

1 (Jury seated)

2 THE COURT: Be seated, please.

3 Mr. Leslie, for the record call your next  
4 witness.

5 MR. LESLIE: State calls Doctor Chu.

6 (Witness sworn)

7 THE COURT: Doctor, if you would just  
8 state and spell your name for the court reporter.

9 THE WITNESS: C-h-u.

10 **ALBERT Y. CHU, M.D.,**

11 having been first duly sworn, testified as follows:

12 **DIRECT EXAMINATION**

13 Q (BY MR. LESLIE) Doctor Chu, where do you work?

14 A I work at the Harris County Institute of  
15 Forensic Sciences.

16 Q What is your job there?

17 A I'm an assistant medical examiner there and my  
18 job is to investigate any sudden unexpected or violent  
19 deaths that occur within Harris County.

20 Q And what sort of educational background do you  
21 need to have that kind of job?

22 A I went to college at Johns Hopkins University  
23 in Baltimore, Maryland. I also got a master's degree  
24 there. I then went to medical school at State  
25 University of New York, Buffalo. I then did a residency

1 training program in anatomic and clinical pathology at  
2 the Hospital of the University of Pennsylvania, in  
3 Philadelphia, Pennsylvania. I then did a fellowship in  
4 forensic pathology at the Office of the Chief Medical  
5 Examiner at the State of Maryland, in Baltimore,  
6 Maryland.

7 Q How many total years are we talking about  
8 there?

9 A Sixteen.

10 Q Sixteen? Do you have any specialized training  
11 beyond that specifically in forensic pathology?

12 A No. The only specialized training for  
13 forensic pathology is that fellowship that I completed  
14 in Baltimore.

15 Q Can you tell us what exactly is forensic  
16 pathology?

17 A Forensic pathology is a subspeciality of  
18 medicine that deals with sudden unexpected or violent  
19 death.

20 Q And in your capacity as an assistant medical  
21 examiner at the Harris County Institute of Forensic  
22 Sciences, do you perform autopsies?

23 A Yes.

24 Q And over the course of your career how many  
25 autopsies would you say you performed?

1 A Over 2,000.

2 Q And have you ever testified in court before as  
3 an expert?

4 A Yes.

5 Q Would you say that's on few or many occasions?

6 A Many.

7 Q Can you tell us just briefly what is an  
8 autopsy?

9 A An autopsy is an examination of a dead body  
10 that basically consists of an external examination  
11 during which I look at the outside of the body for any  
12 evidence of illness or injury, followed by an internal  
13 examination, where I'll look on the inside of the body,  
14 again looking for any evidence of illness or injury.

15 Q And when someone dies and their body is  
16 brought into the Harris County morgue for an autopsy, is  
17 that body assigned some sort of unique number?

18 A Yes.

19 Q And who does that?

20 A The numbers are assigned basically in  
21 chronologic order. So the first case that comes to our  
22 office on January 1st at 12:01 a.m. will get the number  
23 one, the year following number one. So it just goes in  
24 order in which they arrive to our office.

25 Q And did you perform an autopsy on case number

1 ML12-3490?

2 A Yes.

3 Q And was that an autopsy of Almando Owens?

4 A Yes.

5 MR. LESLIE: Permission to approach the  
6 witness, Your Honor.

7 THE COURT: Sure.

8 Q (BY MR. LESLIE) Showing you what has  
9 previously been admitted as State's Exhibit No. 66, is  
10 this the individual that you performed the autopsy on?

11 A Yes.

12 Q What date was it that you performed the  
13 autopsy?

14 A On November 17th, 2012.

15 Q Are you also considered a custodian of  
16 business records for the Medical Examiner's Office?

17 A Yes.

18 MR. LESLIE: Permission to approach the  
19 witness again, Judge.

20 THE COURT: Sure.

21 Q (BY MR. LESLIE) Showing you what has been  
22 marked for identification purposes as State's Exhibit  
23 No. 136. Are you familiar with these records?

24 A Yes. This is a copy of Mr. Owens' autopsy  
25 report with attached toxicology report.

1 Q And were these records kept in the regular  
2 course of business?

3 A Yes.

4 Q And did an employee of the Harris County  
5 Institute of Forensic Sciences make these records?

6 A Yes.

7 Q Were they made at or near the time reasonably  
8 soon after the event?

9 A Yes.

10 Q And did an employee who made these entries  
11 have actual knowledge of the event, the autopsy?

12 A Yes.

13 Q And are these records an exact duplicate of  
14 the originals?

15 A Yes.

16 Q Where are the originals?

17 A At our office.

18 MR. LESLIE: At this point State would  
19 move to offer State's Exhibit 136.

20 THE COURT: Any objection to 136?

21 MR. NEWMAN: I doubt it. No objection.

22 THE COURT: 136 is admitted.

23 Q (BY MR. LESLIE) Can you please describe to us  
24 the general condition of the complainant's body when it  
25 was brought into you?

1           A       When Mr. Owens came to our office, he was not  
2 wearing any clothing, his hands were bagged, and he had  
3 some medical intervention on his body because he came to  
4 us from the hospital.

5           Q       When you say his hands were bagged, is that a  
6 normal medical procedure?

7           A       It's not a medical procedure. It's something  
8 that our investigators will do to preserve any evidence  
9 that might be on the hands.

10          Q       And you talked about medical intervention.  
11 What do you mean by that?

12          A       He had, for example, a breathing tube in his  
13 mouth. It was placed there by hospital personnel. He  
14 had some electrocardiogram knee pads and defibrillator  
15 pads on his chest. He had chest tubes in both the right  
16 and left sides of his chest and some IV lines.

