

IN THE COURT OF CRIMINAL APPEALS OF TENNESSEE
AT NASHVILLE
June 22, 2011 Session

STATE OF TENNESSEE v. JEROME SIDNEY BARRETT

**Appeal from the Criminal Court for Davidson County
No. 2008-B-1791 Steve Dozier, Judge**

No. M2009-02636-CCA-R3-CD - Filed July 13, 2012

The Defendant, Jerome Sidney Barrett, was found guilty by a Davidson County Criminal Court jury of second degree murder, a Class A felony, for a 1975 homicide. See T.C.A. § 39-2403 (1975) (amended 1979, 1985) (renumbered at § 39-2-211) (repealed 1989). He was sentenced to forty-four years, to be served consecutively to a life sentence for a previous conviction. On appeal, he contends that: (1) the evidence is insufficient to support the conviction; (2) the trial court erred in denying his motion to suppress; (3) the trial court erred in denying his motion to dismiss the prosecution due to excessive pre-indictment delay; (4) the trial court erred in admitting evidence that the Defendant stated he “had killed before”; (5) the trial court erred in allowing the State to ask a defense witness whether he was arrested, suspended, and had resigned from the police force in 1978; (6) the trial court erred in allowing the forensic pathologist who performed the victim’s autopsy to testify as an expert in DNA analysis; (7) the trial court erred in permitting impeachment of a defense witness with evidence of a misdemeanor conviction; (8) the trial court erred in imposing a forty-four year sentence; and (9) the trial court erred in ordering the sentence to be served consecutively to the Defendant’s life sentence. We affirm the judgment of the trial court.

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

JOSEPH M. TIPTON, P.J., delivered the opinion of the court, in which THOMAS T. WOODALL and CAMILLE R. MCMULLEN, JJ., joined.

Dawn Deaner, District Public Defender; Jeffrey Devasher and James McNamara (on appeal), and Aimee Solway and Laura Dykes, (at trial), Assistant Public Defenders, Nashville, Tennessee, for the appellant, Jerome Sidney Barrett.

Robert E. Cooper, Jr., Attorney General and Reporter; Rachel West Harmon, Assistant Attorney General; Victor S. (Torry) Johnson, III, District Attorney General; and Tom

Thurman, Katy Miller, and Rachel Sobrero, Assistant District Attorneys General, for the appellee, State of Tennessee.

OPINION

This case relates to the murder of Marcia Trimble. Virginia Trimble Ritter,¹ the victim's mother, testified that on February 25, 1975, she lived on Copeland Drive in Davidson County. She said her daughter was born on March 28, 1965, and was in the fourth grade at the time of her disappearance and death. She said that she allowed the victim to sell Girl Scout cookies in their neighborhood and that the victim sometimes did so alone. She said that the victim was allowed to eat fruit after school and that on the day of the victim's disappearance, the victim may have eaten a small donut.

Ms. Trimble testified that the victim left her home about 5:20 p.m. on February 25, 1975, to deliver cookies to Marie Maxwell, a neighbor who lived diagonally across the street. She said the victim had about twenty dollars with her. The victim was wearing a blue checked blouse, blue jeans, white socks, and black patent leather boots, but was not wearing a coat. She said that around 5:45 p.m., she went outside to call the victim. She said she saw the victim's dogs sitting in Ms. Howard's yard across from her driveway and knew that the victim was on that side of the street. She said that the victim always came home when called but that the victim did not respond on February 25. She said that she called Ms. Maxwell to inquire about the victim's whereabouts and that afterwards, her husband and son drove around the neighborhood searching for the victim. She said she went to the backyard and called for the victim.

Ms. Trimble testified that her husband called a police officer, Sergeant Sherman Nickens, who was an acquaintance. She said a police officer came to their home and completed a missing person report. She said that "everybody in the community" searched for her daughter that night and that there were aerial searches using helicopters. She said that the victim's disappearance received media attention and that various law enforcement agencies established a command post in their home for about ten days. She said a \$30,000 reward was established with funds from her family, a newspaper, and the governor.

Ms. Trimble testified that the victim's body was found on March 30. She said that when they came home from church that day, the police chief and Sergeant Nickens were waiting to give them the news. She said her family was acquainted through the neighborhood with the family that owned the garage where the victim's body was found. She identified a

¹Although she remarried after Mr. Trimble's death, she said she preferred to be called Ms. Trimble.

photograph of the victim that was taken a few days before the victim's disappearance, in which the victim wore the same blouse as she wore when she disappeared.

Ms. Trimble identified an aerial photograph of their neighborhood. She marked the locations of her home, the victim's school, a second school, a landscaping nursery, the house where the victim's body was found in a detached garage, and a vacant lot where neighborhood children played.

On cross-examination, Ms. Trimble said that one of the victim's male classmates walked around the neighborhood with the victim while the victim sold cookies earlier that afternoon and that the classmate then played basketball with the victim's twelve-year-old brother and at least two other boys. Although she did not remember receiving a telephone call before the victim left home the second time, she acknowledged that there was discussion of a telephone call during a 1975 hypnosis session to which she submitted at the request of the authorities. She said the victim's father, who was deceased at the time of the trial, thought the victim left the house around 5:30 p.m. She thought it was between 5:20 p.m. and 5:30 p.m. She said she called for the victim to come home for dinner at 5:45 p.m. She acknowledged that although there were pears in the house, she did not see the victim eat a pear on February 25.

Ms. Trimble testified that when she called Ms. Maxwell about 6:00 p.m., Ms. Maxwell said the victim had not been to the Maxwell home. She said Ms. Maxwell thought she saw the victim by the hedge in Ms. Howard's driveway. She said the police were notified between 7:00 p.m. and 7:30 p.m. She did not recall telling investigators that she did not see the dogs when she first went outside to look for the victim. She did not recall telling them that she instructed the victim's brother not to call the dogs because they were with the victim. She said that within a week, her family paid to have tracking dogs brought from Philadelphia to assist in the search for the victim.

Harry Moffett testified that he was thirty-three years old in 1975 and that he was visiting his in-laws, the Thorpes, for Easter on March 30, 1975. He said there were six adults and eight children staying in the Thorpe home that weekend. Mr. Moffett said that the family attended an early church service that morning and that he went to the Thorpes' garage, which was a detached storage building about twenty feet from the house. He said that he went to the garage to get a tire and an outboard motor and that as he looked at the tires stored in the garage, he saw the victim's body. He said that he had his brother-in-law, John Ed Fuller, come to the garage and that Mr. Fuller touched the victim with a broom handle to see if she was plastic. He said neither of them made any other contact with the body. He said he did not smell decomposition. The police were called. Mr. Moffett identified a photograph of the garage and the locations of the victim's body and various items in the garage.

On cross-examination, Mr. Moffett testified that he did not have to move anything to see the victim's body. He said that he never came closer than a few feet and that he could see the victim's body after he stepped outside the garage. He said that other than a tire he moved, the police saw the garage exactly as he found it.

Retired Metropolitan Police Captain Thomas Cathey testified that he was a detective in the homicide and armed robbery sections in March 1975. He said that he was not involved in the initial investigation of the victim's disappearance but that he responded when the victim's body was discovered on March 30 and took charge of the scene. He said the garage where the body was found was open-ended without doors. He had the garage secured and wood planks laid to cover the dirt floor. He identified photographs of the garage. He said that the victim was well-concealed in the garage and that he could not see her until he was within three feet of her body. He said a greenish glass jar and a large cardboard box were on top of the victim. He identified a form, an empty money envelope, and boxes of cookies near her. He identified a diagram showing the victim in the back left corner of the rectangular garage.

Mr. Cathey testified that Officer Carol Lawrence of the Youth Guidance Division recorded notes of his collection of evidence and measurements of the scene. He said he wore rubber gloves. He said that he and Sergeant Jimmy Vaughn moved the body to a table in the garage after covering the table with a sheet provided by a funeral home. After the body was on the table, he removed the victim's clothing except for her panties and collected it as evidence. He said the victim's clothing was in place, including the snaps on the victim's jeans. He cut the blouse in order to remove it. He said the evidence "was placed in the ID unit . . . outside the garage." He identified the victim's clothing, which he had sent to the FBI for analysis. He said that fingerprints collected from the scene were not useful for identification purposes.

Mr. Cathey testified that the victim's body was placed in a "crash bag" and taken to a funeral home. He said that the normal procedure in 1975 was for examination of a body to take place at a funeral home and that he observed the post-mortem examination conducted by Dr. Michael Petrone and took notes. He said Dr. Petrone conducted a vaginal examination. He said the victim's body was flown to Memphis on a state-owned airplane for further examination by Dr. Jerry Francisco, the state medical examiner.

On cross-examination, Mr. Cathey testified that he supervised the homicide unit in 1975. He agreed Detective Tommy Jacobs was the lead detective assigned to the victim's case and said Detective Jacobs and Sergeant R.C. Jackson were at the victim's home on the night she disappeared.

Mr. Cathey testified that he took extreme care in collecting the evidence and that his goal was for the evidence to be touched only by him. He said that most of the evidence was placed in paper bags, although some evidence might have been placed in plastic bags. He said the unopened boxes of cookies were between the body and the side wall of the garage. He said that after the body was moved, he could see that it had been on top of stacked bags of fertilizer and mulch. He said that although the bags were not initially collected, he had samples taken from them, and that the bags were eventually collected. He said he accompanied the body to the funeral home and to Memphis to maintain the integrity of the evidence. He said that in 1975, Nashville's medical examiners were physicians but not forensic pathologists and that Dr. Francisco was a forensic pathologist. He said he left Memphis on March 30 at 9:00 p.m. and returned the next day with the victim's dental records and information about scars and moles that Dr. Francisco requested.

Mr. Cathey said that officers from other divisions were involved with the case because the homicide division was short-staffed and was investigating ten other murders in the month before the victim's body was found. He said the victim's neighborhood was canvassed after the body was found, which involved going door-to-door and inquiring about anything unusual that occurred around the time of the victim's disappearance. He acknowledged that the homicide division's property room flooded in February 1976.

Dr. Jerry Francisco, an expert in forensic pathology, testified that he was the Tennessee Medical Examiner from 1971 until 1989 and for three additional years in the 1960s and that he performed the victim's autopsy. He said that at the time, no Davidson County pathologist was willing to perform forensic autopsies. He said the victim's cause of death was asphyxia due to manual strangulation, which he said would take considerable pressure because children's cartilage and bones were flexible. He noted that the victim's thyroid cartilage and hyoid bone were broken, that the victim had an adjacent hemorrhage, blue lips, and small hemorrhages of the scalp, surface of the chest organs, heart, and lungs, and that she had a small bruise on her knee. He said that he did not observe any vaginal injuries and that the victim's hymen was intact, which he said "suggested that it was unlikely there had been a sexual act performed." He said he did not know at the time of his autopsy that Dr. Petrone had examined the victim's body in Nashville.

Dr. Francisco testified that the victim showed livor mortis on the back left side of the body, which was consistent with the position of the body in the garage. He said that based upon a pear fragment in the victim's stomach, decomposition, livor mortis, and other changes to the body, it was his opinion that the victim died at or near the time she disappeared. He said that he did not know whether the victim was killed in the location where her body was found but that in his opinion, "she was in that location almost from the time of death." He said he had reviewed Dr. William Bass's report and concurred with it.

Dr. Francisco testified that his report stated that semen was found on vaginal swabbings of the victim's vagina and that Dr. James Spencer Bell collected that evidence before the autopsy. He said that DNA testing was not performed in 1975 and that the technique for magnifying DNA was not developed until the early 1980s. He said that in 1975, there were no precautions in the laboratory to prevent the transfer of DNA. He said that in 1975, the person who prepared a swab would touch it and that there were numerous sources of contamination. He acknowledged that he and Dr. Bell made their own swabs by twisting cotton around a stick and that gloves might not be worn in conducting vaginal swabbings.

Dr. Francisco testified that the vaginal swab procedure called for taking samples with two swabs, which were placed in a tube and delivered to the laboratory with a request slip. He said that during any delay before analysis, they would have been stored in a secure area, currently referred to as an evidence locker, which might be refrigerated. He said that no one except the analyst had access to the swabs during this time and that the samples probably would not have been air dried. He said that slides would have been prepared by rolling the swab onto the slide and that the analysts did not wear gloves at that time. He said the vaginal samples collected in this case were analyzed four days after they were collected. He said the analyst, Ms. Fowler, reported that sperm was detected. He acknowledged that other things that might be present on a dead body, such as mold spores, yeast buds, and fungus, might appear to be sperm. He said that he first saw the slides when they were retrieved from the laboratory in 1990 by the Nashville authorities and that between 1975 and 1990, they would have been stored in numerical order in a slide drawer. He stated that there were conflicting chemical test results regarding whether the substance was seminal fluid because spermine and "the impact [sic] for spermatozoa were found, but acid phosphatase and choline were not detected." He said that it would be unusual for intact sperm to be present after thirty-three days but that sperm could survive much longer on a victim's clothing. He testified that the slides could be identified as the victim's because they were marked with a unique "TE number" assigned by the serology laboratory, TE75-218. He said the autopsy number or the victim's name were not used for the slides. He said that in this case, Ms. Fowler would have assigned the TE number. He said a serological type could not be determined from the slides because the sample was insufficient or degraded. He said the only evidence of sexual assault was the observation of sperm on the slides. He said that if testing of the slides showed four or five DNA contributors, they were probably contaminated. He said contamination would not alter the presence of existing DNA but would place additional DNA on the slides.

On cross-examination, Dr. Francisco testified that the victim's autopsy was the only one he ever performed for Nashville authorities. He agreed that he did not have a standardized working relationship with Metro Police regarding items to be sent with the body, such as clothing and fingernail clippings. He said the victim's hands were bagged. He

did not initially receive crime scene photographs or other items recovered from the immediate vicinity of the body. He said he received crime scene photographs after he performed the autopsy, possibly after he issued his report.

Dr. Francisco testified that the victim's body was in the first stage of decomposition and that there was no evidence of animal destruction. He said that he requested information about food the victim might have consumed, that he was provided information about powdered donuts, and that he was told that pears were available in the victim's home. He said temperature affected the rate of decomposition. He obtained weather information from the Davidson County Weather Bureau and went to Nashville to record temperatures in the garage for comparison with weather bureau reports. He did not include this information in his report.

Dr. Francisco did not recall if he was asked in 1975 whether it would take significant force to break the hyoid bone or whether an adolescent or a child was capable of producing that amount of force, but he conceded he might have stated his opinion to the police. He said a child could produce the necessary force. He stated that although he had some conversations with detectives about specific issues after his report was delivered, he did not recall much conversation.

Dr. Francisco testified that during the autopsy, he saw fluid in the vaginal vault but conceded that it was not possible to identify seminal fluid based upon visual observation. He said there were three unique numbers associated with the forensic institute and the toxicology laboratory – the autopsy number, the toxicology number, and the trace evidence number. He said the batch number was not part of a unique numbering system. He said that he had “no doubt” the slides identified as evidence were from the victim's autopsy and that the numbering used on the slides was consistent with the practice in 1975. He said that the term “intact spermatozoa” used in his report was a plural term meaning more than one sperm. He said spermine referred to a chemical that is typically present in semen. He said he had not changed his original opinion that semen was present on the victim's body. He was unsure whether he was asked in 1975 whether the victim could have been partially penetrated. When asked if he recalled being asked whether the victim might have been penetrated by someone with an underdeveloped penis, he said, “That . . . kind of rings a bell.”

