1 KATHRYN HADEN-PINNERI, 2 having been first duly sworn, testified as follows: DIRECT EXAMINATION 3 0. (BY MS. FULLER) Okay. Good afternoon, 4 Dr. Pinneri. 5 6 Α. Good afternoon. 7 Could you tell us who you're employed by? 0. 8 A. Yes. I'm employed by the Harris County Institute of Forensic Sciences. 9 And what did we used to call the Institute of 10 0. 11 Forensic Sciences? 12 Α. It used to be called the Harris County Medical Examiner's Office. 13 14 Do you know approximately when they changed the 0. 15 name? 16 A. March of 2010, I believe. Okay. How long have you been employed there? 17 0. A little over six years. 18 A . 19 All right. Can you tell the jury a little bit 0. 20 about your educational background? Sure. I went to college at Louisiana Tech. 21 A. After 22 that I went to medical school in Dallas at the University of Texas Southwestern Medical School. After that I did a 23 24 five-year residency in pathology at the University of 25 Tennessee Medical Center in Knoxville. After that I did a

- one-year fellowship in forensic pathology at the Dallas
 County Medical Examiner's Office.
 - Q. Have you received any other professional training that qualifies you to -- qualifies you in the field of forensic pathology?
 - A. My fellowship, I'm board certified in anatomic and forensic pathology and I'm also very active in the forensic academic organizations.
 - Q. Okay. What is forensic pathology?
 - A. Forensic pathology is a specialized branch of pathology, which is essentially the study of disease and disease processes. When you use the term "forensic pathology," you just kind of apply that specialty to individuals who have died. So, it's essentially the study of disease and disease processes in people who die.
 - Q. Now, what exactly is your title with the Institute of Forensic Sciences?
 - A. I'm an assistant medical examiner.
- Q. Now, in your capacity as an assistant medical examiner, do you perform autopsies?
 - A. Yes, I do.

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- Q. Now, in a typical case, can you tell the jury a little bit about what you do to perform an autopsy?
- A. Sure. I basically describe an autopsy as having four parts. The first part is what I call the external

examination. It's where we look at the individual, we document things like hair color, eye color, scars, tattoos and as well as any trauma that we see on the individual.

The second part is we draw some blood and fluids to submit for toxicology testing if we deem that necessary. Then the third part is we'll make an incision in the skin so that we can look at all of the organs inside the body to document the things like natural disease processes, make sure everything looks right, is in the right place, as well as to document any trauma that's there. And the fourth part is as we're looking at the internal organs, we'll take little pieces to look at under the microscope. So, that's the typical, normal, full autopsy procedure.

- Q. Okay. Have you testified in the courts of Harris County before?
- A. Yes.

- Q. And have you testified as an expert in those courts?
- A. Yes.
- Q. Have you done so on few or many occasions?
- 21 A. Many.
 - Q. Now, when a body or someone's remains are brought to the Institute of Forensic Sciences, does the institute assign a unique number to that body or those remains?
- 25 A. Yes.

And I want to turn your attention to June 26th of 1 0. 2010. Did you perform an autopsy around that time? 2 3 Α. Yes, I did. And can you tell us the case number or the 4 0. 5 institute's number, the unique number that was assigned to 6 the autopsy that you performed? 7 Α. On June 26th, 2010, I performed an autopsy on Case ML, which stands for medical legal, 10-1866. 8 What does the 10-1866 stand for? 9 Q. The 10 stands for the year, 2010, and the 1866 is a 10 A. sequential numbering system that starts the first of the 11 12 year and goes to the end of the year. So, this is the 1,866th case for the year. 13 14 Okay. When you received Case No. ML10-1866, what 0. was the first thing that you did in this case? 15 16 Α. The first part of the autopsy procedure with the 17 external examination is to take photographs. 18 Q. Okay. 19 MS. FULLER: May I approach the witness, Your 20 Honor? 21 THE COURT: You may. 22 Q. (BY MS. FULLER) I want to show you what has been marked as State's Exhibit 108, 109, 110 and 111. Can you 23

please take a look at those and tell me if you recognize

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those photos?

I do recognize them. State's 1 exhibit -- State's 1 Α. Exhibit 108, 109, 110 and 111 represent copies of 2 photographs that were taken at the time of the autopsy. 3 Okay. And is it in State's Exhibits 108 through 4 5 111 represent case -- represent the autopsy, ML10-1866? 6 Α. Yes. 7 And are these fair and accurate copies of the 0. 8 photographs that were taken during the autopsy? 9 A. Yes. MS. FULLER: Your Honor, at this time State 10 11 moves to admit State's Exhibits 108 through 111 and tenders 12 to defense counsel for inspection. 13 MR. CORNELIUS: No objection, Judge. 14 THE COURT: 108 through 111 will be admitted. 15 MS. FULLER: May I publish, Your Honor? THE COURT: You may. 16 17 0. (BY MS. FULLER) All right. So, you said that the 18 first thing that you did when you received these remains was 19 that you took photographs; is that correct? 20 Α. That's correct. I'm going to show you State's Exhibit 108. 21 0. 22 are we looking at here? 23 So, these are the remains that we received. 24 came and they were placed in the transport bag and some of 25 them are in a paper bag. And then there's another paper bag

- that contains clothing items.
 - Q. Okay. I'm going to show you State's Exhibit 111.

 Is this what you're referring to as the bag that contained clothing?
 - A. Yes.

- Q. Okay. Now, you get this -- the bag that contains the remains. After you photograph, what is the next thing that you do?
- A. The next thing that I do is attempt to lay the remains out in an anatomic position. Number one, to inventory what all is there, see what all we might be missing, and to look for any obvious signs of trauma.
- Q. Okay. I'm going to show you what has been marked as State's Exhibit 109. Is this what you just described?
 - A. Yes.
- 16 Q. And State's Exhibit 110?
 - A. Yes, this is the lower half of the remains.
 - Q. Okay. Now, when you're laying out the remains in anatomical order, do you have anyone there assisting you?
 - A. We do have an autopsy assistant that works with us. In a case like this, I wouldn't necessarily utilize their assistance but for consultation purposes, we do enlist the help of anthropologists for a case like this.
 - Q. Okay. So, after you receive the remains and you lay them out in anatomical order, what did you do next?

A. Then I asked for a consultation with the anthropologist.

- Q. And did the anthropologist come into the suite with you and perform that consultation at that time or was that performed on another date?
 - A. The full evaluation was performed on another date.
- Q. Okay. In addition to laying the remains out, do you take any x-rays of the remains?
- A. Yes. The x-rays were performed actually prior to me laying the remains out like this.
- Q. Okay. And what was the purpose of taking those x-rays?
- A. We typically take the x-rays in cases like this to look for any projectiles, such as bullets, any sort of knife tips which might be in there, in the remains. We also use them to look for items of property that might show up, such as a ring or item of jewelry that belongs to the decedent. So, there are a few reasons we do the x-rays but the main reason in a case like this is look for any sort of projectile or, you know, knife tip or something like that.
- Q. And are those x-rays taken while the remains are still in the bag?
 - A. Yes. The first set are, yes.
- Q. Okay. And when you received the results of the x-rays, did you find any type of bullet holes or knife

puncture wounds that you could tell in any of these bones?

A. No.

- Q. Okay. Now, can you tell us a little bit about the condition of the remains as you saw them?
- A. Well, we have a fairly full skeleton that we received. Some of the bones have obvious animal scavenging activity on the ends. It's very common in a situation like this to see that type of postmortem change.
- Q. What kind of postmortem change specifically are you talking about?
- A. Well, some of the ends of the long bones are gone and there's actual tooth marks on them that are indicative of an animal chewing on them. So, you'll see some of the bones don't look the same from side to side and that's because parts of them are missing due to this postmortem scavenging activity.
- Q. Okay. Now, were there any soft tissues, any flesh, any muscle that was attached to any of these bones?
 - A. No, not of any significance.
- Q. When you say "not of any significance," what does that mean to you?
- A. Well, there might be a few little strands of some dried tissue, you can see some in one of them, the upper arm bones that might also be dirt. I don't recall. But there's no big muscles, there's no skin, there's no organs, there's

nothing there that I can really do anything with from a soft tissue standpoint.