17          Q       Was an external examination done of the body?

18          A       Yes.

19          Q       Can you please walk us through how that's  
20 done?

21          A       Again, the external examination is a portion  
22 of the autopsy where I look on the outside of the body  
23 for any evidence of illness or injury. The way it works  
24 is that the body is first photographed with any clothing  
25 or medical intervention in place. It basically, as the

1 body arrives to our office, it's photographed. Once  
2 that's done, if necessary, evidence collection might  
3 occur. So in this case where the death is due to  
4 firearm injuries, specimens will be taken for gunshot  
5 residue analysis. Fingernail clippings and scrapings  
6 will be collected. Once that's done and I have  
7 documented all the external findings, the body is then  
8 cleaned. So any medical intervention is removed, any  
9 clothing is removed, any blood that's on the body is  
10 washed away. This allows me to get a better look at  
11 anything that might be on the outside of the body. The  
12 body is then photographed a second time with all that  
13 stuff removed and the body cleaned up, and again I will  
14 look carefully at the outside of the body for any  
15 evidence of illness or injury. And that pretty much is  
16 what we do or what I do in the external examination  
17 portion.

18 Q Did you also conduct an internal examination  
19 of the complainant?

20 A Yes.

21 Q Can you please describe what's the procedure  
22 and process you use for that?

23 A Basically an incision is made on the front of  
24 the body that allows me to gain access to the internal  
25 organs. An incision is also made on the head, because

1 eventually I need to examine the brain as well. But the  
2 goal is the same as the external exam: I'm looking for  
3 any evidence of injury or illness. During the internal  
4 examination I might also be collecting evidence if  
5 someone is shot, I might be retrieving bullets. I'm  
6 also collecting specimens for toxicology, blood, various  
7 fluids and body tissues that can be sent to our lab for  
8 testing.

9 MR. LESLIE: Permission to approach the  
10 witness, Your Honor.

11 THE COURT: Sure.

12 Q (BY MR. LESLIE) Showing you now what has been  
13 marked as State's Exhibit Nos. 64, 65, 67, 68, 69, 75,  
14 71, 72, 79, 107, 87, 86, 91, 93, 95, 128, 125, 129. Can  
15 you take a look at those and tell me if you recognize  
16 them?

17 A Yes. These are photographs of Mr. Owens'  
18 autopsy.

19 Q Do these fairly and accurately depict  
20 Mr. Owens as he appeared during and in the course of  
21 that autopsy?

22 A Yes.

23 MR. LESLIE: Tendering to opposing  
24 counsel, State moves to admit all those photos as  
25 numbered.



1 MR. NEWMAN: Your Honor, may I approach  
2 on two of these?

3 THE COURT: Sure.

4 (Discussion up at bench:)

5 MR. NEWMAN: They are regular numbers, so  
6 I'm going to say I don't object to any of them except 67  
7 and 125. 67, I just object to hearsay and relevance on  
8 that. On 125, I would just argue that it's more  
9 prejudicial than probative because there's a rod there  
10 that shows the trajectory, but it's the same injury as  
11 depicted in 107, which we do not object to, and I would  
12 just argue that can be testified to. It's more  
13 prejudicial than probative.

14 THE COURT: Okay. Your objections to 125  
15 and 67 are overruled. And I don't have all those  
16 numbers.

17 Any objections to any of them other than  
18 those two?

19 MR. NEWMAN: No.

20 (In the hearing of the jury)

21 THE COURT: The State exhibits will be  
22 admitted in their entirety.

23 Would you like to write them down?

24 MR. NEWMAN: No.

25 MR. LESLIE: Permission to publish them?

1 THE COURT: Sure.

2 Q (BY MR. LESLIE) Now, Doctor, what sort of  
3 injuries did you see on Mr. Owens?

4 A He had multiple gunshot wounds.

5 Q And I'm showing you now State's Exhibit No.  
6 136. Can you tell us what this is?

7 A This is a body diagram, a diagram that I made  
8 of Mr. Owens' body that just shows where the locations  
9 of the gunshot wounds were on his body.

10 Q Now I'm showing you State's Exhibit No. 64.  
11 Can you tell us what it is we're looking at here?

12 A This is a photograph of the front or the upper  
13 2/3rds of Mr. Owens' body. This is one of those initial  
14 photographs that's taken that shows him with all his  
15 medical intervention as well as the bags on his hands.

16 Q I'm showing you State's Exhibit No. 65.

17 A This is another picture of Mr. Owens and this  
18 is the one that's taken after the medical intervention  
19 is removed and the hand bags are removed.

20 Q Moving on to State's Exhibit No. 68, can you  
21 please tell us what this is that we're looking at here?

22 A This is a picture of the right side of  
23 Mr. Owens' abdomen and you can see just above the number  
24 label there is a gunshot entrance wound.

25 Q So going back to 136, can you show us which

1 picture or which injury that is on that chart?

2 A (Indicating.)

3 Q And you said this was an entrance wound; is  
4 that correct?

5 A Yes.

6 Q Showing you State's Exhibit No. 69, can you  
7 tell us what this is?

8 A This is a close-up photograph of that entrance  
9 wound on the right side of Mr. Owens' abdomen.

10 Q So going back to 136, again it's that one  
11 right there?

12 A Yes.

13 Q And you said it was an entrance wound. How do  
14 you know that?

15 A There are certain things that I look for to  
16 decide whether a gunshot wound is an entrance wound or  
17 an exit wound. Entrance wounds have a typical  
18 appearance, namely, they are usually round or oval in  
19 shape, as this one is. They also will have what we call  
20 a marginal abrasion. You can see around the rim of this  
21 there's kind of a red-brown discoloration. That's an  
22 abrasion or a scrape of the skin that's caused by the  
23 bullet scraping the skin as it enters the body. So that  
24 combination of a round shape and marginal abrasion,  
25 those are the two things that I look for that allow me

1 to say, okay, this is an entrance wound.

