

IN THE COURT OF CRIMINAL APPEALS OF TENNESSEE
AT NASHVILLE
January 13, 2021 Session

FILED
08/16/2021
Clerk of the
Appellate Courts

STATE OF TENNESSEE v. CALEB JOSIAH CANNON

**Appeal from the Criminal Court for Davidson County
No. 2015-D-2410 Cheryl A. Blackburn, Judge**

No. M2019-01629-CCA-R3-CD

A Davidson County jury convicted the Defendant, Caleb Josiah Cannon, of premeditated first-degree murder, and the trial court sentenced him to life in prison. On appeal, the Defendant contends that: (1) the trial court erred when it denied his motion *in limine* to exclude evidence that a human remains detection dog alerted to the presence of the scent of human remains in the Defendant's home and car; (2) the evidence is insufficient to prove that the victim was deceased or that the Defendant caused her death; (3) the trial court erred when it admitted testimony from a witness identifying him in court because such testimony was tainted; and (4) the trial court erred when it excluded defense proof. After review, we affirm the judgment of the trial court.

Tenn. R. App. P. 3 Appeal as of Right; Judgment of the Criminal Court Affirmed

ROBERT W. WEDEMEYER, J., delivered the opinion of the court, in which ROBERT L. HOLLOWAY, JR., and TIMOTHY L. EASTER, JJ., joined.

Patrick T. McNally (on appeal), Katie Hagan and Jim Todd (at trial), Nashville, Tennessee, for the appellant, Caleb Josiah Cannon.

Herbert H. Slattery III, Attorney General and Reporter; Catlin Smith, Senior Assistant Attorney General; Glenn R. Funk, District Attorney General; and Katrin Miller, Assistant District Attorneys General, for the appellee, State of Tennessee.

Jessica M. Van Dyke, Nashville, Tennessee; Dana M. Delger, Steven M. Witzel, Nathan M. Erikson and Alexandra Verdi, New York, New York, for the Amicus Curiae, The Innocence Project.

OPINION

This case arises from the disappearance of Nicole Burgess, who was last seen by the Defendant, the father of one of her sons. A Davidson County grand jury indicted the Defendant for one count of premeditated first-degree murder.

I. Preliminary Motions and Trial
A. Defendant's Motion in Limine

The Defendant filed a motion *in limine* to exclude certain evidence. As relevant on appeal, the Defendant sought to exclude any evidence that related to the searches conducted by four dogs involved in searching the victim's home for evidence of human remains and the three dogs involved in searching his vehicle. The Defendant sought to exclude any evidence based on the searches and any resulting alerts the dogs may have made.

At a hearing on his motion, the defense presented Carl Alexander, a heavy equipment mechanic and K-9 handler, who testified that he had been handling K-9's for fifteen years. He worked as a volunteer for law enforcement, and sometimes for private citizens, and he had assisted law enforcement in Davidson County on many occasions. Mr. Alexander testified about his extensive training and his own K-9, Stozie, a human remains detection dog ("HRD dog"). Mr. Alexander reviewed Stozie's official training log that detailed the number of training sessions, which varied each year and depended on other factors, such as how often the HRD dog had been asked to attend searches. Mr. Alexander offered Stozie's training records from 2014 as evidence. These records showed that, for each training session, Mr. Alexander recorded the weather conditions and temperature, how Stozie alerted, and a score 1-10 given to Stozie for his performance that day. The records also contained a section for Mr. Alexander to opine the reason if an HRD dog did not perform to his expectation.

Mr. Alexander said that Stozie had a certification through Precision Search Dogs, located in Alberta, Canada. Mr. Alexander himself was certified as an HRD dog handler by Ventosa Kennel and by Drug Beat, a law enforcement-based agency. He could not estimate the number of seminars and training courses he had attended in the last fifteen years, but he said that he had received several hundred hours of training. Mr. Alexander noted that there was no national certification for HRD dogs. Mr. Alexander said he had previously testified as an expert in Tennessee courts concerning tracking and trailing and scent discrimination, and he offered evidence of his testimony in other cases.

The trial court declared Mr. Alexander an expert in HRD dogs. Thereafter, the defense questioned Mr. Alexander about the HRD dogs involved in this case. He said that he had reviewed and seen the records for the four HRD dogs and dog handlers that were

involved in the searches in this case. The defense said that it intended to focus on two searches, one of a home and one of the Defendant's vehicle.

Mr. Alexander reviewed and testified regarding a report prepared by Spencer Harris, a Metropolitan Nashville Police Department ("MNPD") officer, who participated in a search of a home on Oak Vale Drive ("Oak Vale Home") on May 29, 2014. Mr. Alexander said that, although Officer Harris created the report, he was not one of the four dog handlers who had participated in the search. Mr. Alexander opined that, because Officer Harris had not participated in the foundation training of any of the HRD dogs, he should not be allowed to produce a report giving an opinion of what appeared to have happened. Mr. Alexander said that the report was missing key information, such as a diagram or drawings, and it was even missing the minimum of GPS tracking.

Reviewing the report of the search of the vehicle, Mr. Alexander testified that there were several things concerning to him in the report. He first was concerned that Officer Harris, who signed the report, may not have been present for the search. The report contained information about what the dogs did during the search, but there was no evidence that Officer Harris personally observed the searches. Also concerning was that the vehicle search was conducted as a "lineup" that included law enforcement vehicles, and he opined that it is never appropriate to use law enforcement vehicles in a vehicle lineup of cars.

Mr. Alexander then reviewed each of the four dog handlers in this case. First, he said that the records from Sergeant Karen Douglas, who handled K-9 Dakota, showed that before this search she had trained Dakota on four occasions for a total of eighty minutes for the entire year before they conducted this search. Further, each of those training sessions showed only positive, and he would expect that there would be some sessions that were "less than normal." Officer Harris's report indicated that Dakota did not alert on the bathroom in the Oak Vale Home, but the other three dogs present all alerted to the presence of the scent of human remains in the bathroom. Dakota alerted to the presence of human remains on a pink rug near the bed in the bedroom.

Mr. Alexander then discussed Shirley Grauberger and her K-9, Jackson. The documentation provided to him showed that Ms. Grauberger had completed two trainings, one that was twenty hours and one that was eight hours, both of which were in human remains detection. He said that the documents showing the completion of training did not list Jackson's name and did not say that Ms. Grauberger successfully completed the training. He agreed that there was nothing in the record that showed that the HRD dog gave a positive alert or failed to alert during the training. The records indicated that Jackson was cross-trained and also that Ms. Grauberger handled multiple HRD dogs. Mr. Alexander

interpreted the records to indicate that Jackson was trained to find whole cadavers and not human remains.

Next, he reviewed the records from Julie Allen and her K-9, Libby. Mr. Alexander said that Ms. Allen had several certificates for dog handling but none of those pertained to human remains. Further, there was no indication that Libby had been certified in any detection. Mr. Alexander testified that many of the logs Ms. Allen submitted were incomplete, and he noted some of the specific deficiencies in her logs.

In the final set of records for Dr. Ysela Carrillo and her K-9 Cleo, Mr. Alexander testified that this team was involved in two searches, both the May 29 search of the Oak Vale Home and the June 1 search of the Defendant's vehicle. He said that Cleo had not been certified by any organization. He said that the training logs were not specific and did not contain information like the temperature, or the substance the dog was being trained on, or even if the dog made a positive alert. Cleo's logs indicated that he started cadaver training on February 9, just four months before he was involved in the searches in this case. It further appeared that Cleo was cross-trained, meaning that he was trained as a live-find or tracking dog and also as an HRD dog. The records offered no indication of how reliable Cleo was when searching for human remains.

Mr. Alexander then discussed what occurred during the two searches. He first testified regarding the May 29 search of the Oak Vale Home. Mr. Alexander said that four of the dogs alerted to the presence of human remains in the bedroom and three of four alerted to the presence of human remains in the bathroom. He noted that, from his extensive review of photographs, all of the dogs should have alerted in the bedroom because there were items that would have caused them to alert such as: brushes full of hair, dirty undergarments, and even what appeared to be blood in the home, which he described as messy and dirty.

Mr. Alexander noted that, in the bathroom, pictures showed that there was a clump of hair that had been pulled from the drain and a bloody diaphragm in the trash can. He said that an HRD dog would alert to both of these, and it would not necessarily signify that a dead body had been in the bathroom. He again explained that HRD dogs would alert to bodily fluids, semen, blood, hair, fingernails, bone, anything that was a by-product of the human body. Handlers attempted to curb the dogs' response to human waste.

Turning to the June 1 search of the Defendant's vehicle, Mr. Alexander testified that law enforcement officers placed the vehicle in a "line up." He explained that they used two law enforcement vehicles alongside the Defendant's vehicle. He said that they then told the handlers which car belonged to the Defendant. Mr. Alexander said that the dog handlers should never have been privy to that information because the dogs can read the handlers'

body language regarding the vehicles. He said that two of the dogs alerted to the presence of human remains in the Defendant's vehicle. He said that if those alerts were not supported by other proof then those alerts would have to be deemed negative. If law enforcement recovered some type of blood that belonged to someone or some other substance that corroborated the alert, then he would deem the alerts positive. Mr. Alexander said that a dog's uncorroborated alert is only the basis for further investigation.

During cross-examination, Mr. Alexander testified that there was no recording of the vehicle search, so he could not determine whether the handlers gave their dogs "cues" as to which car was the Defendant's car. Mr. Alexander reiterated that there was no national standard that he was aware of for an HRD dog.

The State offered the testimony of inmate Bryan Brewington in order to corroborate the findings of the dogs. Mr. Brewington testified that he met the Defendant while incarcerated, and the Defendant told him that he had been charged with murder. Mr. Brewington asked the Defendant, "Did you do it?" The Defendant went on to describe what happened that night at his ex-girlfriend's home. The Defendant said that he had weekend custody of his son and that he had arrived earlier than normal at the victim's house to get his son, who was outside. When he went into the victim's house, the two started arguing. The victim sent a text to a friend, and the Defendant thought it was a text asking the friend to call the police.

Mr. Brewington said that the Defendant went on to describe how the victim went into the bedroom and how he started beating her in the face with a pair of brass knuckles. He then took a cord and strangled her to death. After he killed her, he put her in the bathroom. Mr. Brewington said that the Defendant then described how his son came in from outside and tried to use the bathroom, but the Defendant told him that he could not because the bathroom was broken. The Defendant said that, the following night, he went back to the home, retrieved his ex-girlfriend's body, and took it to a farm in Knoxville.

Mr. Brewington said that the Defendant felt he would be found "not guilty" of the murder charge because the police did not know the location of the body. The Defendant said that the case could not move forward without a body.

During the course of the months the two men were incarcerated together, the Defendant mentioned how he could make a noose out of saran wrap and how he used bleach in an attempt to clean the crime scene.

During cross-examination, Mr. Brewington testified that he was incarcerated awaiting trial on charges of burglary and robbery. He said he had six previous felony

convictions. Mr. Brewington agreed that he and the Defendant had used heroin while incarcerated. Mr. Brewington clarified that the Defendant told him that he took the body to a farm where he had worked in Knoxville. The Defendant said that he placed the body in a meat grinder that was used to grind up cows.

Each of the dog handlers involved in this case then testified. Ysela Carrillo, M.D., testified that she was a surgeon at Vanderbilt and also owned an HRD dog that was involved in the search of the Oak Vale Home and the Defendant's vehicle. Dr. Carrillo opined that HRD dogs were trained to alert when they detected the gases that a body released when decomposing. Dr. Carrillo testified that she had been involved with working dogs trained to find live people and human remains for over eleven years. She trained her dogs twelve to fifteen hours per week, saying that training working dogs was a time-intensive endeavor.

Dr. Carrillo specifically discussed Cleo, the dog who she used to participate in the searches in this case. Cleo was a nine-year-old Belgium Malinois, a breed known to be good at scent work, and who was used in both "trailing" and HRD, which was not uncommon. She and Cleo had been through years of training together, beginning when Cleo was eight-weeks-old. The two trained through Sumner County Emergency Management Agency and Sumner County Sheriff's Department on a weekly basis. They participated in cadaver and water cadaver trainings. She described training as a "lifelong" process and described how Cleo had been trained. Cleo's training began with "fatty tissue" which she described as "more pungent." As the dog progressed in its training, Dr. Carrillo used smaller pieces of tissue and also older tissue to help refine the dogs' ability to detect the scent of human remains. Dr. Carrillo explained how the locations of the known human remains became more difficult over time too, sometimes buried. The doctor explained that the dog must also have "negative" searches where there was nothing to find so that it understood that there would not always be something found during a search.

Dr. Carrillo testified that she maintained and kept training records for every training in which Cleo had participated. She said that she had not provided her training records for Cleo to the defense based on a misunderstanding, and she would provide those logs.¹ She had both generic logs from the K-9 coordinator at the Office of Emergency Management and also her own personal logs.

The doctor said that Cleo was not nationally certified, as there was no national certification, but explained that both the Maury County Sheriff's Department and the Office of Emergency Management had an internal certification process. She described their training as "arduous" and said that dogs were tested "pretty frequently." Dr. Carrillo testified that Cleo was a reliable cadaver HRD dog and had several successful finds.

¹ The State later filed Dr. Carrillo's training logs. (Exhibit 13).

The trial court admitted Dr. Carrillo as an expert, based on her testimony and qualifications. Dr. Carrillo testified that she first searched the outside of the Oak Vale Home with her live scent dogs, hoping to trail a scent to the victim alive. She did not use Cleo for the trailing exercise. Pursuant to law enforcement's request, Cleo searched the Oak Vale Home for the presence of human remains. When she arrived, she recognized several of the other dogs and dog handlers present, as they were part of the same task force, Tennessee Task Force 2. She described the search as "structured" saying that law enforcement had turned off the ventilation, asked extra people to leave, and made the dogs enter one at a time. The dogs were never in the house at the same time, and no one dog saw whether another dog had alerted.

Dr. Carrillo said that Cleo alerted to a rug in the master bedroom and gave a "strong alert" to the tub in the bathroom. Dr. Carrillo said that Cleo jumped into the tub and started digging at the drain. Dr. Carrillo said that she did not see hair in the tub but explained that hair is not a training tool for her, and she would not expect Cleo to alert for hair. Cleo did not alert to the wastebasket that contained the bloody diaphragm.

Dr. Carrillo then testified about the June 1, 2014 search of the Defendant's vehicle. She said that she and Cleo went to a location that looked like an impound lot. Dr. Carrillo said that there were three or four cars parked in the area and a room with the garage doors open. Dr. Carrillo did not recall any of the cars being marked police cars. The doctor allowed Cleo to search the whole building and the cars. Cleo indicated on a trunk of one of the cars.

During cross-examination, Dr. Carrillo testified, that live find dogs were separate and distinct from HRD dogs. She explained that, if a live person were to bleed or ejaculate, the liquid would become a human remain at some point, whether or not the person was alive when the liquid was left. Dr. Carrillo reiterated that Cleo did not have a national certification, and only an internal one through the Maury County Sheriff's Office and Office of Emergency Management, but she explained that there was no national standard set for HRD dogs. While there were organizations attempting to make a more standardized certification process, that mission had not yet been completed. She described the internal training required for Cleo, saying that she was required to train him at least every weekend. The goal of the training was to make sure each dog had experience. She then said that the dogs were required to be present and evaluated once per month with the specific team of which they were a part. While this was the requirement, Dr. Carrillo testified that the K-9 coordinator more often did a formal evaluation weekly. She opined that the K-9 coordinator, whom she described as "meticulous," kept producible records of the evaluations.

Dr. Carrillo testified that she had been to a week-long training seminar called Old Dominion K-9 seminar and had been asked to be a K-9 cadaver instructor for the seminar in the fall. She described her own training as an apprenticeship under two people who were very well respected in the dog training community. Dr. Carrillo said that she often did not receive confirmation of whether any of her dogs' alerts, including Cleo's, led to forensic confirmation. Her reliability for Cleo was based upon her training, which included finding numerous complex pieces of tissue at varying degrees of age and at different depths. The doctor testified that Cleo had been tested "innumerable" times, including by the instructors at the Old Dominion seminar.