- Q. Okay. Now, let's talk about what you could have done with the soft tissue, had it been there. Could you have used the soft tissue to do a toxicology request or a toxicology test on the remains?
 - A. Yes.

- Q. And how could that have been benefited or what would that have done for you had you been able to do that?
- A. Well, toxicology testing helps us determine whether or not there are drugs in a decedent's system. It can be anything from their prescription medications to illegal drugs such as cocaine, heroin, things like that.
- Q. All right. But you found no tissues that you were able to take any kind of samples for toxicology.
 - A. That's correct.
- Q. Now, what about -- was there or were there any type of tissues that you could use for any type of DNA testing?
 - A. Well, bone can be used for that.
- Q. Okay. And what purpose would that serve if you were able to do DNA testing?
- A. I guess DNA in this type of situation could be utilized, if necessary, for identification purposes. But that's really the only thing I can see it being used for in this case.

0. Okay. Now, in this case did you have any -- did 1 you take any part in the identification of these remains? 2 I did not do the actual identification, no. 3 initiated the requirement for a scientific identification 4 based on the fact that this individual is unknown. 5 6 start the series of requests for a scientific identification 7 to be made. 8 0. Okay. So, after -- after you pretty much laid out 9 the remains and you -- do you inspect as many of the bones 10 as you can? 11 Α. I do look at them, yes. 12 0. Okay. And you stated that you noted that there was 13 some scavenger activity on them? 14 A. Yes. Did you notice anything else? 15 0. 16 Α. No. So, after you did your examination, what did you do 17 0. 18 next? 19 After I did my examination, the photographs, I had Α. 20 the remains placed back in the bag -- in the transport bag and placed in our secure cooler until the anthropologist can 21 22 do their examination. 23 Okay. Now, when the anthropologist does their 24 examination, are you then released from or does your portion

of this autopsy end when you hand it off to the anthropology

1 team?

- A. No.
- Q. Do you continue to be the medical examiner assigned to this case?
 - A. Yes.
 - Q. What benefit does the anthropologist team provide to you?
 - A. Anthropologist provides his expertise in the field of skeletal trauma, skeletal analysis. They can provide a skeletal profile, which can estimate things like age, stature, race, gender, just from looking at the bones so they can help us -- guide us with an identification if necessary as well. And they're -- you know, that's their field of expertise. They can arrange the bones in the proper manner, make sure that we have all our -- they can do fragmentary bones and figure out where they're supposed to go as well, which is something I'm not skilled at. But they -- that's their area of expertise. So, utilizing their expertise helps me with my analysis as well.
 - Q. Okay. So, they'll report their findings back to you of what they find during their examination?
 - A. Yes. And during their examination, I'm -- I went in a couple of times while they were examining the remains to see where they were, see what they were finding. So, it's not like they take them and go off into a hole and hide

- away from me, you know. We're interacting, we're talking, we're discussing, you know, what they're finding and -- throughout the whole process.
 - Q. All right. And you're working as a team?
 - A. Correct.

- Q. Okay. Now, you do your portion of the autopsy on June 26th; is that correct?
 - A. That's correct.
- Q. Okay. And I want to talk about in addition to utilizing the expertise of the forensic anthropologist, now, typically speaking as a medical examiner, what else do you get to consider when you are making a determination for cause of death in a case?
- A. Well, in our cases we have to use what's available. Sometimes we have toxicology testing to help us. Sometimes we have police investigations to help us. Sometimes we have anthropology reports or medical records or just witness or family member reports. So, we use all of that in conjunction with what I find, what I see with my eyes, what I see at the time of autopsy, what I see under the microscope in cases that involve that and then we put all of that together when making the determination of cause and manner of death.
- Q. Are some situations where -- can you give me an example of a situation where you would need to work closely

with law enforcement in order to make a determination of what happened to that person?

- There's lots of times. Α. Oh, gosh. I mean, we can't work in a vacuum, essentially. We have to have their help. Anyone who dies in a house fire, I cannot determine their manner of death without an arson investigation. The source of the fire is what determines how that person died. don't have that information, I can't do it. Same thing for some of the shootings that go on. I need to know, you know, were there intervening targets that affect how the injuries look on the person. There's all kinds of things that we rely on their information to help us with our determination. Like I said, we can't work in this cloud or otherwise we couldn't determine anyone's cause of death perhaps as accurately as we need to.
- Q. Okay. And do police officers ever -- are they ever present during autopsies?
 - A. Oh, yes.

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- Q. Okay. Now, is it important for them to provide you information about what happened at the scene or where the body was found at the scene?
 - A. Yes.
- Q. Okay. And you continue -- do you continue to be in touch with them throughout the course of their investigation and throughout the course of your investigation as well?

1	A. Yes. Sometimes I will initiate further
2	conversation with them regarding something that may have
3	come up. Other times they initiate the conversation with me
4	regarding information that they found out. So, I mean, you
5	have to keep the lines of communication open while you're
6	working on the cases.
7	Q. Okay. Now, among your duties as an assistant
8	medical examiner, are you also the custodian of records of
9	the Harris County Institute of Forensic Sciences?
10	A. Yes.
11	Q. As such, do you have care, custody and control of
12	autopsy records?
13	A. Yes.
14	Q. Are these records made and kept in the regular and
15	normal course of business of the Institute of Forensic
16	Sciences?
17	A. Yes.
18	Q. And those records, are they made at or near the
19	time of the transactions reflected in them?
20	A. Yes.
21	Q. Are they made by someone who has personal knowledge
22	of the transactions reflected in them?
23	A. Yes.
24	MS. FULLER: May I approach the witness?
25	THE COURT: You may.

0. (BY MS. FULLER) I'm going to show you what's been marked as State's Exhibit No. 123. Do you recognize that? Yes, I do. State's Exhibit 123 represents the Α. autopsy report I prepared on Case ML10-1866. 0. Okay. Did you bring a copy of that record with you as well? Yes, I did. A . 0. Is it a fair and accurate copy of the record that you brought with you? Α. Yes. And again, you have care, custody and control of these records? Yes. A . MS. FULLER: Your Honor, at this time State moves to admit State's Exhibit 123, tenders to defense counsel for inspection. MR. CORNELIUS: Can I look at it just a moment, Judge? THE COURT: Sure. MR. CORNELIUS: Could I ask a couple questions, Judge? THE COURT: Sure. MR. CORNELIUS: On voir dire. VOIR DIRE EXAMINATION Q. (BY MR. CORNELIUS) With respect to State's 123,

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1 the autopsy protocol, there's a report in here from the anthropologist consultation that apparently is signed by 2 Deborrah Pinto. Who is that? 3 Α. She is a forensic anthropologist postdoctoral 4 5 fellow. And who does she work for? 6 0. 7 She works for Harris County at that time in the A . 8 anthropologist division but for the Harris County Institute of Forensic Sciences. 9 10 0. And now? Α. She's still there but she's just in a different 11 12 position. Okay. That is also -- that part of the report's 13 Q. 14 also signed by Jason Wiersema. Who is that? 15 Α. He's one of our forensic anthropologists. 16 0. And he's scheduled to be a witness in this case. 17 Do you know that? 18 A. Yes, sir. And this person, Jennifer C. Love, who is that? 19 0. 20 A . She's a forensic anthropology division director. 21 MR. CORNELIUS: Okay. I don't have any 22 objection. THE COURT: 123 will be admitted. 23 24 DIRECT EXAMINATION (CONTINUED) 25 Q. (BY MS. FULLER) Dr. Pinneri, let's talk

- specifically about -- you stated that at some point you're 1 going to hand over the -- you're going to ask for an 2 3 anthropology consultation. Did they complete their consultation? 4 5 Α. Yes, they did. 6 0. And they report -- did they report their findings 7 back to you? 8 Α. Yes. 9 Now, in the meantime, had you also been Q. 10 communicating with the Houston Police Department? 11 Α. Yes. And did you receive information about this case 12 0. that aided you in making a determination of cause of death? 13 Yes, I did. 14 A. 15 Okay. Can you please tell us what the cause of 0. 16 death was that you concluded? I determined the cause of death to be homicidal 17 Α.
 - violence. Q. Can you tell the jury how you came to that cause of

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death?