Dr. Francisco testified that it was possible that the victim's body was moved to the garage after lividity set in. He said it was more reasonable to conclude, as he had, that the body was in the garage from the time of the victim's disappearance or shortly thereafter.

Dr. Francisco testified that the most reasonable explanation for the multiple DNA profiles was “touched DNA,” caused by contamination in preparation of the swabs,

preparation of the slides, storage, and handling. He said that in 1975, there were no concerns about DNA and that no precautions were taken to avoid contamination. He said he did not prepare a report about possible contamination of the slides. He acknowledged that an assistant district attorney general provided the information he used to formulate his opinion about contamination. He did not think he was given specific information about the presence of a mixture and the gender marker for each slide individually.

On redirect examination, Dr. Francisco testified that the fluid he observed in the victim's vagina was small and that decomposition would have produced fluid in the vagina. He said he would expect to have consistent DNA results on the two swabs. He agreed that if there were multiple DNA profiles on the five slides prepared, this would indicate contamination. He said that it was possible to transfer sperm from laboratory samples from one autopsy to another but that it was "very unlikely." Dr. Francisco testified that based upon the lividity of the body, if it was moved from another location after death it would have had to have been placed in exactly the same position at the original location as it was found in the garage.

Marie Maxwell testified that she lived on Copeland Drive in 1975 and knew the victim's family, who lived across and down the street. She said that on February 25, 1975, she arrived home about 5:30 p.m. She said that as she was getting her daughter out of the car, she noticed three people next door at Ms. Howard's home. She estimated they were thirty feet away and said there was still enough daylight for her to tell that there were three people. She admitted she did not see them clearly through the hedge. She said that she thought one of the people might be the victim and that the victim might be bringing cookies to her. She said she looked at the people for four to six seconds and did not focus on the people other than the one she thought was the victim. She said she might have looked at the people a second time when she brought her daughter around the car. She said she went inside to retrieve her checkbook and await the victim's arrival. She identified photographs taken from her driveway toward Ms. Howard's home and said that the two people in the photograph were in approximately the same location as the three people she saw on February 25, 1975, but said that she was standing at a greater distance than the photographer.

Ms. Maxwell testified that she was familiar with the victim's size. She said the person who she thought was the victim had a box like the ones used for Girl Scout cookies on the ground. She acknowledged she could not see the person's face. She said one of the other people was "a little bit taller than" the victim and was not facing her. She said the third person was facing her and was wearing a long, poorly fitted, drab, dark coat. She assumed the third person was Ms. Howard because Ms. Howard lived on the property alone. She said she previously described the person as about 5'7" or 5'8", which she based on the person appearing about one and one-half feet taller than the victim. She recalled the victim reaching

up to hand something to the taller person. She acknowledged she told the FBI the next day that she thought the taller person was white. She said that in retrospect, she thought she had assumed the person was white because Ms. Howard was white and she did not have any African-American neighbors. She did not, however, recall the person's race.

Ms. Maxwell testified that the victim's mother called and inquired about the victim. She said she told the victim's mother that she had seen the victim next door about 5:30 p.m. but that she thought the victim went to the Thorpes' house because she heard her dog bark at the back right corner of her yard. She said she assumed the victim was going through the woods at the back of her property. She said the Thorpes' garage, where the victim was found, was about a thirty-second walk from her backyard.

Ms. Maxwell testified that she was interviewed by law enforcement agencies at least twenty times about the victim's disappearance. She said that on February 25, she spoke with several people but was not sure whether they were police officers or media reporters. She said she felt pressured to provide information that would help find the victim, and later, to find the victim's killer. She said she participated in two to four hypnosis sessions around March 17, 1975, which she did not think were helpful. She said she provided a description of the taller person, from which a composite sketch was drawn, but she was unsure whether she had described something she saw or "was just desperate to help." She acknowledged telling the police that the person had a dark complexion, but she thought she said this based upon the person's complexion in comparison with Ms. Howard's. She said the person's hair was darker than Ms. Howard's gray hair. She said that based upon the person's pants, she described him as being male. She said women did not wear pants often at the time, especially Ms. Howard. She said she did not think she could identify the taller person. She said that she was unsure what she saw on February 25 but that she was "pretty sure" she saw the victim.

On cross-examination, Ms. Maxwell testified that she reviewed her previous statements before testifying. She said that although she did not know the victim's family well, she was familiar with the victim because the victim was interested in Ms. Maxwell's one-year-old daughter. She identified a photograph that depicted her driveway, Ms. Howard's house and driveway, and the Thorpes' garage. The Thorpes' garage was visible from her driveway. She acknowledged that other than the victim, she did not recognize the people in Ms. Howard's driveway. She said that because she thought the victim was one of them, she did not change her daughter's outfit in order for the victim to see it, and she retrieved her checkbook to pay for her cookie order. She said she waited for the victim to deliver the cookies for twenty to twenty-five minutes, until Ms. Trimble called to inquire about the victim. She informed Ms. Trimble of her belief that the victim went to the

Thorpes' house, based upon the barking dog in the back corner of her yard. She said her yard was fenced but the Thorpes' was not.

Ms. Maxwell testified that she was interviewed by several law enforcement agents while the victim was missing. She said she wanted to help and was not trying to give faulty information. She agreed that she described the taller person in Ms. Howard's driveway as a child but that she did not know the person's gender. She recalled stating that the child was white but did not recall being asked whether the child was black. She was certain that the adult was facing her. She said the person's coat was knee-length or longer and acknowledged she may have described it as "an old woman's coat." She said the coat was too big for the person. She agreed she described the person as white.

Ms. Maxwell testified that she attended the victim's funeral. She did not recall telling the police that a person named "Demassa" or "Massa" who was at the funeral resembled the adult she saw in Ms. Howard's driveway, but she acknowledged that reports created at the time reflected that she made the statement. She said that at the time the victim disappeared, she did not know Jeffrey Womack but that she later became familiar with his appearance. She said she "probably" told the authorities that the person resembled Jeffrey Womack. She identified a composite sketch that was prepared from her description of the adult in Ms. Howard's driveway. She agreed that the sketch depicted a white person, that the sketch was distributed publicly for a long time, and that she never requested its recall due to inaccuracy. She agreed that the sketch was prepared from her descriptions during four hypnosis sessions with the authorities. She said she did not think she was ever under hypnosis during the sessions because she did not feel like she ever lost awareness of her environment. She said that she never identified a suspect and that she did not think she would have been able to do so. She agreed she probably told the police in October 1976 that she never looked at the adult's face. She agreed that when she was hypnotized, she had been exposed to outside information about the investigation. She agreed that Jeffrey Womack came to her door soliciting money for charity a couple of weeks after the victim's disappearance. She maintained that she did not see the person's facial features and said she was unsure of the person's race.

Dr. William Bass testified as an expert in forensic anthropology. He said he was asked to review the case in 2002 in order to determine the victim's time of death. He reviewed the autopsy report, the victim's dental records, photographs of the autopsy, and photographs of the crime scene. He identified his written report, which was received as an exhibit. He said that in his opinion, the victim died at the time of her disappearance. He said that temperature was the major factor in the decay of a body. He said he reviewed the records of the temperatures in the thirty-three days between the victim's disappearance and the discovery of her body. He said he examined the insect activity relative to the body and

noted that flies were active only at fifty-two degrees and above. He also noted the presence and maturity of maggots. He said he agreed with Dr. Francisco that the body was not moved after the victim's death.

On cross-examination, Dr. Bass testified that he told defense counsel before the trial that he had not looked at the crime scene photographs, but he acknowledged that a detective told him earlier on the day of testimony that he had seen the photographs but had not retained them. He said he reviewed the photographs that morning but did not recall seeing them previously. He was unaware in 2002 that the garage did not have doors. He said that this could be a significant factor but that he did not think it was in this case. He said that he was not provided with preserved maggot larvae, which would have been helpful. He said he was not provided with a 1975 entomology report and did not recall seeing the photographs taken by Dr. Francisco. He acknowledged that his review was premised upon observations made by others and said the description of the body in the autopsy report was consistent with the victim's having been dead for thirty-three days. He said his opinion that the body had been in the garage for the thirty-three days was based upon the fact that the lividity was unchanged and Dr. Francisco's observation that the victim's clothing was not dirty. He agreed that the victim's body could have been elsewhere in an environment under similar conditions.

On redirect examination, Dr. Bass testified that if the victim's body had been in another location before it was in the garage, it would have had to have been in a position "very close" to its presentation at the scene in order to match the rigor mortis pattern. When shown photographs from the scene, he said the condition of the body was consistent with his opinions. He agreed that he concurred with Dr. Francisco's findings.

William Gavin, an expert in forensic serology, testified that he was a former FBI agent and was employed by the FBI for twenty-eight years. He said that in 1975, he had been working as an analyst in the serology unit of the FBI laboratory for about three years. With respect to the procedure for maintaining evidence submitted to the laboratory, he said that evidence was "signed in" when it was received. He said that they used the case number assigned by the local agency, that an FBI number would be used if the FBI had an interest in the case, and that a laboratory number was also assigned. He said that forensic evidence typically had three numbers. He said that if the substance to be examined was known, this was designated by a K. Where the composition or identity of a substance was questioned, this was designated by a Q. He said that when he received evidence, he determined whether he had been given everything that was supposed to be present. He then conducted tests to determine the nature of the Q substances. He further marked stains with B, denoting blood, and S, denoting semen, depending on the substance for which he was looking. He said that in 1975, they did not photograph the evidence they examined. He said that DNA testing was not available at the time.

Mr. Gavin testified that blood testing involved identifying a stain visually, conducting an initial chemical test, making a cutting, applying a confirmatory chemical test, and examining the sample under a microscope. If the substance was determined to be blood, another chemical test was applied and observed microscopically to determine whether the source was human. If there was enough of the substance for further testing, it was then grouped by blood type. He said that testing for seminal fluid involved visual inspection and tactile examination of a stain on a garment, making a cutting, mixing the cutting in a test tube with a saline solution, placing a sample on a slide, adding a reagent, and examining the slide under a microscope. He said that the presence of seminal fluid did not allow for a conclusion that semen was present and that spermatozoa must also be present on the slide to support a conclusion that a substance was semen. He said that the appearance of spermatozoa was very distinctive, with a head, neck, and a tail, and that he would not have confidence to conclude that spermatozoa were present if he merely observed segments. He said he would not work on two cases simultaneously due to the risk of contamination.

Mr. Gavin testified that he examined evidence in the victim's case. He said that although he prepared notes when he conducted his examination, he learned when he was called to testify that his notes were destroyed, although his reports were not. He said that after he conducted his testing, he would have returned the notes and evidence to the person or persons who gave him the evidence and would have given them his conclusions. He said the conclusions from various laboratory examinations would have been typed into a report. He identified a report containing his findings and identified the laboratory number, PCL7190, the FBI number associated with the victim's kidnapping, 7-15942, and his initials used on the report, OJ. He said he used his own initials when identifying evidence. Referring to the report, he testified that Lieutenant J. Wise delivered the evidence to the laboratory on March 31, 1975.

Mr. Gavin identified underwear that he examined for the presence of blood and semen and testified that neither was present. He identified a pair of pants and said he found semen containing spermatozoa on them, but not blood. He identified a blouse and said he found blood on the sleeve but was unable to obtain a blood type grouping. He found semen containing spermatozoa on the blouse. Mr. Gavin stated that in 1975, cuttings made from evidence were partially consumed in the testing process and that the remaining portions were not retained. He said he was not provided with any of the Defendant's bodily fluids for serology examination.

On cross-examination, Mr. Gavin testified that he recognized the items he tested based upon their identification number, not his specific recall of having tested them thirty-four years earlier. He said that although he did not have specific memories of conducting individual tests in this case, he was confident from the documentation and identifying

information that he worked on the case. He said his name did not appear on the report but that the initials OJ designated him. He said the identities of others who handled the evidence were likewise designated by initials, not names.

Mr. Gavin testified that in the victim's case, Agent John Hipperd received the evidence first and designated the Q numbers. He said Agent Hipperd conducted microscopic analysis and then gave the evidence to him. He said that three people examined the evidence but that he was unsure of the third person's identity and the nature of the testing done by that person. He said that laboratory aides who worked under the supervision of the analysts might have handled the evidence. He said he could not identify the date when he conducted the examination but said the information would have been recorded in his notes.

Mr. Gavin testified that protocol called for garments to be packaged individually. He said that evidence was examined in the laboratory in a specific order and that in a rape case, microscopic analysis for hair and fibers was conducted before the serological examination. He acknowledged that he did not wear gloves when performing the tactile examination. He said the number of cuttings he made on the various garments would have been recorded in his notes. He acknowledged the report did not state the number of cuttings, the results for the individual cuttings, or the number of spermatozoa he observed. He said that the microscopic testing he performed to determine the presence of semen was considered reliable at the time. He conceded that he had not worked at the FBI laboratory since 1977 and that he did not know the current testing standards. He said the semen grouping tests were inconclusive. He said that as a matter of customary practice, the cuttings and slides would have been discarded. On redirect examination, Mr. Gavin testified that during his time in the FBI laboratory, he never had a semen sample from any individual associated with this case.

Metro Police Captain Mickey Miller testified that he was presently in charge of the warrant fugitive division but that he was assigned to the criminal investigation division in 1990, when he reviewed the victim's case file. He said their review was for evidence to submit for DNA testing. He identified the victim's blouse and jeans. He said they retrieved slides that had been stored by the medical examiner's office in Memphis. He said that the medical examiner had been unable to locate the slides when they first requested them but that the slides were located about two-and-one-half weeks later in a basement file cabinet. He said the jeans were submitted to the FBI laboratory and then to CDR Laboratories. He said a DNA profile was identified in March 1992. He said that due to advancing technology, the jeans were sent to the TBI laboratory in 2000 and to the FBI laboratory in 2004. He said the slides were sent to the FBI initially, returned in December 1990, sent to CDR Laboratories, and sent to CDR a second time in 1994. He said the slides were also reviewed by Roche Biomedical, which later became Lab Corp, and by Joe Minor of the TBI. He said the blouse was sent first to the FBI laboratory, then to CDR. The blouse was also sent to the TBI in

2000 and to the FBI in 2004. He said that over 100 samples were obtained for DNA testing, including those of Jeffrey Womack and Bill Massa. He agreed they tried to obtain DNA samples for almost everyone in the victim's neighborhood.

On cross-examination, Captain Miller testified that Detective Tommy Jacobs reopened the investigation in August 1990. He agreed he was not involved with the investigation until 1990 but said Detective Jacobs had been involved since the night of the victim's disappearance. He agreed that DNA testing in 1990 required blood to be drawn but that it could now be accomplished from swabbing a person's cheek. He agreed that the majority of people gave a biological sample voluntarily but that a search warrant had to be obtained to draw blood from some of the people. He also agreed that numerous polygraph tests were administered. He thought that all of the people whose blood was drawn and who were given polygraph tests were white males.