Shirley Grauberger testified that she owned an HRD dog named Jackson that assisted in the search of the Oak Vale Home on May 29, 2014. Jackson was a "hound Rottweiler" mix, breeds known to be good at scent work, either working on or off a lead. Ms. Grauberger said that she had been involved with working dogs for over eleven years and worked primarily with live find and HRD dogs. Ms. Grauberger trained her dog with as many different kinds of tissue and bone as she could to cover the effects of aging on the scent of human remains. She trained with fresh tissue and also years old bone and teeth.

Ms. Grauberger said that she worked with the Wilson County Sheriff's Department and the Davidson County Office of Emergency Management. Dr. Melissa Riley was her K-9 coordinator, and she trained with her every week. Additionally, she trained with the Sumner County and Williamson County Sheriff's Department. She said it helped to get as much training as possible, so she trained with both groups. She described her training as like an apprenticeship and said that she had been fortunate to be trained by some of the best trainers around. She said she had been to multiple seminars but there was no school to train a cadaver dog.

Ms. Grauberger discussed training Jackson to alert to the smell of human remains. She explained the process that she had employed and that his training began when he was three months old. Ms. Grauberger said she trained with Jackson for two years before she felt confident that he was ready to go on an actual deployment. She described burying the cadaver pieces at different depths in the soil, and having others hide the cadaver pieces so that she, as the handler, would not know the locations of the cadaver pieces. She said that she was "training as hard as [Jackson]" was, so she could not know where the material was located. Ms. Grauberger said that Jackson still participated in four to eight hours of "official training" with actual human cadavers and body parts every week, and then at home the two would do extra training.

Jackson's first deployment was in the aftermath of the tornados in 2008. He found two bodies located in a pond. Jackson had since successfully found several other victims.

When Jackson would alert to a scent, he would sit. Ms. Grauberger testified that she and Jackson had been to multiple seminars, and she offered certificates from those seminars. She had additionally read books on the subject matter.

Ms. Grauberger identified her training logs, saying that her K-9 coordinator kept the logs. She said that she did not personally keep training logs. She said that it was her job to know how Jackson was doing and that she did not personally see the point in keeping logs. Ms. Grauberger said that she trusted Jackson to be reliable when he alerted to cadavers, in part based on his training and actual deployments where he had found bodies and body parts.

The trial court admitted Ms. Grauberger as an expert in HRD dog handling. Ms. Grauberger then described responding to the call for a cadaver dog to search the Oak Vale Home on May 29. When she arrived, officers asked her to search the house without giving her more information. There were no other dog handlers present in the house when she sent Jackson into the home. She did not have him on a lead, and he first went into the kitchen. Jackson left the kitchen, went down the hall and into the bedroom. He went and sat on a rug by the bed. She told the law enforcement officer that Jackson's alert meant that he was indicating that there was human remains material in that area. Jackson then went into the bathroom on his own. Ms. Grauberger described the bathroom as "small." Ms. Grauberger said that Jackson sat next to the tub but that he seemed "really alert," indicating that there was a lot of cadaver scent in the bathroom. Jackson then went through the living room and went outside.

Ms. Grauberger said that Jackson would not have alerted to human hairs in the drain unless there was some sort of root tissue attached to them. She said that hair does not decay quickly and does not have a smell. Further, she had not trained Jackson on just hair. Ms. Grauberger further testified that Jackson did not alert to a trash can but alerted to the tub.

Describing the vehicle search on June 1, 2014, Ms. Grauberger testified that the car was located in a garage area. Ms. Grauberger testified that Dr. Carrillo was present at the search, but their two dogs did not search the vehicles at the same time. There were two cars present², and Jackson searched the one on the right first. He went around the car and did not alert to a scent. As soon as he approached the second car, he alerted "quick[ly]" to the trunk area, which indicated to her that there was the scent of human remains in the trunk.

During cross-examination, Ms. Grauberger testified that Jackson would alert on remains that are from a human person in some circumstances, such as a placenta that is aged. She did not know how long the material must be apart from the body in order to give off the

² We note that Dr. Carrillo said that there were three cars present. Other testimony indicates that there were three cars in the vehicle lineup.

gas that he detected. She said that she did not train Jackson with fresh blood but with other tissue, so she opined that if it were blood on the rug where he indicated then his alert meant that he was indicating the presence of human remains.

Ms. Grauberger testified that Jackson had been certified at workshops and seminars, similar to herself. She agreed that she did not fill out a report about the conditions on the day that Jackson searched the Oak Vale Home, saying that she left that to law enforcement as was her practice. She again said that she did not keep records but maintained that Jackson had never to her knowledge incorrectly alerted to the presence of human remains.

During redirect examination, Ms. Grauberger testified that she put fresh blood from a live person out when training Jackson as a distraction, and he did not alert to it. In further cross-examination, Ms. Grauberger said that, during the search of the vehicles, she did not know which vehicle was suspected to be involved in the crime.

Julie Allen, a paramedic, testified that she owned a working dog and assisted in the search of the Oak Vale Home. She said that her dog, Libby, was a Belgian Malinois, which was bred for search and rescue, police work, tracking and trailing, and other working tasks. Libby was trained as an HRD dog. Ms. Allen said that she had owned Libby, who was six years old, for five-and-a-half years. Ms. Allen testified that she started training Libby as an HRD dog and that she had previously owned two other HRD dogs, having been involved with working dogs since 1999.

Ms. Allen said that she became interested in working dogs when she came into contact with a narcotics dog when working as a vet technician. She became friends with the K-9's handler, and the two began training dogs from that point forward. She said she had worked with police departments, other rescue teams, attended seminars, read books, and studied about cadaver dogs and tracking dogs.

Ms. Allen testified that she trained with Libby at least twice a week for between one to five hours per session. The two trained with the Carroll County Fire Department and EMA. Ms. Allen said that she also assisted in training and evaluating other dogs, as she was the K-9 handler for the Carroll County Fire Department, which had a team of Belgian Malinois. Occasionally she worked with Ms. Grauberger, Dr. Carrillo, and Sergeant Douglas.

Ms. Allen identified certificates that she and Libby had received and also her training logs. Ms. Allen provided more detailed training logs and also deployment records as a late-filed exhibit. Ms. Allen described how she trained Libby using material from a cadaver, and sometimes appendages from a cadaver. She said that they used a whole cadaver for training

when they had access to them. Ms. Allen described the progression during training from a small, simple search to find material, and then advancing to finding hidden sources and double-blind tests. She said that Libby was trained not to alert to animal remains but that she would alert to fresh blood. Ms. Allen said that Libby had found both deceased people and parts of deceased people on several occasions, and Ms. Allen opined that Libby was a reliable HRD dog. The trial court admitted Ms. Allen as an expert in the field of HRD dog handling.

Ms. Allen recounted her participation in the Oak Vale Home search on May 29, 2014. She said that there were other dogs and handlers present when she arrived. She was told only that the case regarded a “missing female,” so Libby searched the outside of the house first. She did not indicate to anything outside the house. When Ms. Allen and Libby entered the house, there was only one law enforcement officer present. Ms. Allen took Libby off her lead and let her search the house on her own accord. Libby did not alert to the entryway, kitchen, or living area. She then went into the bedroom, circled on a rose-colored rug, and alerted to the rug. Libby then went into the bathroom and alerted to the side of the bathtub. Ms. Allen said that Libby would not have alerted to hair alone. Ms. Allen opined that Libby alerted to the presence of the odor of a deceased human on the bedroom rug and also in the bathtub. Ms. Allen said that Libby did not participate in the search of the vehicle.

During cross-examination, Ms. Allen testified that she was unaware of a difference between the blood of a live person, such as the blood from a placenta that she used in training, and the blood from a dead person. Ms. Allen said that she would expect that her dog would alert to the blood from a living person as well as the blood from a deceased person. She opined that there was no way to know whether the odors that Libby alerted to in the Oak Vale Home came from a person who was alive or deceased.

Ms. Allen said that HRD dogs alert to the odor of decomposition and that hair does not decompose. She further said that teeth themselves do not decompose but the pulp inside them does. She also said that Libby had never made a false alert in training, but there was no way to be certain whether she had made a false alert in her actual work because Ms. Allen did not always know how the case resolved. Ms. Allen agreed that Libby might have alerted to the blood from the diaphragm and that she could not be sure to what Libby alerted in the bathroom. Ms. Allen noted that one of her training logs indicated that Libby failed to alert to a buried piece of placenta.

During redirect examination, Ms. Allen noted that the dirt was packed over the buried piece of placenta and that when she aerated the area the odor became detectable for Libby.

Sergeant Karen Douglas, with the Tennessee Highway Patrol, testified that she was the director of the K-9s, and as such she was responsible for training all the dogs for the State of Tennessee. This included explosive dogs, patrol dogs, tracking dogs, cadaver dogs, and drug dogs. Her position required her to travel. Sergeant Douglas described her training, which occurred during the course of her twenty-six-year career working with K-9s. The sergeant identified her certifications and the training records for Dakota, who was the cadaver detection dog that she personally worked with. Dakota was a Dutch Shepherd, which as a breed had high drive and ambition and worked well off a lead.

Dakota had originally been trained in a different discipline, but because of circumstances Sergeant Douglas introduced her to working as an HRD dog with the assistance of Heather Wilkerson at Savannah Springs K-9. The sergeant described her training process with Dakota, including working with Ms. Allen. Sergeant Douglas and Dakota went to a training at Vohne Liche Kennels in Indiana, after which the sergeant was confident that Dakota was ready for her first deployment in February 2014. Sergeant Douglas identified Dakota's training logs. Sergeant Douglas offered information from Terry Fleck's website that provided current case law about HRD dogs. The trial court found Sergeant Douglas to be an expert in the field of handling and training HRD dogs.

Sergeant Douglas testified that she and Dakota were asked to participate in the search of the Oak Vale Home. A detective told them that there was a missing woman from the residence, and that there may or may not have been foul play. He also said that some information indicated that the woods around the residence may be involved. Sergeant Douglas and Dakota first searched the woods, and Dakota did not alert to anything in the woods. Dakota rested for a short period before entering the Oak Vale Home. Dakota started in the living room but did not alert there. She quickly went to the bedroom where she alerted. She then went into the bathroom on her own, jumped into the tub, sniffed the drain, and began barking.

Sergeant Douglas testified that barking is not her preferred alert for Dakota. Dakota originally barked as her alert and the sergeant had since trained her to sit in the presence of the scent of human remains. She opined that Dakota barked at the drain because of the confined space. She, however, did not tell the K-9 coordinator that Dakota had "alerted" but told him to check that area based on Dakota's behavior. Sergeant Douglas said that Dakota would not have alerted to the presence of hair alone because it does not decompose.

During cross-examination, Sergeant Douglas testified that in her expert opinion someone deceased had been in the home. She agreed, however, that blood from a live person may cause a dog to alert. She, however, did not think that this explained Dakota's behavior. Sergeant Douglas said she had never before been asked about the weather conditions on the

day of a dog search. She said that, while the weather may affect the ability of the dog to detect a scent, the weather would not cause a false indication. Sergeant Douglas said her records indicated that Dakota was ninety percent accurate in her alerts.

Sergeant Douglas said that the records for HRD dogs were much different than the records required for narcotic detection dogs.

The defense recalled Mr. Alexander who testified that an HRD dog would alert on hair if the hair has root substance or tissue attached. He further stated that Dr. Carrillo was an instructor for Old Dominion, so any certification her dog Cleo received would not have been an “independent” certification. He called into question the reliability of Cleo. He similarly asserted that Sergeant Douglas was an instructor at Vohne Liche Kennels. He took issue with the other experts’ records calling them inadequate and incomplete.

During cross-examination, Mr. Alexander disagreed with all the other experts’ testimony that an HRD dog would not alert to human hair when there was no follicle attached. Mr. Alexander said that he was being paid by the defense for his testimony.

Detective Jill Weaver testified about the searches in this case. She said that the hair in the drain in the bathroom was not collected because it did not seem relevant at that time. She further stated that, when the Defendant’s vehicle was searched by the dogs, it was in a vehicle line up of three cars. The dogs all separately indicated to the presence of human remains in the trunk of the Defendant’s vehicle, but further testing did not show physical evidence to support this alert.

At a separate pretrial hearing, the parties discussed the trial court instructing the jury on HRD dogs. The trial court proposed that it would instruct the jury that the evidence from the human remains detection dogs had been:

received for the purpose of showing, if it does, that a crime has been committed and the defendant is a perpetrator. This evidence is not by itself sufficient to permit an inference that the defendant is guilty of the crime for which he is charged. Before guilt could be, . . . inferred, there must be other evidence that connects the defendant with the commission of the offenses. The corroborating evidence must be evidence which independently links the defendant to the crime. However, the evidence may be circumstantial. In determining the weight, you should consider the training, proficiency, experience and proven ability, if any, of the dog, its training, and its handler, together with all the circumstances surrounding the K9 human remains detection in question.

The trial court modeled this instruction from standard instructions issued by Texas and California.

The trial court later issued a written ruling that contained extensive, clear, and helpful findings. Ultimately, it denied the Defendant's request to suppress the evidence stemming from the HRD dog alerts.

B. State's Motion in *Limine*

In a motion *in limine*, the State sought to exclude evidence that the victim was allegedly engaged in "dangerous sexual activity." The defense argued that the victim had twenty emails from a web site "Fet Life," which allowed users to sign up for bondage and other sexual encounters. The defense argued that, as recently as eleven days before she went missing, the victim was communicating on the website with another person. They argued that this, combined with the fact that there were three unidentified semen stains in her bed, was relevant to whether she was sexually active on a website that was dangerous and could have resulted in her death. The trial court asked defense counsel what proof there was that the website was dangerous, and defense counsel said the website itself urged caution and stated that people had gone missing as a result of their encounters through the website.

The defense also sought to introduce evidence that the victim was selling items on Craigslist. The defense opined that this was relevant to show that she was attempting to amass money and theorized that this could be in order to leave town and establish a new identity.

The State contended that none of this evidence was relevant.

Based upon this evidence, the trial court granted the State's motion *in limine*. The trial court issued a written order in which it noted that the Defendant sought to introduce a collection of unauthenticated texts and emails in an attempt to show that an unidentified suspect other than the Defendant may have killed the victim or that the victim had chosen to disappear. The trial court stated that the defense theory was "speculative at best" and the evidence did not implicate any identifiable alternative suspect. The trial court found that the defense had not proven that the information was reliable. Further, the Defendant had not proven that this evidence, which constituted hearsay, was critical to the defense. Since no hearsay exception applied, the evidence was inadmissible.

C. Trial

At the Defendant's trial on the charges of premeditated first-degree murder, the parties presented the following evidence: Stephanie Blainey Lamoreaux testified that she and the victim had been best friends for approximately one year, having been introduced by a mutual friend. Ms. Lamoreaux testified that, around the time of the victim's disappearance, the victim had been dating Jason Henry for two or three months, whom Ms. Lamoreaux had introduced the victim.

Ms. Lamoreaux testified that she and the victim spent most weekends together, either at Ms. Lamoreaux's house in Clarksville or at the victim's Oak Vale Home. She recalled that the victim was allergic to bleach, so she had to be mindful how she washed the sheets.

Ms. Lamoreaux described the victim, saying that she drove a yellow Volkswagen GI, smoked cigarettes "[c]onstantly," and had two dogs and a cat. She treated her pets like children and left them in the house or gated them in the kitchen if she was not at home.

Ms. Lamoreaux testified that in May 2014 the victim was suffering financial strain. Ms. Lamoreaux paid her rent, sent her food via delivery service, and sometimes transferred money to the victim via Google Wallet. The money transfer worked via email, and Ms. Lamoreaux identified the victim's email address as BurgessNikki77@gmail.com. She also offered the password, which allowed her to transfer the money. Ms. Lamoreaux said that she had sent the victim money on the morning before she disappeared. Google notified Ms. Lamoreaux that the funds were no longer going to be available, so she logged on to the account and transferred the money back to her own account.

Ms. Lamoreaux said that the victim earned income by modeling and selling things online, and she described the victim as an artist. The victim and her son, T.C.,³ were "really close," and Ms. Lamoreaux did not know the victim's father, the Defendant. She said that in all the time she spent with the victim, she had never seen the Defendant at the Oak Vale Home.