A. Well, skeletal remains are a little bit different when trying to determine the cause of death because you don't have the usual structures to look at. You really just have the bones. So, I received information from the police investigators on the case and I had information from the

anthropologist regarding their investigation and the two of them together led me to the conclusion this is not a natural death. I don't know everything that happened to the individual but one thing that I could tell from the information that I was given was that there was some sort of forceful neck compression because one of the bones that was recovered was the hyoid bone, which is a small bone in the neck and it had a fracture on it, which would go along with some sort of neck compression.

- Q. And let me stop you there. Have you -- have you had occasion to perform autopsies on bodies where the person was strangled?
 - A. Yes.

- Q. And in those cases can you tell us in regard to the hyoid bone -- first of all, tell us where the hyoid bone is located.
- A. The hyoid bone is up in your upper neck. It's above your thyroid cartilage which is the part you can see sticking out in men more than women, but it just sits right above that.
- Q. And can you tell us some of the other -- tell us some of the anatomy around the hyoid bone.
- A. So, the hyoid bone sits right here right above your thyroid cartilage, which, cartilage is not a bone. It can become ossified as you age but it's really not a bone.

And there are neck muscles that go from the hyoid bone to the thyroid cartilage, they go from the hyoid bone down to your -- the sternum or your breastbone right here, they go to your clavicles, which are your collarbones and so there's all these neck muscles that span this distance.

- Q. Can you tell us, from what you've observed, when somebody's neck is compressed, what can happen to that hyoid bone.
- A. What we see is hemorrhage in the muscles where the hyoid bone is and where the structures of the neck are from the compression and you can see a fracture of the hyoid bone.
- Q. Okay. And since we don't have actual muscles in this case, you were able, though, to see the hyoid bone.
 - A. Yes. One portion of the hyoid bone was recovered.
- Q. Okay. Do you recall which portion of the hyoid bone was recovered?
 - A. I believe it's the body of the hyoid bone.
 - Q. Okay. And the fracture was in the body of it?
 - A. Yes.
- Q. Now, when you received -- you laid out the body anatomically like we see in State's Exhibit 110, were you able to find the hyoid bone when you laid out the remains?
- A. No.

- *Q*. Okay.
- 2 A. No.

- Q. When you received information that there might have -- that there were neck compressions in this case, were you -- what did you do with that information?
 - A. Well, I made note of it for myself and went down to the anthropology laboratory to see if they had recovered any of the neck structures.
- Q. Okay. And when you went down there, did you learn if they had found or had recovered the hyoid bone?
- 11 A. Yes, I was informed that they had found a portion of the hyoid bone.
 - Q. Okay. And did you observe the fracture yourself?
 - A. Yes, I did.
 - Q. Now, in cases where you do have strangulation, is the hyoid bone something that you always look for in your autopsies?
- 18 A. Yes.
 - Q. And why is that?
 - A. Because it's a indicator of some sort of neck compression and it's very common for us to actually take the hyoid bone and the thyroid cartilage and submit it for anthropology consultation in those cases, as well for further documentation of the -- any fractures.
 - Q. Now, when -- you said that you also observed the

- hyoid bone; is that correct?
- A. Yes.

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- Q. You mentioned there was a lot of scavenger activity on the rest of the remains, on the rest of the skeleton.
- 5 Did you notice any scavenger activity on the hyoid bone?
 - A. No, I didn't see tooth marks or anything like that.

 There was just a well-defined irregular fracture on one edge.
 - Q. Okay. And you -- did you say earlier that it was a partial hyoid bone?
 - A. Yes. The hyoid bone has a body and two horns, a left and right horn, and sometimes they're fused together. Sometimes there's a little bit of a -- not a true joint but a little connection where there's more movement there. And so, in young people they're not fused together. In older people they become fused. So, in this case we only found the one piece of it.
 - Q. The body of the hyoid bone?
- 19 A. The body, yes.
 - Q. Okay. And you said that there were no teeth marks in that -- the body of the hyoid.
- A. No. That -- I didn't appreciate any and neither did the anthropologist.
- Q. Okay. Now, I want to talk to you a little bit about when somebody is being strangled, is it common or

likely for them to convulse?

- A. Yes. It's certainly not uncommon for them to have seizure-like activity.
 - Q. Can you tell us why?
- A. Well, the -- you're obstructing the flow of blood and subsequently oxygen to the brain during those types of scenarios. So, as a result of that, the body goes into seizure activity.
- Q. And can you describe -- when you say "seizure activity," what does that mean, medically speaking?
- A. Well, there's lots of different types of seizure activities. It has a different appearance to different people. It can be anything from just a mild shaking of the arms and legs to full flailing of the arms and legs. So, there's a whole spectrum of what people describe as seizure-like activity.
- Q. Okay. Now, are there any other -- generally speaking, are there any other things that happen with the body if somebody is being strangled, if their neck is being compressed? Are there any other traits that would normally occur?
- A. Well, there are things that we would see on the skin, such as bruising, things like that, marks on the skin. You can have a manual strangulation with hands; you can have a ligature strangulation. So, it just kind of depends on

1 | what the actual mechanism used is as to what we may see.

- Q. Would you see things like foaming at the mouth or somebody's tongue coming out of their mouth?
- A. Yes. Those are -- we don't really use the word "foaming at the mouth" but the tongue certainly comes through the teeth. That's a very common finding. Sometimes you can get fluids that come back up from the nose a little bit. We'll see petechial hemorrhages, which are little dot-like hemorrhages, in the eyes, sometimes on the face, sometimes on the inner lips from blood vessels that are kind of bursting from the blood not being able to go where it needs to go. So, those are things that we see in individuals that are not skeletonized.
- Q. Now, in this case, you -- the only thing that you had left to actually corroborate a possible strangulation is this structure in the hyoid bone; is that correct?
 - A. That's correct.

- Q. So, no skin to look at for bruising, no muscles to see for bruising. The hyoid bone is the only thing that gave indication of that being a possibility.
 - A. That's correct.
- Q. Okay. I want to also talk to you a little bit about the -- since this -- these remains were skeletonized, there's no ability for you or there's no way for you to test for any other type of diseases or problems that this person

may have had; is that correct?

- A. Mostly correct. I mean, we did see that this person has arthritis from the bones. You can tell whether or not the person has osteoporosis, things like that, but as far as whether or not they had heart disease or hypothyroidism, we can't tell that just from bones.
- Q. Okay. Now, if a person has Type 2 diabetes -- can you describe to the jury what Type 2 diabetes is?
- A. Type 2 diabetes is a fairly common medical condition that -- it's also called adult onset diabetes. It's generally associated with obesity and it's just a glucose regulation problem where you have too much glucose in your system. Over time too much glucose in your system can cause problems with things like your kidney, predominantly your kidney, your heart eventually. So, it's a glucose disregulation problem for which there are medications.
- Q. In addition to medications are there other ways -can it go away?
- A. Yes. Actually Type 2 diabetes is the form of diabetes that if a person loses weight and starts exercising and things like that, it can go away so you won't need medications for it.
- Q. How common is it for somebody to die from Type 2 diabetes?

- A. I don't use Type 2 diabetes as an actual cause of death. It can contribute to kidney problems and heart disease but that -- generally I'll list it as a contributory condition. Type 1 diabetes, insulin-dependent diabetes, is one that can be associated with a cause of death or can be the cause of death.
- Q. Okay. So, Type 2 diabetes, if properly treated, or if you lose weight, can actually go away?
 - A. That's correct.
- Q. And then that person can maintain a healthy lifestyle with diet and exercise.
 - A. Correct.

