amount of time or would it decrease the
18 amount of time?

19 A. I don't know.

20 MR. BALLENGEE: No further questions, Your
21 Honor.

22 MS. McLAUGHLIN: No further questions,
23 thank you.

24 THE COURT: You are excused, Doctor. Thank
25 you so much for your testimony.

1 Next witness, please.

2 MR. BALLENGEE: The State calls Christy
3 Smejkal to the stand.

4 THE BAILIFF: Your Honor, this witness has
5 not been sworn in.

6 THE COURT: Would you raise your right
7 hand?

8 (Witness sworn)

9 THE COURT: From the State, please.

10 **CHRISTY SMEJKAL,**
11 having been first duly sworn, testified as follows:

12 **DIRECT EXAMINATION**

13 **BY MR. BALLENGEE:**

14 Q. Ms. Smejkal, would you please introduce
15 yourself to the jury, please?

16 A. My name is Christy Smejkal. And I'm a DNA
17 analyst at the Harris County Institute of Forensic
18 Sciences.

19 Q. And how long have you been at the Harris County
20 Institute of Forensic Sciences?

21 A. Almost six years.

22 Q. You said you're a DNA analyst. What does that
23 entail?

24 A. Okay. My duties are to analyze evidence for
25 the presence of biological stains such as blood, semen,