On the day of her disappearance, the victim and Ms. Lamoreaux were both talking and texting via cell phone. She said that the two spoke around 1:00 p.m., and that they texted approximately twenty-five times. She received the last text message from the victim at 2:00 p.m. on May 23, 2014. After receiving the victim's last text, Ms. Lamoreaux continued to text the victim, sending four or five texts, but received no response. She called the victim "[a] lot," but her calls went straight to voicemail. Ms. Lamoreaux said that she never heard from the victim again after May 23, 2014.

³ We will refer to the victim's son by his initials to protect his privacy. We do note, however, as it bears relevance, that T.C. shares a last name with the Defendant.

Ms. Lamoreaux said that she and the victim had made plans for Memorial Day weekend, the weekend after the victim's disappearance. The two planned for the victim to pick up Ms. Lamoreaux on Saturday May 24, so Ms. Lamoreaux could help the victim move into a new home that day. All week, the victim texted Ms. Lamoreaux pictures of the house, and rooms that she was cleaning in preparation for the move. The victim never arrived on the agreed day. She did not respond to any texts, and she never answered or returned any calls. Ms. Lamoreaux said this was unusual in that the victim "always responded" to her texts or calls. She became concerned, so she had a friend drive her to the victim's home. They arrived at 10:30 or 11:00 p.m. During this time, Ms. Lamoreaux had been communicating with Mr. Henry.

Ms. Lamoreaux said that the Oak Vale Home was dark when she arrived. She heard the dogs barking when she knocked on the door but did not see them. She jiggled the front door, but it was locked. She looked in the victim's car but did not see anything out of place, but it was dark and hard to see.

Ms. Lamoreaux went to the victim's father's house, but he was not there. She called the police and filed a missing person report with the police on Sunday, May 25, 2014. On Tuesday May 27, Ms. Lamoreaux returned to the Oak Vale Home to get the victim's dogs as requested by a police officer. Both Mr. Henry and the victim's father, Bill Burgess, accompanied her. The three gathered the dogs and walked through the house "a little bit" but left when they saw the state of the home. Ms. Lamoreaux said that the dogs were not in the kitchen where the victim normally kept them when she left, but they were in the main part of the home. She said there was dog feces everywhere. The house was in complete disarray, which dramatically differed from the pictures the victim had sent her days before. Ms. Lamoreaux said that she could not find the victim's phone or keychain. She did find an old cell phone, which she took hoping to retrieve some contact information from it.

Ms. Lamoreaux said the police arrived while she was there. She had been in contact with the police, so the police expected her to be in the home. The police asked Mr. Henry, Mr. Burgess, and her questions. Ms. Lamoreaux said that, at some point, she saw the victim's wallet in the victim's car.

Ms. Lamoreaux recalled that she asked the victim's neighbors if they had seen the victim or seen her car move. She saw a child named D.D., who went to school and was friends with T.C. After speaking with him, she took him to the police, so that he could tell the police what he had said.

Ms. Lamoreaux said that, before her disappearance, the victim seemed "extremely happy," and she did not know of anyone who wanted to harm her. Ms. Lamoreaux identified

pictures of the Oak Vale Home, noting that there was a bleach bottle in the kitchen area, which was unusual because the victim was allergic to bleach. She also noted other abnormal things in the pictures, such as piles of clothes, drawers out of place, and the general disarray of the home.

Ms. Lamoreaux identified text messages between she and the victim on May 24, the day that the victim disappeared. In the texts, the two discussed money that Ms. Lamoreaux sent to the victim and that the Defendant had communicated with the victim about picking up T.C. at 1:00 or 2:00 p.m. Later, the victim texted Ms. Lamoreaux and said that the Defendant was present at her home and being a “dick.”

During cross-examination, Ms. Lamoreaux agreed that the victim sold items online to strangers. Ms. Lamoreaux testified that the victim planned for both she and her son to move in with Mr. Henry. She conceded that the victim had money problems and was not making enough money to support herself. The victim made and sold high-end cell phone cases. Ms. Lamoreaux said she knew that the victim had another son and that the victim’s brother was raising him.

Jason Henry testified that he and the victim began dating in March of 2014. Their relationship became serious quickly, and the victim always came to his home in Sparta, Tennessee. He had never been to her home. The victim always brought her dogs with her when she came to see him. He said that he and the victim texted and spoke frequently, contacting each other more than thirty or forty times a day. T.C. had been to his home with the victim, and he described the victim’s relationship with T.C. as “loving.”

Mr. Henry said that the victim and T.C. planned to move in with him the weekend after her disappearance. He and the victim spoke by text message on Friday May 23, and she planned to come see him at his home the following day. At some point on May 24, the victim stopped responding to his text messages and phone calls, so he became concerned. Out of his concern, he went to the Oak Vale Home on Sunday, May 25, 2014, where he saw her car parked in the yard. He knocked on the door, but there was no answer. He could not see anything through the windows, so he left.

Mr. Henry returned to the Oak Vale Home on Tuesday, May 27, with Ms. Lamoreaux and the victim’s father. With law enforcement’s permission, the three went into the home through an unlocked back door. He described the inside of the house as a disaster, saying that there were items thrown about. There was a bottle of bleach sitting on a kitchen counter, which he found unusual because the victim was allergic to bleach and had asked him not to clean with it.

Mr. Henry said that he took the animals and the victim's son's video console from the home. He said that he used the toilet while there and noted that it flushed normally. Mr. Henry said that, before he left, the police arrived. Several days later, the police later asked him for a hairbrush, which he provided to them. Mr. Henry did not know of anyone who would have wanted to harm the victim.

During cross-examination, Mr. Henry said that he knew that the victim sold items online. As far as he was aware their relationship was exclusive.

Billy Burgess, the victim's father, testified that the victim's mother, his wife, passed away before the victim's disappearance. He said that, before she disappeared, he spoke with the victim, who seemed "happy," on a regular basis. No one in his family, including the victim's siblings, had heard from her since the day of her disappearance on May 24, 2014.

T.C., the victim's son, testified that he was ten years old at the time of his mother's disappearance. The two lived together in the Oak Vale Home. T.C.'s older half brother lived with his uncle in Crossville, Tennessee. T.C. said that, before her disappearance, he and his mother had never been apart for any long period of time. She appeared happy in her life. T.C. described the victim's allergic reaction to bleach, saying that it made her eyes water and her face get red and swollen.

T.C. said that the victim and the Defendant, his father, were never married. His father lived in a trailer on his great grandmother's property in Knoxville, Tennessee or in an apartment that the Defendant's friend rented. For as long as he could remember, he spent every other weekend with his father. When T.C. lived in Nashville, the Defendant would pick him up from home or school. Sometimes the victim drove him halfway, they would meet the Defendant at a restaurant, and then the Defendant drove him the rest of the way.

T.C. said that, generally, when the Defendant came to the Oak Vale Home to pick him up, the Defendant did not go inside the house. He would pull up to the house, the victim would say that the Defendant was there, and T.C. would get into the car and leave. The Defendant usually took T.C. to the Defendant's mother's house for the weekend. The Defendant would take T.C. home on Sunday, drop him off, and not go inside the Oak Vale Home.

T.C. said that he had been interviewed multiple times about what occurred on May 23, 2014. He said that, on that date, he woke up in his bed in the Oak Vale Home. When he woke up, the dogs, Elvis and Lily, were in the house where his mother generally kept them. When the two would leave the home for short periods of time, his mother boarded the dogs in the kitchen, so they had free reign in the kitchen. When they left for long periods

of time, his mother put the dogs in separate crates in the kitchen. His mother always brought the dogs with her if she was leaving to spend the night away from the home.

After waking the morning of May 23, 2014, T.C. dressed, brushed his teeth, and went to school. He recalled that he used the restroom and that the toilet worked properly that day. His mother drove him to school in her yellow Volkswagen, and he had not spoken with or seen his mother since that day. After school, the Defendant was late to pick him up, and T.C. was the last child to leave the school pick up line. The Defendant took T.C. to the Oak Vale Home. Normally, T.C. would go in the front door and retrieve anything he needed for the weekend while the Defendant waited in the car. He did not need anything but headed toward the front door. The Defendant told him not to enter through the front but to go around back. The Defendant then accompanied him into the house through the back door, which T.C. was surprised was unlocked. The Defendant did not have keys to the Oak Vale Home. The Defendant entered the house and went and sat down on the living room couch and started reading a book. The Defendant told him not to go into the bathroom, and the bathroom door was closed, and the light inside was on. Normally, they kept the door open.

Despite his statement to Detective Weaver otherwise, T.C. did not see his mother while he was inside the Oak Vale Home that afternoon. T.C. said that the Defendant told him that the victim had left with her friend Ms. Lamoreaux. He found this unusual because Ms. Lamoreaux did not drive, and the victim's car was still at the house.

T.C. said that the two dogs were in the same kennel in the living room. He had never before seen his mother put them in the same kennel rather than their own separate kennels. T.C. recalled that the Defendant told T.C. not to go into T.C.'s room because the dogs had defecated in his room. The door to his mother's room was also closed, and he did not go in there.

T.C. said he sat down in the living room and asked the Defendant when they would be going to Asheville, North Carolina. The Defendant said "later." This had never happened before, and he only recalled one other time when the Defendant was inside the Oak Vale Home, and that was only briefly for the Defendant to ask the victim a question.

T.C. said that he left to ride bikes with a neighborhood friend D.D.⁴ The two then jumped on a trampoline and then went back to T.C.'s house to watch a movie. T.C. fell asleep on the couch. T.C. said that, the whole time, the Defendant sat on the couch reading a book. Eventually, the Defendant told him that it was time to leave. T.C. got into the Defendant's car, which was backed into the driveway, and the Defendant repeatedly went into the victim's home and placed things in the trunk. T.C. said that the Defendant did not

⁴ For privacy, we will refer to this minor by his initials only.

keep anything at the victim's house and that he could not see what the Defendant was placing into the trunk. He estimated that the Defendant went into the house two or three separate times, each time placing items in the trunk.

He and the Defendant left and went to the Defendant's mother's house. The two dogs were in the same kennel when they left. T.C. said that, by the time they arrived at his grandmother's house, it was dark outside. T.C. spent the weekend at his grandmother's house and did not notice if the Defendant slept there. The Defendant came and went during the weekends while he was at his grandmother's house, so he did not notice anything out of the ordinary.

T.C. said that the Defendant did not take him home on Sunday as planned. Instead, later that week, the Defendant took T.C. to the Defendant's apartment in Knoxville. On May 29, 2014, the police came and got T.C.

During cross-examination, T.C. testified that the Oak Vale Home was usually messy. He said that when he returned to the home on May 31, 2014, he told Detective Weaver that the house smelled like bleach and that there were clothes in the hallway. T.C. said that, when he left the house with the Defendant on Friday, it was dark outside and the Defendant did not get in the car immediately.

T.C. agreed that the weekend was Memorial Day weekend. Sometime that Monday, the Defendant told him that they could not find the victim. Later that week, law enforcement officers, with guns drawn, came and got him from the Defendant's home.

During redirect examination, T.C. testified that he told the police during the May 31 interview that it was unusual for him to be inside the Oak Vale Home with the Defendant.

D.D. testified that he was neighbors with the victim and T.C. He and T.C. went to the same school and were in the same grade. The two, who had been friends for a few months, played together several days a week after school. D.D. recalled meeting the Defendant on May 23, 2014. After D.D. got off the bus that day, he went to T.C.'s house to see if he could play. The Defendant was there walking down the front steps carrying a bag. He described the bag as a "pretty big," black or green duffel bag. He said the bag had two straps, one of which could go over his shoulder. D.D. said that the Defendant was leaning to one side like he was struggling with the weight of the bag. D.D. asked the Defendant if T.C. was home, and the Defendant said that he was late going to pick up T.C. from school.

D.D. said that the Defendant left to get T.C. from school, and D.D. went back to his house. When T.C. returned, he and D.D. jumped on a trampoline in the neighborhood. D.D.

described T.C. as “nervous,” which was an unusual demeanor for him. Later, D.D. and T.C. returned to T.C.’s house, and he noted that it smelled of bleach. The Defendant was watching television, and D.D. and T.C. joined him; they all sat in the living room watching television. D.D. said he had to use the restroom, and the Defendant told him that he could not go into the bathroom. D.D. noticed that the bathroom door was closed but that the light was on.

Later, the Defendant told T.C. and D.D. to go outside and play. The two played outside until D.D. was called home at dark. D.D. said that he had not seen or spoken to the victim, T.C., or the Defendant since that day.

During cross-examination, D.D. testified that he did not tell detectives about the duffel bag when they first interviewed him. He agreed that he had watched news stories related to this case.

Kelee Akers, the principal at the school where T.C. was a fourth-grade student at the time of the victim’s disappearance, testified that T.C. was a car rider at the time. She explained that car riders are released for dismissal at 3:00 p.m. and that T.C. was usually picked up on time. Ms. Akers recalled that Friday, May 23, 2014, was field day at the school, and the victim was present for part of those festivities during 11:30 a.m. and 12:30 p.m. Ms. Akers, who had a conversation with the victim while she was there, described her demeanor as “normal.”

Ms. Akers said that, later that day, T.C. was the last child to be picked up from school. The Defendant called and told her that he was running late because he was driving from Knoxville. T.C. fell asleep in the front office as he waited for his ride to arrive. He was picked up by the Defendant between 3:30 and 3:40 p.m. Ms. Akers noted that she had never before seen or spoken to the Defendant.

Ms. Akers said that she received a message from the Defendant that he left on Monday, May 26, 2014, when the school was closed for Memorial Day. The Defendant informed her that, due to a family emergency, T.C. would not be returning to school that week.

James McCavanagh testified that he lived with his two sons and a roommate in the other side of the Oak Vale Home, which he described as a duplex. He said that he and the victim quickly became friends, and their sons had shared interests. Mr. McCavanagh said that he and the victim both smoked, so the two would see each other every day while outside. They discussed what had happened during their respective days. Mr. McCavanagh said the victim seemed happy and was a genuine person. Mr. McCavanagh said that the victim

treated her dogs “like gold,” saying that she had a routine with them and let the dogs out every night at 10 or 10:30 p.m.

Mr. McCavanagh had never met the Defendant personally but knew that he picked up T.C. every other weekend. He saw T.C. walk from the Oak Vale Home to the Defendant’s vehicle. He never saw the Defendant go inside the victim’s home.

Mr. McCavanagh recalled the weekend that the victim disappeared. He said that a friend of his, who was a child psychologist, came and stayed with his boys for one Friday night while he was working. When he returned on Saturday night, at around midnight, he saw a man jump quickly off the porch onto the other side of the duplex. After Mr. McCavanagh got out of his vehicle, he saw the man near the Oak Vale Home. His face was illuminated by the cigarette that he was smoking. Mr. McCavanagh was able to tell that the man was Caucasian and had earrings and wore black clothing and a black hat. He thought it unusual to see the man at that time of night.

Mr. McCavanagh testified that he then went inside his house and, shortly thereafter, he returned briefly to his vehicle and saw two people carrying a large duffel bag out of the Oak Vale Home. He noted that one of them was the same man that he had seen previously. The two people were on each end of the duffel bag, which he could tell was heavy and difficult to move. Mr. McCavanagh said he assumed that the victim was moving things out of her home in preparation to move but said that there were no lights on at her house, which he found unusual. He said that he was going to offer to help her move, but, when he went back inside, he got distracted.

The following day, Sunday, May 25, he spoke with the victim’s boyfriend and Ms. Lamoreaux, and the three decided to call the police. They were concerned because the victim’s car was still at her house, her dogs were loose in her home, and she was missing. He described these things as out of character for the victim. When the police arrived, they told Mr. McCavanagh, Ms. Lamoreaux, and Mr. Henry that they could enter the home. Mr. McCavanagh was hesitant because he believed that the home was a crime scene with the “bizarre” set of circumstances that had occurred.

Mr. McCavanagh entered the Oak Vale Home and said that it was in disarray and different from the way that the victim kept her house. He further noted that one of his jobs was to clean homes. He and the victim discussed that the victim was allergic to bleach, so she could never use it. He said that there was an open bottle of bleach in the house, which he found strange.

Mr. McCavanagh said that, when he spoke with police officers, he relayed to them what he had seen that Saturday evening. Police officers showed him photographs, and he could not identify anyone from the photographs. He later saw the Defendant on camera, and he identified him as the man whom he had seen jumping off the porch at the Oak Vale Home late that Saturday night, May 24.