- Q. Okay. Now, in this case did you talk to any family members?
- 15 A. No, I did not.
 - Q. Is it common for you to talk to family members on every case that you perform an autopsy on?
 - A. No, I don't at all.
 - Q. Okay. If there's information that you needed to get from the family, certainly that's available to you to call them and talk to them if you needed to?
 - A. Yes, I will call them if I need information.

 Subsequently if they call me, I will speak with them but it can be upsetting for some family members to receive calls from us unexpectedly or during the day, if all we have is a

- phone number and it's their work number, it can be very upsetting. So, sometimes I'll wait for them to contact us.

 However, our investigative staff does call and notify family members, the next of kin, of an identification or a death when it comes to our office.
 - Q. Okay. Now, can you tell me again what you ruled the cause of death to be in this case?
 - A. I determined the cause of death to be homicidal violence.
 - Q. And what exactly does that mean?

- A. It -- the way that I use that is that there was some sort of traumatic event that led to this person's death.
- Q. Now, are there other -- why did you go to homicidal violence?
- A. I went with that cause of death because of the findings with the hyoid bone and from the investigative information I received from the police.
- Q. Now, what is that investigative information that you received? Because you used that to determine your cause of death, what exactly was it that you received from the police that made you use that and make your ruling?
- A. I was informed by the police that the person had sustained neck compression at the time of her death and I used that information in conjunction with what the

- 1 anthropologists had found and put them together.
- Q. Okay. Were you given any information about where she was found?
 - A. Yes.

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- 5 Q. And where was that?
 - A. In an open field or a kind of wooded field.
- Q. Okay. Were you given any information about whether or not she had a home?
 - A. Yes, I was.
- 10 *Q*. And what information was that?
- 11 A. I was told that she had a home.
- 12 Q. And were you also given any information about her 13 being missing?
- 14 A. Yes.
- Q. Okay. Were you given information regarding howlong she had been missing?
- 17 A. Yes. We did receive a copy of a missing persons
 18 flier.
- Q. Okay. And that, in addition to the actual remains that you found, shows that she was missing for several weeks.
- 22 A. Yes.
- Q. Okay. Were there any other factors that you were told about that played into your ruling of cause of death?
- 25 A. Well, I kind of looked at all of the circumstances,

like I said, the information regarding the neck compression, 1 the finding of the hyoid bone fracture, the fact that this 2 person has a home, routinely -- I was told would go home, 3 was uncommon for this person to disappear, from what I was 4 5 told, and the fact that she's found in this field, I 6 thought, was very unusual for her to be so close to her home 7 and for her to be found there, given the circumstances. 8 put it all together that she did not go -- she did not die 9 in this field of anything other than some sort of traumatic 10 event. Dr. Pinneri, based on your education, your training 11 0. 12 and your experience as a medical doctor and as a forensic pathologist, can you tell the ladies and gentlemen of the 13 jury whether or not the hand can be used as a deadly weapon? 14 Α. Yes, the hand can be used. 15 16 0. And can you give us a -- an example of how a hand 17 can be used as a deadly weapon? 18

Α. A hand, as we discussed, can be used for manual

strangulation, you can use it to hit someone.

MS. FULLER: May I have one moment, Your Honor?

> THE COURT: Sure.

> > MS. FULLER: Pass the witness.

THE COURT: Mr. Cornelius.

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CROSS-EXAMINATION

- Q. (BY MR. CORNELIUS) Dr. Pinneri, I'm Skip
 Cornelius. We've talked before and on this case before,
 correct?
 - A. That's correct.

- Q. You did not find that she was strangled, correct?
- A. I do think that she was strangled.
- Q. Why didn't you make that the cause of death?
- A. I chose not to put that as the cause of death because I don't know what else may have happened to her. I don't know if there was any other sort of inflicted trauma that may have contributed to her death and I didn't want to lock myself into just one mechanism because that's all that I had to go with. So, I chose to use a broader term.
- Q. Okay. Well, you understand that this person here is on trial and has been indicted for strangling someone and you're the expert, medical examiner in this case and you file an autopsy protocol that does not list the cause of death as strangulation, right?
- A. My cause of death does not say strangulation, that's correct.
- Q. And you filed this autopsy protocol in August of 23 2010, right?
- A. Correct.
- 25 Q. And everything that could be known about this case

was known in August of 2010, right? You didn't have any 1 conversation with the police after that, did you? 2 3 Α. I don't recall, no. Okay. Now, let me ask you a question about that. 4 0. 5 You work for the -- what we used to call the medical 6 examiner, the Institute of Forensic Sciences, correct? 7 Α. Correct. 8 0. And that's a position in Harris County, right, or 9 the Harris County government? 10 Α. Yes. 11 It's not law enforcement, though, is it? 0. 12 Α. No. 13 Q. It's not really your job to solve murder cases, to 14 figure out who did it, right? 15 Α. No, sir. 16 0. Your job is as a medical doctor to determine the 17 cause of death. 18 Α. Correct. 19 And as a medical doctor, you cannot determine this 0. 20 cause of death, can you? I can't determine the exact mechanism of death. 21 A. 22 Q. Okay. I mean, everybody knows that this person,

whoever this person is, is dead. I mean, obviously they're

But you as a medical doctor cannot say how the person

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died, can you?

A. In this case, I feel that I did have enough to determine that there was neck compression.

- Q. Well, why didn't you put that? I mean, why didn't you make that finding?
- A. For the reason I stated just moments ago, that I don't know what else may have happened, if there was some other mechanism involved in the -- if I use strangulation, that needs to be clarified with manual or ligature and I don't know in this case what.
- Q. Okay. You based that on what the police told you, didn't you?
- A. I based it partially on that in addition to what the anthropologist found.
- Q. When the police told you -- what did they tell you? And who was it that told you this?
- A. I received a voice mail from, I believe it was Sergeant Cisneros, regarding the -- a confession that was given and what it was and --
- Q. What does that mean? "A confession," "what it was"? What was it? What did he tell you it was?
- A. He told me that they had a suspect in custody and that person had confessed to -- I don't recall the exact words.
- Q. It led you to believe he confessed to strangling the person?

Α. 1 Yes. 2 0. Did you ever hear the confession? 3 Α. No. Do you have any idea if it's true or not? 4 Q. 5 MS. FULLER: Objection, speculation. 6 THE COURT: Sustained. Maybe you can 7 rephrase. 8 0. (BY MR. CORNELIUS) Okay. I mean, you're basing 9 your decision as to cause of death on something you got off a voice mail from a homicide investigator. Did you do 10 11 anything to see if what he told you was true? I went down and looked at the bones and saw 12 A. that there was a fracture of a bone that is frequently 13 14 broken in cases that involved neck compression. 15 0. Okay. Y'all already had that, though. 16 anthropologist already had that fractured bone along with a whole bunch of other fractured bones, right? 17 18 A . A lot of bones with postmortem scavenger activity, 19 yes. 20 Q. You got a lot of bones that are fractured that don't have any postmortem activity, don't you? 21 22 A . No, not a lot, no. Okay. We'll go into that in just a minute. 23 0. 24 from a medical standpoint, the only thing that you have to 25 substantiate what you're telling this jury today is part of

a hyoid bone that has a fracture, right? 1 2 Α. Yes. Nothing else? 3 0. Correct. 4 Α. 5 And you don't know how that fracture got on there, 0. 6 do you? 7 The most likely reason, in my opinion, is with neck A . 8 compression. It does not look like postmortem scavenger 9 activity to me. How about somebody stepping on it? 10 0. 11 Be very unlikely. A . 12 0. Well, how do you know it didn't happen? I don't see where there's any evidence that these 13 Α. 14 bones were stepped on. Have you seen pictures of the scene? 15 0. Yes. 16 Α. 17 And you don't think any of those bones were stepped 0. 18 on? How about by animals? You think animals stepped on 19 them? 20 Α. I guess they -- yes, they could have. I know that they were in there with the bones for sure. 21 22 Don't you think it would be impossible for animals 23 not to have stepped on these bones? I mean, they ate virtually all the flesh, right? 24 25 Oh, not necessarily, no. The body decomposes and Α.