2 Q Are you able to determine how far away the  
3 shooter was when they caused this entrance wound?

4 A Not from this entrance wound, no.

5 Q In some cases you are able to determine that;  
6 is that correct?

7 A Yes.

8 Q And what would you be looking for to be able  
9 to make that kind of determination?

10 A There's a number of different things. So if,  
11 for example, it's a contact wound, meaning the end of  
12 the gun is pressed up against the person when it's  
13 fired, you might see an impression of the muzzle on the  
14 skin around the entrance wound. If it's a little bit  
15 further away, there are different things I can look for.  
16 So when a gun is fired, it's not just a bullet that  
17 comes out of the end of the gun. There's also a lot of  
18 hot gases as well as particles of either unburned or  
19 partially burned gunpowder. So if a gun is close enough  
20 to a person when it's fired, you might see deposition of  
21 some of those other substances, the gunpowder particles  
22 of the gun or the smoke or soot on the skin around the  
23 wound. So, for example, if a gun is within roughly  
24 6 inches of a person that's fired, typically we will see  
25 what we call soot or kind of looks like gray smudgy

1 material around the entrance wound. And when I see  
2 that, I can say, okay, the gun is roughly, ballpark,  
3 roughly within 6 feet of a person when it's fired. If I  
4 see what's called gunpowder stippling, which is little,  
5 tiny red-brown dots around the entrance wound that are  
6 caused by those particles of gunpowder striking the  
7 skin, a ballpark figure is the gun is within 2 feet of  
8 the person when it was fired.

9 In this case there's not any soot nor  
10 stippling around the entrance wound, so I can't make any  
11 statements about the range of fire for this gunshot  
12 wound.

13 Q Now, moving on to State's Exhibit No. 71, can  
14 you tell us what this is that we're looking at here?

15 A This is a picture of the left side of  
16 Mr. Owens' abdomen. You can see there are two -- well,  
17 there's actually three defects in this photo. There are  
18 two on either side of the number label and then there's  
19 one closer down to his groin area.

20 Q And going back to your chart, can you point  
21 out where on this chart that photograph is?

22 A (Indicating.)

23 Q And what else can you tell us about these  
24 wounds?

25 A They actually all are exit wounds. The one

1 that's below the number label is the exit wound that  
2 corresponds to the entrance wound you saw in the last  
3 photograph.

4 Q So in that case you're talking about this  
5 injury here?

6 A Yes.

7 Q And by exit wound, how can you tell that it's  
8 an exit wound?

9 A Again things like the shape of it. So you can  
10 see here in contrast to the entrance wound which we saw  
11 was nice and round and it had marginal abrasion, this  
12 wound is not round. It's more slit like or elliptical.  
13 It does not have the marginal abrasion that we talked  
14 about that's caused by the bullet scraping the skin as  
15 it enters the body. So for those reasons this is a  
16 typical-appearing exit wound.

17 Q And you had said earlier, do you know which  
18 entry wound this matches?

19 A This matches the entrance wound that's on the  
20 right side of Mr. Owens' abdomen.

21 Q So Exhibit 136, can you show us the entrance  
22 wound and the exit wound that we're talking about here  
23 on that chart?

24 A So the entrance wound on the right side of the  
25 abdomen there and then the exit wound on the left side

1 of the abdomen roughly there.

2 Q So essentially you're saying if we put the  
3 pictures together like this, are you saying that the  
4 bullet went in on the picture on the left and came out  
5 on the picture on the right, the larger of the two  
6 wounds; is that correct?

7 A Yes.

8 Q Was that the only entry injury to the front  
9 side of the complainant?

10 A It's the only one on the front of his torso.

11 Q Moving on to State's Exhibit No. 87, can you  
12 tell us what this is that we're looking at here?

13 A This is a picture of the back of Mr. Owens'  
14 body.

15 Q And are there any injuries that are visible on  
16 the back of his body?

17 A Yes.

18 Q And could you please point those out to us?

19 A (Indicating.)

20 Q Going back to State's Exhibit 136, so these  
21 would be the ones that you labeled as B, C, D and E; is  
22 that correct?

23 A Yes.

24 Q Now, B, where did that enter?

25 A It's a gunshot entrance wound on the right

1 side of the lower back.

2 Q And where did that exit?

3 A B did not exit the body. I recovered a bullet  
4 from the front of Mr. Owens' chest.

5 Q So showing you now State's Exhibit 128, can  
6 you tell us what this is that we're looking at here?

7 A This is a picture of the front of Mr. Owens'  
8 chest.

9 Q And what is that discoloration there that  
10 you're highlighting with the ruler?

11 A It's a bruise, or we call it a contusion, but  
12 it's a bruise.

13 Q And what did that tell you when you were  
14 looking at that bruise when you were examining the body?

15 A Oftentimes if there's a bullet that ends up  
16 directly underneath the skin, there will be a little bit  
17 of a bruise on the overlying skin.

18 Q And did you extract a bullet from Mr. Owens?

19 A Yes.

20 Q Showing you now State's Exhibit No. 129, can  
21 you tell us what this is that we're looking at here?

22 A This, again, is a picture of Mr. Owens' chest  
23 and there's an incision that's been made through that  
24 bruise that I made through recovery of the bullet which  
25 you can actually see if you look closely is sitting



1 inside that incision.