Captain Miller acknowledged that a report was prepared from a 1991 exercise in which various officers played the roles of the victim and other individuals in the case in order to reconcile the various timelines. He said, however, that they were unable to reconcile the timelines. He could not recall whether he met with Ms. Ray, a library employee, on the same day as the exercise or the following day, regarding "the bus exercise." Captain Miller identified an undated police photograph as appearing to be the same as the Defendant's 1975 police photograph, which he reviewed previously.

On redirect examination, Captain Miller testified that Jeffrey Womack took several polygraph examinations. He said that in the 1991 exercise, he was unable to disprove Mr. Womack's alibi.

Charles "Friday" Blackwood testified that he was a private investigator and was a former crime scene investigator for the Metro Police Department. In September 1991, he visually examined the victim's pants, shirt, underwear, and boots using an alternate light source. He said he was looking for items such as stains, fibers, or hairs. He said that to his knowledge, the police department did not have alternate light sources in 1975 and that alternate light source technology continued to improve after 1991. He said that he identified five areas showing contrast on the victim's jeans and that he marked and made cuttings for further examination. He said he did not identify any contrasting areas on the victim's blouse, and he explained that the alternate light source did not detect all stains. He said a sample was collected from a stain on the victim's underwear, another from the victim's left boot, and two from the victim's right boot. On cross-examination, Mr. Blackwood testified that he collected hair and fibers from the victim's jeans.

Davidson County Sheriff's Investigator Michelle Ray testified that she reviewed recorded video footage from the jail in which the Defendant was confined. The recording was received as an exhibit.

Sheldon Anter testified that he and the Defendant were housed in the Davidson County Jail in the summer of 2008. He acknowledged that he was an illegal alien from Trinidad facing deportation proceedings that were deferred until after he testified in the Defendant's case. He acknowledged that he testified previously in another matter involving the Defendant and that the State requested that federal authorities release him into the community in order for him to testify in the present case. He denied receiving other benefits for his testimony. He said that he had been convicted of worker's compensation fraud and that a theft charge was retired in exchange for his agreement not to appeal the fraud conviction.

Mr. Anter testified that while he was in jail with the Defendant, they talked "pretty much" every day. He said they discussed their respective cases. He said that the first time the Defendant mentioned the case involving the victim, the Defendant stated that the Defendant's DNA was on the victim but denied raping the victim. He said they had another conversation on the roof in which the Defendant admitted killing the victim but denied raping her. He said the Defendant stated that his DNA was on the victim but not inside her. He said that another time, a television program featured information about the victim, prompting the Defendant to say to Frank White and him that the authorities found the Defendant's DNA on the victim. He said the Defendant stated that the authorities were about to obtain fingerprints from him and perform tests. Mr. Anter recalled another occasion in the recreation room when he and Mr. White inquired why the Defendant's DNA was on the victim, given the Defendant's previous denial of any knowledge of the victim. He said that the Defendant admitted that his DNA was on the victim and that the Defendant claimed to have killed but not raped the victim. He said the Defendant made the same statement on another occasion when he, Mr. White, and Jerome Napper questioned the Defendant about the victim.

Mr. Anter testified that on August 16, 2008, Mr. White was taunting the Defendant about being a "baby killer and a rapist." He said the Defendant responded, "I have killed before and I have no problem killing you." He said the Defendant went inside Mr. White's cell and stated that the Defendant would kill Mr. White as the Defendant had killed before. He said that Mr. White pushed the Defendant away and that the Defendant said, "I will kill you like I've killed before." He said the Defendant also claimed to have killed but not raped the victim. He said that later the same evening, Mr. White continued to taunt the Defendant and that the Defendant continued to admit killing the victim but denied raping her. He acknowledged that it was not good to be known in jail as a child rapist. He said the incident

was documented on videotape. The video recording introduced during Ms. Ray's testimony, which had no audio, was played for the jury as Mr. Anter narrated it. Mr. Anter said he did not report any of the Defendant's statements to the police until he was questioned by Detective Coleman about ten days after the August 16 incident. He denied requesting the meeting with Detective Coleman.

On cross-examination, Mr. Anter testified that he had been in the United States for twenty-four years. He said he had family, a fiancée, and children in the country. He said that before his arrest, he planned to live the rest of his life in the United States. He said he feared for his life if he returned to Trinidad. He acknowledged that he knew in March 2008 that he faced deportation proceedings. He acknowledged that he hired an immigration attorney to help avoid his return to Trinidad but denied that he was using the Defendant as leverage in the deportation matter.

Mr. Anter acknowledged that the pod in which he and the Defendant were housed was small, that there was only one television in the pod, and that he first heard the victim's name on television, not from the Defendant. He agreed that Mr. Napper and Mr. White had been his cellmates at times. He acknowledged that the inmates spoke to each other through the vents and that conversations could be heard throughout the pod. He acknowledged that he did not know the Defendant until he requested and was moved into the pod on May 21, 2008, and that the Defendant was already in the pod when he arrived. He said he asked the Defendant what his charges were but denied asking questions about the victim. He acknowledged that the Defendant did not answer him. He denied asking the Defendant about writing a letter to the District Attorney General regarding another inmate.

Mr. Anter acknowledged that he spoke with Mr. White frequently about Bible study, although they had not known each other before being in jail. He said the Defendant and Mr. White did not like or trust each other. He agreed he told Detective Coleman about Mr. White's statement that Mr. White would kill the Defendant because the Defendant was a "baby killer." He agreed that Mr. White had information from the internet about other inmates in his cell and that the materials were contraband in the jail. He said Mr. White had a photograph of the Defendant. He said he was never questioned about Mr. White's possession of the materials.

Mr. Anter denied that Corporal Antonio Johnson, one of the jailers, allowed him to come out of his cell when the other inmates were locked inside their cells. He denied that he asked Corporal Johnson about the Defendant. He acknowledged that as time passed, he and the Defendant did not get along well. He said the Defendant approached and threatened him when he was playing cards with other inmates. He said he overheard the Defendant talking to other inmates in addition to the Defendant's statements to him. He acknowledged

that Mr. White became his cellmate the night of August 16, 2008, and that he told the Sheriff's Department that he wanted to report a crime. He said that the crime was a fight between Mr. White and the Defendant and that he told them he did not want to explain the details of the incident. He acknowledged that when he was questioned about the Defendant, he told the authorities he had notes of everything that occurred in the pod. He said, though, that he later flushed them in the toilet.

Mr. Anter denied that he committed the theft that was the basis for the retired felony charge or that he tried to defraud a business by using a receipt for previously purchased goods. He denied telling his sister that the State was going to help him with his immigration case in exchange for his testimony in the other matter involving the Defendant. He said that he did not ask for the State's assistance and that the only thing the State did was write a letter requesting that he remain in the United States in order to testify. He denied that he previously refused to testify unless his custody status was changed but explained that he demanded to be released in order to deal with the immigration case. He said that he refused to testify because he wanted to avoid cameras and that the Defendant had threatened his life and his family. He said he had been deported previously. He agreed he had been released from federal custody and was home with his family in Nashville but said his deportation proceeding was still pending.

On redirect examination, he identified the Defendant in the courtroom. He agreed he had a good relationship with the Defendant at times. He agreed he had no knowledge whether his lawyer requested that the district attorney's office write a letter on his behalf regarding the deportation proceeding.

Metro Police Detective Hugh Coleman testified that on August 26, 2008, he was assigned to the Homicide Cold Case Unit. He said he interviewed Sheldon Anter about possible statements made by the Defendant. He said Mr. Anter cooperated and did not request anything, nor did he promise Mr. Anter anything in exchange for the statement. On cross-examination, Detective Coleman testified that Mr. Anter claimed to keep information to himself. He agreed that Mr. Anter did not know ahead of time that the sheriff's department was going to interview him.

Andrew Napper, an inmate, testified that he was present when a news story about the victim was on television at the jail. He said that Mr. Anter made a remark to the Defendant and that the Defendant stated, "I killed her, I didn't rape her." He said that he did not report the statement to the police but that he revealed it when the police questioned him. He acknowledged his own lengthy criminal record, which included convictions for burglary, robbery, forgery, theft, escape, and criminal impersonation. He also acknowledged that he had worked as a paid police informant in drug cases. He had a pending probation violation

case. He denied making any deals with the State other than his transfer to another county for protection following his testimony.

On cross-examination, Mr. Napper acknowledged writing a letter to the district attorney about an inmate other than the Defendant in which he requested assistance with his case in exchange for his testimony against the inmate. He said he never received a response. He denied that he made statements to jail workers claiming that he made a deal which would require him to serve sixty days of a five-year sentence.

Will Griffith testified that he was Andrew Napper's attorney. He said the State did not promise anything to his client aside from its agreement that Mr. Napper could be transferred to another county if he testified in the Defendant's case.

Metro Police Detective Pat Postiglione testified that he was the sergeant in charge of the Homicide Cold Case Unit. He said that in the course of investigating the victim's homicide, the police determined that the Defendant lived in Nashville in 1975, that the Defendant lived in Memphis in 2007, and that they obtained a search warrant for the Defendant's DNA sample. He said a DNA sample was collected by swabbing the inside of the subject's mouth on both cheeks. He identified the swabs used to collect evidence from the Defendant and said they were first sent to the TBI laboratory and later sent to the SERI laboratory in California. He said the SERI laboratory conducted DNA testing using the same method used to test the victim's jeans in 1991. He said that the method of testing was no longer prevalent but that they had to use the same means for the Defendant's sample as had been used to test the victim's pants. He said that after the testing, the Defendant was indicted and arrested.

Detective Postiglione testified that he interviewed Andrew Napper at the CCA correctional facility on September 11, 2008. He said Mr. Napper did not request the interview but was cooperative. He said he did not offer assistance, nor did Mr. Napper request it. He said a paid police informant must be truthful and reliable. On cross-examination, Detective Postiglione testified that he learned through the investigation that the Defendant was in jail part of the time the victim was missing, beginning on March 12, 1975, and continuing through the time the victim's body was found.

Janice Williamson testified as an expert in DNA analysis and said that from 1974 until 1997, she was employed with Center for Blood Research (CBR) Laboratories as the manager of clinical laboratories. She said that from 1990 until 1994, she worked with the forensic section of CBR Laboratories. She said the laboratory conducted two types of DNA testing, PCR testing for forensic applications and RFLP testing for paternity applications. She said that PCR testing was better suited for forensic settings because it allowed for amplification

of old or small samples. She said that DNA could degrade but that it could not change its genetic composition. She identified DQ Alpha testing as a type of PCR testing the laboratory used in the early 1990s.

Ms. Williamson testified that the procedure for newly submitted evidence was to make a log entry for the sample, assign a unique case number, and photograph the evidence. Individual numbers were also assigned for each item pertaining to a single case. She said that the evidence would be stored in the best location for the type of evidence. She said that she worked with a team that included Dr. David Bing and Susan Mitchell and that they worked collaboratively when determining the strategy for testing samples, that at least two of them read the results independently, and that they discussed any discrepancies. She said Dr. Bing was deceased. After the evidence was documented, the team would discuss who was going to test the evidence and the procedures that would be used for the tests. She said that the evidence relative to the victim's homicide was numbered F131 and that some of the records of the testing done with respect to the victim's homicide were no longer available, including a notebook and photographs.

Ms. Williamson described the process of differential extraction, whereby an analyst separated "fractions" of cells in two groups to determine whether it was possible to isolate DNA in each type of cell. The laboratory compared the DNA profiles of stains on the victim's clothing with the victim's DNA from her hair roots. The laboratory results reflected that the victim's DQ Alpha Type was not the same as that on two samples from the victim's jeans. The laboratory report, which was received as evidence, reflected that ten individuals whose biological samples were submitted were ruled out as the contributor. These individuals included Mr. Womack, Mr. Egerton, and Mr. Mesa.

Ms. Williamson identified slides that the laboratory received on April 6, 1994, and testified that the slides were previously received on September 18, 1991, and that numbers were assigned, but that no testing was done at that time and they were returned to Nashville. She said that in 1994, the slides were assigned new individual numbers but retained the same case number. She said the slides were opened and the material was tested for DNA evidence. She said that because some of the slides had mixtures of DNA from multiple persons, she sent the slides to another laboratory for further testing. On cross-examination, she identified the laboratory where the slides were sent as Roche Lab in North Carolina.

Megan Clement, the technical director of the forensic identity department of Laboratory Corporation of America in Research Triangle Park, North Carolina, testified as an expert witness in DNA analysis and said that in 1994, "Lab Corp" operated with a different business name. She received approximately eighty-one vials of extracted DNA, slides, cloth material taken from a pair of underwear, and the victim's reference sample,

which were shipped from Dr. Bing at CBR Laboratory. She stated that her laboratory was able to examine eight areas of DNA, whereas Dr. Bing's laboratory could only examine one.

Ms. Clement testified that a laboratory number for her laboratory was assigned to the evidence. She said they tested samples from thirty-five people who had not been ruled out by the testing done at CBR Laboratory. She stated that with one exception, her laboratory relied on the DQ Alpha test results developed by CBR Laboratory. Her laboratory developed a DQ Alpha type for one sample that CBR had been unable to develop. She said that none of the known DNA profiles matched the slides from the victim's body and that they were not given a sample from the Defendant. She said they could not verify the victim's DNA on any of the slides they tested, although she would have expected to find the victim's DNA from the vaginal swabbings. She said, though, that there were DNA mixtures on all but one of these slides. She said that similar results were expected but that completely different results were not. She identified three samples containing two or more DNA profiles and said that the combination of the contributors to the mixtures varied. She stated that DNA from at least five people was in the mixtures and that there could have been as many as six to eight. She said there were numerous ways in which extraneous DNA might reach the slide, including someone who touched the slides, spoke near the slides and deposited saliva, or sneezed on the slides. She doubted that gloves were worn in laboratories in 1975 and said that she did not wear gloves when she began doing serological analysis in 1985.

Ms. Clement testified that she did not examine whether there were sperm cells on the slides, nor did she determine the gender of the contributors. She said technology to determine the sex of the contributor was not available at the time. She said sperm cells broke down over time and could become unidentifiable. Ms. Clement said that her laboratory tested the substance on the slide that CBR Laboratory had not been able to type with the DQ Alpha process and eliminated all thirty-five known samples as not matching the DNA on the slide. She said the eliminated samples included the victim's known sample.

On cross-examination, Ms. Clement testified that her laboratory used what was cutting-edge technology at the time. She said that technology existed at the time of the trial that allowed analysis of a DNA profile to determine whether it was from a sperm cell but that her laboratory did not have the technology when it conducted the testing. She said that the probability of the profile that was developed matching someone in the Caucasian population was approximately one in 180,000 and that it was one in 10,800,000 for the African-American population. She said that after the initial testing, the laboratory received seventeen additional samples to test. After their testing was complete, they sent the slides to the Nashville authorities.

On redirect examination, Ms. Clement testified that although the victim's underwear was tested, they were unable to obtain any DNA results. She acknowledged that upon microscopic examination of apparent sperm cells, the substance might actually be yeast or overlapping cell nuclei.