it liquifies. You can see from the scene photos that they 1 didn't --2 Okay. The bones were scattered 40 feet one way and 3 0. 20 feet the other. How do you think they got there? 4 5 Α. They were dragged by --6 MS. FULLER: Objection, Your Honor, that's a 7 misstatement of the evidence. 8 MR. CORNELIUS: It is? 9 Q. (BY MR. CORNELIUS) Well, I stand by my statement. I believe the evidence is from the crime scene unit that in 10 one direction the bones were scattered 40 feet and the 11 other, 20 feet. 12 MS. FULLER: Objection, Your Honor, that's a 13 14 misstatement of the law (sic). He's talking about the total area of the scene from the first point of where bones are 15 16 found to the homeless camp to the other direction. He's not 17 talking about the small area where there's the main bone 18 cluster and the -- however many feet out it went with the 19 bones. 20 MR. CORNELIUS: Maybe I'll --THE COURT: That is my recollection, sort of, 21 22 but it has -- we covered a lot of testimony since then so 23 maybe if you want a hypothetical or something like that. 24 Maybe rephrase it.

(BY MR. CORNELIUS) Have you seen the pictures?

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Q.

A. Yes.

- Q. How about the police report? We figured it out mathematically on the police report how far they were from one set of bones to the furthest set of bones this way and from one set of bones to one set of bones this way. I think it's more than 40 by 20 actually. I think it's 60 by 20.
- A. The whole set of bones didn't start out here and be dragged over here. The bones started in one area and some were taken this way and some were taken that way, which does not mean they were dragged the whole distance; so, I don't think that's really -- I mean, they were dragged. Some were dragged away but not the entire distance for the recovery site.
- Q. Okay. I agree with everything you just said, all right. How did they get dragged?
 - A. They were taken by animals.
- Q. Okay. How did the animals -- don't you think the animals had to stand in the area where the body was at one point when it was mostly together to take it apart and move the bones wherever they moved them?
- A. Well, you're assuming that the animals had to take the bones apart. I mean, the -- if the bones are skeletonized, they're just laying there and they just go up and take them and drag them.
 - Q. Okay. So, do they get there on their furry four

feet? 1 2 A . Yes. And they get hold of a bone and they take it 3 0. Okay. someplace else? 4 Α. 5 Yes. 6 0. Okay. So, don't you think it's impossible animals 7 didn't step on those bones? 8 Α. I said I think it is possible that they stepped on the bones. 9 Well, how do you know they didn't step on the hyoid 10 0. 11 bone? They may have but I don't think there would have 12 Α. been enough pressure to break the hyoid bone where it was 13 14 broken. 15 0. Really? 16 Α. Yes. You don't think a dog can break a hyoid bone? 17 0. 18 Α. No. Okay. How large is the hyoid bone? 19 0. 20 Α. It varies from individual but it's one and a half centimeters for the body, if that's what you're talking 21 22 about. The whole thing is C-shaped and gosh, I've never 23 measured all the dimensions. 24 0. Now, as I understand it, there's only one of three 25 parts that were found.

1 Α. That's correct. 2 0. What happened to the other two parts? They were not recovered. 3 Α. Okay. Why is that? 4 Q. 5 It's -- actually the hyoid bone is one of the bones Α. 6 that is frequently not recovered and the fact that we found 7 one, I thought, was very good. It indicated a very thorough 8 search but because of the size, a lot of times the hyoid bone is not recovered. 9 Okay. So, you think they just missed it or you 10 0. 11 think an animal ate it. 12 MS. FULLER: Objection to speculation, Your 13 Honor. 14 MR. CORNELIUS: It's all speculation, Judge, 15 she's an expert witness. 16 THE COURT: If you can answer the question. 17 I don't know what happened. No, I'm not 18 necessarily sure that an animal ate it. It could be 19 displaced by wind. It can be sunk into the soil after the 20 decomposition. It can be small, it can be washed away by 21 rain. 22 0. (BY MR. CORNELIUS) Do you know that the

anthropologist team dug under that area where most of the

A. Uh-huh.

bones were found?

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0. And sifted through the soil. 1 2 Α. Yes. And they're professionals at doing that, right? 3 0. 4 Α. Yes. 5 It's probably unlikely that they missed it; would 0. 6 you agree with me? You have confidence in your anthropology 7 team? 8 Α. Absolutely. 9 Q. Okay. You think the wind blew them away, those two 10 parts, but not the one part that was found? 11 I think it could have been washed away with rains. There's all kinds of situations. 12 13 Q. Why didn't the rain wash away the part that you found? 14 Because it was found. 15 Α. 16 0. It's kind of wishful thinking, isn't it? 17 I don't wish for anything. A. 18 MS. FULLER: Object to argumentative and 19 sidebar, Your Honor. I just look at what I've got. I didn't wish for 20 Α. anything. 21 22 0. (BY MR. CORNELIUS) Okay. So, you found this one 23 part of a bone, one part of a bone that has three parts and 24 it's got a structure on it and that's the only evidence you

have as a medical doctor to say that this woman was

strangled, right?

- A. That's the only physical evidence, yes, sir.
- Q. Can you say as you sit there she didn't have a heart attack?
- A. Okay. Heart attack is a layman's term that just means the heart stops; so, it's a hundred percent sure that her heart stopped because she died.
- Q. Okay. Well, I'm not trying to mince words with you. The diabetes that she had can sometime cause heart problems.
 - A. Yes.
 - Q. And it can sometimes cause heart failure, right?
- 13 A. Over time, yes.
 - Q. Uh-huh. Somebody that loses a ton of weight, who has a deplorable health activity using drugs and alcohol, losing almost all of their teeth before they die, can you tell us that this woman didn't -- because of her diabetes, have heart disease and ultimately had a heart attack?
 - A. Well, I see that a lot. There are lots of people that die from heart disease and diabetes and alcoholism and drug use but they don't have broken hyoid bones.
 - Q. Okay. Do they get eaten by dogs and raccoons? How many do you see like that where they've been eaten, literally eaten or decomposed and nothing left but bones. How many do you see like that?

- A. Well, it's actually more common than you think.
- Q. That somebody died of heart disease and then nothing was left but their bones?
- A. It's not that uncommon -- well, in that situation, I don't know that we could say they died of heart disease but there are lots of individuals in Harris County that die that don't get found in a timely fashion that have animals that get hungry.
- Q. And if you don't have anything but the bones, you're never able to say they died of heart disease, are you?
 - A. No.

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- Q. Some sort of cerebral hemorrhage. How can you tell us she didn't have some sort of cerebral hemorrhage or some kind of reaction to the drugs, to crack cocaine?
- A. Well, the hemorrhage, a lot of times blood is dark and it will stain the inner surface of the skull. So, we can see a suggestion of that in some individuals that have an intracerebral hemorrhage or subdural hemorrhage or something where there's bleeding in the skull but as far as the drugs, no.
- Q. You say you consult with the police on your cases, that that's normal to do?
- A. Yes.
- 25 Q. When the police come to -- and it's been asked do

- they come to the autopsies and you say that's -- that happens, correct?
 - A. Yes, sir.

- Q. Do they come there to tell you how to do the autopsy and to tell you what the cause of death is or do they come there to learn from you things they can learn in investigating their case?
- A. They certainly don't tell me how to do the autopsy.