2 Q So this right here, that's the bullet that was  
3 in his chest; is that correct?

4 A Yes.

5 Q Going back to the chart, State's Exhibit 136,  
6 Injury C, where was that located?

7 A C enters above the left buttock.

8 Q And where does it exit?

9 A That one exits on the left side of the  
10 abdomen.

11 Q So showing you now State's Exhibit 71, is that  
12 the exit wound?

13 A Yes. The round defect above the number label  
14 is the exit wound for the gunshot wound that I labeled  
15 letter C.

16 Q Now, is there anything unusual about that  
17 injury?

18 A Yeah. As I mentioned earlier, entrance wounds  
19 typically are round in shape and exit wounds are more  
20 irregular, and here we have an exit wound that actually  
21 looks somewhat round and it even has a little bit of an  
22 abrasion around the edge of it.

23 Q I am showing you now State's Exhibit 72 just  
24 to help you explain it a little bit better.

25 A Actually it is a close-up photograph of the

1 same thing, and so we're talking about this one as the  
2 exit wound. It has a round shape. It has a hint of a  
3 marginal abrasion or a scrape around the skin. So it  
4 kind of looks like an entrance wound. And sometimes we  
5 can see exit wounds that mimics entrance wounds in cases  
6 where there's something grazing the skin where the  
7 bullet exits. It could be anything. If a person is  
8 wearing tight clothing, like a belt or a bra strap,  
9 anything that's grazing the skin if they're up against a  
10 wall or a flat surface. If a bullet exits the body  
11 against skin that's been grazed, it can create an exit  
12 wound that looks like an entrance wound.

13 Q Is that what happened in this case?

14 A Yes.

15 Q And that was what you would describe as wound  
16 C, correct?

17 A Yes.

18 Q Now, moving on to wound D, where was that  
19 located?

20 A Wound D is on the right buttock or entrance is  
21 on the right buttock.

22 Q So showing you State's Exhibit 91, is that  
23 what you characterized as wound D?

24 A Yes, it is.

25 Q So that one right there; is that correct?

1 A Yes.

2 Q And as we discussed earlier, is that an entry  
3 wound?

4 A Yes.

5 Q And did that bullet exit the body?

6 A Yes.

7 Q And where did that bullet exit the body?

8 A That bullet exited the front of Mr. Owens'  
9 body, above his penis.

10 Q So showing you State's Exhibit No. 79, is the  
11 exit wound visible on the photograph?

12 A Yes, above the number label.

13 Q And again how can you tell which one was the  
14 entrance and which one was the exit wound in this case?

15 A Again, based on the shapes of the entrance and  
16 the exit wound.

17 Q Now, wound F on your chart, where is that  
18 located?

19 A Wound F is on the left forearm.

20 Q Showing you State's Exhibit No. 107, is that  
21 what you had characterized as wound F?

22 A Yes.

23 Q And you said this is his left forearm; is that  
24 correct?

25 A Yes.

1 Q And which one of those is the entrance and  
2 which one of those is the exit?

3 A The entrance is the defect on the left side of  
4 the photograph and the exit is the one on the right.

5 Q Now, in your report you had marked that that  
6 is an atypical entrance wound.

7 A Yes.

8 Q Can you tell us what that means?

9 A So I described to you what a typical entrance  
10 wound is, something that is round and has a marginal  
11 abrasion that's a typical entrance wound. That means  
12 that the bullet is entering the body without having been  
13 interfered with. So when a bullet is fired from a gun,  
14 it's spinning like a football in a tight spiral that  
15 gives it its stability in flight. And so if the bullet  
16 is in that tight spiral, it's unimpeded the target, but  
17 if it enters the body, it will create that nice round  
18 hole with abrasion. So anything that interferes with  
19 the flight of the bullet -- maybe the bullet is  
20 tumbling -- if it hits something first, it might start  
21 to tumble, it might be partially fragmented or deformed.  
22 Anything that interferes with that flight of the bullet  
23 causes the bullet to strike the target when it's not in  
24 that optimal spiral can give atypical gunshot entrance  
25 wounds. So it's pretty much anything that deviates from

1 that round hole with the marginal abrasion. So if a  
2 bullet is spinning or tumbling if it's deformed or  
3 fragmented, it can create an entrance wound that is not  
4 so round, where it might not have a real tight marginal  
5 abrasion.

6 So in this case it's kind of hard to see,  
7 but it's really broad. Along this side of it, there's a  
8 very broad marginal abrasion, this sort of dark brown,  
9 almost black discoloration. It's a much wider abrasion  
10 than we would normally see in a typical gunshot entrance  
11 wound. So this to me is an atypical entrance wound.  
12 Again, it suggests that something has interfered with  
13 the flight of the bullet before it struck the left  
14 forearm.

15 Q And do you have any way of determining what  
16 that might have been?

17 A No.

18 Q Is it possible it's clothing?

19 A Yes.

20 Q Showing you now State's Exhibit No. 93, can  
21 you tell us what we're looking at here?

22 A This is a close-up view of the bottom part of  
23 Mr. Owens' right buttock and you can see that there are  
24 three defects in the photograph.

25 Q And what caused those?

1           A        These are all caused by a single gunshot  
2 wound.   So the defect at the top of the photograph is  
3 the initial entrance wound.   The bullet then almost  
4 immediately exited the left or, sorry, the right buttock  
5 with a defect in the middle and then it reentered the  
6 back of the right thigh through the third defect, the  
7 one closest to the bottom of the photograph.

8           Q        So just to make sure I understand it, the very  
9 top picture, the very top wound, is where the bullet  
10 went in and then it came out the middle hole and went  
11 back in at the bottom?