Retired Berry Hill Police Officer Tommy Lunn testified that he was on duty on March 12, 1975, around 8:30 p.m., when he was called to an apartment complex, where he arrested the Defendant. He said the Defendant was wearing a full length coat, a ski mask, a second hat, and two pairs of gloves. He identified the Defendant's booking photograph and clothing. He said the Defendant gave a home address that was eight or nine miles from the arrest location. He said that at the time of the arrest, the Defendant was 6'2", 150 pounds, with black hair and brown eyes. On cross-examination, Officer Lunn testified that the Defendant reported that his employer was the Nation of Islam.

TBI Special Agent Forensic Scientist Joe Minor testified as an expert in DNA analysis and said that on August 25, 2000, he received the victim's blouse and slides for testing. He analyzed the blouse with an alternate light source and noticed stains. He did not receive results from presumptive testing, but he explained that this did not eliminate the possibility that DNA or semen was present. He said Jennifer Luttmann performed additional testing to develop the DNA profiles.

Agent Minor testified that he was familiar with the methodology for serology testing in the 1970s and 1980s. He said that a swab of a person's vaginal area would be air dried up to sixteen hours and then packaged in paper. Air drying involved removing the swab from the tube and exposing it to air. He said he tested the swabbings of the slides prepared by Lab Corp. He developed one profile from the swabbings. He said that it was a male profile but that he could not say whether it was sperm or another type of cell. He said that the statistical probabilities for the profile were that it would match one in approximately forty-one billion individuals in the Caucasian population, and one in one trillion in the African-American population. He considered it a "strong profile." He placed the profile in the CODIS system, a national database of DNA profiles, and did not receive a match. He said he did not receive a match from any of the other profiles from samples that were submitted. He said the male profile from the slide did not match the Defendant's profile. He acknowledged that he tested the Defendant's DNA recently and did not have DNA samples from Dr. Bell, Dr. Petrone, or the Memphis laboratory for comparison.

When asked how many rape kits he had worked with in homicide and rape cases, Agent Minor said, "[H]undreds, thousands perhaps." He said he had never seen a rape kit that did not contain the victim's DNA. He said he would have expected to receive different results and varying mixtures from the five slides prepared from the two vaginal swabs from

the victim's autopsy. He said that DNA would be transferred if the laboratory personnel did not wear gloves or if they made their own swabs to collect the evidence and that performing a vagina examination without wearing gloves could also transfer DNA, as could touching the slides without gloves. He said that the current practice was to wear gloves and laboratory coats, and to limit conversations in the lab due to the easy transfer of epithelial cells. He agreed he did not have a known sample from the Defendant for testing until 2007. Agent Minor thought it would be unusual to find intact sperm inside a vagina thirty-three days after sperm was deposited.

On cross-examination, Agent Minor testified that the testing of the slides in 2000 used technology that was not available at the time of the previous testing. He was confident that the male contributor identified from one slide was from one person and could only have come from a male. He said, however, that testing was not done to eliminate Dr. Francisco or Dr. Bell as the contributor. He reiterated that the Defendant was not the contributor and did not recall telling Captain Mickey Miller otherwise. He acknowledged that DNA was developed from only one of the two differentiated cell types in the sample. He said he compared sixty-three samples with the profile on the slide. He said the presumptive test he used to detect the possible presence of semen on the victim's shirt was still considered reliable. On redirect examination, Agent Minor clarified that he told Captain Miller that the slide contained a sperm fraction, which referred to male cells, not necessarily to sperm. He said it was possible for DNA not to be shown in a presumptive test but found in microscopic analysis.

Gary Harmor, a forensic serologist with The Serological Research Institute, testified as an expert in DNA analysis. He said that advances had been made in DNA technology and that that current technology allowed for identification of anyone other than identical twins. He said DQ Alpha testing was no longer widely used because it was not as sensitive as STR testing now used. He said DQ Alpha testing used only one marker, which would yield different test results in two people about ninety-six percent of the time. In contrast, STR testing was more discriminating because it used about fifteen markers.

Mr. Harmor identified the Defendant's reference sample, which he received on December 12, 2007. He identified the packaging in which he received the sample and the case number assigned by his laboratory, which was M'73-7531'07. He said that when the sample arrived in his laboratory, it was "logged in and stored in a secured area, frozen." The case file was established and assigned to him because he was the only person in the laboratory who did DQ Alpha testing. He gave the reference sample to Amy Lee, who worked in a separate reference sample room. The reference sample room existed to keep reference samples away from unknown samples. Ms. Lee performed testing and gave him the extracted DNA. Mr. Harmor amplified the extracted DNA, determined the typing, and

wrote his report. He identified two reports he prepared. He said that the first, dated January 28, 2008, stated an incorrect date for his receipt of the evidence, and that the second, dated July 8, 2009, corrected the error.

Mr. Harmor testified that the original DQ Alpha testing only tested for one marker, but that more recent tests allowed testing for four markers. Using the four-point test for comparing the Defendant's sample with the crime scene evidence, he determined that the Defendant's DQ Alpha DNA type was the same as that on the victim's right front pants leg and inside pants leg. He also determined that the victim was not the source of the DNA on the pants leg. He said the test results excluded ninety-two percent of the population. On cross-examination, Agent Minor testified that DNA testing did not reveal how or when a sample was deposited.

TBI Special Agent Chad Johnson testified as an expert in forensic science and DNA analysis and said that in STR DNA testing, thirteen loci and the sex-determining marker were analyzed. He received the Defendant's sample on October 25, 2007, analyzed it, and issued his report on November 7, 2007. He said he did not receive any physical evidence from the victim's homicide. He sent his report to the FBI when it was requested.

Jennifer Luttmann, an expert in forensic DNA analysis, testified that she was the chief of the CODIS Unit of the FBI and had worked as a DNA examiner. She said the FBI followed multiple procedures to avoid contamination or cross-contamination of biological samples. She said that the examiners had only one item on their workbenches at a time, that they cleaned their workbenches and implements, and that they covered their workbenches with butcher paper for each item of evidence. She said the DNA analysts ran control tests to ensure accuracy.

Ms. Luttmann testified that the FBI conducted short tandem repeat (STR) analysis, for which there were three possible outcomes. If the profile from evidence was found to match a known reference sample, it was reported as an inclusion, or DNA match. Alternatively, if the two did not match, it was reported as an exclusion. She said that when DNA was found but the information was not sufficient to allow confidence, it was reported as inconclusive. She said they also conducted probability analysis based upon four population groups. She said the laboratory could determine whether a sample contained DNA from more than one person and the relative proportions from the different sources.

With respect to the laboratory procedures, Ms. Luttmann testified that a sample must be accompanied by a letter explaining the nature of the crime and detailing the evidence submitted. She said the evidence was given a laboratory number that was based on the day the evidence was received and whether the source was questioned or known, and followed

a numerical pattern. She said that the evidence was also assigned a case file number if it was submitted from a state or local agency and that the case file number would have been assigned previously if the evidence was submitted from an FBI field office. She said that the evidence was inventoried and that its transfer to units within the laboratory was documented. She said that each analyst was assigned a two-letter identifier and that hers was MD. That identifier was noted on the evidence she was assigned to examine.

Ms. Luttmann testified that evidence from the victim's homicide was received in the laboratory on March 29, 2004. The evidence was also submitted in 1975 and 1995. From its 1995 analysis, it was already assigned case number 7-15942 and laboratory number PC-L7190NUOJJP. She said that the policy for assigning case numbers changed and that evidence from the victim's homicide was assigned new case number 95A-HQ-1460421, the new laboratory number for the victim's head hair was 040329005UJMD, and the new laboratory number for the victim's clothing was 040405031UJMD. She said that the laboratory's policy was not to re-examine previously analyzed evidence but that there was an exception if the notes from the previous analysis could not be found, as with the 1975 notes in this case. She said that additional examinations but not re-examinations might also be warranted due to technological advances. She said that despite the absence of the 1975 notes, the reports from 1975 were available.

Ms. Luttmann testified that serology testing was conducted in 1975 and that RFLP DNA typing analysis was conducted in 1990. She said that there had been advances since the introduction of RFLP testing, which required a large sample that was not degraded. With respect to samples from the victim's jeans and blouse, she said that no DNA profile was obtained through RFLP testing and that the stains were consumed in the testing process.

Ms. Luttmann testified that the evidence from the victim's jeans and blouse was re-analyzed in 2004. She said that after biologists conducted tests, she analyzed the results and determined that semen was present on one sample from the victim's jeans and two samples from the victim's blouse. The samples from the the victim's blouse and jeans were submitted for DNA testing. She said samples from the victim's underwear were tested by the serology unit and were negative for semen. She said the DNA testing on the jeans did not establish that DNA was present. She said that DNA from more than one person was present on the victim's blouse and that they were able to obtain a profile for the major contributor and determine that the person was male. DNA from the minor contributor was only present at two locations, which was below the laboratory's threshold for conclusive results. Ms. Luttmann said that due to the small quantity of DNA from the major contributor, she was only able to examine nine of the thirteen loci. A known sample of the victim's DNA was compared and did not have the same profile as the DNA from the major contributor for the blouse. The comparison of the victim's DNA to the minor contributor's DNA was

inconclusive but consistent with the victim's DNA. The comparison allowed for elimination of some individuals as the minor contributor. She said that the evidence was returned to local authorities and that a report was generated. The report was received as an exhibit.

Ms. Luttman testified that she placed the profile she obtained from the evidence into CODIS in August 2004. In the fall of 2007, she received information about the evidence that she gave to the local authorities. The TBI later provided her with the Defendant's DNA profile, although she was not given the cheek swabs. She said the Defendant's DNA profile matched the major contributor's profile developed from the blouse. She said the random match probability was one in six trillion. She said the probability of selecting an unrelated person from the general African-American population was approximately one in five quadrillion. The probability in the Caucasian population was approximately one in 160 quadrillion. The probability in the Southeastern-Hispanic population was approximately one in 230 quadrillion. The probability in the Southwestern-Hispanic population was approximately one in 2.2 quintillion. She said the Defendant was eliminated as the source of the minor contributor. Her report was received as an exhibit.

On cross-examination, Ms. Luttman agreed that the FBI laboratory used a team approach with "different people routinely conduct[ing] different aspects of testing." She agreed that the laboratory's reports did not specify each member of the team and each person's participation in the testing, but she said that the information was in the case notes. With respect to the 1975 analysis, Ms. Luttman acknowledged that she was not able to tell where cuttings were made on the blouse. She said she did not know when cuttings were made or how many people handled the blouse before it came to the laboratory in 1975. She said she had information about the 1990 blouse cuttings' approximate locations and that the notes from 1990 state that the cuttings were taken from the same area. She acknowledged that the cuttings she made in 2004 were not from the immediate area of the previous cuttings. She said the stains from 1975 and 1990 were consumed in the testing process. She said that the victim's boots were tested in 2004 and that blood and semen were not detected.

Ms. Luttman testified that she did not know what the FBI laboratory's protocols were in 1975 because she was not employed there at the time. She agreed the protocols were different in 2004 than in 1990. She acknowledged that there were new protocols in place in 2004 because a biologist had not followed existing protocols in 2002, which had required repeating work in many cases. She said that although there were thirty-one recommendations, the protocols did not change drastically. On redirect examination, Ms. Luttman said that the person who did not follow protocols did not work on the present case.

The defense called retired Metro Police Officer Bill Fallati, who testified that he was employed in the Youth Guidance Division in February 1975. He said he was assigned to

investigate the victim's disappearance. He recalled searching the Thorpes' garage for the victim about one and one-half to two weeks after her disappearance. He said it was mid-morning and daylight. He said the Trimble home was approximately 100 yards from the garage. He said that he asked his partner, David Mincey, to accompany him during the search but that he went alone because Officer Mincey had other duties. He said he did not see a child lying on fertilizer bags in the corner of the open garage. He acknowledged that he did not create a report about his search.

On cross-examination, Mr. Fallati acknowledged that earlier in the week of the trial, he told Captain Miller he was not 100% sure the body was not in the garage. He conceded that it was possible the body was in the garage. On redirect examination, he said that he did not think there was a body in the garage but that there was "some possibility."

Ewen Robert "Bobby" Downs testified that in February 1975, he was a police recruit in training at the police academy. He said he left the police department in January 1980. Mr. Downs said that as part of the investigation of the victim's disappearance, he and his partner, Larry Felts, were asked to search the area near the Thorpes' garage, the garage, and in the Trimbles' neighborhood. He said that "pretty much the whole class" of recruits was involved in the search. He could not recall how long after the victim's disappearance the search occurred, although his report stated it was February 28, 1975. He said he was looking for a living person, not a body.

With respect to the search of the garage, Mr. Downs testified that he and Mr. Felts used a systematic method whereby he searched right to left and Mr. Felts searched left to right. He said that he inspected the inside of the garage, that he emptied wood from a bin, that he looked under a swimming pool, in fertilizer bags, on shelves, and around a table, but that he did not see the victim or any boxes of Girl Scout cookies. The diagram he drew hastily after searching the garage was received as an exhibit.

On cross-examination, Mr. Downs testified that after leaving the police department, he had done iron work, odd jobs, and been a district manager of furniture stores. He did not recall how many places he searched for the victim, although he remembered the garage because he "felt very strange" about it. He did not recall Billy Butler being present during his search of the garage. He said he expressed his "gut feeling" about the garage in a meeting of the recruits held after the victim's body was found. He said Mr. Felts also expressed his strange feeling about the garage. He said that they had not yet been told that the victim's body had been found and that he was asked to draw a diagram of the garage. He said he also wrote a three-page report at the request of his superior officer but did not recall when it was written in relation to his drawing the diagram. He denied that he was taken to the garage to view it again before he created the diagram and the report. He maintained that

he remembered specific items in the garage that were mentioned in his report, even though it was created thirty-one days after the search. He said a hole in the back of the garage and the open front of the garage allowed him to see the fertilizer sacks clearly. He denied that he was fearful of losing his job because the body was not found during the search.

Mr. Downs denied that he involuntarily resigned from the police department after being charged with fraudulent breach of trust. He said that it was possible he was charged at the time he resigned but that he could not remember without “see[ing] the paperwork.”

John Thorpe, Jr., testified that he was fourteen years old in 1975 and that he lived on Estes Road with his parents and older sister. He said the victim’s body was found in his family’s garage and identified a diagram of the neighborhood. He said that the house was thirty yards from Estes Road and that the detached garage was ten to twenty feet from the house. He said that the garage was used to store items such as garden tools, fertilizer, lawnmowers, and a bicycle, and that his parents did not park their cars in the garage. He said his family had a German Shepherd/Laborator mix dog that was allowed outside unleashed.

Mr. Thorpe testified that on February 25, 1975, he came home around 5:15 to 5:30 p.m. from school and basketball practice. He ate a snack inside the house for about ten to fifteen minutes and left through the back door to go to the Ettinger home to play basketball. He said he passed behind the garage as he went through his back yard, “trotted” through the Frenches’ backyard and the Ettingers’ backyard, and arrived at the Ettingers’ driveway. He did not see anyone or hear anything unusual other than the sound of a bouncing ball. He said he would have remembered if he had seen anyone unusual. He thought that Brooks Ettinger, Jodie Macey, Overton Tompson, Chuck Trimble, and March Ettinger were playing basketball. He said that the victim’s home was across the street from the Ettinger home. He said that while they were playing basketball, the victim’s father came to the door and called for the victim.