 But it -- certainly our findings will aid them in their investigation and vice versa, the information that they have aids us in our cause and manner of death determinations.
- Q. So, when the police come to view an autopsy, are they coming to help you determine what the cause of death is or are you determining the cause of death so that it will help them in their investigation?
- A. Are you asking that from my point of view or from a law enforcement point of view?
 - Q. Well, I'm asking it from your point of view.
- A. From my point of view, they're there to provide information that will help me determine cause and manner of death.
 - Q. Really?
- A. Yeah.
- Q. So, you're not interested in just doing it from a doctor's standpoint. You want to get information from the

police, what they think. I mean, it would seem to me that you would try to get the cause of death as a medical doctor and not based on hearsay and themes that the police might have in their minds as to how this person got killed.

- A. Of course I make it on my medical opinion. But that's -- I'm not going to close my ears and not hear about things like I discussed earlier about how -- a house fire, not hear what they found at the scene about how the fire may have started. I can't do that. I can't function in a vacuum, as I said earlier. I don't rely on their information. A lot of times what they find isn't what they were initially thinking.
- Q. Okay. I understand the house, the arson investigation. I understand that. This is not like that, though. This is a police detective telling you that the defendant confessed to strangling this person, right?
 - A. Correct.

- Q. And you finding a single bone, which is just part of the hyoid bone, that has a fracture and deciding that this is a strangulation, even though you wouldn't put that in writing in your report. But you're telling this jury that.
 - A. Correct.
- Q. Okay. As a part of the autopsy protocol that's in evidence there, is there a skeleton that's put together here

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to show all these bones that were recovered? Do you have a
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      copy of that where you are?
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          Α.
               Yes, I do.
               It might be easier for you to see.
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          0.
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                    MR. CORNELIUS: May I approach the --
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                    THE COURT: Sure.
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                    MR. CORNELIUS: -- screen, Your Honor.
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                    THE COURT: Sure.
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                    MS. FULLER: Skip.
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                    MR. CORNELIUS: Does she not have one?
                    MS. FULLER: She does. I just didn't know if
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      you wanted the one that's in evidence.
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                    MR. CORNELIUS: I've got that one.
14
          0.
               (BY MR. CORNELIUS) You've seen this before,
15
      correct?
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          A.
               Yes, sir.
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               And this was done by whom?
          0.
               Dr. Pinto.
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          Α.
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               And Wiersema?
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          Α.
               Yes.
               And this was done June 30th, 2010?
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          0.
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          Α.
               That's correct.
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               Okay. And does it have on here the bones that are
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     present and the bones that are missing? With the ones in
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     black being gone and the ones -- there's a little graph on
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1 the right-hand side over there. 2 Α. Uh-huh. The ones in black are bones that were not 3 0. recovered, as I understand this; is that correct? 4 5 Α. That's correct, although the hyoid bone is not 6 listed on this. 7 Okay. And what does FRX mean? 0. 8 Α. Fracture. 9 Okay. And what does puncture mean? Q. A penetrating wound. 10 Α. 11 Okay. And is that consistent with -- could it be a 0. 12 tooth bite, a bite mark? Yes. That's what's implied. 13 Α. 14 Okay. Because some of these say that they're bite 0. 15 marks or chewing or whatever and some just say a puncture or 16 a puncture mark, right? Yes. But I don't take this to be that this is all 17 Α. 18 that they saw on each of the bones. It's just too 19 cumbersome to list every single tooth mark or puncture on 20 all of the bones but it's a very good documentation of what they found. 21 22 Q. What is this bone right here? 23 That's the clavicle, the collarbone. Α.

Does it have a fracture up here? Is that what that

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means?

- A. She has a fracture posterior, yes.
- Q. Okay. That means in the back?
- A. Yes.

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- Q. All right. Now, that bone doesn't have any -- it doesn't have any bite marks on it, does it?
 - A. Not that she's drawn. I'd have to look at the actual bone to see what it looked like.
 - Q. Okay. Well, she didn't even draw the hyoid bone on here at all, right?
 - A. That's correct.
- 11 Q. This is kind of what we've got to work with, right?
- 12 A. Well, there should be -- yes. I mean, there should 13 be photos of the bones.
- Q. So, if this is a fractured bone up here, the clavicle -- what is that? The collarbone?
- 16 A. Yes.
 - Q. It's got a fracture on it. It doesn't have any bite marks on it. Does that mean a human did it; an animal didn't fracture this bone?
 - A. You're asking me to make an opinion about something that I would need to see in person, not somebody's drawing.
- 22 I'd need to see the bone to make that determination.
 - Q. How about this fracture right here? There's no bite marks.
- 25 A. There's no bite marks that are listed, that's

1 correct.

- Q. Does that mean a human did it?
- A. No, it does not.
- Q. How about this one over here? There's a fracture there. In fact, it's broken off completely and there are no bite marks on it, at least none of them recorded. Does that mean a human did that? An animal didn't do that?
- A. I can't say that there aren't puncture marks on these things just because they're not written down. The areas that are listed, the ends of long bones are one of the most common places for postmortem animal activity. That's what they grab; that's what they start eating first.
- Q. How about this foot down here? Parts of it are gone. Think they got washed away, these parts?
 - A. Yeah, I can't tell you exactly.
- 16 Q. Blown away?
 - A. Sure, yeah. The foot and hand bones and the hyoid bone as well as the thyroid cartilage are the most common bones to not be recovered in skeletal cases. They're very small, they get displaced by wind, by water. They don't get recovered for those reasons, plus more that I'm probably not mentioning.
 - Q. These bones were there. They were recovered, right?
- 25 A. Yes.

1 0. They don't have any bite marks on them. There's a picture of this. Do you remember the picture of this? 2 There was a picture of this foot right here, what's left of 3 this foot. Do you remember seeing that picture? 4 That's been admitted into evidence? 5 Α. 6 0. Yeah. 7 No, I don't. A . 8 0. State's 81, is that a foot? 9 Α. They look like -- it is not a foot. They look like foot bones. 10 11 0. It looks like what? 12 Α. They look like bones from the foot. 13 Q. Okay. 14 But I don't know that it's a complete foot. Α. 15 does not look to be like a complete foot. 16 0. Okay. Well, the reason it's not a complete foot is 17 because the right foot was gone, according to this diagram. There is no right foot. It's gone because it's in black 18 19 here, right? This is the only part that was recovered, 20 according to this diagram, right? Α. 21 Yes. 22 Q. That would have to be a picture of that, wouldn't 23 it? 24 Α. Yes.

Okay. Does any of that look like it's in danger of

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Q.

- being blown away or washed away by water? I'll put it up here.
 - A. Well, clearly some parts of it were because they were not recovered with that.
 - Q. How do you know they weren't just eaten?
 - A. I don't know.
 - Q. By animals.

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- A. I don't know what happened to them. If they're not recovered, I don't know. All I can tell you is what can happen.
- Q. Okay. If they were eaten by animals, how come we don't have bite marks all over them? There are no bite marks recorded on here.
- A. I'm sorry. I guess I'm not understanding where you're -- what you're asking me.
 - Q. Well, let's see if you can understand it. You're saying that because the hyoid bone that was recovered doesn't have any bite marks on it, it wasn't broken by an animal, right?
 - A. I'm saying that the hyoid bone does not have any tooth marks on it. The hyoid bone is also not a commonly scavenged bone in my -- to my knowledge and that is what I used to determine the significance of the fracture found on it.
 - Q. This is State's 51. Is that the skull?

One of the items is the skull as well as ribs and Α. 1 2 the sacrum, which is the upper part of the butt bone, if you want to think of it that way, and multiple ribs and it looks 3 like vertebra and one of the long bones. 4 5 0. The one up top is a skull. 6 Α. Uh-huh. 7 Sacrum is which one? 0. 8 Α. The one right by it. 9 And this is the sacrum. And what is that? Q. That's the lower part of the -- it's part of the 10 Α. 11 It's the back part of the pelvis. pelvis. 12 Q. So, this is not very anatomical, is it? No, sir. 13 A . 14 The wind didn't do that, though, did it? Wind 0. didn't blow that skull around? 15 16 Oh, gosh, the skull moves all the time. The skull is one of the first things -- it's rounded. It rolls. 17 not uncommon for the skull to be found farther away from 18 19 everything else. What we typically find --20 Q. Because the wind blew it? Sure. It rolls. It can be --21 Α. 22 Q. Do you really think the wind blew this skull down 23 here to the sacrum or the sacrum up to the -- do you really 24 think that?