During cross-examination, Mr. McCavanagh testified that he had never met the victim's boyfriend. He agreed she had a different boyfriend a few months prior but that was for a short period of time. He noted that a black filing cabinet was missing from the kitchen when he went into the Oak Vale Home after her disappearance. He also found it unusual that the victim had left her cigarettes and lighter at the Oak Vale Home.

Mr. McCavanagh knew that the victim was struggling financially, so when he saw what appeared to be someone moving out during the night, he thought that maybe she was leaving without paying her rent. He therefore did not mention to police at first that he had seen someone moving something out of the home late Saturday night.

MNPD officers processed the victim's home, car, and the Defendant's car. In the victim's car, Officer Lisa Whitaker found some clothing and a "handbag." In a brown paper sack on the floorboard, she found a toothbrush and a cell phone. She collected multiple items from the car including energy drink cans, cigarettes, make up, and shoes. Upon further examination of the purse, Officer Whitaker found the victim's driver's license, credit card, and social security cards for the victim and for T.C. In the Defendant's vehicle, Officer Whitaker found three areas of possible blood or bleach on the backseat and floorboard. The car did not appear to have been cleaned or detailed, and the carpet in the trunk looked original to the vehicle. In the Oak Vale Home, Officer Linville found areas of possible blood or bleach in the master bedroom, a trashcan, and on bedding and carpet in the master bedroom.

Other officers processing the victim's home described it similarly to other witnesses. They gathered three cell phones from the home and obtained fingerprints from a pack of Marlboro cigarettes in the bedroom and an empty Coke bottle in the living room. The officers gathered a pink rug from the master bedroom.

Special Agent Gregory Fort with the Tennessee Bureau of Investigation ("TBI") testified as an expert in the field of DNA analysis. He said that he obtained a DNA profile from the Defendant from a buccal swab. Comparing that to items submitted by law enforcement officers, he found the Defendant's DNA on a Coke bottle that officers found inside the Oak Vale Home.

Special Agent Fort testified that the mattress pad in the master bedroom of the Oak Vale Home had semen from three different men, none of whom was the Defendant. The sheets also had a semen stain from one of the three males. These samples could be fifteen or twenty years old and remain even if the mattress pad had been washed. The agent did not find blood on the piece of carpet submitted from the master bedroom. He found female blood on a box of tissues and in a trash can.

Kim Himes testified that she had been in a “domestic relationship” for about eighteen months with the Defendant when T.C. was “[r]eally young.” She knew the victim and T.C. through the Defendant, and she had met them both while exchanging T.C. for visitation. Ms. Himes recalled that, when the victim would not show up as scheduled or not be on time, the Defendant became angry. It also angered him that the victim moved so frequently with T.C. She said that he did not express his anger in front of T.C. but spoke about it with Ms. Himes.

Ms. Himes recalled a time when the Defendant said that he would have the perfect alibi if T.C. was with him and the victim disappeared. He said that everyone would assume that she had relapsed back into drug use or that she had “just r[u]n off.” Ms. Himes did not take him seriously at first but said that he began to say this regularly, almost every time that they exchanged T.C. for visitation. Ms. Himes said that she began to believe that the Defendant was seriously considering this because he began to say it when he was not mad and “just very matter of fact.” Ms. Himes said that her relationship with the Defendant eventually ended. She agreed that the Defendant owned brass knuckles during their relationship.

During cross-examination, Ms. Himes testified that the Defendant had made these statements when they dated between eleven and thirteen years ago. Ms. Himes agreed that, while she was with the Defendant, she helped raise T.C. because the victim was using drugs. Ms. Himes said that T.C. was an infant when the Defendant made the statements about the victim disappearing and him having the perfect alibi if he was with T.C.

Holly Cross testified that the victim was her best friend, and the two met when they were fifteen. She said that they were friends twenty-one years ago when the victim had her older son, Tristan. When Tristan was young, the victim gave up custody of him, in part because she was having trouble. Ms. Cross said that, when the victim had T.C., it was a “totally different situation,” because she wanted things to be different than they were with Tristan.

Ms. Cross said that she saw the victim at least once a month, if not twice a month. When the victim stayed with Ms. Cross for the weekend, the victim left her dogs at the

victim's father's house. Ms. Cross said that she had a child close in age to T.C., and her child and T.C. grew up together. The victim had custody of T.C. and was "very close" to him. The victim had stopped using drugs, and Ms. Cross thought she was a good mother. Ms. Cross said that she had been present when the Defendant and the victim exchanged T.C. for the weekend. She had never seen the Defendant inside the Oak Vale Home, and she was unaware that he kept any property there.

Ms. Cross said that, before the victim disappeared, the two had not spoken since March. The victim told her that she was moving back to the Crossville area where they had grown up and told her about her boyfriend, Mr. Henry.

During cross-examination, Ms. Cross said that the victim had birthed Tristan when she was seventeen years old and had custody of him for six or seven years. She said that the victim lost custody of Tristan before she had T.C.

Mr. Brewington testified consistently with his testimony from the motion *in limine* hearing. During their incarceration together, the Defendant learned that Mr. Brewington's lawyer, Dan Alexander, also represented Perry March, a high-profile defendant who had been convicted of murder when law enforcement officers had never found the victim's body. The Defendant asked Mr. Brewington to ask Mr. Alexander how Mr. March had been convicted of murder without a body. Mr. Brewington said he complied with the Defendant's request.

Mr. Brewington said that he and the Defendant were housed in a dormitory together. During a late-night conversation, Mr. Brewington asked the Defendant if he "did it," and the Defendant looked at him and "grinned." The Defendant said he had gone to the Oak Vale Home and, at some point, sent T.C. and his friend outside. The Defendant said that he and the victim argued about custody issues, money issues, and her current boyfriend. The Defendant said that the victim had her cell phone and was sending a text, and the Defendant became upset because he believed she was sending out an "SOS" to her friend to call the police. He said he went into the bedroom, took a pair of brass knuckles, wrapped them in cloth, and struck the victim on the back of the head repeatedly until she fell on the ground in the bedroom. The Defendant told him that he then took a cord from an appliance, put it around her neck, and strangled her to death. The Defendant put the body in the bathroom.

Mr. Brewington said that the Defendant then told him that his son came back in from outside and tried to use the restroom, and the Defendant told his son it was broken. The Defendant said he retrieved a tarp from his car, wrapped the victim's body in the tarp, put her body in the trunk and drove it back to Knoxville. The Defendant said he took the body to a farm and put it in a machine meant to grind up large carcasses used to feed pigs.

The Defendant told Mr. Brewington that one of the mistakes he had made was to leave the brass knuckles behind at the Oak Vale Home. He said he cleaned the brass knuckles with cleaning solution from the kitchen but that he left them at the Oak Vale Home. He further stated that he was concerned that he also left the cord behind. The Defendant told him that, after the murder, he looked at the victim's phone, and she had simply sent a text that said that they were arguing and not asking for help from the police.

During cross-examination, Mr. Brewington testified that he first met the Defendant when he gave the Defendant heroin in exchange for a phone card while the two were incarcerated. Mr. Brewington recalled several incidents while they were incarcerated that led him to believe that the Defendant had killed the victim. He said the Defendant hung a noose from the bunk and said "if this is how you want to kill a bitch, this is how you do it." And then when another inmate said "I hope you die for killing that girl," the Defendant responded, "I'll kill you too," and laughed.

Matthew Belcher testified that he had previously been convicted of several offenses, including burglary, and was incarcerated on a probation violation charge at the time of his testimony. Mr. Belcher said that he knew the Defendant because the two had been incarcerated together. During their incarceration, they shared a pod, or living unit, and they engaged in multiple conversations. During the first conversation, Mr. Belcher asked the Defendant if he had murdered the victim, and the Defendant said that he had but that the State was not going to be able to prove a case against him because they would not have enough evidence. The Defendant told him in subsequent conversations that the murder occurred while the Defendant was at the Oak Vale Home to pick up their son for visitation. The Defendant told Mr. Belcher that law enforcement had seized his vehicle, but he was confident that they would not find any blood in the vehicle. He expounded that he was not concerned if they found the victim's DNA, because she had ridden in his vehicle previously. The Defendant said that the only evidence that the police had against him were text messages that the victim had sent to her friend that said that the Defendant was present at the Oak Vale Home and acting "crazy."

Mr. Belcher said that the Defendant was worried that T.C. might suspect something. The Defendant mentioned cleaning up in the bathroom and telling T.C. that he could not come in the bathroom. The Defendant told Mr. Belcher that he and the victim had been in a dispute about T.C.'s custody. Mr. Belcher said that the Defendant made the comment that he worked on a pig farm and that the pigs will eat up anything. He said that you could "throw a body in there and they wouldn't leave no bones behind."

During cross-examination, Mr. Belcher said that he did not record his conversations with the Defendant. Mr. Belcher said that he knew Mr. Brewington also and that, when the Defendant made the comment about the pigs, both he and Mr. Brewington were present.

Chief Christopher Brown testified that he was the Chief of Security with the Davidson County Sheriff's Office and assigned to the Hill Detention Center. His records indicated that the Defendant was housed with both Mr. Brewington and Mr. Belcher while incarcerated. The records indicated that they had recreation and meal times on the same schedule.

Dr. Carrillo, who had testified at the suppression hearing, testified for the jury about her HRD dog, the Belgian Malinois, Cleo. Her testimony largely comported with her testimony at the motion *in limine* hearing. She said that these dogs can indicate that there may be human remains present. She explained that dogs have 50,000 more olfactory cells, so they are an amazing tool for detection. She said that this was "a very complex science," a decomposing body emits gases and substances, about 486 chemicals, that an HRD dog can detect.

Dr. Carrillo described how she became interested in dog-handling and Cleo's training, which began when Cleo was a puppy, and Cleo's development over her ten years of life. She described Cleo's training, which occurred several times per week, and her work with several agencies, including predominantly with the Sumner County Sheriff's Department and Emergency Management. Dr. Carrillo testified about the internal certification done on Cleo by Maury County and also that Cleo has been used repeatedly and certified as a reliable human remains detection dog by multiple agencies. She said that she and Cleo also maintained their certifications with the groups that deploy them by participating in ongoing monthly trainings. Dr. Carrillo said that Cleo had been asked to work with the TBI and the FBI on occasion.

Dr. Carrillo testified that Cleo was an off-lead working dog, so, when Cleo located a scent upon which she should alert, she would go back to the doctor and then take the doctor to where the scent was strongest. She mentioned that Cleo had found a body fifty or sixty feet under water by indicating where on the water the body was located. The doctor said that Cleo had also had several other recoveries, including finding remains in a burned down house and, in another case, finding the inner ear bone of a baby that had been murdered. She estimated that Cleo had participated in twelve to fifteen searches where she had recovered remains.

Based on her qualifications, the trial court declared Dr. Carrillo to be an expert in the area of training K-9s and HRD. About this case, Dr. Carrillo testified that, when she arrived

at the Oak Vale Home, Spencer Harris, who was a K-9 MNPD officer but had responded as a volunteer for the Office of Emergency Management, was present at the scene to ensure that the searches by the multiple dogs present were conducted in an orderly fashion. Also present were Ms. Allen and Sergeant Douglas, both with their respective dogs. The searches were “very controlled.” Officer Harris had turned off the ventilation of the house, secured the house, and only allowed one dog at a time to enter and search. He kept the dogs and handlers separated and did not tell them about any alerts, or lack thereof, by any other dog.

Dr. Carrillo then described Cleo’s search. Cleo alerted to the presence of human remains on a rose-colored rug in the master bedroom. Dr. Carrillo testified that her dogs are trained not to alert to the presence of other bodily fluids like semen, human blood, or animal blood, but are trained to alert to the scent of decomposition. Dr. Carrillo testified that the only other place that Cleo alerted was in the bathtub. Cleo actually got into the bathtub and began digging at the drain, something she typically did not do, and was “very, very intent” on the drain. When the doctor attempted to have Cleo search other things, Cleo kept returning to the drain in the bathroom. Dr. Carrillo said that this was an alert by Cleo to the presence of human remains or decomposition in the bathtub. She said Cleo would not have alerted to the presence of hair or fingernail clippings. The doctor said that she had trained Cleo in “a lot of bathrooms,” and Cleo did not alert to the presence of normal human sanitation. She similarly did not alert to a bloody diaphragm that was in the wastebasket of the bathroom. Officer Harris was present during the search and saw Cleo’s alerts.

Dr. Carrillo testified that the K-9 coordinator called she and Cleo to come search at an impound lot. When they arrived, there were garages and different cars there. The coordinator present simply asked them to search the area. After searching a garage bay, Cleo alerted to the presence of human remains in the trunk of one of the vehicles present. She testified that an HRD dog can alert to the presence of human remains despite there not being any physical part of a body found. She said that studies had shown that the dogs can detect scents on a level that is more minuscule than one can find. Detective Jill Weaver was present during the search.

During a break in the testimony, the trial court offered the jury the following instructions:

There are certain factors you need to determine. The performance of a scent dog is not infallible, and it should not be given undue weight and is not alone sufficient to convict or to even establish there was a crime. What you need to do is you need to look at four different factors while you’re listening to this. That is, the training of the dog, the training of the handler, the circumstances of the alleged find or hit, if there is one, and whether there is other independent

evidence that would either establish that there was a crime or connecting the defendant with it. So it's circumstantial evidence, and what weight you give it[,] is going to be up to you. . . . I'll give you a much lengthier instruction, but that's what you need to be looking for.

During cross-examination, Dr. Carrillo said that after Cleo alerted in another case the TBI was able to recover and DNA test bones found in the area that Cleo alerted. The defendant in that case chose to confess. She said that no dog is 100% but that they were more likely to give a false negative than a false positive. Further, the dogs were all assessed weekly and by multiple agencies to ensure that they were reliable.

Dr. Carrillo testified that, often, the agency who called her and her dog to the scene would create the report documenting any alerts made by the dog. In retrospect, she would probably create her own report. In this case, Officer Harris was acting as the K-9 coordinator, so he created the report.

Dr. Carrillo acknowledged that she used blood in her training. She explained that if there was a bloody diaphragm in the trashcan that Cleo did not alert to, it would likely be because she was trained to go to the place where the scent of human remains was the strongest. To Cleo, the scent of human remains was the strongest in the bathtub drain of the bathroom.

Ms. Allen also testified during the trial about her search with her HRD dog, the Belgian Malinois, Libby. She said that she is a paramedic by occupation but had been involved with human remains detection dogs for seventeen years. She said that she also trained and evaluated other dogs for Carroll County. Ms. Allen described that she had trained two other dogs before Libby and that she had owned Libby since she was six months old. Ms. Allen described training Libby, and her testimony comported with her testimony during the suppression hearing. She added that hair did not decompose the way that human tissue did, so she did not use hair to train Libby.

Ms. Allen recounted how she trained with the Carroll County Fire and Emergency Management Agency and the Gleason Police Department. She said that the two worked with Tennessee Task Force 2. Ms. Allen described the certifications that Libby had received and the factors that ensured that she was a reliable human remains detection dog. Ms. Allen described the double-blind test during which eight to ten sources of human remains were left buried overnight in water, a vehicle, in the open, and in a building or house. The test also included an area that was blank with nothing hidden and multiple areas where animal remains, clothing, or food were hidden. Both she and Libby passed the test as a reliable handler and a reliable human remains detection dog, respectively. In other trainings and on

other assignments, some of which Ms. Allen specifically detailed, Libby had proven herself to be a reliable dog.

After the trial court admitted Ms. Allen as an expert in the area of HRD dogs, she testified about the search that Libby participated in during this case. She said that she and Libby were deployed to search the Oak Vale Home on May 29, 2014. Ms. Allen said that Libby searched the house off lead, and her first alert to the presence of human remains was on a pink rug in the bedroom. Libby next alerted beside the bathtub in the bathroom. When Ms. Allen entered the bathroom after Libby, Libby put her head over into the tub to point her nose inside the tub. Ms. Allen opined that Libby alerted to the presence of human remains in the bathtub. Libby had searched “many” bathrooms, most of which contained hair, and she did not alert to the presence of human remains in every bathroom.

Ms. Allen clarified that Libby would not alert to semen, hair, dead skin cells, or animal blood. Ms. Allen said that Libby did not alert to the bloody diaphragm in the trashcan, but she said that Libby was trained to go to the “largest scent pool” or “largest scent source.” Ms. Allen opined that Libby’s alert meant that there was a larger scent pool for decomposition in the bathtub.