12          A        Yes.

13          Q        Did it stay in his body at that point?

14          A        It then went through his right thigh and  
15 exited the front of his right thigh.

16          Q        So showing you now Exhibit No. 75, are you  
17 telling us, is that the exit wound that matches those  
18 entry wounds that we just saw?

19          A        Yes.

20          Q        Now, going to State's Exhibit No. 95, can you  
21 tell us what this is that we're looking at here?

22          A        This is a picture of Mr. Owens' left ring  
23 finger and there's a grazed gunshot wound right there on  
24 that joint.

25          Q        And how are you able to determine that was a

1 gunshot wound?

2 A It has a typical appearance of a gunshot  
3 wound.

4 Q Now, in your report you label these A, B, C,  
5 D, E, F and G. Can you tell which shot came first?

6 A No.

7 Q So the labels, the A, B, C, D, E, F and G,  
8 that does not designate the order of the injuries as  
9 they appear?

10 A Correct.

11 Q How do you determine that kind of labeling  
12 system?

13 A It's somewhat arbitrary. I just start -- for  
14 me I just start with the front of the body, any entrance  
15 wounds that are on the front, starting from the top of  
16 the head moving downward. I start with A and then I do  
17 the same for the back. So he has one entrance wound on  
18 the front, that's A, and the one on the back, the one  
19 closest to his head is B, and I just sort of go in  
20 order, and then when I'm done with the torso, I move to  
21 the extremities. So it's a somewhat arbitrary order.  
22 It has nothing to do with the order in which the person  
23 might have been shot.

24 MR. LESLIE: Permission to approach the  
25 witness, Your Honor.

1 THE COURT: Sure.

2 Q (BY MR. LESLIE) Did you recover any foreign  
3 objects from the decedent's body?

4 A Yes.

5 Q Showing you now what has been marked State's  
6 Exhibit No. 146 and its contents, do you recognize this?

7 A Yes. This is the envelope which I used to  
8 submit the bullet I recovered from Mr. Owens' body.  
9 This is a bullet -- I don't know if this is the same  
10 bullet, but it looks similar.

11 Q How would you know? Did you make any kind of  
12 unique markings to be able to identify the bullet that  
13 you recovered from Mr. Owens' body?

14 A Not on the bullet, no.

15 Q Did you make any markings on the bag that you  
16 put the bullet in?

17 A Yes. It's labeled in my writing.

18 Q And is this your handwriting?

19 A On this envelope it is. Not on the plastic  
20 bag.

21 Q And are there any other markings on the  
22 envelope that would indicate where this bullet has been  
23 since it left your custody?

24 A There's someone else's handwriting with  
25 another number on it and a date.



1           Q     Okay.  Showing you State's Exhibit No. 131, do  
2 you recognize this?

3           A     Yes.

4           Q     And what is it?

5           A     This is a photograph taken during Mr. Owens'  
6 autopsy, a picture of the envelope or, sorry, the  
7 bullet, which I recovered from his body, along with the  
8 envelope that I used to submit that bullet for evidence.

9                   MR. LESLIE:  Tendering to opposing  
10 counsel.

11                   MR. NEWMAN:  No objection, Your Honor.

12                   THE COURT:  State's 131 will be admitted.

13           Q     (BY MR. LESLIE) So, Doctor Chu, is this the  
14 bullet you recovered from Mr. Almando Owens?

15           A     Yes.

16                   MR. LESLIE:  Judge, State would also move  
17 to admit State's Exhibit No. 146, the envelope  
18 containing the bullet.

19                   MR. NEWMAN:  Your Honor, I believe the  
20 doctor said he wasn't sure it was the same bullet, so on  
21 those grounds we would have to object.  We would also  
22 object to the hearsay that's written on the envelope.  I  
23 don't believe it has been authenticated.

24                   THE COURT:  Okay.  I guess we will hold  
25 off until the next witness.

1                   MR. LESLIE: At a minimum, Your Honor, is  
2 it possible to admit the bag he did identify as having  
3 his markings on it?

4                   THE COURT: His markings alone?

5                   MR. LESLIE: Yes.

6                   THE COURT: Do you want to mark that  
7 separate?

8                   MR. NEWMAN: May I see it, please?

9                   Your Honor, I do not object to 146  
10 without its contents.

11                   THE COURT: Okay. Let's just make 146  
12 the bag that will be admitted and we can mark the bullet  
13 separate.

14                   MR. NEWMAN: That is not admitted at this  
15 time?

16                   THE COURT: Right.

17           Q        (BY MR. LESLIE) Now, Doctor Chu, when you have  
18 something like this bullet, once you put it in an  
19 evidence bag and seal it up, do you seal it up  
20 typically?

21           A        Yes.

22           Q        Do you know what usually happens with it after  
23 that?

24           A        I seal it in an envelope with evidence tape  
25 and I initial over the tape, and then with that, I

1 complete a chain of custody form, so it's just paperwork  
2 that will accompany that particular piece of evidence so  
3 that there's a record of every person who eventually  
4 ends up handling that piece of evidence. Basically at  
5 that point I submit it to our evidence room and then  
6 that's the last I see of it until the trial.

7 Q Thank you, Doctor. Now, we already talked a  
8 little bit about determining distance of a gunshot. Can  
9 you tell us a little bit about trajectory? What is  
10 trajectory?

11 A Just the path, direction of the bullet.

12 Q And is it possible for you to determine the  
13 path of a bullet?

14 A I can determine the path of a bullet within a  
15 person's body, assuming that they're kind of in an  
16 upright position. So I don't know anything about how  
17 they were actually positioned when they're shot or where  
18 they were relative to the person shooting them. All I  
19 can do is describe the general direction within the body  
20 after they get -- after they're dead.