MS. FULLER: Objection to argumentative, Your

Ι

Kathryn Haden-Pinneri - January 11, 2012 Cross-Examination by Mr. Cornelius

1 Honor. THE COURT: Rephrase, please. 2 That really what you think? 3 0. (BY MR. CORNELIUS) I see skulls displaced by wind, water, gravity, all 4 Α. I don't think it's uncommon. What we use for a 5 the time. 6 placement of an individual when they're found like this are 7 the vertebra. The spinal column is usually what stays where 8 the person dies. That's what stays the most. Everything else scatters. 9 10 0. All right. Is this the spinal column right here? Α. 11 Yes. 12 0. Almost all of it's recovered, isn't it? 13 A . Yes. 14 0. And the parts that aren't recovered, do they get blown away by the wind or washed away by the rain? Or do 15 16 you think they were carried away by animals? 17 MS. FULLER: Objection to argumentative, Your 18 Honor. 19 THE COURT: Overruled. 20 Α. I can't say what happened to them. I think it's 21 possible that they could have been moved by wind, water, 22 rain or animals. 23 0. (BY MR. CORNELIUS) Okay. But you don't think the 24 hyoid bone could have been moved by an animal.

I think it could have been moved by an animal.

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Α.

- don't think the fracture was made by -- I think the fracture was real.

 Q. What's -- why would it be unreal? It's just a fracture.
 - MS. FULLER: Objection to argumentative and sidebar, Your Honor.

THE COURT: Overruled.

- Q. (BY MR. CORNELIUS) I mean, the hyoid bone has the horns that come off of it, right?
 - A. Uh-huh, correct.

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- Q. Well, it's got at least two fractures because they're gone, right? I mean, you don't have them anymore because you can't see it but they're gone. Right?
 - A. They were not recovered, yes.
- Q. So, what's left is this little piece -- and it's much smaller than what I'm showing you, right? It's not even an inch, correct?
- A. Typically, yes. It can be up to an inch but I don't believe it was in this case.
- Q. And two parts of it are gone. They obviously were removed somehow. They're fractured somehow, removed from it, right?
 - A. Not necessarily. The --
- Q. Maybe they didn't exist?
- 25 A. Is that a real question you'd like me to answer?

- Q. No, I thought maybe if people don't -- maybe they don't develop those or something.
- A. No, but what happens is sometimes, as I was stating earlier, that horns don't fuse to the bone so it's just a cartilaginous structure so when the bones -- when the body decomposes and becomes skeletonized, that cartilage dissolves as well. So, one horn, it appears that it was nonfused on the -- make sure I get the right side. It appears that it was nonfused on the right side. So, the right side was not fused together. There's just a little bit of cartilaginous tissue keeping that together. So, when that dissolved, due to decomposition, that other side could just fall off.
 - Q. Okay.

- A. Because the other side appeared to be fractured, it is consistent with there being some fusion of those two structures and when the fracture happens, they become separated and you lose the other piece.
 - Q. Uh-huh. You know what a wishbone is on a turkey?
- A. Yes, I do.
- Q. Is it possible one animal had one part of that hyoid bone and another animal had the other and they broke it just like a wish bone?
 - A. No. Well, I think that would be an extremely unlikely scenario.

Q. Why? Why would that be unlikely?

- A. Because a hyoid bone is not that big. The hyoid bone would have tooth marks on it if there were -- you would have two animals pulling on it almost mouth to mouth and I don't see that happening.
 - Q. Like little animals, like raccoons or rats.
- A. Whatever animal you pick, if it's a rat, you're going to see -- rats -- okay. Rats give gnaw marks on bones. They don't give puncture marks like we're seeing on here. They're more gnaw marks. That's what they do. They gnaw on --
- Q. Every single time. There's never been an occasion where an animal bit a bone and didn't leave a teeth mark. There's always been a puncture every single time.
- 15 MS. FULLER: Objection to argumentative, Your 16 Honor.
- 17 THE COURT: Overruled.
 - A. I don't know. I haven't seen every single time a bone has been bitten by an animal.
 - Q. (BY MR. CORNELIUS) Well, I guess I'll ask

 Dr. Wiersema about this chart but you're telling me that

 you're not buying the fact that these bones that have

 fractures don't have tooth marks in them, just because it's

 not written up here. That's what you're saying to the jury,

 right?

- A. I'm -- can I phrase it the way -- I'm not sure exactly what you said.
 - Q. Yes, yes.

- A. Okay. I know that there are fractures on some of these bones. Most of them are associated with tooth mark and animal activity. I do recognize that they observed some fractures to not have associated tooth marks but a lot of those are in areas that are very commonly scavenged by animals. The hyoid bone is not necessarily one of those that is frequently scavengerized (sic).
- Q. Let's take this bone, the large bone in the shin, what's that bone called?
 - A. That is the tibia.
- Q. Tibia. The tibia at this end has puncture marks like it's been gnawed on, right?
- A. Yes.
 - Q. This part is gone. It's gone. But it -- they don't record that it has any animal activity, correct?
 - A. That -- yes. That --
- 20 Q. So why would --
 - A. It's not written on here but I don't know that it didn't have it. I don't record every single piece of information on my diagrams and I don't believe they do either.
 - Q. Okay. And over here we've got a fracture at both

- ends like we do here and no mention of any puncture marks, right?
 - A. Correct.

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- Q. What about this little part right here? Of this bone in the arm? It's a fracture. Do you think that means that a human did that, not an animal? Because there aren't any tooth marks there?
- A. I can't say who did that. It's a very tiny fragment of bone.
- Q. Okay. Is there any record of where the hyoid bone was found?
- A. I don't know if I have the answer to that immediately. The hyoid bone, when I saw it, was part of a collection of small bones that included the feet, so I'm not sure if that was known that it was the hyoid bone at the time of the recovery or not. Or if maybe they thought it was just a fragment.
- Q. Do you know that all these yellow markers indicate where bones are found?
- A. Yes.
- Q. Do you know that the anthropology team assisted by the crime scene unit or vice versa tried to mark where -what the bones were and where they were found?
- A. Yes.
- 25 Q. So, do you know if there's any record as to where

- 1 the hyoid bone was found?
- 2 A. No. I would be surprised if there was because I
- don't know that they were aware that they had actually
- 4 recovered the hyoid bone at the scene.
 - Q. Okay.

- A. I certainly was not aware when I observed the bones when I started my autopsy.
- 8 Q. This picture right here, do you recognize the
 9 people in this picture?
- 10 A. Yes, I do.
- 11 Q. Who are they?
- 12 A. The female is Dr. Deborrah Pinto and the male is
- 13 Dr. Jason Wiersema.
- Q. Okay. So, he's the one that's going to testify in
- 15 this case, right?
- 16 A. Correct.
- 17 Q. Now, this is -- do you think this is the burn area that they're looking at?
- 19 A. I'm --
- 20 Q. Where the body decomposed or do you know?
- 21 A. I don't know. I don't know for sure. It looks
- 22 | like it is a site of decomposition but I don't know what
- 23 the -- what else is around there.
- Q. These are the two people that would be most expert
- 25 | out there in identifying bones, correct?

A. Correct.

- Q. And you're telling me that you'd be surprised if they knew they recovered the hyoid bone?
- A. At the scene, yes. I mean, maybe they thought they did but if you're just recovering a piece of it, it's not -- they might have thought it was a fragment of another bone.