During cross-examination, Ms. Allen agreed that the bathroom of the Oak Vale Home was a very small space. She said that, when she searched the home, she did not notice the trashcan in the bathroom. She explained, however, that Libby was trained to alert to the area that had the largest scent. In this case, that was not the trashcan that may have contained a bloody object but was the bathtub. She explained that Libby does not alert to semen, which had been tested and proven. She agreed that Libby might alert to menstrual blood but said that she would only alert to it if that was the only “decomposition in the room.”

Sergeant Karen Douglas testified that she was the K-9 coordinator for the Tennessee Highway Patrol. She had worked with dogs since 1999 and, at the time of trial, she assisted in training and deploying forty-three working dogs belonging to the Tennessee Highway Patrol. Sergeant Allen said that she had obtained an HRD dog, Dakota, in 2013. Sergeant Douglas described training Dakota, a Dutch shepherd, to alert to the presence of human remains. She said that she worked with Ms. Allen and several other trainers to understand and learn how to train Dakota for this type of work, but the training was similar to training a drug or explosive detecting dog.

She discussed the process of training Dakota and the incremental increase in difficulty of hiding the object she was tasked to find. The sergeant said that she trained Dakota sixteen hours a month. Sergeant Douglas described training with Vohne Liche Kennels, Savannah Springs K-9, and also with Deborah Burnett in Memphis, and she

described the training with these organizations. She also said that she and Dakota were recertified every year by the North American Police Work Dog Association. Dakota had been deemed a reliable HRD dog. Sergeant Douglas described a successful deployment in which Dakota had participated. The trial court declared her an expert on the subject of HRD dogs.

Sergeant Douglas described searching the Oak Vale Home with Dakota. They entered the living room of the home, and Dakota sped to the bedroom, sniffed between an overnight bag and a rug in the bedroom, stuck her nose down on a rug and sat, which was her alert to the presence of human remains. Officer Spencer Harris was present to see Dakota's alert. Sergeant Douglas said that Dakota would not alert to the presence of semen.

After Dakota alerted on the rug, Sergeant Douglas praised her. Dakota went out of her arms, which was unusual, and headed toward the bathroom. She sniffed along the way, jumped in the tub, sniffed around the drain, and then barked and came out of the bathroom. Sergeant Douglas did not consider that a typical "alert," but she told Officer Harris to check the tub because that was Dakota's previous alert to the presence of human remains. The sergeant opined that Dakota was "spun up" because she had not been rewarded for finding remains in the bedroom since the search was not done, so she reverted to her previous alert. She further opined that Dakota did not alert to any blood in a trashcan because the smell of human remains was stronger in the bathtub.

During cross-examination, Sergeant Douglas testified that Dakota's first human remains detection deployment was in February 2014. She agreed that she did not keep regular training logs from that time until this search in May of that year.

Detective Kevin Akin, an MNPD detective with the Specialized Investigations Division, testified that at the time of the victim's disappearance he was in the Cold Case Unit. As such, Detective Arendall, who had been originally assigned to the victim's missing person case, asked him to come to the Oak Vale Home to help investigate this case. Detective Jill Weaver took over for Detective Arendall, so Detective Akin and Detective Weaver worked this case together.

While at the Oak Vale Home, Detective Akin spoke with Mr. Burgess, Ms. Blainey, and Mr. Henry for a brief period of time. He ensured that the victim's dogs were secure with them, and he did not enter the home at that time instead opting to wait for a search warrant. The first order of business was to contact the Defendant, who was the last person to see the victim alive, and to ensure that T.C. was safe.

On Wednesday, May 28, 2014, Detective Akin and Sergeant Kemper drove to the address listed on the Defendant's driver's license. When they arrived, the Defendant's mother came to the front porch and informed the detective that the Defendant was not there. She gave him a phone number to call, which he did. When the Defendant answered, the detective told him that there was an investigation involving the victim who was missing. The Defendant did not seem "overly concerned." The Defendant agreed to meet with the detective at the Defendant's parents' home.

At the Defendant's parent's home, the detective saw the Defendant's vehicle outside and the Defendant inside. It appeared that T.C. was also with the Defendant. The Defendant exited his parents' home, and the detective informed him that he was there to check on T.C. because the victim was missing. As the two were talking, the Defendant seemed to become nervous, his breathing was "shallow" and "shaky." The Defendant would not allow the detective to speak with T.C. because the Defendant did not trust the police. T.C., who was there, seemed "withdrawn," and he did not show interest in speaking with the officers. Detective Akin said that he asked the Defendant if they could go inside and sit and talk, and the Defendant said that he had locked himself out of his parents' home, so they could not.

Detective Akin said that he asked the Defendant if he and the victim had a volatile relationship or if there was any abuse, and the Defendant said that they had a "good relationship." The Defendant then told the detective that the victim had probably returned to drug use and became a prostitute and run off as she had done previously. Detective Akin testified that he tried to steer the conversation toward a positive direction but invariably the Defendant returned to speaking negatively about the victim.

Detective Akin recounted how the Defendant informed him that T.C. had a debt at school and could not get his final grades. The Defendant further stated that he was at the Oak Vale Home around the time that the victim was last seen. When the detective asked if anything happened between the two of them, the Defendant said that he wanted an attorney and wanted to end the conversation. The detective told the Defendant that he was the last person to see the victim alive and asked the Defendant to call him if he wanted to talk, giving the Defendant a card upon which Detective Akin's phone number was written.

After speaking with the Defendant, Detective Akin became concerned that the Oak Vale Home was a crime scene. He returned to Nashville where Detective Weaver obtained a search warrant for the Oak Vale Home. He and other officers executed the search warrant on May 29, 2015, and he recalled the presence of the HRD dogs.

Detective Akin described the victim's home, saying that upon entering, he smelled cat and dog feces and urine. There was an uncapped bottle of bleach left on the kitchen table

and a spray bottle of cleaner as well. He described the bathroom, which had a bloody diaphragm in the trashcan and a “glob of hair” in the bathtub. The detective said that there was a pink rug in the victim’s bedroom that looked like it belonged in the kitchen where there was a stained area that matched the size and shape of the rug. Detective Akin said that there was no visible sign of forced entry and that the victim’s valuables had not been taken. The victim’s car was still parked at her home. It was locked but looking through the windows the detective saw a purse, which he later discovered contained the victim’s driver’s license, social security card, and cell phone.

Based upon what witnesses had told him, including D.D., the detective returned to the Oak Vale Home and flushed the toilet, which appeared to be in working order. The detective said that he spoke with Mr. McCavanagh in June, and learned that he saw two people at the Oak Vale Home during the night of May 24, one of whom he identified as the Defendant. Detective Akin said that he was also present when interviewers from Nashville Children’s Alliance spoke with T.C. but in an area that he could not be seen. Before the interview he noted that T.C. was “[v]ery withdrawn, not very engaging at all, sad.” After the interview, they took T.C. to the Oak Vale Home. He began to talk a little bit and, when he found a Mother’s Day card, he opened up more about the victim. He described to the detective where the victim kept her keys, and the detective noted that they were not in that location.

Detective Akin testified that he obtained a search warrant for, and got, DNA samples from both T.C. and the Defendant. The detective also participated in a search of the Defendant’s parents’ house. There, he noted that the Defendant had Army jump boots and a backpack, which contained knives, a handgun, a pill vial, glass bottles, and a pill cutter. Officers gathered these, some cell phones, and a few other items. HRD dogs also searched the home but none of them alerted. The detective also later participated in a search of the Defendant’s apartment. There, he found interesting a missing person poster for the victim, as well as a time line of the events that transpired between her going missing and a later time.

During cross-examination, Detective Akin testified that the Defendant did not ask for an attorney until the detective asked him what had happened between he and the victim at the Oak Vale Home and what the Defendant had done to her. The detective said that the way the Oak Vale Home had been found, specifically the blood on the floor, the bundle of cords, and the brass knuckles, led him to believe that a crime had occurred in her home. Detective Akin identified a photograph that appeared to be from the victim’s Facebook page and, in it, she appeared to have a small set of brass knuckles on her neck.

During redirect examination, Detective Akin noted that the brass knuckles depicted in the photograph were “[c]ompletely different” from the ones found in the Oak Vale Home. Detective Akin testified that, at the time of the Defendant’s arrest, the detective knew the following facts: that there were text messages from the victim indicating that the Defendant was at her house acting poorly; that, shortly after sending these messages, the victim ceased communicating with her best friend and boyfriend; that the victim’s car was parked at her house and in it was the victim’s purse that contained her driver’s license, social security card, and credit cards; that D.D. had given a statement that he saw the Defendant carry what appeared to be a heavy duffel bag; that D.D. said that he asked the Defendant to use the bathroom while at the Oak Vale Home on May 23, 2014, and the Defendant denied his request; that T.C.’s statement included that the Defendant said that the victim had left with her friend Ms. Lamoreaux; that Ms. Lamoreaux did not have a valid driver’s license at this time; that T.C.’s statement included that the Defendant would not let him use the bathroom at the house; that the bathroom was in proper working order at the time of the victim’s disappearance; that T.C.’s statement included that the Defendant had stayed at the Oak Vale Home until after dark on Friday night; that DNA tests had proved that the Defendant’s DNA was on a Coke bottle found in the Oak Vale Home; that three human remains detection dogs had independently alerted to the presence of human remains in the victim’s bedroom and two to the presence of human remains in the bathtub; that two dogs alerted to the presence of human remains in the trunk of the Defendant’s car; that there were brass knuckles found in the victim’s bedroom; that Mr. McCavanagh had seen a man matching the Defendant’s description carrying to be what appeared to be “dead weight” in a bag from the Oak Vale Home the night after her disappearance; that Ms. Himes’s statement included that the Defendant told her that the victim would one day disappear and that he would have the perfect alibi because he would have T.C. with him and everyone would assume the victim had relapsed; that the Defendant had been untruthful when he told Principal Akers why he was late and where he was travelling from; and that the Defendant had refused to let the detective speak with T.C. Later, both Mr. Brewington and Mr. Belcher came forward and the cell phones were analyzed in this case. The detective said that there was never any evidence that anyone else had been involved in this case.

The State then offered a stipulation into the record: the trace examiner from the FBI laboratory found that the hairs collected from the Defendant’s vehicle did not match the victim’s hairs. It further stated that the hair brush offered as a sample of the victim’s hair was not a good sample because it could have contained hair from multiple sources and does not account for use when the source chemically alters hair (such as dyeing). As such, the victim’s hair could not be included or excluded as the source of the hairs in the Defendant’s vehicle.

Officer Spencer Harris, an MNPD K-9 handler, testified that he responded as a volunteer to the Oak Vale Home prior to the search with the HRD dogs. As the coordinator, he was responsible to ensure that the HRD searches went smoothly. The live-find dogs first searched the woods around the home, and no dog alerted. Each dog searched the Oak Vale Home individually, and Officer Harris did not give the handlers any information prior to their search. Also, before the search, he ensured that the Oak Vale Home was emptied of all personnel and that the air conditioning system was turned off. After each dog searched, he ensured that the handler did not inform subsequent handlers of the search results.

Officer Harris then recounted each of the three searches by the HRD dogs. His recount largely comported with each of the handler's own testimony about the searches. He agreed with Sergeant Douglas's testimony that, while not giving a formal alert, it appeared that Dakota was "in an odor" in the bathroom of the victim's home. He noted that before barking Dakota jumped into the bathtub.

MNPD Detective Jill Weaver testified that on May 27, 2014, Detective Akin called her about this case, as she had been assigned to help him investigate the case. She said that she learned that the Defendant had picked up T.C. from school on the day that the victim disappeared. She obtained a search warrant for the house, and, when she entered it, she smelled feces and urine. It became apparent that there were animals inside that had been in the home while the victim was missing. Detective Weaver described other items in the home, including the kitchen rug in the bedroom and the brass knuckles by the bed. She found no evidence of illegal drug use or forced entry.

Detective Weaver said that the police department commonly used HRD dogs, and she had been present for between fifteen and twenty such searches. She and the other investigators in the case decided to request the HRD dogs for use at the Oak Vale Home. The detective only observed one of the dogs' searches, and she described how Ms. Allen's dog alerted next to the bathtub in the bathroom and then also on the pink bath rug in the victim's bedroom.

Detective Weaver said that she was present when Detective Akin spoke with D.D. After speaking with him and the other neighbors, they determined it was necessary to make an emergency removal of T.C. from the Defendant's custody. Detective Weaver said that she later learned that the Defendant had filed a petition to establish parentage of T.C. in the Davidson County Juvenile Court. Having reviewed the permanent parenting plan with regard to T.C., Detective Weaver said that it granted the victim custody with the Defendant allowed visitation rights from 7:00 p.m. on Friday to 7:00 p.m. on Sunday every other weekend. According to the parenting plan, the Defendant and the victim had alternating

years for holidays. The Memorial Day weekend of the year that the victim went missing fell on a year that was the victim's holiday weekend to have custody of T.C.

Detective Weaver discussed T.C.'s interview with Nashville Children's Alliance. She described T.C. as "very quiet," saying that he had a hard time answering the questions. After the interview, she and other officers accompanied T.C. and a Department of Children's Services caseworker to the Oak Vale Home. There, T.C. retrieved some items, and his demeanor changed. He found a Mother's Day card he had made for the victim and became emotional. T.C. then seemed more open to questioning.

After hearing T.C.'s responses to questioning, Detective Weaver obtained a search warrant for the Defendant's vehicle. She said that the HRD dogs came to search the Defendant's vehicle, which appeared clean initially. The detective described the search, saying that there were two cars in two bays of a garage and a truck in the third bay. The dogs were to search each of the vehicles, two of which were "placebo cars," meaning the detective did not believe that they had been involved in a crime. The detective did not inform the dog handlers which car was suspected of being involved. Detective Weaver described how Dr. Carrillo's dog alerted to the trunk of the Defendant's car.

Detective Weaver said that, on June 5, 2014, she participated in a search of one of the Defendant's residences, where it appeared he had been staying in the basement. Officers confiscated the Defendant's backpack, black jump boots, and two cell phones. The detective said that this did not appear to be the Defendant's primary residence because very few of his belongings were there. They did find some of T.C.'s clothing in a duffel bag on the kitchen table. Inside the duffel were the Defendant's old bank receipts.

Detective Weaver described her response to a tip that came in via Crime Stoppers. She said that she spoke with Ms. Himes, who had previously been in a relationship with the Defendant. Based upon this information and information from other witnesses, she learned that the Defendant had been staying at a home on North 4th Avenue in Knoxville, Tennessee. During a search of this home, it became obvious that the Defendant lived there because the utility bills were in his name. Detective Weaver found a book about Perry March, who was arrested and charged for the murder of his wife, despite her body never having been found. The detective also found a missing person poster of the victim inside a dresser of the home. Also in the home, the detective found cell phones that she turned over to the TBI for analysis.

The detective said that she also found a tan knapsack inside which she found seventeen news articles about the victim's disappearance along with a chronological listing of some of the victim's different addresses.

Detective Weaver testified that she obtained the PayPal records for the victim's account, which had not been used since the day of her disappearance. The detective said that she interviewed Mr. Belcher on April 5, 2016. She had never before suspected that the victim's body may have been fed to pigs. Similarly, before her June 1, 2016, interview with Mr. Brewington, she was unaware that the Defendant may have chased the victim into the bedroom, struck her in the back of the head with brass knuckles, strangled her with a cord, and dragged her to the bathroom. None of that information was in a police report or news articles prior to her interview with those two witnesses.

The detective said that the victim's information had been entered into a national missing person database. If the victim had used her information, then it would have alerted in the database. Similarly, if her remains were located anywhere in the country, it would create an alert. The victim's body had never been located.

During cross-examination, Detective Weaver agreed that some of the news articles made mention that brass knuckles and cords had been found in the Oak Vale Home. The detective agreed that she did not review the victim's phone records from before the victim went missing.

During redirect examination, she said that the Perry March book found at the Defendant's apartment corroborated Mr. Brewington's statements that the Defendant was interested in speaking with Mr. Brewington's attorney who had represented Perry March.