21 Q How do you do that? How are you able to  
22 determine the path of a bullet through the body?

23 A Basically, again, by identifying which wounds  
24 are entrance wounds, which wounds are exit wounds,  
25 looking at internal injuries and where bullets are

1 recovered, we are able to give a general direction, so  
2 right to left, front to back, up or down, that kind of  
3 thing.

4 Q Now, based on your training and experience,  
5 are the injuries that you documented on Mr. Owens  
6 consistent with an individual having been shot four  
7 times?

8 A I think he was probably shot at least five  
9 times.

10 Q Are the injuries you observed and documented  
11 consistent with an individual having been shot while  
12 running away from the person shooting at them?

13 A It's consistent with that.

14 Q Now, Doctor, based on the autopsy that you  
15 performed, do you have an opinion as to the cause of  
16 death of Almando Owens?

17 A Yes.

18 Q And what is that opinion?

19 A Multiple gunshot wounds.

20 Q Was any one of these gunshot wounds the most  
21 immediate cause of death?

22 A I think that gunshot wound D, which is the one  
23 to the right side of the lower back, was the most  
24 immediately life-threatening injury because it went  
25 through Mr. Owens' heart as well as his liver and some

1 major blood vessels.

2 Q And can you just tell us again or show us on  
3 this chart again which one that is?

4 A (Indicating.)

5 Q And is that the one where you actually removed  
6 the bullet from his chest?

7 A Yes.

8 Q Now, Doctor, based on your education, training  
9 and experience as a medical doctor and a forensic  
10 pathologist, can you please tell this jury whether or  
11 not a firearm is a deadly weapon?

12 A Yes.

13 Q Thank you.

14 MR. LESLIE: Pass the witness.

15 THE COURT: Mr. Newman.

16 **CROSS-EXAMINATION**

17 Q (BY MR. NEWMAN) How are you, Doctor Chu?

18 A Yes.

19 Q You mentioned that you got your master's from  
20 Johns Hopkins, too?

21 A Yes.

22 Q In what?

23 A Infectious disease epidemiology.

24 Q So it's kind of an elective? You didn't have  
25 to have that to become a pathologist?

1           A     Correct.

2           Q     It's just your interest?

3           A     Yes.

4           Q     Just like a doctor may be interested in  
5 literature, so I was curious when you said you got your  
6 master's as well.

7                     A couple of questions that I do have.  
8 You mentioned that when you received the body of Mr.  
9 Owens, that his hands were bagged, and that's typically  
10 done, you mentioned, for fingernail scrapings and other  
11 things that might be of evidentiary value, correct?

12          A     Yes.

13          Q     And also could you tell the jury what is an  
14 SEM test?

15          A     SEM stands for scanning electron microscopy.  
16 What it means in this context is a test for gunshot  
17 residue. So particles that might be deposited on a  
18 person's hands if they had either fired a firearm or  
19 picked up a firearm that recently had been fired. So  
20 the SEM kit is a collection of, let's say, that's taken  
21 from the hands to look for these particles.

22          Q     And Mr. Owens had that, had the bags on his  
23 hands, correct?

24          A     Yes.

25          Q     And so he certainly would have been eligible

1 to have an SEM test performed on him?

2 A Yes.

3 Q Do you do that as part of the autopsy as a  
4 matter of course?

5 A No.

6 Q Who would be responsible for doing that?

7 A It's done -- it will be done by a firearms  
8 lab. Typically that testing is requested by either law  
9 enforcement or the DA's Office.

10 Q To your knowledge, was that done on Mr. Owens?

11 A I do not know.

12 Q And it can have evidentiary value because it  
13 could indicate that a person was firing a weapon,  
14 correct?

15 A Yes.

16 Q It could also help establish distance,  
17 correct, if, say, someone had their hands up as someone  
18 was pointing a gun, to the degree that their hands were  
19 close enough to the weapon that perhaps some of the  
20 residue could --

21 A I think theoretically that's possible, but I'm  
22 not aware that it's ever been used to establish  
23 distance.

24 Q Okay. And we're going to talk about distance  
25 in a second, but you also mentioned that at the back of

1 State's 136 is also a toxicology report; is that  
2 correct?

3 A Yes.

4 Q And it's part of admitted evidence and it is  
5 basically a toxicology report on the blood of Mr. Owens,  
6 correct?

7 A Yes.

8 Q And in that exhibit -- do you have your copy  
9 or do you have the exhibit?

10 A I have a copy.

11 MR. NEWMAN: Do you have the exhibit,  
12 Mr. Leslie?

13 MR. LESLIE: Yes.

14 Q (BY MR. NEWMAN) If you would refer to the back  
15 page on there. In a test, a toxicology, there were two  
16 things that came up on that, correct?

17 A Yes.

18 Q And what's the first one?

19 A Benzoylecgonine.

20 Q Would you explain in layman's terms what that  
21 is?

22 A Benzoylecgonine is a breakdown deposit of  
23 cocaine.

24 Q Is it a metabolite? Is that the correct term  
25 for it?



1 A Yes.

2 Q And so when you look at a toxicology report  
3 you can see basically that means that the person has  
4 used cocaine and it is processed through their body?

5 A Yes.

6 Q In some instances you may actually have a  
7 toxicology report that says cocaine in it?

8 A Yes, sir.

9 Q As a matter of fact, if you look down about  
10 three lines there's a place for it under specimen of  
11 blood, femoral.