Mr. Thorpe testified that he was sure he went into the garage between February 25 and March 30 to get a bicycle, garden hose, or other item, but that he did not go into the garage regularly. He said other family members would have done the same. He said he never saw anything suspicious in the garage.

On cross-examination, Mr. Thorpe testified that a photograph exhibit depicted his bicycle near the front of the garage and that he usually kept it near the front. He agreed there were several neighborhood boys playing basketball that afternoon. He said there had been a nice path from the Thorpe house to the Maxwell house, although it became overgrown in the past couple of years since the Maxwells moved into the house. He said that

neighborhood children typically did not go into the woods to the right of the Maxwell house but that they played in his backyard.

Mr. Thorpe testified that he did not see the victim or Ms. Maxwell on the night of the victim's disappearance. He said that Hal Moffett, who found the victim's body, was his uncle. He said that his family's dog "was free to roam" and that she was allowed to sleep inside or outside.

Larry Felts testified that he was a police recruit in 1975 and that he worked as a police officer until his termination in 1992. He said that he pled guilty to misdemeanor attempted misuse of information as a result of charges that led to his termination. He said he was presently employed as an attorney. He said he and his fellow recruits searched for the victim for two weeks. He said that on February 28, he searched behind the Thorpes' house with Bobby Downs. He did not recall how long they searched inside the shed. He said Mr. Downs began on the right and moved to the left and that he searched in the opposite direction. He said he could see the location where the victim was eventually found. He said, "[I]t was evident . . . that she was not out in the open. We would have literally almost tripped over her." He said the body was not there, nor did he see any Girl Scout cookies.

Mr. Felts said that after the victim's body was found, the recruits were told of the discovery and asked who searched the Thorpes' garage. He said that he and other recruits had searched several open garages. The commanding officer said there was something unique about the Thorpes' garage. He said that when Mr. Downs told the commanding officer that there was a commode in a garage, he and Mr. Downs were taken to another room to prepare a report and a diagram. He did not recall going back to the scene before preparing the diagram.

On cross-examination, Mr. Felts testified that the recruits searched many locations and buildings for weeks. He recalled that the Thorpes' garage was "kind of an eye sore" in the upper middle class neighborhood and that most of the other garages they searched were enclosed. He acknowledged that he did not write a report about any of the garages he searched other than the Thorpes' garage. He did not recall any lights inside the garage but said that it was daylight and that light was coming through the front. He did not recall Billy Butler searching with him, but he would not dispute it if Mr. Butler said he did. He said that although he and Mr. Downs were taken into a room together to write their reports, they did not confer and wrote the reports separately. He was not positive that he was not taken back to the scene before writing the report. He maintained that he remembered specific items in the garage, including golf shoes and a small swimming pool, even though time passed between the search and his creating a report.

Mr. Felts testified that his employment was terminated because he told a person who was later arrested that the person was not going to be “raided,” although his information proved incorrect. He said he did not appeal a determination that he lied to his superior officers.

Davidson County Sheriff’s Corporal Antonio Johnson testified that in August 2008, he worked at the jail. He said that the Defendant, Mr. Anter, and Mr. White were in a subsection of the unit he monitored and that Andrew Napper was another inmate he monitored. He said that the pod area was ten to fifteen yards from the recreation area. He recalled a day when Mr. Anter asked to come out of his cell to clean and said that Mr. Anter had been requesting to clean for several days. He said Mr. Anter eventually said that Mr. Anter wanted to talk to him privately. He said Mr. Anter stated that the Defendant’s case had been on television recently and inquired whether Corporal Johnson knew anything about the case. He said he told Mr. Anter that he did not become involved in other inmates’ business. He said that most inmates would not have asked about another inmate’s case.

On cross-examination, Corporal Johnson testified that Mr. White filed a complaint alleging that he showed favoritism toward the Defendant. When asked whether he disliked Mr. White, he said Mr. White was “another inmate.” He said he did not know at the time what the Defendant’s charges were, although he knew the Defendant had been moved to protective custody.

On rebuttal, Billy Butler testified that he was a retired police officer. He said he left in good standing. He said he searched for the victim in 1975. His partner in the search was Ricky Smith, and they also searched with Mr. Downs and Mr. Felts. He thought that during the search, he saw Mr. Downs and Mr. Felts through a hole or crack in the back of a small building. He went to the front of the building and watched from the opening but did not go inside. He recalled seeing a table and a commode inside. He thought Mr. Downs sat on the table and looked into a back corner. He said that Mr. Downs and Mr. Felts were searching but did not touch anything inside and that he watched them for “no more than a couple of minutes.” He said that at the meeting after the body was found, “We were taken back to the scene and that’s where I was handed a supplement report to fill out.” He said he wrote the report while looking at the garage.

On cross-examination, Mr. Butler acknowledged that photograph exhibits did not depict a hole in the back wall of the garage but maintained that to the best of his recollection, he saw Mr. Downs and Mr. Felts through a hole or crack. He remembered that the garage did not have doors but not whether it faced the driveway beside the house. He agreed he did not go past the center post in the doorway. He did not see Mr. Downs or Mr. Felts discover anything in the garage. Based on the date reflected in his report, he agreed that this search

was on February 28, 1975. He identified an undated diagram and said he drew it on March 31, 1975, the same day he created the supplement report.

The jury found the Defendant guilty of the lesser included offense of second-degree murder for the count charging premeditated murder and for the count charging felony murder in the perpetration of larceny. The jury sentenced him to forty-four years for each conviction. The trial court merged the convictions and ordered that the sentence be served consecutively to a life sentence for a previous conviction. This appeal followed.

I

The Defendant challenges the sufficiency of the convicting evidence. He states that there was no eyewitness account of the crime, that the evidence is circumstantial, and that the conviction rests “solely” upon proof of his DNA on the victim’s blouse and the testimony of two convicted felons. The State counters that the proof is sufficient to support the convictions. We agree with the State.

Our standard of review when the sufficiency of the evidence is questioned on appeal is “whether, after viewing the evidence in the light most favorable to the prosecution, 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); State v. Williams, 657 S.W.2d 405, 410 (Tenn. 1983). This means that we may not reweigh the evidence but must presume that the trier of fact has resolved all conflicts in the testimony and drawn all reasonable inferences from the evidence in favor of the State. See State v. Sheffield, 676 S.W.2d 542, 547 (Tenn. 1984); State v. Cabbage, 571 S.W.2d 832, 835 (Tenn. 1978). Any questions about the “credibility of the witnesses, the weight to be given to their testimony, and the reconciliation of conflicts in the proof are matters entrusted to the jury as the trier of fact.” State v. Dotson, 254 S.W.3d 378, 395 (Tenn. 2008) (citing State v. Vasques, 221 S.W.3d 514, 521 (Tenn. 2007)); see State v. Bland, 958 S.W.2d 651, 659 (Tenn. 1997).

The Defendant’s contention is premised, in part, upon the former standard for analysis of convictions based solely upon circumstantial evidence. Previously, Tennessee law provided that for a conviction to be based upon circumstantial evidence alone, the evidence “must be not only consistent with the guilt of the accused but it must also be inconsistent with his [or her] innocence and must exclude every other reasonable theory or hypothesis except that of guilt.” Pruitt v. State, 460 S.W.2d 385, 390 (Tenn. Crim. App. 1970); see also State v. Crawford, 470 S.W.2d 610, 612 (Tenn. 1971). Shortly after the Defendant filed his brief, however, our supreme court adopted the United States Supreme Court’s perspective that the standard of proof is the same, without regard to whether evidence is direct or circumstantial, eliminating the “every other reasonable theory or hypothesis except that of

guilt” analysis. State v. Dorantes, 331 S.W.3d 370, 379 (Tenn. 2011) (citing Jackson, 443 U.S. at 326; Holland v. U.S., 348 U.S. 121, 139-40 (1954)). We will, therefore, conduct our review in accord with Dorantes. See State v. Sisk, 343 S.W.3d 60, 68 (Tenn. 2011) (reinstating convictions based on Dorantes analysis after Court of Criminal Appeals reversed convictions for insufficient evidence under Crawford circumstantial evidence analysis but noting that intermediate court did not err in applying Crawford because its ruling was pre-Dorantes).

At the time of the Defendant’s crime, the relevant statute provided that the defining characteristics of second degree murder were an unlawful, willful, and malicious killing of a victim. T.C.A. §§ 39-2401 (1975, 1985) (renumbered at T.C.A. § 39-2-201) (repealed 1989), 39-2402 (1975) (amended 1977, 1979, 1988) (renumbered at T.C.A. § 39-2-202) (repealed 1982), 39-2403 (1975) (amended 1979) (renumbered at T.C.A. § 39-2-211) (repealed 1989); see, e.g., State v. Johnson, 541 S.W.2d 417, 418-19 (Tenn. 1976); State v. Shepherd, 862 S.W.2d 557, 565 (Tenn. Crim. App. 1992).

The Defendant challenges both the sufficiency of the proof of the statutory elements of the crime and that of his identity as the perpetrator or as an aider and abettor to the crime. In the light most favorable to the State, the record reflects that the victim died from asphyxia due to manual strangulation. Her injuries were so great that her thyroid cartilage and hyoid bone were broken. Dr. Francisco testified that this would take considerable pressure because a child’s cartilage and bones were flexible. The evidence demonstrates that the killing was unlawful, willful, and malicious and is sufficient to support the conviction for second degree murder.

With respect to the proof that the Defendant perpetrated the crime, the evidence in the light most favorable to the State established that the Defendant’s DNA was present on the victim’s blouse. The chance of the same STR DNA profile occurring in another person was one in five quadrillion for the African-American population and one in 160 quadrillion for the Caucasian population. The Defendant’s DNA alpha type was present on the victim’s pants. This type was shared by only eight percent of the population. Over 100 other individuals, including virtually everyone from the victim’s neighborhood, were eliminated as the contributors of the DNA evidence. Two of the Defendant’s fellow inmates testified that the Defendant admitted that he killed the victim and that his DNA was on her. Their testimony regarding the altercation between the Defendant and Frank White was consistent with the video recording of the altercation. There was no indication of any prior acquaintance or association of the victim and the Defendant that might provide an alternate explanation of the presence of his DNA on her clothing. Dr. Francisco and Dr. Bass testified that the victim died at or near the time of her disappearance, which was before the Defendant was in jail. When the Defendant was arrested, he was wearing a full length coat, a ski mask,

another hat, and two pairs of gloves. His clothing and physical stature were consistent with the description Ms. Maxwell gave of the adult she saw in Ms. Howard's driveway with the child she presumed was the victim. The Defendant is not entitled to relief.

II

The Defendant contends that the trial court erred in denying his motion to suppress the evidence obtained pursuant to a search warrant for his DNA sample in another case. The DNA sample was later matched to the DNA evidence in this case, leading to the Defendant's arrest for and charge of the victim's murder. The Defendant contends that the affidavit used to obtain the warrant contained a false statement that overstated the evidence supporting probable cause and omitted material information that was favorable to the Defendant. The State contends that the affidavit did not contain a material misrepresentation or a material omission and was supported by probable cause. We conclude that the trial court properly denied the motion to suppress.

A trial court's factual findings on a motion to suppress are conclusive on appeal unless the evidence preponderates against them. State v. Odom, 928 S.W.2d 18, 23 (Tenn. 1996); State v. Jones, 802 S.W.2d 221, 223 (Tenn. Crim. App. 1990). Questions about the "credibility of the witnesses, the weight and value of the evidence, and resolution of conflicts in the evidence are matters entrusted to the trial judge as the trier of fact." Odom, 928 S.W.2d at 23. The prevailing party is entitled to the strongest legitimate view of the evidence and all reasonable inferences drawn from that evidence. State v. Hicks, 55 S.W.3d 515, 521 (Tenn. 2001). The application of the law to the facts as determined by the trial court is a question of law which is reviewed de novo on appeal. State v. Yeargan, 958 S.W.2d 626, 629 (Tenn. 1997).

In Franks v. Delaware, the United States Supreme Court held that the fruits of a search should be excluded when the affidavit in support of the search warrant contains deliberately or recklessly false statements by the affiant, which are material to the establishment of probable cause. 438 U.S. 154, 172-73 (1978). The "fraudulent misrepresentation of a material fact will invalidate a search warrant." State v. Little, 560 S.W.2d 403, 406 (Tenn. 1978). Our supreme court has defined two situations in which false information within the supporting affidavit mandates the application of the exclusionary rule despite the affidavit's facial sufficiency:

- (1) a false statement made with intent to deceive the Court, whether material or immaterial to the issue of probable cause, and

(2) a false statement, essential to the establishment of probable cause, recklessly made. Recklessness may be established by showing that a statement was false when made and that affiant did not have reasonable grounds for believing it, at that time.

Id. at 407. Thus, even an immaterial statement in the affidavit will result in exclusion of the evidence if the statement is intentionally false. However, “negligence or innocent mistake [is] insufficient” to support exclusion. Franks, 438 U.S. at 172; see Little, 560 S.W.2d at 406-07. This court has recognized that the Franks analysis has also been applied to material omissions from an affidavit. See State v. Yeomans, 10 S.W.3d 293, 297 (Tenn. Crim. App. 1999) (citing 2 LaFave, Search and Seizure § 4.4(b) (3d ed.1996)). Nevertheless, the court in Yeomans said that “an affidavit omitting potentially exculpatory information is less likely to present a question of impermissible official conduct than one which affirmatively includes false information.” Id. at 297.

The evidence presented at the suppression hearing and the trial reflects that a series of crimes including rape, attempted rape or assault, and homicide occurred in a particular geographic area of Nashville in 1975. In 1976, the Defendant was convicted of one of the crimes, the rape of A.P. He was charged with two other crimes that occurred in the area involving a second rape and an attempted rape of two other victims, but those charges were retired. In 2007, Detective Bill Pridemore of the Metro Police Department’s Cold Case Unit was investigating an uncharged crime, the 1975 homicide of S.D., in which the Defendant was a suspect. Detective Pridemore reviewed the transcript of the A.P. rape trial and the investigative records for other crimes in the area that occurred around the same time. As a result of his review, he prepared an affidavit seeking a search warrant for the Defendant’s DNA. The affidavit stated:

On February 2nd, 1975, [S.D.] was found murdered by Asphyxia in her apartment located at 911 20th Ave. South Nashville, Tn. During the investigation it was determined that the victim was sexually assaulted in the early morning hours. Evidence from the sexual assault including but not limited to negroid pubic hairs and semen was collected and examined. Investigators interviewed the last person known to be with [S.D.] who states during the early morning hours of February 2nd 1975 he dropped [S.D.] off in front of her apartment building located at 911 20th Ave. South Nashville, Tn. and drove away. During the time frame of her death there was a rash of rapes and sexual assaults occurring in the same general area where the victims [sic] body was located. The pattern of the

assaults consisted of female white's [sic] being assaulted in their dorm rooms or apartments. The suspect would enter through an unlocked door and would forcibly rape the victim. March of 1975, one month after the death of [S.D.], [the Defendant] was arrested and charged with committing at least two of the rapes and one attempted rape in the vicinity of [S.D.'s] residence. He was later tried and convicted in Davidson County Criminal Court Nashville, Tn. for rape. During the investigation [the Defendant] made a statement implicating himself. In this statement Mr. Barrett stated in the early morning hours he would enter the buildings attempting to find unlocked apartment doors. Once entering the apartment he would forcibly rape the victims. All of the victims were young female whites who appeared to be alone.