Agent Andrew Vallee with the TBI testified as an expert in law enforcement use of communication records about cell phone records in this case. Agent Vallee testified that he obtained the phone records for the cell phones involved in this case. He also obtained general information about the case, including the location of the crime scene, etc. He then created a presentation to explain both cell phone communications in general and also as related to this case. The three phones analyzed in this case were: cell phone numbers ending in -7742, which belonged to the victim, and cell phone numbers ending in -7319, -1466, and -5754, which all belonged to the Defendant.

When analyzing the victim's phone, Agent Vallee noted that on May 23, 2014, she received a call from Mr. Henry at 9:21 a.m. and made an outgoing call to Mr. Henry at 10:46 a.m. Both calls were made and received from the same location. At 12:38 p.m., the victim called Ms. Lamoreaux, and, at 12:40 p.m., she had an incoming call from Ms. Lamoreaux. These calls were routed through a different cell phone tower, meaning that the victim's phone was away from the Oak Vale Home at that time. The victim received a call from Mr. Henry at 1:50 p.m., which was routed from a cell phone tower that covered the Oak Vale Home, meaning she was likely at home.

Agent Vallee testified regarding several texts between the victim and the Defendant on the day that she went missing, May 23. The victim communicated with two of the Defendant's cell phones. The victim's last communication was by text to Ms. Blainey at 2:27 p.m., after which her phone had no network connection, meaning it was powered off or in an area that had no reception. Records indicated that Mr. Henry and Ms. Blainey attempted to communicate with the victim via cell phone numerous times after 2:27 p.m. The last time she accessed her email was May 22, 2014, and the last time she accessed her Google Wallet was on May 23, 2014.

Agent Vallee summarized the data from the Defendant's cell phones, saying that the victim called the -1466 number at 2:01 p.m., and the Defendant's cell phone placed him in a site near the Oak Vale Home. Between 2:17 p.m. and 3:18 p.m., the Defendant's cell phones used a cell site near the Oak Vale Home. He placed a call from his -1466 number to T.C.'s school at 3:19 p.m. The Defendant's phone did not receive texts and phone calls from 6:57 p.m. until 8:45 p.m., meaning that his cell phone was off, destroyed, or in an area without reception.

At 8:47 p.m., the Defendant's -7319 phone connected to the cell site covering the victim's home. The network logged multiple text messages from 8:48 until 10:30 that were undelivered, meaning the phone was off, destroyed, or in an area without reception.

Between 10:37 p.m. and 2:55 a.m., the Defendant's phone traveled from Nashville to Knoxville, ending up at Lambdin Road at 2:55 a.m. Between 12:06 a.m. on May 24, 2014 and 11:41 p.m. on May 25, 2014, the Defendant's -7319 phone sent 118 texts and received 114 texts from a phone number ending in -2001 that belonged to Jennifer Body.

The Defendant's -1466 number communicated with the victim on May 23, 2014, and then not until May 26, 2024, when he attempted to call her eight times and also sent text messages to her several times.

On May 29, 2014, the Defendant's -7319 cell phone traveled down I-75 and then up I-24. His cell phone later traveled from Nashville to Cleveland, Tennessee.

Mary Ann Warren testified for the Defendant as a professional dog trainer. She said that she gave speeches and seminars on HRD dogs. She was helping to develop standards, ways of testing, and ways of training these dogs. Ms. Warren said she had trained dogs for more than twenty years and was currently working with her fourth, and training her fifth HRD dog. Ms. Warren offered her certifications, and the trial court admitted her as an expert in the field of training HRD dogs.

Ms. Warren offered the training logs of her HRD dog, Twang. She said that each time she trained with Twang she generated a log to reflect what happened in training. Ms. Warren opined that it was important to keep records so that the handler knew how the dog was progressing in training. She said she also occasionally videotaped her training sessions because she worked by herself and this allowed her to have someone else view her training and give her an honest critique. Ms. Warren also discussed the “search report” that she created for each time she and the dog were called to search.

Ms. Warren said she reviewed Dr. Carrillo’s training records and was concerned by the lack of information. She also raised concerns that Ms. Allen did not complete her training log sheets. Similarly, she said that Sgt. Douglas’s training logs were also incomplete.

Ms. Warren said that viewing photographs of the bathroom, she would have expected her dog to alert to the trashcan, which contained the bloody diaphragm. She also said her dog would have alerted to the hair in the bathtub. She disagreed with other experts who said that the dogs would not alert to hair. She clarified that she trained her dog to alert to anything from the tip of the head to the tip of the toes, which included hair.

Ms. Warren expressed concerns with how the vehicle search was conducted, saying that having the other two cars be agency cars was problematic.

During cross-examination, Ms. Warren acknowledged that other experts opined that hair should not be used in training because it decomposed differently than other body parts.

For the Defendant, Scott Cothran testified that the Defendant’s attorneys hired him to investigate this case. He acknowledged that Detective Weaver testified that there were no news articles that mentioned that the victim may have been strangled. He, however, found an article published on June 6, 2014 and updated on December 10, 2014, that stated that investigators thought a cord or string could have been used to murder the victim. During cross-examination Mr. Cothran testified that none of the articles he found indicated that the victim was chased into the bedroom or struck repeatedly in the head with brass knuckles. During redirect, he testified that one article stated that bloody brass knuckles had been found at the scene.

Based upon this evidence, the jury convicted the Defendant of premeditated first-degree murder, and the trial court sentenced him to life in prison. It is from this judgment that the Defendant now appeals.

II. Analysis

On appeal, the Defendant contends that: (1) the trial court erred when it denied his motion *in limine* to exclude evidence that the HRD dogs alerted to the presence of human remains; (2) the evidence is insufficient to prove that the victim was deceased or that the Defendant caused her death; (3) the trial court erred when it admitted testimony from a witness identifying him in court because such testimony was tainted; and (4) the trial court erred when it excluded defense proof.

A. Motion *in Limine*

The Defendant contends that the trial court erred when it did not exclude the expert testimony regarding the searches of the HRD dogs because the dogs' alerts were not corroborated by "scientific verification of the presence of human remains." He contends that this error harmed him because it allowed the State to argue that it had proven beyond a reasonable doubt that the victim was dead based upon the alerts of the HRD dogs. The Defendant further contends that the trial court used an improper standard when deciding this issue and that the dogs in this case were not reliable. The Innocence Project filed an *amicus curiae* brief in which it argued that the trial court erred in admitting the dog evidence and that such error was "highly prejudicial." The State counters that the trial court used the correct standard, that the dogs' findings were corroborated by other evidence, and that the trial court did not err.

The trial court possesses the sound discretion to determine the admissibility of evidence, and we review a trial court's denial of a motion *in limine* to restrict the admission of evidence under an abuse of discretion standard. *See State v. Robinson*, 146 S.W.3d 469, 490 (Tenn. 2004). More particularly, a trial court's decisions regarding the admissibility of expert evidence are reviewed for abuse of discretion. *State v. Schiefelbein*, 230 S.W.3d 88, 130 (Tenn. Crim. App. 2007); *State v. Rhoden*, 739 S.W.2d 6, 13 (Tenn. Crim. App. 1987). A trial court does not abuse its discretion unless it "applied an incorrect legal standard, or reached a decision which is against logic or reasoning that caused an injustice to the party complaining." *State v. Herron*, 461 S.W.3d 890, 904 (Tenn. 2015).

The criteria for the admissibility of expert testimony is set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d 257 (Tenn. 1997). The admission of expert testimony is governed by Tennessee Rules of Evidence 702 and 703. *State v. Copeland*, 226 S.W.3d 287, 301 (Tenn. 2007) (citing *Brown v. Crown Equip. Corp.*, 181 S.W.3d 268, 273 (Tenn. 2005)). Rule 702 provides, "If scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as

an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise.” Tenn. R. Evid. 702. Rule 703 provides:

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence. Facts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert’s opinion substantially outweighs their prejudicial effect. The court shall disallow testimony in the form of an opinion or inference if the underlying facts or data indicate lack of trustworthiness.

Tenn. R. Evid. 703. It is well-settled that “the allowance of expert testimony, the qualifications of expert witnesses, and the relevancy and competency of expert testimony are matters which rest within the sound discretion of the trial court.”

In *Daubert*, the United States Supreme Court held that Federal Rule of Evidence 702 requires that a trial court “ensure that any and all scientific testimony . . . is not only relevant, but reliable.” 509 U.S. at 589. Our supreme court, in *McDaniel*, set forth the following list of factors for determining the reliability of scientific evidence:

(1) whether scientific evidence has been tested and the methodology with which it has been tested; (2) whether the evidence has been subjected to peer review or publication; (3) whether a potential rate of error is known; (4) whether . . . the evidence is generally accepted in the scientific community; and (5) whether the expert’s research in the field has been conducted independent of litigation.

955 S.W.2d at 265. Rigid application of these factors is unnecessary. *Copeland*, 226 S.W.3d at 302. Not all expert testimony will “fit” with these factors, thus, the exact considerations that may be appropriate will vary depending upon “the nature of the issue, the witness’s particular expertise, and the subject of the expert’s testimony.” *Brown*, 181 S.W.3d at 277.

The trial court in this case allowed expert testimony by multiple witnesses that their HRD dogs alerted to the presence of human remains in two places in the victim’s house and in the trunk of the Defendant’s car. Neither this court, nor any court in Tennessee, has ruled on the admissibility of expert testimony regarding an HRD dog’s alert.

This court has discussed trailing scent dogs, the admissibility of expert testimony regarding their alerts, and the necessary foundation required for the admission of evidence of a scent dog, namely a trailing dog. In *State v. Barger*, 612 S.W.2d 485, 491 (Tenn. Crim. App. 1980), the defendant contended that the trial court had erred by admitting evidence that a bloodhound had tracked the defendant's scent to stolen merchandise. The *Barger* court noted that: "The majority rule in the United States, held by twenty-two states including Tennessee, provides that if a proper foundation is laid, evidence of trailing by bloodhounds is admissible." *Id.* (citations omitted). It further noted that there was a five-step procedure to be followed to establish a requisite foundation. *Id.* (citing *People v. Centolella*, 61 Misc. 2d 726, 305 N.Y.S.2d 460 (Oneida County Ct. 1969); *Copley v. State*, 153 Tenn. 189, 281 S.W. 460 (1926)).

The *Barger* court went on to delineate those five steps as follows:

(1) Pure blood. The dog must be of pure blood, and of a stock characterized by acuteness of scent and power of discrimination. *Copley, supra*, 153 Tenn. at 194, 195, 281 S.W. 460; *People v. Centolella, supra*, 305 N.Y.S.2d at 462; *State v. McLeod*, 196 N.C. 542, 146 S.E. 409, 411 (1929); *Pedigo v. Commonwealth*, 103 Ky. 41, 44 S.W. 143, 145 (1898); *State v. Steely*, 327 Mo. 16, 33 S.W.2d 938, 940 (1930). . . .

(2) Proper training. The dog must possess "acuteness of scent and power of discrimination," and must have been accustomed and trained to track human scents. *Copley, supra*, 153 Tenn. at 195-96, 281 S.W. 460; *People v. Centolella, supra*, 305 N.Y.S.2d at 462; *McLeod, supra*, 146 S.E. at 411; *Pedigo, supra*, 44 S.W. at 145; *State v. Harrison*, 149 La. 83, 88 So. 696, 697 (1921); *Moore v. State*, 26 Ala. App. 607, 164 So. 761, 762 (1935). . . .

(3) History of reliability. The dog must be shown by experience in actual cases to be reliable in tracking humans. *Copley, supra*, 153 Tenn. at 195-96, 281 S.W.460; *People v. Centolella, supra*, 305 N.Y.S.2d at 462; *McLeod, supra*, 146 S.E. at 411; *Pedigo, supra*, 44 S.W. at 145-46; *Steely, supra*, 33 S.W.2d at 940; *Harris v. State*, 143 Miss. 102, 108 So. 446, 447 (1926). . . .

(4) Placed at reliable point. The dog must have been placed on the trail at a spot where the suspect in the crime was known to have been, *People v. Centolella, supra*, 305 N.Y.S.2d at 463, "or on a track which the circumstances indicated to have been made by him." *Copley, supra*, 153 Tenn. at 195, 281 S.W. 460. *See also Terrell, supra*, 239 A.2d at 138; *McLeod, supra*, 146 S.E. at 411. . . .

(5) Placed within period of efficiency. The dog must be placed upon the trail within its period of efficiency, i.e., before rainstorms or the passage of time have weakened the scent beyond the point of reliability. *Copley, supra*, 153 Tenn. at 196-97, 281 S.W. 460; *People v. Centolella, supra*, 305 N.Y.S.2d at 463-64; *State v. Brown*, 103 S.C. 437, 88 S.E. 21, 23 (1916). . . .

Barger, 612 S.W.2d at 491-492. Based upon these factors, the *Barger* court ruled that the trial court had not erred when it admitted the scent-dog evidence. *Id.* Although our court found the evidence admissible in *Barger*, it suggested that the jury should be cautioned that the performance of the scent dog is not infallible, should not be given undue weight, and is not alone sufficient to convict. *Id.* at 492-93; *see also State v. Brewer*, 875 S.W.2d 298 (Tenn. Crim. App. 1993).⁵

A Wisconsin case recently addressing the admissibility of an HRD dog alert in the absence of other corroborating evidence, rejected the defendant's request that the admissibility of the HRD dog evidence be conditioned upon physical or forensic evidence corroborating the dog alerts. *State v. Bucki*, 947 N.W.2d 152, 155 (Wis. App. 2020). It held, instead, that "expert testimony regarding dog alerts, like all other expert testimony, may be admitted if the court concludes it satisfies the threshold reliability criteria in [Rule of Evidence 702] and is not otherwise excluded by [Rule of Evidence 403]." *Id.*

Multiple cases from several states have applied the standards for admissibility of expert testimony from tracking and trailing scent dogs to HRD dogs. In Alabama, the court of appeals applied the standard for trailing scent dogs to HRD dog evidence and found that the HRD dog evidence was reliable and admissible. *Dennis Morgan Hicks v. State*, 2019 WL 3070198, at *30-31 (Ct. Crim. App. Ala. July 12, 2019). In *People v. Lane*, 862 N.W.2d 446, 457 (Mich. App. 2014), the appellate court in Michigan applied the tracking dog reliability standard to HRD dogs and found the HRD dog alert evidence sufficiently reliable to be admissible. In *Trejos v. State*, the Texas court of appeals ruled that the trial court did

⁵ In this case, the trial court instructed the jury both during the dog handler testimony and at the conclusion of the trial as follows:

There are certain factors you need to determine. The performance of a scent dog is not infallible, and it should not be given undue weight and is not alone sufficient to convict or to even establish there was a crime. What you need to do is you need to look at four different factors while you're listening to this. That is, the training of the dog, the training of the handler, the circumstances of the alleged find or hit, if there is one, and whether there is other independent evidence that would either establish that there was a crime or connecting the defendant with it. So it's circumstantial evidence, and what weight you give it[,] is going to be up to you. . . .

not abuse its discretion when it determined that expert testimony on two cadaver dogs and their alerts to scent of human remains was reliable and admissible. 243 S.W.3d 30, 49-50 (Ct. App. Tx. 2007) (stating, “To determine whether the testimony describing the alerts by the cadaver dogs meets the third prong in *Nenno*, we must examine the (1) the qualifications of the particular trainer, (2) the qualifications of the particular dog, and (3) the objectivity of the particular cadaver search.”). In *Castillo v. Commonwealth*, the Virginia court of appeals applied the tracking and trailing scent dog standard to the alerts of HRD dogs. 827 S.W.2d 790, 812 (Ct. App. Va. 2019). It concluded that the same analysis that applied to trailing scent dogs applied to the admission of HRD dog evidence. *Id.* Further, it stated HRD “dog evidence does not require a scientific foundation for its admission; rather, the [HRD] dog evidence must be shown to be reliable from experience, which can be met through the testimony of the cadaver dog handler.” *Id.* Thus, it concluded, as with dog trailing evidence, HRD dog evidence may be admitted without a showing of its precise scientific basis. *Id.*

There are other courts in other states that have held that, as a categorical rule, dog scent evidence is too unreliable to admit under any circumstances. *Myers v. Superintendent, Ind. State Prison*, 410 F. Supp. 3d 958, 1000-04 (S.D. Ind. 2019) (predicating, as a matter of state law, that bloodhound tracking evidence, which had been inadmissible in Indiana prior to the adoption of the Indiana Rules of Evidence, would remain so); *see e. g., People v. Montano*, 77 N.E. 3d 114, 132-33 (Ill. App. 2017) (noting cases involving tracking scent dogs in Illinois and application to HRD dogs but concluding any admission in HRD dog evidence was harmless).