 I don't know -- I can't -- actually I don't know what they were thinking.
- Q. This is State's 77. This is the scene, I'm told, up here, if you can barely see it, where all those yellow flags are, where most of the bones are found, and this is some distance away from that. Are you really telling the jury that you think the bones that have been found here were washed down here or blown down here by the wind?
- A. I don't know what bones were found down there. If they have scavenger marks on them, I would say that they're brought down there by an animal.
- Q. Okay. So, you're sticking to your opinion that this is a strangulation because you have a crack on that bone, a fracture of that one bone. It can't be anything else. Has to be a strangulation.
- A. I'm sticking to the position that I think this is a nonnatural death, given all of the circumstances put together. I think that neck compression is the most likely mechanism for her death, given what we found and what I was

- told by the investigation. That's how I came to my cause of death.
 - Q. Okay. So, you're saying it's the most likely explanation. Is that what you just said?
 - A. Yes. I don't know if -- I'm sorry. Yes.
 - Q. Okay. So, that's as far as you're going to get with it. It's most likely what the cause of death is.
 - A. No, my cause of death is homicidal violence.
 - Q. Well, which is it? I mean --
 - A. Homicidal violence.
- 11 Q. I don't want you to mince words with us. Tell us.
- 12 A. Homicidal violence.

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- 13 MS. FULLER: Objection to argumentative and sidebar, Your Honor.
- 15 THE COURT: Overruled.
- 16 A. My cause of death is homicidal violence.
- 17 Q. (BY MR. CORNELIUS) Okay.
 - A. I can't tell you whether her airway was obstructed or anything else that may have happened to soft tissues that I don't have to examine. All I can tell you is what was found on the bones and what I was told from the police, I put them together for my cause of death.
- Q. Okay. Now, all of these, you said that's based on all of the circumstances. Is that what you said? I've forgotten the word you used.

- A. Yes, the investigative information regarding the circumstances and the anthropology findings.
- Q. Are you talking -- when you say "circumstances," are you talking about the hearsay that the police told you?
 MS. FULLER: Objection to asked and answered,
 Your Honor.

THE COURT: Overruled.

- A. I'm referring to the information regarding the confession. I'm also referring to the information regarding the individual and her whereabouts and going missing and that she's -- has a home to return to and she did not and for some reason she's found dead skeletonized in a field.
- Q. (BY MR. CORNELIUS) Okay. And you know all that because somebody told you that, right? You know she has a home to go home to because somebody told you.
 - A. Yes.

- Q. Because you didn't talk to her family, right?
- A. I did not personally but someone in our office did.
 - Q. Because they called y'all, right? Her sister and her husband called the ME's Office, didn't they?
 - A. They may have but we also initiate calls to the family as well.
- Q. So, you're saying the ME's Office called her family?
 - A. We do next-of-kin notification for deaths and

- whenever we get a positive ID, we do call the family member to notify them that their loved one, number one, either has been identified or we also notify them that their loved one has died.
 - Q. So, when whoever it was from the ME's Office talked to them, did they find out any information about this woman that you believe is the woman that died here?
 - A. Not that they documented, no.
- Q. Don't you think her health would be something that would be important for you to consider in determining the cause of death?
- A. I did have some information regarding her health.
- Q. Which was what?

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- A. That she abused drugs and alcohol.
- Q. Okay. Now, Dr. Pinneri, the fact that she didn't go home, okay, means that she -- or could mean that she died, correct? She didn't go home because she was dead, right?
- A. That's what it appears, yes.
 - Q. How does that mean she was strangled, though? Why didn't she have a heart attack? Why didn't she commit suicide? Why didn't she have a drug overdose? How does that mean she was strangled because she didn't go home?
 - A. Okay. Well, because we look at all of the circumstances and --

- 0. Well, what are the circumstances? What are you 1 2 looking at? You've already told us what it is. There's no pill bottles, there's no suicidal 3 Α. mechanism that anyone could find at the scene or in her 4 5 residence. There's no -- I was not notified of any 6 significant medical conditions other than the drug and 7 alcohol abuse. 8 0. Can you tell the jury that she wasn't stabbed? 9 Α. I can tell the jury that she was not stabbed such 10 that it left a mark on a bone that we recovered; however, 11 the possibility exists that she could have been stabbed in soft tissues that we did not receive. 12 Could she have been grabbed by the neck and 13 Q. 14 stabbed? Grabbed in the neck? 15 Α.
 - Q. No, grabbed by the neck, grabbed by the neck and held and stabbed in the stomach.
- A. I guess that's a possibility. It's still homicidal violence.
 - Q. Sure is.
- 21 MR. CORNELIUS: Could I have just a moment,
- 22 Judge?

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- 23 THE COURT: You may.
- Q. (BY MR. CORNELIUS) Okay. Just one more thing.
- 25 Why was there no attempt to get DNA from the bones or from

- the clothing that this woman was wearing? I mean, I know there's attempt to try to get foreign DNA or touch DNA or trace evidence from that stuff but why wasn't there an attempt to get the person who died's DNA?
 - A. I'm not entirely sure I have an answer for that.

 It's not common for us to do that.
 - O. Really?
 - A. Yes.

- Q. When you don't know the identity of someone, it's not common to get their DNA?
- A. If our other mechanisms for identification have failed, then, yes, we will go to DNA but it's very expensive, it's very time consuming. It's essentially a last resort for identification and if we're able to make it by other means, we do that instead.
 - Q. Don't you have your own DNA lab right there in the Institute of Forensic Sciences?
 - A. Yes, we do.
- Q. Okay. Do you think it would cost more to hire a professional forensic witness for a dental examination than for y'all to do it yourself in office? That would cost more than doing the DNA.
- A. I'm sorry.
- Q. Do you think it's cheaper for y'all to hire this forensic dentist --

MS. FULLER: Objection as speculation for this 1 2 witness, Your Honor. THE COURT: Sustained, sustained. 3 (BY MR. CORNELIUS) Well, if you know. 4 0. I mean, do 5 you know? It's absolutely cheaper to use Dr. Stimson than it 6 A. 7 is to do a DNA profile. 8 Q. Really? 9 Α. Yes. 10 0. Okay. Well, I'll take your word for it. I know this woman was cremated and that's what 11 12 the evidence says. Did y'all keep anything upon which DNA could be determined? 13 We did not keep any of the bones, to my knowledge. 14 Α. I don't have the body release form but usually we document 15 16 when we retain any skeletal elements and I don't see they were retained. The clothing was submitted as evidence to 17 18 the -- back to the investigating agency. 19 Do you think you could get DNA from the clothing, 0. 20 the decomposing body's fluids that went into the clothing, think you could get DNA from that? 21 22 A . I don't know. Decomposed DNA isn't all that 23 reliable. I don't know. I'm not a DNA analyst. 24 0. Doesn't the Medical Examiner's Office always keep 25 some sort of tissue or something in case there's a request

1 later for a DNA exam? Actually we don't keep it for that reason, no. 2 do keep tissues from -- we keep blood samples for a certain 3 period of time. We don't keep them indefinitely for people. 4 5 We try to return as much of the individual to the legal next 6 of kin for proper burial or however -- whatever disposition 7 they choose, we try to give them back as much as we can. 8 0. All right. 9 MR. CORNELIUS: I'll pass the witness. 10 MS. FULLER: Nothing further, Your Honor. 11 THE COURT: May this witness be excused? 12 MS. FULLER: Yes, Your Honor. 13 MR. CORNELIUS: Yes, Your Honor. 14 THE COURT: Thank you, Doctor. You're free to The Rule has been invoked; so, don't discuss your 15 16 testimony with any other witness. Can I see the lawyers for just a second? 17 (At the bench, on the record.) 18 19 THE COURT: Okay. Marie left and went and talked to him. What's the story? 20 MS. FULLER: I believe he said his doctor's 21 22 appointment is at 1:00. As long as we get him out of here 23 by noon, I think we're okay. 24 THE COURT: Maybe we should start at 9:30. 25 MR. CORNELIUS: Whatever time you say.