12 A Yes.

13 Q And if the person's body was still actively  
14 processing through cocaine, you would possibly expect it  
15 to actually have a registered number on that, correct?

16 A Yes.

17 Q So it looked as if, based on that, it's a  
18 reasonable deduction that he had used cocaine in the  
19 past, but it had processed through his body?

20 A Yes.

21 Q Now, would you tell the jury what the next one  
22 is?

23 A Phencyclidine.

24 Q And that actually shows it in its active  
25 state, correct?

1 A Yes.

2 Q And would you explain to the jury what's a  
3 more common name for Phencyclidine? Is it  
4 Phencyclidine?

5 A I don't know what the correct pronunciation  
6 is. PCP.

7 Q And are you familiar with the drug PCP?

8 A Somewhat.

9 Q It's an illegal narcotic, correct?

10 A Illegal drug, yes.

11 Q And would you tell the jury what it is  
12 characterized by as far as what type of behavior it can  
13 have? What type of effect can it have on the behavior  
14 of a person who takes PCP?

15 A PCP has effects on the central nervous system,  
16 so it can produce things like hallucinations, psychotic  
17 types of behavior.

18 Q It can also be characterized with aggressive  
19 types of behavior, correct?

20 A Yes.

21 Q And also the inability of processing the  
22 feeling of pain?

23 A That's starting to move out of my area of  
24 expertise.

25 Q Fair enough. But it can cause erratic and

1 aggressive and violent behavior?

2 A Yes.

3 Q Now, talking about these injuries, you said  
4 that ultimately you think that it is probably five  
5 separate, for lack of a better term, gunshots that  
6 created this?

7 A I said at least five.

8 Q At least. So are you counting the injuries to  
9 the left wrist as a separate one?

10 A It's described as a separate wound in the  
11 report, but I can't rule out that that wound is like a  
12 reentry wound from one of the shots to his torso.

13 Q And that it traveled through his torso and  
14 into his arm?

15 A Correct.

16 MR. NEWMAN: May I approach, Your Honor?

17 THE COURT: Sure.

18 Q (BY MR. NEWMAN) If you don't mind holding up  
19 your left arm and showing on your left arm entrance and  
20 exit just to the jury.

21 A So it would enter here and then exit sort of  
22 on the outside. This is with my palm facing forward.

23 Q So if a person were perhaps running, it could  
24 have been one of the exits going in that way and coming  
25 out that way, theoretically?

1           A     Yes.

2           Q     You mentioned stippling to the jury.  Is that  
3 the same thing as, at least it used to be called  
4 tattooing as well?

5           A     There's a subtle difference, but it's a  
6 similar idea.

7           Q     Okay.  Would you explain what the difference  
8 is?

9           A     Stippling, again, we're talking about  
10 gunpowder particles striking the skin hard enough to  
11 actually cause little abrasions or scrapes on the skin  
12 that again is something that is typically seen when the  
13 gun is within about two feet of the person when it's  
14 fired.  Tattooing is slightly different.  It is also  
15 caused by gunpowder, but it's caused -- it results when  
16 those particles actually embed themselves within the  
17 skin.  So, one, which is stippling is caused by  
18 particles impacting the skin and bouncing off, whatever.  
19 Tattooing is when they embed the skin and just stick  
20 there.

21          Q     And are both typical things that you would  
22 expect to see in a gunshot wound where there's a close  
23 proximity from the barrel -- the end of the barrel of a  
24 gun and the skin?

25          A     If there's no intervening target, if there's

1 nothing in between the end of the gun and the target or  
2 the person, then, yes, I would expect to see gunpowder  
3 stippling, again, if the gun is close, within a few  
4 feet.

5 Q How does clothing affect that?

6 A Clothing or anything that's in between the end  
7 of the gun and the target or the person can affect it  
8 because that intervening object or clothing can filter  
9 out those substances even if the gun is within that  
10 range.

11 Q But there are instances where the gun, it can  
12 go through the clothing and you will see stippling, and  
13 depending on the fabric obviously, but you will see  
14 stippling or tattooing on the skin even though the  
15 bullet has traveled through a shirt?

16 A Yes.

17 Q And to be clear, there was none of that on  
18 Mr. Owens' body, correct?

19 A Yes.

20 Q Not on any of the seven different or seven  
21 injuries or five separate gunshots, none of them had  
22 stippling on them?

23 A Correct.

24 Q None of them had tattooing on them?

25 A Correct.

1 Q And to be clear, if you're looking at a wound,  
2 basically you would see like a bunch of dots around it,  
3 correct?

4 A Yes.

5 Q That's what it would appear like to the naked  
6 eye?

7 A Yes.

8 Q And what they are are a cluster of tiny, tiny,  
9 little injuries, correct?

10 A Yes.

11 Q And stippling can be useful in some occasions  
12 of determining distance if the distance is close?

13 A Within a few feet.

14 MR. NEWMAN: May I have the witness step  
15 down, Your Honor?

16 THE COURT: Sure.

17 Q (BY MR. NEWMAN) I'm not going to turn you into  
18 a contortionist or anything, but if you don't mind  
19 stepping right over here and keeping your voice up.

20 If you had someone shooting at this  
21 distance at someone, you would expect a higher degree of  
22 the possibility of stippling?

23 A Yes.

24 Q And if you step back or I step back, lesser?

25 A Yes.

1 Q And anything much past that, you're going to  
2 have no idea of distance?

3 A Correct.

4 Q Stippling, now you can actually get a pretty  
5 good range of it depending on the pattern, correct, if  
6 you are within that two feet?