Tennessee law has not excluded dog scent evidence as unreliable and, as previously stated, the *Barger* court delineated a five-step standard for determining the reliability. We hold herein that the five-step standard for determining the reliability of tracking and trailing scent dogs articulated in *Barger* and *Brewer* is applicable to HRD dogs. In sum, we conclude that expert testimony about an HRD dog’s alert is sufficiently reliable under *Daubert* and *McDaniel* standard if the proponent of the evidence establishes the foundation that: (1) the dog is of a breed and type that is well-suited for HRD work;⁶ (2) the dog must have been accustomed and trained to alert to the scent of human remains; (3) the dog must be shown by experience to be reliable in detecting human remains; (4) the dog must have been taken to a location where a crime was known to have occurred or where there is circumstantial evidence to corroborate the dog’s alert; (5) the dog must be taken to the location or search the location within its period of efficiency.

⁶ We note that the “pure blood” requirement in *Brewer* is slightly modified. Other courts have held that given the keen olfactory sense of canines and the need of an HRD dog to distinguish between human and non-human decomposition rather than specific scents like a tracking and trailing canine, proof that the dog be of pure blood is not imperative. *See Trejos*, 243 S.W.3d at 52-53. We agree.

The Defendant contends that the trial court applied the improper standard when reviewing the expert testimony. He argues that the trial court rejected engaging in an analysis pursuant to *McDaniel* or *Daubert*, finding it “unnecessary” in light of the standard articulated in *Barger* and *Brewer*. We disagree. Both *Barger* and *Brewer* are cases involving scent dogs that specifically discussed the analysis a trial court should engage in pursuant to *McDaniel* and *Daubert*. Both *McDaniel* and *Daubert* govern the determination of the reliability of all expert testimony, and *Barger* and *Brewer* make that examination more specific to scent dogs. We conclude that these standards apply to the trial court’s determinations, and that the trial court in this case did not apply an incorrect standard.

The Defendant next contends that expert testimony about uncorroborated cadaver dog scent alerts must be excluded. The Defendant relies heavily on testimony from his expert, Carl Alexander, who said that HRD dogs may not be able to distinguish between items shed by humans every day, i.e. hair and blood, and human remains. The amicus curiae brief by The Innocence Project also takes issue with the lack of corroboration.

After review of the testimony, arguments, and briefs, none of it persuades this court that the trial court erroneously exercised its discretion when it deemed the canine scent evidence admissible. Neither *Daubert*, *McDaniel*, nor Tennessee Rules of Evidence 702 and 703 conditioned the admissibility of expert opinion testimony on it being unassailable. Several of the factors that may be considered clearly establish that something less than complete accuracy is acceptable. Where to draw that line is a decision to be made by the trial court in exercising its discretion after considering all the relevant factors. Any deficiencies in the theory, methodology, or application can be explored on cross-examination, and the jury can then give the opinion whatever weight it deems appropriate.

Having decided that expert testimony about HRD dog alerts is admissible under certain circumstances, and having decided that the trial court did not use an improper standard, we now turn to decide whether the trial court abused its discretion when it determined that the expert testimony in this case was admissible.

Dr. Carrillo and Cleo: Dr. Carrillo testified as an expert about the alerts of her HRD dog, Cleo. Cleo was a Belgium Malinois, a breed known for successful scent work. Cleo began training at eight weeks old and maintained her training for eight years before working on this case. Dr. Carrillo described Cleo’s training, beginning with larger, easier to find remains to smaller, hidden remains. Cleo was sometimes given nothing to find to maintain her training integrity. Cleo went to multiple seminars and was tested on a regular basis. She successfully passed the internal certification for the Maury County Sheriff’s Department and the Office of Emergency Management. Cleo was evaluated once per month and tested

“innumerable” times over the course of her training, which included multiple hours per week. Cleo had shown experience in detecting human remains, having recovered remains during twelve to fifteen different deployments and finding a body under fifty feet of water. Cleo was called to the last known place where the victim was located, her home, and she alerted on a rug in the victim’s bedroom and on the drain of the bathtub. Cleo was also asked to examine three cars in a lineup, one of which belonged to the Defendant. Cleo alerted to the trunk of the Defendant’s car.

Corroborating evidence presented included that the Defendant told two other people that he had strangled the victim with a cord in her bedroom and then placed her in the bathtub. He said that he later took her body to a pig farm where he placed it in a grinder and fed it to the pigs. The Defendant was untruthful with the school principal about his whereabouts and why he was late to pick up T.C. He admitted to being at the Oak Vale Home before going to pick up T.C., and the victim sent a text saying that the Defendant was at her home and that the two were arguing. The Defendant brought T.C. back to the Oak Vale Home, and he went inside, which was unusual. He stayed in the home until dark, not allowing T.C. or his friend to use the bathroom, saying that it was not in working order. After dark, the Defendant then told T.C. to go sit in the car and he carried something and placed it into the trunk of the car. The victim’s neighbor later saw a man matching the Defendant’s description carrying a heavy duffle bag from the victim’s home to a car.

In addition, the alerts of the four dogs each corroborated each other. None of the dogs saw each other search, yet all alerted to the same area rug in the bedroom. Three of four alerted strongly to the drain in the bathtub. The fourth dog acted in a manner that the handler felt was an alert to the bathtub, and she asked the law enforcement officer to investigate that further. None alerted to the kitchen, T.C.’s bedroom, or any other area of the home. All three dogs who searched the vehicles in the lineup alerted to the presence of human remains in the Defendant’s trunk.

Finally, as to the last factor to be considered, each dog was taken to the search location where the conditions had been preserved for the search (namely the windows left closed, the heat and air turned off, etc.).

In sum, we conclude that the trial court did not abuse its discretion when it determined that the Dr. Carrillo’s expert testimony about Cleo’s alerts was sufficiently reliable under the standards as set forth in *Daubert*, *McDaniel*, *Barger*, and *Brewer*.

Ms. Grauberger and Jackson: Jackson was a hound/Rottweiler mix. Both hounds and Rottweiler’s are known for being good at scent work. Ms. Grauberger had worked with several live-find and HRD dogs in her career. She began training Jackson at three months

old and did not feel confident to deploy him until he was two years old. She and Jackson trained four to eight hours per week and then additionally at home. The two had been to numerous seminars, and Jackson had received certifications from multiple organizations.

Jackson's training involved identifying human remains in large and small quantities in varying locations. He was trained to alert to the presence of human remains, and Ms. Grauberger trained extensively with him to recognize and understand his alerts. Jackson was first deployed after the tornado in 2008, and he found two bodies. Since, he had successfully found other victims.

When taken to the Oak Vale Home, Jackson searched the house off lead. He first searched the front rooms, offering no alert, and then he went into the victim's bedroom, alerting to the presence of human remains on an area rug by her bed. Jackson also indicated that there was a high concentration of cadaver scent in the bathroom. As for the search of the Defendant's vehicle in the vehicle lineup, he quickly alerted to the trunk of the Defendant's vehicle.

We note that the same corroboration for Jackson's alert existed and that the same conditions in the Oak Vale Home were present, as he searched the home on the same day as the other dogs.

We conclude that the trial court did not abuse its discretion when it determined that the Ms. Grauberger's expert testimony about Jackson's alerts was sufficiently reliable under the standards as set forth in *Daubert*, *McDaniel*, *Barger*, and *Brewer*.

Ms. Allen and Libby: Libby was a Belgian Malinois, a breed known for scent work. Ms. Allen, who had previously owned two HRD dogs, began Libby's training at six months old. Ms. Allen described Libby's incremental training and stated that she and Libby still trained two times per week every week. Libby had received certificates from multiple HRD organizations after multiple trainings. Ms. Allen testified that, on multiple occasions when deployed, Libby had successfully alerted to a deceased body and/or body part.

Ms. Allen said that Libby went to the Oak Vale Home, and she did not alert to the entryway, kitchen, or living area. Libby then went to the bedroom and alerted on an area rug by the bed. Libby went to the bathroom and alerted to the tub, indicating that the largest pool of scent was toward the drain.

We note that the same corroboration for Libby's alerts existed and that the same conditions in the home were present, as she searched the Oak Vale Home on the same day as the other dogs.

We conclude that the trial court did not abuse its discretion when it determined that the Ms. Allen's expert testimony about Libby's alerts was sufficiently reliable under the standards as set forth in *Daubert, McDaniel, Barger, and Brewer*.

Ms. Douglas and Dakota: Dakota was a Dutch Shepherd, a breed known as being good for multiple aspects of police work, including scent work. Ms. Douglas described Dakota's extensive training and that he still trained sixteen hours per month. Dakota trained with and worked with several organizations. Dakota was recertified every year by the North American Police Working Dog Association. Ms. Douglas said that, from training, seminars, and past experience, Dakota had proven to be a reliable dog. The two had worked together extensively, and Ms. Douglas had modified Dakota's original alert, a bark, to a sit. He was trained to sit when he found the scent of human remains.

Ms. Douglas said that she searched the Oak Vale Home on the same day as the other dogs. Dakota searched off lead, and did not alert to the kitchen, living area, entry, or T.C.'s bedroom. Dakota went into the victim's bedroom, and he sat near an area rug in the bedroom, meaning he alerted to the presence of human remains there. He then went to the bathroom, jumped into the bathtub, and barked at the drain. Ms. Douglas said that, since she had modified Dakota's alert, this behavior did not qualify as an alert. She said, however, that in the presence of a strong scent of human remains, Dakota may have reverted to his original alert. She informed the law enforcement officer present that, while this was not considered a positive alert, the officer should check the bathtub and the drain because Dakota's behavior was unusual.

We note that the same corroboration for Dakota's alerts existed and that the same conditions in the home were present, as he searched the home on the same day as the other dogs.

We conclude that the trial court did not abuse its discretion when it determined that the Ms. Douglas's expert testimony about Dakota's alerts was sufficiently reliable under the standards as set forth in *Daubert, McDaniel, Barger, and Brewer*.

The trial court heard evidence as to the qualifications and training of the HRD dog handler, the training of the dog itself, and the circumstances surrounding the search and the dog's scent identification. This evidence established a proper foundation for the admission of the HRD dog evidence. Therefore, we hold that the trial court did not abuse its discretion when it admitted the expert testimony regarding the HRD dog evidence.

After reviewing the law, we conclude that there should be no requirement of corroboration of the dog's alerts with chemical evidence. This holding comports with cases from other states. *See e.g., Lane*, 862 N.W.2d at 56. With sufficient corroboration from other evidence aside from chemical evidence, as exists in this case, with an opportunity for cross-examination, and with a properly instructed jury, the dogs' alerts provide a valuable piece of circumstantial evidence.

As a final argument on this subject, the Defendant contends that the probative value of the HRD evidence outweighs the unfair prejudice of its admission. We disagree. The trial court instructed the jury on multiple occasions about how it should consider the HRD dog evidence and how to determine what weight it should be given. The law in Tennessee is that a jury is generally presumed to follow a trial court's instructions. *State v. Jordan*, 325 S.W.3d 1, 55 n.12 (Tenn. 2010); *see State v. Brandon Churchman*, No. W2013-00175-CCA-R3-CD, 2014 WL 12651043, at *11 (Tenn. Crim. App., at Jackson, Apr. 28, 2014) (the jury was presumed to follow the trial court's instructions regarding prejudicial evidence offered not for the truth of the matter asserted but for its effect on law enforcement's investigation), *no Tenn. R. App. P. 11 application filed*.

Accordingly, we conclude that the trial court did not abuse its discretion when it admitted the expert testimony from the HRD dog handlers. The Defendant is not entitled to relief on this issue.

B. Sufficiency of Evidence

The Defendant contends that the State failed to prove the *corpus delicti* of the crime because there was insufficient proof that the victim was dead or that the Defendant caused her death. The State counters that there was sufficient evidence to support his conviction. We agree with the State.

When an accused challenges the sufficiency of the evidence, this court's standard of review is whether, after considering the evidence in the light most favorable to the State, "any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt." *Jackson v. Virginia*, 443 U.S. 307, 319 (1979); *see Tenn. R. App. P. 13(e); State v. Goodwin*, 143 S.W.3d 771, 775 (Tenn. 2004) (citing *State v. Reid*, 91 S.W.3d 247, 276 (Tenn. 2002)). This standard applies to findings of guilt based upon direct evidence, circumstantial evidence, or a combination of both direct and circumstantial evidence. *State v. Pendergrass*, 13 S.W.3d 389, 392-93 (Tenn. Crim. App. 1999) (citing *State v. Dykes*, 803 S.W.2d 250, 253 (Tenn. Crim. App. 1990)). In the absence of direct evidence, a criminal offense may be established exclusively by circumstantial evidence. *Duchac v. State*, 505 S.W.2d 237, 241 (Tenn. 1973). "The jury decides the weight to be

given to circumstantial evidence, and “[t]he inferences to be drawn from such evidence, and the extent to which the circumstances are consistent with guilt and inconsistent with innocence, are questions primarily for the jury.” *State v. Rice*, 184 S.W.3d 646, 662 (Tenn. 2006) (quoting *Marable v. State*, 313 S.W.2d 451, 457 (Tenn. 1958)). “The standard of review [for sufficiency of the evidence] ‘is the same whether the conviction is based upon direct or circumstantial evidence.’” *State v. Dorantes*, 331 S.W.3d 370, 379 (Tenn. 2011) (quoting *State v. Hanson*, 279 S.W.3d 265, 275 (Tenn. 2009)).

In determining the sufficiency of the evidence, this court should not re-weigh or reevaluate the evidence. *State v. Matthews*, 805 S.W.2d 776, 779 (Tenn. Crim. App. 1990). Nor may this Court substitute its inferences for those drawn by the trier of fact from the evidence. *State v. Buggs*, 995 S.W.2d 102, 105 (Tenn. 1999) (citing *Liakas v. State*, 286 S.W.2d 856, 859 (Tenn. 1956)). “Questions concerning the credibility of witnesses, the weight and value to be given the evidence, as well as all factual issues raised by the evidence are resolved by the trier of fact.” *State v. Bland*, 958 S.W.2d 651, 659 (Tenn. 1997). “A guilty verdict by the jury, approved by the trial judge, accredits the testimony of the witnesses for the State and resolves all conflicts in favor of the theory of the State.” *State v. Grace*, 493 S.W.2d 474, 476 (Tenn. 1973). The Tennessee Supreme Court stated the rationale for this rule:

This well-settled rule rests on a sound foundation. The trial judge and the jury see the witnesses face to face, hear their testimony and observe their demeanor on the stand. Thus the trial judge and jury are the primary instrumentality of justice to determine the weight and credibility to be given to the testimony of witnesses. In the trial forum alone is there human atmosphere and the totality of the evidence cannot be reproduced with a written record in this Court.

Bolin v. State, 405 S.W.2d 768, 771 (Tenn. 1966) (citing *Carroll v. State*, 370 S.W.2d 523, 527 (Tenn. 1963)). This court must afford the State of Tennessee the ““strongest legitimate view of the evidence”” contained in the record, as well as ““all reasonable and legitimate inferences”” that may be drawn from the evidence. *Goodwin*, 143 S.W.3d at 775 (quoting *State v. Smith*, 24 S.W.3d 274, 279 (Tenn. 2000)). Because a verdict of guilt against a defendant removes the presumption of innocence and raises a presumption of guilt, the convicted criminal defendant bears the burden of showing that the evidence was legally insufficient to sustain a guilty verdict. *State v. Carruthers*, 35 S.W.3d 516, 557-58 (Tenn. 2000) (citations omitted). This standard is identical whether the conviction is predicated on direct or circumstantial evidence. *State v. Casper*, 297 S.W.3d 676, 683 (Tenn. 2009); *State v. Brown*, 551 S.W.2d 329, 331 (Tenn. 1977). In the absence of direct evidence, a criminal offense may be established entirely by circumstantial evidence. *State v. Majors*, 318 S.W.3d 850, 857 (Tenn. 2010) (citing *Duchac* 505 S.W.2d at 241; *Marable*, 313 S.W.2d at 456-58).