At the suppression hearing, Detective Pridemore acknowledged in his testimony that he was aware that the Defendant confessed to the rape of A.P. but that the Defendant had not confessed to another rape and attempted rape. The detective claimed he summarized his investigation by stating in the affidavit, "In this statement Mr. Barrett stated in the early morning hours he would enter the buildings attempting to find unlocked apartment doors." He said this summary was a compilation of the Defendant's statement, a detective's reports and the trial transcripts from the A.D. case, a statement from a victim that "he attempted to get in her door, and also another door, neighbor's door and . . . was the one arrested trying to get into the maintenance area." Detective Pridemore later explained that the sentence in the affidavit referred to "[t]he college campus of Belmont and also the different levels that he – he entered through the basement door and he went through several levels of the building before he found an unlocked door where [A.P.] was sleeping." He denied that he used the word "buildings" to refer only to floors of a single building and said, "That could be a combination of – of [A.P.], entering into her dormitory, going through the floors and a combination of the – of the crime scenes of other crimes that were committed and also from [another victim's] statement."

Detective Pridemore testified that the sentence in the affidavit, "Once entering the apartment he would forcibly rape the victims," was based upon "the one statement that he made that he had committed the rape and also in [another victim's statement] that she was forced into her house or her apartment and then forced to have sexual intercourse." The detective denied that he intended to imply that the Defendant made all of the statements and reiterated that the affidavit was a summary of all of the investigative files.

In denying the Defendant's motion to suppress, the trial court stated:

The “statement” or more specifically “word” at issue here is “buildings.” The search warrant affidavit contained the following language “. . . [the Defendant] would enter buildings attempt to find unlocked apartment doors.” The defendant maintains that the statement attributed to the defendant as contained in the investigative files (including evidence gathered by Ralph Langston), did not use the plural of the word. He adds that Detective Pridemore’s use of the term was in error and constituted a false statement. The defendant suggests that the false statement was intentionally or at least recklessly made by Detective Pridemore. He added that at a minimum Pridemore was negligent in including the term “buildings.” As a result, he maintains, the judge reviewing the search warrant and affidavit was necessarily [misled] as to the existence of probable cause.

. . .

[T]he Court heard the testimony of Detective Bill Pridemore and was in a position to assess his credibility. Detective Pridemore conceded that the statement attributable to the defendant did not indicate an admission to going into “buildings” to search for females. However, he testified that he went through the voluminous files and attempted to summarize what he had learned from his review. Detective Pridemore indicated that he did not intentionally include erroneous information in his affidavit.

Having heard from Pridemore and Langston, the Court is unconvinced that Detective Pridemore intentionally included a technically false statement in his affidavit. Further, relying on the appellate court’s definition of reckless (in this context), this Court similarly cannot find that defendant has shown (or the evidence support[s]) that the term was false when made and that affiant (Detective Pridemore) did not have reasonable grounds for believing it at that time. Finally, . . . negligence or innocent mistake do not support exclusion.

On appeal, the Defendant complains that Detective Pridemore’s assertion that the Defendant admitted entering buildings, attempting to find unlocked doors, and raping the

victims was false. He also complains that Detective Pridemore failed to divulge that some of the charges against him were retired.

The trial court accredited Detective Pridemore's testimony that he did not intend to make false statements. Because the trial court relied entirely on its credibility determination and in the absence of proof to the contrary of Detective Pridemore's testimony about his lack of intent, we conclude that the evidence does not preponderate against the trial court's finding that there was no intentionally false statement in the affidavit. See Odom, 928 S.W.2d at 23.

We must consider, then, whether the statements were recklessly made, and if so, whether they were essential to establishing probable cause. See Little, 560 S.W.2d at 407. The record reflects that Detective Pridemore reviewed the cold case file and compiled his information from it. We note first that his affidavit states, "In [the Defendant's] statement, he stated in the early morning hours he would enter the buildings attempting to find unlocked apartment doors. Once entering the apartment he would forcibly rape the victims." A police report summarizing the Defendant's statement reflects that the Defendant admitted raping one victim but denied multiple attacks, although police reports in the record also contain information that the Defendant was arrested "attempting to break into a female whites [sic] apartment" and that the victim of another rape and the victim's husband identified articles of clothing and a gun that had been collected from the Defendant or his home. We conclude that the evidence preponderates against the trial court's finding that the statement was not recklessly made. Given the evidence of record, we also conclude that Detective Pridemore did not have reasonable grounds for believing the facts as represented in the affidavit.

Regarding the Defendant's argument that the affidavit did not reveal that some of the charges were retired, we note that the omission of potentially exculpatory information from an affidavit is less likely to support a finding of official misconduct than the inclusion of false information. Yeomans, 10 S.W.3d at 297 (citing United States v. Atkin, 107 S.W.3d 1213, 1217 (6th Cir. 1997)). In any event, we do not view it as significant that the affidavit did not state that the charges were retired given that it accurately stated that the Defendant was charged with "at least two . . . rapes and one attempted rape in the vicinity of [the victim's] apartment" and that he was later convicted of rape. The affidavit did not falsely state that the Defendant was convicted of all of the charges. Any favorable inference that could be drawn from some of the charges being retired could likewise be drawn from the Defendant's conviction of a single rape from the multiple charges. We conclude that Detective Pridemore was not reckless in not disclosing that two of the charges were retired.

The question of the proper remedy remains. In Franks v. Delaware, the Supreme Court said:

In the event that at that hearing the allegation of perjury or reckless disregard is established by the defendant by a preponderance of the evidence, and, with the affidavit's false material set to one side, the affidavit's remaining content is insufficient to establish probable cause, the search warrant must be voided and the fruits of the search excluded to the same extent as if probable cause was lacking on the face of the affidavit.

Franks, 438 U.S. at 156. We consider, then, whether the affidavit establishes probable cause absent the portion that states: "In [the Defendant's] statement, he stated in the early morning hours he would enter the buildings attempting to find unlocked apartment doors. Once entering the apartment he would forcibly rape the victims." Absent this portion, the affidavit still recites that there were multiple rapes in the area around the time of S.D.'s homicide, that S.D. was sexually assaulted, and that the pattern of the rapes was similar in that they involved a rapist entering a dormitory room or apartment and assaulting a white female who appeared to be alone, that the Defendant was arrested and charged with at least two rapes and one attempted rape, and that the Defendant was convicted of one of the rapes. We conclude that even without the erroneous statement, the affidavit contained sufficient information to establish probable cause. Despite the trial court's erroneous finding that the affidavit did not contain recklessly made false statements, the court did not err in denying the motion to suppress. The Defendant is not entitled to relief.

III

The Defendant contends that the trial court erred in denying his motion to dismiss the indictment on the basis that the delay between the offense and the return of the indictment violated due process. The State counters that the trial court correctly denied the motion. We agree with the State.

A criminal defendant has the right to due process under the Fifth and Fourteenth Amendments to the United States Constitution and article I, section 8 of the Tennessee Constitution. The delay between the commission of an offense and the initiation of formal proceedings may violate this right to due process. State v. Gray, 917 S.W.2d 668, 671 (Tenn. 1996).

In State v. Dykes, 803 S.W.2d 250, 256 (Tenn. Crim. App. 1990), relying upon United States v. Marion, 404 U.S. 307 (1971), this court stated that "[b]efore an accused is entitled to relief based upon the delay between the offense and the initiation of adversarial proceedings, the accused must prove that (a) there was a delay, (b) the accused sustained

actual prejudice as a direct and proximate result of the delay, and (c) the State caused the delay in order to gain tactical advantage over or to harass the accused.” In State v. Utley, 956 S.W.2d 489, 495 (Tenn. 1997), the supreme court acknowledged the “Marion-Dykes” analysis for cases of delay in charging a defendant.

The offense was committed in February 1975, and the victim’s body was discovered in March 1975. It is undisputed that DNA technology was not available to the State in 1975. The DNA testing that identified the Defendant took place in 2007. The indictment was returned in June 2008.

We agree with the Defendant that sufficient delay occurred in this case to trigger a due process inquiry. See, e.g., State v. Carico, 968 S.W.2d 280 (Tenn. 1998) (conducting due process inquiry in case involving seven-year delay between offense and arrest); Utley, 956 S.W.2d 489 (five-year delay). Without question, the thirty-three-year delay was lengthy. We do not dispute that in some cases, the passage of this many years may be prejudicial to the defense. The Defendant argues, “[T]he extraordinary delay between the commission of the crime and the return of the indictment rendered all but impossible the Defendant’s ability to formulate an alibi defense or produce witnesses or other evidence in his favor.” He argues generally that the passage of time may impair the quality and quantity of evidence available and may compromise the reliability of the outcome. We acknowledge that this is a relevant concern. See, e.g., Carico, 968 S.W.2d at 285 n.5. We note that the Defendant has not identified any specific unavailable witness or evidence due to the passage of time, nor is any actual prejudice apparent. We likewise note that the Defendant does not contend that the State intentionally delayed the prosecution in order to obtain a tactical advantage. In fact, the record reflects that the police continued to investigate the crime through the cold case unit and that advances in DNA technology eventually proved fruitful in identifying the Defendant.

The record supports the trial court’s determination that the Defendant’s due process rights were not violated by the pre-indictment delay. The trial court did not err in denying the motion to dismiss the indictment. The Defendant is not entitled to relief.

IV

The Defendant contends that the trial court erred in admitting Sheldon Anter’s testimony that while the Defendant was in custody, he said that he “had killed before.” The Defendant advocates the application of Tennessee Rule of Evidence 404(b). The State, on the other hand, argues that the trial court did not abuse its discretion in admitting the evidence as an admission of a party opponent pursuant to Rule 803(1.2). We agree with the State.

We begin with a review of the relevant evidentiary rules. Evidence is 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.” Tenn. R. Evid. 401. However, relevant evidence “may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury.” Tenn. R. Evid. 403. Prejudicial evidence is not excluded as a matter of law. State v. Carruthers, 35 S.W.3d 516, 577 (Tenn. 2000) (citing State v. Gentry, 881 S.W.2d 1, 6 (Tenn. Crim. App. 1993)). The term “undue prejudice” has been defined as “[a]n undue tendency to suggest decision on an improper basis, commonly, though not necessarily, an emotional one.” State v. Banks, 564 S.W.2d 947, 951 (Tenn. 1978) (quoting Fed. R. Evid. 403, Advisory Comm’n Notes).

When relevant evidence reflects on the defendant’s character, however, the trial court must apply the more rigorous standard of Tennessee Rule of Evidence 404(b), rather than Rule 403. State v. James, 81 S.W.2d 751, 758 (Tenn. 2002); State v. Dubose, 953 S.W.2d 649, 655 (Tenn. 1997). Rule 404(b) prohibits evidence of other crimes, wrongs, or acts offered to show a character trait in order to prove that a defendant acted in conformity with that character trait. Tenn. R. Evid. 404(b). However, evidence of other crimes, wrongs, or acts may be admissible for other purposes, such as establishing identity, motive, common scheme or plan, intent, or absence of mistake. Id.; State v. McCary, 119 S.W.3d 226, 243 (Tenn. Crim. App. 2003). The rule lists four requirements that must be satisfied before a court determines admissibility:

- (1) The court upon request must hold a hearing outside the jury’s presence;
- (2) The court must determine that a material issue exists other than conduct conforming with a character trait and must upon request state on the record the material issues, the ruling, and the reasons for admitting the evidence;
- (3) The court must find proof of the other crime, wrong, or act to be clear and convincing; and
- (4) The court must exclude the evidence if its probative value is outweighed by the danger of unfair prejudice.

Tenn. R. Evid. 404(b)(1)-(4).

Hearsay is an out-of-court statement offered in court “to prove the truth of the matter asserted.” However, Tennessee Rule of Evidence 803(1.2), provides

Hearsay Exceptions.-The following are not excluded by the hearsay rule:

.....

(1.2) Admission by Party-Opponent.-A statement offered against a party that is (A) the party’s own statement in either an individual or a representative capacity

A defendant’s statements, both written and oral, are admissible under this exception, subject to Tennessee Rules of Evidence 401 and 403. See State v. Binion, 947 S.W.2d 867, 874 (Tenn. Crim. App. 1996); see also Neil P. Cohen et al., Tennessee Law of Evidence, § 8.06[3][a] (6th ed. 2011).

The State filed a pretrial notice that it intended to offer evidence of the Defendant’s other crimes that included the Defendant’s statements to Sheldon Anter about having killed other people. The trial court conducted a hearing, at which Mr. Anter testified that while incarcerated with the Defendant, he witnessed an altercation between the Defendant and Frank White on August 16, 2008. He said that Mr. White and the Defendant argued about the television and about another inmate, Andrew Napper. He said that Mr. White had paperwork containing information about the Defendant’s crimes and taunted the Defendant, calling him a rapist and a baby killer. Recalling the Defendant’s response, Mr. Anter said, “[H]e said he don’t have no problem killing here, he had killed four people and had no problem killing again.” Mr. Anter said the Defendant followed Mr. White into his room and said, “I will kill you like I killed them blue-eyed b-----.” Mr. Anter said Mr. White pushed the Defendant on top of him. He said the Defendant said that he did not rape the victim, but that he killed her. He said that the Defendant and Mr. White continued to talk through the ducts that night after they were “locked down” and that the Defendant again stated he did not rape anyone but that he killed the victim. Mr. Anter said he did not report the incident to the police but recounted it when he was questioned ten days later.

Mr. Anter also recalled an occasion when he and the Defendant were on the roof and the Defendant talked about the charge related to the victim’s death. Mr. Anter could not recall precisely what the Defendant said, although he recounted,

he was talking about he – that he have a – he haven’t raped – he hadn’t raped. He killed her but he did not rape her and – . . . He

also mentioned, he says his DNA wasn't in her, it was on her. And he told me if I said anything to anybody he would kill me.

He said the Defendant made these statements on several occasions.

Mr. Anter was cross-examined extensively about his immigration status and his prior convictions, and his hearing testimony was in accord with his trial testimony on these points. He acknowledged that he saw television coverage and that he discussed the Defendant's case with Mr. White when he and Mr. White were cellmates briefly. He acknowledged that he told the guards he wanted to report a crime. He denied ever asking Corporal Johnson for information about the Defendant's case. He admitted that he did not tell Detective Coleman in the first interview about the Defendant's statement that the Defendant had killed "blue-eyed b-----," but said he reported it later in a meeting with Detective Postiglione and an Assistant District Attorney General.