7 A There's a lot of different variables involved,  
8 so that's why I gave a ballpark figure, because it's  
9 going to be varied depending on the ammunition, the  
10 weapon, not to mention any clothing that might be in  
11 between. So that's why I give a general number.  
12 Without having the actual weapon and the same ammunition  
13 and someone systematically doing test fires at different  
14 ranges, it's hard to get a precise estimate of the range  
15 of fire.

16 Q Where was that entrance wound on the abdomen,  
17 if you would indicate on your own body?

18 A On the right side of the abdomen.

19 Q If a person was standing right here at this  
20 distance or even this distance, there would be a higher  
21 probability of stippling, correct?

22 A Yes.

23 Q And that's the one entrance wound that's on  
24 the front side of the body, correct?

25 A Yes.

1           Q     Everything else would be, if you don't mind  
2     turning around, let's say a person is fleeing, you  
3     wouldn't expect them, after getting past three feet, for  
4     there to be anything?

5           A     Yes.

6           Q     But if a person is standing right there when  
7     that shot goes off, you would expect to see it?

8           A     It's possible, yeah.

9           Q     Thank you. If you will have a seat.

10          A     (Complies.)

11          Q     The absence of stippling, though, once you  
12     cross that two-foot range -- and there are opinions that  
13     differ on that, correct? Some people will get it up to  
14     three, four -- what's the highest range you've ever seen  
15     stippling on?

16          A     I mean, I don't know, because I don't know  
17     what the ranges actually were, but if you read various  
18     references on the subject, some people leave up to  
19     36 inches, some people will describe more of specific  
20     types of ammunition, like Magnum rounds supposedly can  
21     cause stippling further out. So there's a lot of  
22     variability, so it's hard to put a precise number on it.

23          Q     So you almost kind of average it out to  
24     two feet?

25          A     Yes.



1 Q Once you get outside the stippling range, a  
2 person could be four feet away, ten feet away or half a  
3 mile away when it comes to analyzing it based just on  
4 stippling, correct?

5 A Yes.

6 Q Once there's not a presence of it at all that  
7 you see, there's no telling how far away the gun barrel,  
8 the end of the barrel, was from you, correct?

9 A Yes.

10 Q You could just tell that they weren't at  
11 two feet?

12 A I can't even go that far, because, again, I  
13 don't know if there's any intervening things between the  
14 end of the gun and the person if they're wearing heavy  
15 clothing or there's a door, it could be within two feet  
16 and I still wouldn't see stippling or soot.

17 Q But you certainly don't have the evidence that  
18 it was there?

19 A Correct.

20 MR. NEWMAN: Pass the witness, Your  
21 Honor.

22 THE COURT: Mr. Leslie?

23 MR. LESLIE: Briefly, Your Honor.

24 **REDIRECT EXAMINATION**

25 Q (BY MR. LESLIE) You had said on cross that

1 it's possible that the injuries to his left arm were  
2 another entry or exit/entry wound, something that's  
3 already on his torso, correct?

4 A Yes.

5 Q So it is possible that he was only shot four  
6 times?

7 A Again, I think it's at least five. The one on  
8 the right side of his abdomen, letter A, and then four  
9 on his back and buttocks, B, C, D and E. That's five.

10 Q Now, going back to what defense counsel was  
11 asking you about with the stippling and determining  
12 range and you had said that clothing was one of the  
13 factors that could affect your ability to determine  
14 that; is that correct?

15 A Yes.

16 Q Does the type of clothing matter?

17 A Yes.

18 Q So if someone were wearing something like a  
19 sweat shirt or a hoodie, would that be more or less  
20 likely to prevent stippling from showing up?

21 A I think the thicker the clothing, the more  
22 likely it is it would filter out any stippling.

23 MR. LESLIE: No further questions, Judge.

24 THE COURT: Mr. Newman?

25 MR. NEWMAN: Nothing further, Your Honor.

1 THE COURT: May this witness be excused?

2 MR. NEWMAN: Yes, Your Honor.

3 THE COURT: Mr. Leslie?

4 MR. LESLIE: Yes.

5 THE COURT: Thank you, Doctor. You are  
6 free to go. The rule has been invoked.

7 Ladies and gentlemen, we are going to  
8 take our morning break at this time. We will be in  
9 recess until 5 after 11:00, so if you want to get  
10 something to drink and bring it back up, you are welcome  
11 to.

12 (Recess taken)

13 (Jury seated)

14 THE COURT: Be seated, please.

15 Please call your next witness.

16 MR. LESLIE: Deputy Mcelvany.

17 THE COURT: Would you state and spell  
18 your name for my court reporter?

19 THE WITNESS: Yes. It's Mark Mcelvany,  
20 M-c-e-l-v-a-n-y.

21 THE COURT: And you may proceed.

22 MR. LESLIE: Thank you, Your Honor.

23 **MARK MCELVANY,**

24 having been previously duly sworn, testified as follows:

25

**DIRECT EXAMINATION**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

Q (BY MR. LESLIE) Deputy, where do you work?

A I work in CSU with the Harris County Sheriff's Office.

Q How long have you worked for CSU?

A For six years now.

Q What does CSU stand for?

A Crime scene unit.

Q How long have you been with the Deputy's Office?

A With the Sheriff's Office?

Q With the Sheriff's Office.

A Fourteen years.

Q So you were employed with the CSU division on November 16th of 2012?

A No. I've been with CSU for six years.

Q Which would include November 16th of 2012, correct?

A Yes.

Q What sort of training or education does it take to become a CSU?

A I have numerous hundreds of hours of crime scene-related courses, from photography, latent print examination, DNA collection. Just numerous crime scene-related courses. And I'm certified through the