The State must still prove the *corpus delicti* beyond a reasonable doubt. *State v. Shepherd*, 902 S.W.2d 895, 901 (Tenn. 1995). *Corpus delicti*, meaning literally “the body of the crime,” consists of two elements: (1) the death of a human being; and (2) a criminal agency in producing that death. *State v. Driver*, 634 S.W.2d 601 (Tenn. Crim. App. 1981); *see also State v. Ellis*, 89 S.W.3d 584, 600 (Tenn. Crim. App. 2000). In establishing the *corpus delicti*, the State may proffer testimony of an eyewitness to the act or rely purely on circumstantial evidence. *Berry v. State*, 523 S.W.2d 371, 373 (Tenn. Crim. App. 1974). Regardless of the State’s method, the evidence must show that death or disappearance was not occasioned by accident, suicide, or natural causes. *Shepherd*, 902 S.W.2d at 901 (citing *Davis v. State*, 445 S.W.2d 933, 936 (Tenn. Crim. App. 1969)). “Whether the [S]tate has sufficiently established the *corpus delicti* is primarily a jury question.” *State v. Jones*, 15 S.W.3d 880, 891 (Tenn. Crim. App. 1999).

In this case, we conclude that the jury did not err when it found that the State had proven the *corpus delicti* of the murder and that the Defendant was the perpetrator of that murder. The first issue is whether the State proved that the victim was dead, and we believe that the evidence supports the jury’s conclusion that she was deceased. The victim was in close contact with several people before the time of her disappearance, including her boyfriend and best friend. She exchanged multiple communications with them daily, she had plans to see Ms. Lamoreaux that weekend and to move in with Mr. Henry. The victim was at her son’s school the day of her disappearance and appeared “happy.” The victim’s keys, car, and dogs were all left at her house. The car contained her purse, in which law enforcement officers found her social security card and other important documentation. The victim never logged into her email or tried to access her bank account after she disappeared.

The victim sent Ms. Lamoreaux a text saying that the Defendant was at her home the day of her disappearance and being a “dick.” The Defendant told the school he was late picking up his son because he was coming straight from Knoxville. After getting T.C., the Defendant told him that the victim had left with Ms. Lamoreaux. The Defendant went into the Oak Vale Home, which was unusual, and he remained there until dark, telling T.C. it was not time to leave. He would not allow T.C. or his friend to enter the bathroom. After dark, the Defendant put the victim in his car, which was backed into the victim’s driveway, and he returned to the home several times to retrieve items. The Defendant then took T.C. to the Defendant’s mother’s house for the weekend.

The Defendant told a previous girlfriend that he would have the perfect alibi if he killed the victim because he would say that she returned to drug use, as she had issues with addiction. When police arrived and asked about the victim’s whereabouts, he told police that he believed that the victim probably returned to drug use and or prostitution and left.

After his arrest, the Defendant told other inmates that he had used brass knuckles to hit the victim in the head and then used a cord to strangle her to death. He said this occurred in the victim's bedroom and then he placed her body in the bathtub. He expressed concern that, while he had cleaned the brass knuckles, he had left them and the cord in the victim's bedroom. Law enforcement officers found brass knuckles and a cord in the bedroom. HRD dogs alerted to the presence of human remains on a rug in the bedroom and also in the bathtub in the bathroom.

The Defendant also told the inmates that he took the body to a farm where he put it in a grinder and fed it to pigs. The victim's neighbor saw the Defendant and another person late at night retrieving a heavy duffle bag and placing it in the trunk of the Defendant's vehicle. HRD dogs alerted to the presence of human remains in the Defendant's trunk.

We conclude that the evidence is sufficient to sustain the jury's verdict finding the Defendant guilty of premeditated first-degree murder. The evidence proves the *corpus delicti* of the offense, namely that the victim is dead and the Defendant acted in the criminal agency that resulted in her death. The Defendant is not entitled to relief on this issue.

C. Potentially Tainted Testimony

The Defendant next contends that the trial court erred when it admitted testimony from a witness, Mr. McCavanagh, identifying him in court because such testimony was tainted. He asserts that he did not learn until right before trial that Mr. McCavanagh would identify the Defendant as being the man who Mr. McCavanagh saw late during the evening the Saturday after the victim's disappearance. At the bond hearing, Mr. McCavanagh had said he could not identify anyone. The Defendant asked for a pretrial hearing on the matter, and the trial court denied his request. He asserts first that the trial court erred by not holding a pretrial hearing and next that the trial court erred when it did not allow him to impeach Mr. McCavanagh with a video tape recording of Mr. McCavanagh's interview with police.

This court has recognized that a violation of due process may occur in a suggestive identification procedure even in the earliest stages of a criminal investigation. In deciding whether there has been a violation, the court must view the "totality of circumstances." *State v. Chapman*, 724 S.W.2d 378, 380 (Tenn. Crim. App. 1986) (citing *Stovall v. Denno*, 388 U.S. 293, 302 (1967)); *State v. Beal*, 614 S.W.2d 77, 82 (Tenn. Crim. App. 1981). Due process has been violated if the court finds that the identification procedure was so suggestive as to give rise to "a very substantial likelihood of irreparable misidentification." *Simmons v. United States*, 390 U.S. 377, 384 (1968). Where a witness's in-court identification is tainted by an unconstitutional pretrial identification, then the in-court

identification is not admissible in evidence. *State v. Shanklin*, 608 S.W.2d 596, 598 (Tenn. Crim. App. 1980); *Holt v. State*, 591 S.W.2d 785 (Tenn. Crim. App. 1979); *Sloan v. State*, 584 S.W.2d 461 (Tenn. Crim. App. 1978).

In this case, the witness, Mr. McCavanagh, did not identify the Defendant when shown pictures by police. Mr. McCavanagh then saw the Defendant on television and noted that his appearance mirrored that of the man he saw on the night at the Oak Vale Home. He noted that the Defendant's appearance had changed from the pictures that the police had shown him, which were taken some length of time before the victim went missing. Once Mr. McCavanagh saw the Defendant, and his movements, on television, he became confident that the Defendant was the man he had seen during that night at the Oak Vale Home. The Defendant contends that Mr. McCavanagh's identification was "suggestive" and cites case law related to when law enforcement officers engage in practices that lead to a suggestive identification of a defendant. *See i.e., Neil v. Biggers*, 409 U.S. 188 (1972).

The United States Supreme Court has emphasized that "due process concerns arise only when law enforcement officers use an identification procedure that is both suggestive and unnecessary," and only if the eyewitness's identification "is tainted by police arrangement." *Perry v. New Hampshire*, 565 U.S. 228, 238 (2012) (no law enforcement arrangement where witness saw defendant talking to police officer in parking lot and spontaneously identified him) (citing *Manson v. Brathwaite*, 432 U.S. 98, 107-09 (1977), and *Biggers*, 409 U.S. at 198).

In *State v. Martin*, 505 S.W.3d 492, 500-01 (2016), our supreme court addressed a similar issue and held:

Trial judges are not required "to prescreen eyewitness evidence for reliability any time an identification is made under suggestive circumstances." *Perry [v. New Hampshire]*, 565 U.S. 228, 240 (2012)]. "[T]he due process check for reliability . . . comes into play only after the defendant establishes improper police conduct [because the] very purpose of the check . . . was to avoid depriving the jury of identification evidence that is reliable, notwithstanding improper police conduct." *Id.* at 726 (emphasis in original) (citing [*Manson v. Brathwaite*, 432 U.S. 98, 112-13 (1977)]). The Court in *Perry* explained that the rationale behind the rule is deterrence of police misconduct: "A primary aim of excluding identification evidence obtained under unnecessarily suggestive circumstances . . . is to deter law enforcement use of improper lineups, showups, and photo arrays in the first place." *Id.* (citing *Brathwaite*, 432 U.S. at 112 . . .). Therefore, unless the defendant establishes "the taint of improper state conduct," the trial court need not screen eyewitness

identification evidence before allowing the jury to assess it. *Id.* at 728. The same is true under the Due Process Clause of the Tennessee Constitution. *See State v. Reid*, 91 S.W.3d 247, 272 (Tenn. 2002) (no state action where witness identified defendant from television coverage) (“In the absence of state action in the identification process, constitutional due process rights are not implicated.”).

We conclude that the trial court did not err when it did not hold a hearing to determine whether Mr. McCavanagh’s identification was made under unduly suggestive circumstances. Mr. McCavanagh did not identify anyone from the two line-ups shown to him by police, a fact brought out by the defense during the cross-examination. Further, his identification was made after seeing the Defendant on television. As in *Reid*, we conclude that there was no state action where a witness identified the defendant from television. *See id.* Accordingly, we conclude the trial court did not err in this regard.

The Defendant further contends that the trial court erred when it refused to allow him to pause the trial to allow the defense to get an audio person to come and hook up computer equipment with which he could play Mr. McCavanagh’s interview with police to impeach him about his statement to police about whether the Defendant had facial hair. Importantly, the trial court did not rule that the Defendant could not present this evidence, it simply said that it would not pause the trial for this evidence to be presented. The Defendant retained the right to recall witnesses, a fact about which the trial court specifically informed the Defendant. The Defendant chose not to recall Mr. McCavanagh, and he cannot now assign error to the trial court for his failure to do so. *See* Tenn. R. App. P. 36(a) (a party is not entitled to relief if the party failed to take whatever action was reasonably available to prevent or nullify the harmful effect of an error).

D. Defense Proof

The Defendant contends that the trial court erred when it excluded defense proof. He asserts that the trial court improperly excluded the following evidence: (1) evidence that would explain how his fellow inmates knew facts about the case; (2) a photograph of the victim with brass knuckles to explain why they were found in her bedroom; (3) proof that the victim was engaged in dangerous sexual activities as alternative causes of death; (4) evidence of favorable treatment of the fellow inmates; and (5) cross-examination of Ms. Himes about whether she falsely accused the Defendant of hiring her neighbor to rape her. The State counters that the trial court did not err.

Generally, “[a]dmission of evidence is entrusted to the sound discretion of the trial court, and a trial court’s ruling on evidence will be disturbed only upon a clear showing of

abuse of discretion.” *State v. Robinson*, 146 S.W.3d 469, 490 (Tenn. 2004). The Tennessee Rules of Evidence provide that all “relevant evidence is admissible,” unless excluded by other evidentiary rules or applicable authority. Tenn. R. Evid. 402. Of course, “[e]vidence which is not relevant is not admissible.” *Id.* Relevant evidence is defined as evidence “having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.” Tenn. R. Evid. 401. Even relevant evidence, however, “may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.” Tenn. R. Evid. 403.

Although “[p]rinciples of due process require that a defendant in a criminal trial have the right to present a defense and to offer testimony” favorable to his cause, *State v. Flood*, 219 S.W.3d 307, 316 (Tenn. 2007) (citing *Chambers v. Mississippi*, 410 U.S. 284, 294 (1973); *State v. Brown*, 29 S.W.3d 427, 431 (Tenn. 2000)), that right is not without limits. *see Flood*, 219 S.W.3d at 316 (citing *Chambers*, 410 U.S. at 302). Indeed, the Supreme Court has observed that “[i]n the exercise of this right, the accused, as is required of the State, must comply with established rules of procedure and evidence[.]” *Chambers*, 410 U.S. at 302. “So long as the rules of procedure and evidence are not applied arbitrarily or disproportionately to defeat the purposes they are designed to serve, these rules do not violate a defendant’s right to present a defense.” *Flood*, 219 S.W.3d at 316 (citing *United States v. Scheffer*, 523 U.S. 303, 308 (1998); *Holmes v. South Carolina*, 547 U.S. 319 (2006); *Chambers*, 410 U.S. at 302). To determine whether a particular evidentiary ruling has violated a defendant’s constitutional right to present a defense, a reviewing court must consider:

- (1) Whether the excluded evidence is critical to the defense;
- (2) Whether the evidence bears sufficient indicia of reliability; and
- (3) Whether the interest supporting exclusion of the evidence is substantially important.

Flood, 219 S.W.3d at 316 (citations omitted); *see also State v. Ackerman*, 397 S.W.3d 617, 633 (Tenn. Crim. App. 2012).

The Defendant first contends that the trial court erred when it excluded evidence establishing how the two men incarcerated with him knew about the details of the crime from a source other than him. The Defendant sought to introduce an attorney, Mr. Thomas, who would review the interviews of the two men incarcerated with the Defendant, review

the discovery materials in the Defendant's possession, and investigate information about the case available online and then testify about whether the inmates could have fabricated their stories. First, there was no evidence that the inmates saw the Defendant's discovery. They both testified, and the Defendant had the opportunity to cross-examine them. Further, as the trial court noted, there was no way for Mr. Thomas to know what discovery materials the Defendant had in his possession at the time that he was incarcerated with the other men, making this testimony speculative. Finally, as the trial court stated, there was no way to ascertain which news articles were published before the Defendant allegedly made his statements to the inmates. The trial court did not abuse its discretion when it did not allow Mr. Thomas to testify.

In further support of this holding, we note that the trial court allowed the Defendant to cross-examine both inmates about all of these issues, which he did. The trial court allowed him to bring in an investigator to testify that there were news articles detailing that the victim may have been strangled by a string or a cord. It did not err in making other limitations to this testimony.

The Defendant next contends that the trial court erred when it denied his request to admit a photograph of the victim with brass knuckles to explain why brass knuckles were found in her bedroom. Importantly, investigators testified that the brass knuckles depicted in the photograph were different from the ones they found in her bedroom. The trial court ruled that the photograph was misleading and speculative. We conclude that the trial court did not abuse its discretion in this regard.

The Defendant asserts that the trial court erred when it granted the State's motion *in limine* to exclude proof that the victim was engaged in dangerous sexual activities as alternative causes of death. The Defendant sought to introduce evidence that the victim had emails indicating that she may have engaged in prostitution and bondage and that she participated on a sex-related website that contained cautionary disclaimers to users about safety. He further sought to include evidence from a medical examiner about "causes of death and manners of death."

We agree with the trial court that the Defendant sought to introduce a collection of unauthenticated texts and emails in an attempt to show that an unidentified suspect other than the Defendant may have killed the victim or that the victim had chosen to disappear. The trial court stated that the defense was "speculative at best" and the evidence did not implicate any identifiable alternative suspect. The trial court found that the defense had not proven that the information was reliable or that it was admissible hearsay. We agree and conclude that the trial court did not abuse its discretion in this regard.

Further, we conclude that any evidence by the medical examiner would not be relevant. The Defendant sought to show that there were other potential causes of death with no proof that any of them occurred. The trial court was within its discretion when it excluded this evidence. The Defendant is not entitled to relief on this issue.

The Defendant next contends that the trial court erred when it limited his cross-examination of one of the two inmates. He asserts that he wanted to cross-examine Mr. Belcher about his release on his own recognizance related to a probation violation charge. The trial court ruled that this evidence was not relevant, and we agree. The trial court ruled that there was no proof that the State knew, or influenced, Mr. Belcher's release in any capacity. The Defendant said he would attempt to ascertain if there was any such proof, and he never did so. The Defendant chose not to present proof that the State knew of or influenced Mr. Belcher's release, and he cannot now assign error to the trial court for his failure to do so. *See* Tenn. R. App. P. 36(a) (a party is not entitled to relief if the party failed to take whatever action was reasonably available to prevent or nullify the harmful effect of an error). The Defendant is not entitled to relief on this issue.

The Defendant finally contends that the trial court erred when it limited his cross-examination of Ms. Himes. He sought to introduce evidence that she had previously accused him of hiring her neighbor to rape her. The trial court ruled that this evidence was not relevant. We agree. Pursuant to Rule 401, evidence is deemed relevant if it has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." *See Forbes*, 918 S.W.2d at 449 (quoting Tenn. R. Evid. 401). In other words, "evidence is relevant if it helps the trier of fact resolve an issue of fact." *State v. James*, 81 S.W.3d 751, 757 (Tenn. 2002) (citing NEIL P. COHEN, ET AL., TENNESSEE LAW OF EVIDENCE § 4.01[4], at 4-8 (4th ed. 2000)). The evidence of any potential past allegation made by Ms. Himes would not help the jury resolve an issue of fact. The Defendant is not entitled to relief on this issue.

III. Conclusion

In accordance with the aforementioned reasoning and authorities, we affirm the judgment of the trial court.

ROBERT W. WEDEMEYER, JUDGE