The trial court applied the Rule 404(b) framework in analyzing whether the evidence was admissible. The court found by clear and convincing evidence that the incidents described in Mr. Anter's testimony occurred. See Tenn. R. Evid. 404(b)(3). The court found that the evidence was admissible because

in some respects it would go to identity, ie., and admission of guilt and [the Defendant's] intent. These segments that I am speaking of are the references to, I've killed four other people and I will kill you, and the statement about, I've killed blue-eyed b-----, plural, in the past, and I will kill you. The Court, in the prior case [against the Defendant for the murder of S.D.], and I see no reason t[o] change in here, has redacted that statement about I've killed four people to – still reflecting the content of the statement to a reference of, I've killed before and I will kill you, the Court still is of the opinion that still does not change the meaning of that statement. And under the case law that can be done to protect the defendant in terms of the prejudicial effect that may be present when, or if, the multiple references were made.

And I do think that that is, obviously, probative as to intent and the identity of the perpetrator in this particular case. Could it mean other things? Sure. Maybe he is not speaking of [the victim], but maybe he is. So that goes more to the weight and the argument that the parties want to make of it.

The court found that the prejudicial effect of the statement about the “blue-eyed b-----” was too great and that it would not be admitted. The court noted the impossibility of redacting the reference in that statement to the Defendant killing more than one person, finding that the statement could not effectively be modified to refer to the Defendant killing one blue-eyed person without changing the meaning. The court noted that the victim had blue eyes. The court found, however, that evidence of the Defendant’s statements about having killed before and his threats to kill other inmates was admissible. See Tenn. R. Evid. 404(b)(2), (4). Thus, at the trial, Mr. Anter was allowed to testify that the Defendant threatened to kill as the Defendant had killed before.

The question before us, first, is whether Mr. Anter’s testimony that the Defendant had “killed before” is subject to the general bar of evidence of a defendant’s other crimes, wrongs, or acts as contemplated by Rule 404(b), or whether the admissibility should be analyzed under Rule 803(1.2) as an admission of a party-opponent. The evidence was offered to show that the Defendant admitted killing the victim, the charged crime. The trial court’s ruling required that the evidence be limited to the Defendant’s admission that he killed the victim but did not rape her and excluded his admission that he killed four people, eliminating the evidence of other crimes. In the context in which the Defendant made the statement, he was referring to homicides he committed before his threat to kill other inmates, not to homicides he committed before he killed the victim. Once the evidence was limited to the Defendant’s inculpatory statements about the victim’s homicide, any issue regarding Rule 404(b) was eliminated.

Turning to Rule 803(1.2), the evidence was an admission of a party opponent and was admissible subject to the limits of Rules 401 and 403. In that regard, the evidence was relevant and material because it included the Defendant’s admission that he killed the victim. See Tenn. R. Evid. 401. We acknowledge that the Defendant’s actual statement that he killed “them blue-eyed b-----” did not specifically identify the victim, although it might be interpreted to refer to her. The trial court allowed only the testimony that the Defendant said he had “killed before.” Standing alone, the evidence as limited by the trial court might be interpreted to be more inculpatory of the Defendant’s guilt of killing the victim to the extent that it could be interpreted to refer to a single victim, rather than multiple individuals who might or might not include the victim. With respect to the victim, however, the Defendant specifically admitted in other statements that he killed her but did not rape her. The probative value of the evidence was not substantially outweighed by the danger of unfair prejudice. See Tenn. R. Evid. 403. The court did not abuse its discretion in admitting the evidence.

In so holding, we have rejected the Defendant’s argument that the trial court’s “attempt to ‘sanitize’” the Defendant’s prior record was not permitted by State v. Galmore,

because it created the risk the jury would speculate about the Defendant's other crimes. See 994 S.W.2d 120, 122 (Tenn. 1999). We note, first, that the trial court's ruling eliminated any evidence of any homicide other than the victim's that the Defendant claimed to have committed. We likewise disagree with the Defendant that Galmore has any bearing on his case. The issue in Galmore was whether the testifying defendant's credibility could be impeached with his prior conviction pursuant to Rule 609(a)(3) when the impeaching conviction was identified only as a prior felony conviction, rather than by identifying the specific crime of which the defendant had been convicted. See id. The supreme court was concerned in Galmore that the jury might speculate to the defendant's detriment about the nature of the unidentified conviction. Id. In the present case, the Defendant did not testify, meaning the evidence was not used to impeach his credibility. Perhaps more significantly, the crime in this case was neither a prior conviction nor was it unidentified. The Defendant is not entitled to relief.

V

The Defendant contends that the trial court erred in allowing Bobby Downs to be questioned about the circumstances surrounding his departure from the Metropolitan Police Department. The Defendant argues that Tennessee Rule of Evidence 608 did not permit the questioning. The State contends that the trial court did not err. We conclude that the Defendant is not entitled to relief.

Rule 608 provides that conduct involving dishonesty may be inquired into on cross-examination of a witness if certain conditions are met. See Tenn. R. Evid. 608. Rule 608(b)(1) provides,

(b) Specific Instances of Conduct.— Specific instances of conduct of a witness for the purpose of attacking or supporting the witness's character for truthfulness, other than convictions of crime as provided in Rule 609, may not be proved by extrinsic evidence. They may, however, if probative of truthfulness or untruthfulness and under the following conditions, be inquired into on cross-examination of the witness concerning the witness's character for truthfulness or untruthfulness The conditions which must be satisfied before allowing inquiry on cross-examination about such conduct probative solely of truthfulness or untruthfulness are:

(1) The court upon request must hold a hearing outside the jury's presence and must determine that the alleged conduct has

probative value and that a reasonable factual basis exists for the inquiry;

(2) The conduct must have occurred no more than ten years before commencement of the action or prosecution, but evidence of a specific instance of conduct not qualifying under this paragraph (2) is admissible if the proponent gives the adverse party sufficient advance notice of intent to use such evidence to provide the adverse party with a fair opportunity to contest the use of such evidence and the court determines in the interests of justice that the probative value of the evidence, supported by specific facts and circumstances, substantially outweighs its prejudicial effect[.]

Tenn. R. Evid. 608(b)(1), (2).

As we noted in our recitation of the trial evidence, Mr. Downs testified as a defense witness about the extensive search of the victim's neighborhood conducted by police recruits. He described the systematic approach he and Mr. Felts used to search the Thorpes' garage. He said that he was searching for a missing child and a large box of Girl Scout cookies but that the search was not fruitful. He described the contents of the garage in detail.

Before the State cross-examined Mr. Downs, the prosecutor requested at a bench conference that he be permitted to ask the witness "if he was suspended from the police department on August 22nd, '78 for lying during a police investigation." The defense objected on the basis that the conduct was "way too remote" and noted that Mr. Downs's police work on the victim's homicide was in March 1975. The prosecutor represented to the court that the witness "resigned under investigation when he was charged with fraudulent breach of trust. He stole a car (phonetic) basically." The defense did not challenge the accuracy of the prosecutor's statement about the resignation and underlying facts. The only basis for objecting to the evidence that the defense raised was that "[i]t exceeds the years." The trial court ruled that the evidence was admissible. The record does not reflect that the court elaborated on its rationale for admitting the evidence, although the court said something that is recorded in the transcript as "(Indiscernible, too low to understand)."

On cross-examination, Mr. Downs said that at a meeting about the case on March 30, he told his superior officer that he had a strange feeling about the Thorpes' garage. He denied knowing at the time that the victim's body was found in the garage that day. He said that he was asked to draw a diagram of the garage and that he wrote a detailed three-page supplemental report about the garage. The report was dated March 31. He denied that he

knew when he wrote the report that the victim's body had been found. He denied that he was taken to the garage before drawing the diagram and writing a report. He claimed he was able to remember all of the details about the contents of the garage that he recorded in the March 31 report. The State also elicited that as a recruit, Mr. Downs could have "washed out" of his police training before becoming an officer. The prosecutor asked Mr. Downs if he was suspended for lying to Internal Affairs, to which Mr. Downs replied that he would have to see the paperwork. Mr. Downs denied that he resigned from the force under investigation. He said he would have to see the paperwork to answer whether he was charged with fraudulent breach of trust at the time he resigned. He said he would "have to see it on paper" to answer whether he was arrested for fraudulent breach of trust when he was a police officer.

On appeal, the Defendant argues that the cross-examination about the resignation and its circumstances involved a matter that was too remote in time from the Defendant's indictment and that the State failed to present "specific facts and circumstances" about the conduct. Alternatively, he argues that the probative value of the cross-examination did not substantially outweigh its prejudicial effect.

As a preliminary matter, we address the Defendant's argument that the State failed to present the specific facts and circumstances of the prior conduct. Our supreme court has said:

[W]henver possible, extrinsic proof should be offered at the jury-out hearing to establish the "reasonable factual basis." If the realities of trial make it impossible to do so, the attorney proposing to ask the question should, at a minimum, clearly state on the record the source and origin of the information underlying the specific instance of conduct about which inquiry is proposed.

State v. Nesbit, 978 S.W.2d 872, 882 (Tenn. 1998) (examining requirements for impeachment of a character witness with evidence of specific instances of conduct under Rule 405); see State v. Wyrick, 62 S.W.3d 751, 781 (Tenn. 2001) (applying Nesbit guidelines to analysis of admissibility of specific instances of conduct for witness impeachment pursuant to Rule 608(b)(1)). Although the State did not provide extrinsic proof of the matters about which it sought to cross-examine Mr. Downs, the prosecutor stated specific factual information about the identity and nature of the prior conduct about which it sought to cross-examine the witness. The defense did not question the accuracy of the prosecutor's statement to the court. Given that no challenge was raised in this respect, the record supports that a reasonable factual basis existed for the inquiry. See Tenn. R. Evid. 608(b)(1).

The question that arises next is whether the alleged 1978 misconduct was too remote under Rule 608(b)(2), which generally prohibits evidence of conduct that occurred more than ten years before the prosecution began. Rule 608(b)(2) places limits on impeachment with specific instances of conduct that occurred more than ten years before the prosecution commenced and requires that the proponent give the adverse party advance notice and an opportunity to contest the use of the evidence. The general rule is one of exclusion, the theory being that conduct that occurred more than ten years ago has little bearing on the witness's credibility. Neil P. Cohen et al., Tennessee Law of Evidence, § 6.08[8][a], [c] (6th ed. 2011). Evidence of the conduct is considered to be "too stale to be probative." Id. at [b].

Considering the facts of the present case, the record reflects that Mr. Downs left the police department in 1978, and the Defendant was indicted thirty years later. Mr. Downs's testimony on direct examination was significant to the defense theories that the victim was not killed in the garage and that her body was not in the garage during the neighborhood search. Mr. Downs insisted that he remembered the search of the garage and recalled detailed information about the garage's contents, even though he did not see the victim or the Girl Scout cookies that the State's proof suggested had been in the garage since the victim's death around the time of her disappearance. The State also elicited evidence from Mr. Downs that he was able to draw a diagram and write a three-page report weeks after the victim's disappearance. Mr. Downs denied that he knew the victim's body had been found in the garage on the day he drew the diagram and wrote the report. He admitted he was a police recruit at the time and could have "washed out" of the police academy.

As with any untruthful conduct, the evidence of the alleged misconduct was probative of Mr. Downs's character for truthfulness. Given the passage of decades between the witness's alleged misconduct and the commencement of the prosecution, however, we cannot conclude that the probative value substantially outweighed its prejudicial effect. We conclude that the trial court erred in allowing the State to cross-examine Mr. Downs about the circumstances of his departure from the police force.

The Defendant is not entitled to relief unless he can demonstrate that the error more probably than not affected the judgment. T.R.A.P. 36(b). We hold that he has not. Mr. Downs denied that he was fired and professed not to remember other details of his departure from the police force and an alleged criminal charge. In any event, the State cross-examined Mr. Downs thoroughly about his claims that he thoroughly searched the garage, that he recalled in detail the items in the garage, and that he was able to draw a diagram and write a report weeks after the search, his failure to find the victim or the cookie box notwithstanding. The Defendant is not entitled to relief on this basis.

VI

The Defendant contends that the trial court erred in allowing Larry Felts to be questioned about the circumstances of his departure from the police department and his conviction for attempted misuse of information. The State contends that the trial court did not abuse its discretion. We conclude that the trial court did not err in allowing cross-examination about the conviction and the employment termination.

Before Mr. Felts was called as a witness, the State requested a ruling on whether it would be permitted to cross-examine him about the circumstances under which he left the police department. The prosecutor told the court,

[Mr. Felts] was fired in 1991 for leaking information of a known target for a State and Federal investigation. He was also discharged for lying to superior officers about where he got the information orally. And . . . in writing . . . he later was charged with a felony and pled guilty to a misdemeanor misuse . . . of information.

Defense counsel objected on the basis that the conviction was more than ten years old and noted that the correct conviction offense was attempted misuse of information. The trial court noted that the conviction was “related to his police work” and inquired whether the evidence was probative of bias² against the police department.

Like Mr. Downs, Mr. Felts was a police recruit at the time he helped search for the victim, and he later became an officer. Mr. Felts testified on direct examination that he pled guilty to attempted misuse of information and that as a result, his employment was terminated in 1992. He testified about his search of the Thorpes’ garage and said he specifically recalled it because there was a commode inside. On cross-examination, Mr. Felts explained that he leaked information to a suspect and lied to his superior officers about the matter. He claimed to have specific recall of the garage because it was not as well-maintained as others in the neighborhood.

The Defendant argues that the evidence of the conviction and conduct should have been excluded because it did not qualify for admission under Tennessee Rules of Evidence 608, 609, or 616 and that it was barred by Rule 403. As in the situation involving Mr. Downs, the evidence regarding Mr. Felts involved misconduct related to official duties as a

²The trial court meant prejudiced against the police. Under the rule, bias indicates favoring the police. See Tenn. R. Evid. 616.

police officer. Although there was no offer of proof, the defense did not object to the facts recited at the bench conference by the prosecutor except to note that the conviction offense was attempted misuse of information, rather than misuse of information. As noted by the defense, the events and conviction were outside the ten-year period.

As we have noted, specific instances of conduct of a witness for the purpose of attacking a witness's character for truthfulness or untruthfulness may, in certain circumstances, be the subject of cross-examination of the witness. Tenn. R. Evid. 608(b). When the conduct was prosecuted and formed the basis for a criminal conviction, however, Tennessee Rule of Evidence 609 is the operative rule. See Tenn. R. Evid. 608, 609; Neil P. Cohen et al., Tennessee Rules of Evidence, § 6.08[4] (6th ed. 2011) (stating that acts resulting in a criminal conviction must be introduced via Rule 609, not Rule 608).

The State asserted that Mr. Felts was involved in a specific instance of conduct in which he leaked information to a suspect and lied to his superior officers. The conduct formed the basis for his attempt conviction, and Rule 609 provides the relevant framework. The rule permits impeachment of a witness with his or her prior convictions if certain conditions are met: The prior conviction must be for a misdemeanor involving “dishonesty or false statement” or for a felony. Tenn. R. Evid. 609(a)(2); State v. Mixon, 983 S.W.2d 661, 674 (Tenn. 1999). Less than ten years must have elapsed between the witness's release from confinement for the prior conviction and the commencing of the present prosecution, or if there was no confinement, from the date of conviction, although older convictions may be admissible if the adverse party has sufficient advance notice and a fair opportunity to challenge the evidence. Tenn. R. Evid. 609(b). If the conviction is more than ten years old, the trial court must find that in the interests of justice, “the probative value of the conviction, supported by specific facts and circumstances, substantially outweighs its prejudicial effect.” Id. Finally, the trial court must find that the impeaching conviction's probative value on credibility outweighs its unfair prejudicial effect on the substantive issues. Id.

The conviction offense was attempted misuse of official information. The substantive offense, misuse of official information, is a Class B misdemeanor. T.C.A. § 39-16-404(b) (2010). Attempted misuse of official information is a Class C misdemeanor. See id., § 39-12-17(a) (2010). Although a question of first impression, we conclude that attempted misuse of official information is a crime involving dishonesty or false statement as contemplated by our supreme court. See generally T.C.A. § 39-16-404(a) (defining misuse of official information: “A public servant commits an offense who, by reason of information to which the public servant has access in the public servant's official capacity and that has not been made public, attains or aids another to attain a benefit.”). The offense involves dishonesty because a person entrusted with official information misuses it to his or her own advantage or to the advantage of a third party.

We note that the trial court did not make the required findings pursuant to Rule 609. The record reflects that the conviction was more than ten years old. Despite the age of the conviction, the misconduct was related to Mr. Felts' police duties, although there is no indication the misconduct was related to the Defendant or the investigation of the victim's disappearance and death. The Defendant notes that Mr. Felts has since demonstrated his honesty and good moral character because he was licensed as an attorney after his law enforcement career ended. We are persuaded, though, that the State was properly allowed to cross-examine Mr. Felts about the conviction because it was a crime involving dishonesty that occurred in his capacity as a police officer. The integrity of the investigation was called into question by the failure of the police to locate the victim's body in the Thorpes' garage, even though the forensic evidence suggested that it had been there all along. Whether Mr. Felts testified truthfully was a significant point. We conclude that the probative value of the evidence on Mr. Felts's credibility substantially outweighed the prejudicial effect of the evidence. The trial court did not err in allowing the State to cross-examine Mr. Felts about the conviction.

We consider next the admissibility of the evidence under Rule 616, which provides for cross-examination, extrinsic evidence, or both, of a witness's bias or prejudice toward a party or another witness. See Tenn. R. Evid. 616. The Defendant contends that the trial court erred in allowing the State to cross-examine Mr. Felts about the circumstances surrounding the conviction in order to demonstrate that he was prejudiced against the police department. The State concedes that Rule 616 does not apply because the police department was not a party or other witness. While we view the adverse party as the State, we view the police department as the functional equivalent of the State, which prosecuted the crime.

Mr. Felts testified about a thorough search of the garage and said, "Her body was not there." His testimony called into question the State's theory that the victim was in the garage from the time of her disappearance and death until being found. The defense offered his testimony to attempt to show otherwise. The facts of Mr. Felts's dismissal from the police department were relevant to possible prejudice against the State. We acknowledge the passage of many years between the employment termination and the Defendant's trial, but the facts of the dismissal included Mr. Felts's admission that he lied to his superior officers. We conclude that the evidence was probative of prejudice and that the trial court's admission of it was consistent with Rule 616.

We have also considered the Defendant's argument that even if the evidence was otherwise admissible, Rule 403 barred its admission because "its probative value [was] substantially outweighed by the danger of unfair prejudice." See Tenn. R. Evid. 403. As we have noted regarding admissibility under Rule 609, the probative value of the evidence was

not substantially outweighed by the danger of unfair prejudice. Rule 403 did not defeat its admissibility.

The trial court did not err in allowing the State to cross-examine Mr. Felts about his conviction and employment termination. The Defendant is not entitled to relief.

VII

The Defendant contends that the trial court erred in allowing Dr. Jerry Francisco to testify as an expert in DNA analysis. The State contends that the trial court did not err in allowing the former state medical examiner to testify in limited fashion about his observations of the handling of DNA in his laboratory. We conclude that the trial court did not abuse its discretion.

Tennessee Rules of Evidence 702 and 703 address the admissibility of opinion testimony of expert witnesses. Questions regarding the admissibility, qualifications, relevancy, and competency of expert testimony are left to the discretion of the trial court. McDaniel v. CSX Transp., Inc., 955 S.W.2d 257, 263-64 (Tenn. 1997). A trial court's ruling on the admissibility of such evidence may be overturned on appeal only for an abuse of discretion. State v. Stevens, 78 S.W.3d 817, 834 (Tenn. 2002).

The record reflects that Dr. Francisco testified as an expert witness in forensic pathology. During his direct examination, he was asked about precautions taken in the laboratory at the time of the victim's autopsy to avoid the transfer of DNA evidence. The defense objected to Dr. Francisco's testifying as an expert in DNA analysis. The State then questioned Dr. Francisco about his medical training and education specific to DNA. He said he had DNA-specific training in medical school. He said it was necessary for a physician to learn about DNA because "[i]t's pervasive, it's everywhere." He said that he had not done DNA analysis or interpretation but that he had knowledge of the science of DNA. When cross-examined on voir dire, he said he was in medical school in 1952 through 1955. He said he had never testified as an expert in DNA testing. He said he attended a DNA seminar at least ten years earlier, before his retirement, but that he had done additional "work, review, literature searching, online examinations constantly since that time because . . . it's a very fas[c]inating thing." The trial court ruled, "I'll allow Dr. Francisco to answer the question he's been asked and we'll deal with any other objections in terms of explaining . . . about the lab not taking precautions for any DNA issues."

Dr. Francisco proceeded to testify that because DNA was present in small amounts, there was a need for a technique to magnify it. He said that in the late 1970s, a magnification technique called polymerase chain reaction was developed to unwind DNA molecules. He

explained, “In 1975, we didn’t know it existed and, therefore, you would touch the swab with your hands. There were all sorts of contamination that would lead to a false positive, if you will, and we had no knowledge of this in 1975.” He said that at the time, swabbing was done to collect fluid in order to examine it for the presence of sperm. He explained the process by which he and Dr. Bell made their own swabs and the procedure for handling the swabs and transferring the fluid to slides. He also testified that if testing showed that four or five individuals’ DNA was on the slides, this was probably due to contamination.

When the trial court instructed the jury, it listed Dr. Francisco as an expert witness in forensic pathology. The court listed William Gavin as an expert in forensic serology. It listed Janice Williamson, Meghan Clement, Jennifer Luttman, Chad Johnson, Joe Minor, and Gary Harmor as experts in DNA analysis.

We conclude that contrary to the Defendant’s assertion, Dr. Francisco did not testify as an expert in DNA analysis. He testified as an expert in forensic pathology, and as part of his expertise as a physician, he described basic scientific knowledge as it related to his laboratory’s lack of procedures for preventing contamination of DNA evidence in 1975. His voir dire testimony established that basic scientific knowledge about DNA was part of his medical school curriculum and continuing education and that he had additional independent education due to his particular interest in the field. He did not testify about any DNA analysis performed on the evidence in this case. The Defendant has not established that the trial court abused its discretion or arbitrarily allowed Dr. Francisco to testify about basic scientific facts within his knowledge as a forensic pathologist.

In so holding, we distinguish the case cited by the Defendant, State v. Halake, 102 S.W.3d 661 (Tenn. Crim. App. 2001). In Halake, this court held that the trial court committed prejudicial error by allowing a police officer to testify as an expert witness that blood spots on the defendant’s pants were consistent with gunshot blood spatter. The court noted the complicated nature of blood spatter analysis. The court also noted that although the officer had some on-the-job experience at crime scenes where blood spatter was present and had attended general law enforcement seminars where information about blood spatter was presented, the officer had no specialized training in blood spatter analysis. Id. at 670-72. In contrast to Halake, Dr. Francisco’s testimony in the present case was appropriate expert testimony for an expert in forensic pathology. Dr. Francisco’s testimony was limited to the procedures in his laboratory before the advent of techniques to examine evidence for the presence and identity of DNA, the means by which samples prepared before that time could become contaminated, and his opinion that the slides from the victim’s homicide containing DNA from multiple sources probably were contaminated. As a forensic pathologist who worked in a laboratory setting for many years and who had specialized training and an

individual interest in DNA, Dr. Francisco did not exceed the scope of his expertise. The Defendant is not entitled to relief.

VIII

The Defendant contends that the jury imposed an excessive sentence of forty-four years. The State counters that the sentence is within the range of ten years to life imprisonment that was prescribed for second degree murder at the time of the offense. We conclude that the Defendant has not established error.

As noted by the State, second degree murder at the time of the offense carried a sentence to prison “for life or for a period of not less than ten (10) years.” T.C.A. § 39-2408 (1975) (renumbered at T.C.A. § 39-2-212) (repealed 1989); see id., § 40-35-117(c) (2010) (providing that prior law shall apply to sentencing of a defendant for a crime committed before July 1, 1982). The law also provided, “The jury before whom the offender is tried, shall ascertain in their verdict whether it is murder in the first or second degree; and if the accused confess his guilt, the court shall proceed to determine the degree of crime by the verdict of a jury, upon the examination of testimony, and give sentence accordingly.” See id., § 39-2404 (1975) (amended 1977, 1988) (repealed 1989); see, e.g., State v. Bryant, 805 S.W.2d 762, 763 (Tenn. 1991). “Until 1982, appellate review of sentencing was limited to issues of probation, consecutive sentencing, and capital punishment. Where the jury fixed sentences within the range authorized by the criminal statute, no appeal was available.” Bryant, 805 S.W.2d at 763 (citing Ryall v. State, 321 S.W.2d 809 (Tenn. 1959); State v. Webb, 625 S.W.2d 281 (Tenn. Crim. App. 1980); Johnson v. State, 598 S.W.2d 803 (Tenn. Crim. App. 1980)).

The Defendant acknowledges that jury-imposed sentences within the range prescribed by the former sentencing law normally have not been considered to be “excessive or indicative of passion, prejudice, or caprice on the part of the jury.” See Dukes v. State, 578 S.W.2d 659, 666 (Tenn. Crim. App. 1978). He notes that the Tennessee Supreme Court modified sentences involving jury-imposed jail confinement in McKnight v. State, 106 S.W.2d 556 (Tenn. 1937) and Bacon v. State, 385 S.W.2d 107 (Tenn. 1964). We note, however, that both cases cited by the Defendant involved misdemeanors, and distinguish them on that basis. See Bacon, 385 S.W.2d at 270 (identifying “assault and battery” and describing a misdemeanor assault); McKnight, 106 S.W.2d at 557 (identifying unlawfully soliciting insurance as a misdemeanor).

In any event, the Defendant advocates that this court should reduce his sentence to one commensurate to a Range I sentence for second degree murder under current law. He notes that his forty-four year sentence is greater than the maximum sentence for both Range I and

Range II sentences for second degree murder under current law. He argues that pursuant to current Code section 39-11-112, he should receive the benefit of the lesser sentence provided for second degree murder by current law. Code section 39-11-112 states:

When a penal statute or penal legislative act of the state is repealed or amended by a subsequent legislative act, the offense, as defined by the statute or act being repealed or amended, committed while the statute or act was in full force and effect shall be prosecuted under the act or statute in effect at the time of the commission of the offense. Except as provided under the provisions of § 40-35-117, in the event the subsequent act provides for a lesser penalty, any punishment imposed shall be in accordance with the subsequent act.

T.C.A. § 39-11-112 (2010) (emphasis added). Code section 40-35-117 provides that prior law shall apply for all defendants who committed crimes before July 1, 1982. Id., § 40-35-117(c) (2010). This court has said that section 40-35-117 is constitutional. See, e.g., State v. Turner, 919 S.W.2d 346, 361-62 (Tenn. Crim. App. 1995); State v. Melvin, 913 S.W.2d 195, 201-02 (Tenn. 1995).

We conclude that the jury imposed a sentence that was within the applicable range and that the Defendant is not afforded further review by this court. The Defendant is not entitled to relief.

IX

The Defendant's final contention is that the trial court erred in imposing his sentence consecutively to a life sentence for a previous conviction. The State counters that the trial court did not err. We agree with the State.

Before considering the issue raised, we note that at the Defendant's request, the trial court considered consecutive sentencing of the Defendant under current Code section 40-35-115. That statute was not in effect at the time of the Defendant's crime. At that time, the Code provided:

When any person has been convicted of two (2) or more offenses, judgment shall be rendered on each conviction after the first, providing that the terms of imprisonment to which such person is sentenced shall run concurrently or cumulatively in the discretion of the trial judge; provided, that the exercise of the

discretion of the trial judge shall be reviewable by the Supreme Court on appeal.

T.C.A. § 40-2711 (1975) (amended 1979) (repealed 1982). As we noted in Section VIII, the current Criminal Code provides that prior law shall apply for all defendants who committed crimes before July 1, 1982. See id., § 40-35-117(c). The proper law for determining whether the Defendant should receive a consecutive sentence was the law as it existed in 1975.

In that regard, the Defendant's crime was committed before our supreme court's decisions in Gray v. State, 538 S.W.2d 391 (Tenn. 1976) and State v. Taylor, 739 S.W.2d 227 (Tenn. 1987). Those cases established the framework that was adopted by our legislature in defining the current consecutive sentencing scheme. See generally T.C.A. § 40-25-115, Sent'g Comm. Cmts. Collectively, Gray and Taylor defined five categories of offenders for whom consecutive sentencing was appropriate. See id. The legislature added two additional categories in 1990. Id. Before the Gray and Taylor decisions, there was no guidance for a trial court in imposing consecutive sentencing. See Gray, 538 S.W.2d at 392-93 (noting the absence of guidelines for determining when consecutive sentencing was appropriate and defining guidelines to be followed in the future); see also Bundy v. State, 140 S.W.2d 154 (Tenn. 1940) (stating that consecutive sentencing was in the discretion of the trial court); Wooten v. State, 477 S.W.2d 767, 768 (Tenn. Crim. App. 1971).

All of that said, the development of the law is of little consequence to the outcome of this case. Use of the subsequently developed guidelines only reinforces that the trial court did not abuse its discretion. In the present case, the trial court found two bases for imposing consecutive sentencing. First, the court found that the Defendant's history of criminal activity was extensive. See Gray, 538 S.W.2d at 393. The record reflects that the Defendant had prior convictions for first degree murder, rape, unlawful carnal knowledge of a minor, and assault with intent to rape. This was an appropriate consideration that was within the discretion of the trial court, without regard to the timing of the Gray decision. The trial court did not abuse its discretion in imposing consecutive sentencing on this basis.

Second, the trial court found that the Defendant was a dangerous offender with little or no regard for human life and who had no hesitation about committing a crime involving a high risk to human life. See id. With regard to this finding, the court noted that the sentence "need[ed] to be long enough to keep [the Defendant] permanently incarcerated" and that an extended sentence would minimize the deaths of the victim and the murder victim from the previous case. See id.; see also State v. Wilkerson, 905 S.W.2d 933 (Tenn. 1995). Again, this was an appropriate consideration for the trial court to have considered. The trial court did not abuse its discretion in relying on this basis to impose consecutive sentences.

In consideration of the foregoing and the record as a whole, the judgment of the trial court is affirmed.

JOSEPH M. TIPTON, PRESIDING JUDGE