

IN THE COURT OF CRIMINAL APPEALS OF TENNESSEE

FILED

AT KNOXVILLE

OCTOBER SESSION, 1998

April 20, 1999

STATE OF TENNESSEE,)	C.C.A. NO. 03C01-9705-CR-00164
)	
Appellee,)	
)	
VS.)	HAMILTON COUNTY
)	
PAUL WILLIAM WARE,)	HON. DOUGLAS A. MEYERS
)	JUDGE
)	
Appellant.)	(Felony Murder, Rape of a Child)

**ON APPEAL FROM THE JUDGMENT OF THE
CRIMINAL COURT OF HAMILTON COUNTY**

FOR THE APPELLANT:

FOR THE APPELLEE:

ARDENA J. GARTH
District Public Defender

JOHN KNOX WALKUP
Attorney General and Reporter

DONNA ROBINSON MILLER
Assistant District Public Defender
Suite 300 - 701 Cherry Street
Chattanooga, TN 37402

MICHAEL J. FAHEY, II
Assistant Attorney General
425 Fifth Avenue North
Nashville, TN 37243

WILLIAM H. COX
District Attorney General
600 Market Street, Suite 300
Courts Building
Chattanooga, TN 37402

OPINION FILED _____

AFFIRMED

DAVID H. WELLES, JUDGE

OPINION

The Defendant, Paul Ware, was indicted in 1994 for felony murder and multiple counts of rape of a child. The State filed notice of intent to seek the death penalty. A Hamilton County jury found him guilty of felony murder and two counts of child rape, and he was sentenced to life without parole for the felony murder. At a subsequent sentencing hearing, the trial court imposed concurrent twenty-five year sentences for the child rape convictions and ordered that the twenty-five year sentences be served consecutively to the sentence of life without the possibility of parole. The Defendant now appeals his convictions and sentences pursuant to Rule 3 of the Tennessee Rules of Appellate Procedure. We affirm the judgment of the trial court.

The Defendant presents eight issues on appeal: (1) whether the evidence presented at trial is sufficient to support his convictions; (2) whether the State withheld exculpatory information from the Defendant, resulting in an unfair trial; (3) whether the results of mitochondrial DNA analysis were properly admitted into evidence; (4) whether the trial court erred by excluding evidence indicating that State witness Paul Crum practiced Satanic worship; (5) whether the trial judge demonstrated bias against the Defendant in the presence of the jury; (6) whether there was sufficient accumulation of errors to mandate a new trial; (7) whether consecutive sentences were properly imposed; and (8) whether the trial court erred by failing to declare a mistrial or halt jury deliberations because of the testimony of a newly discovered defense witness.

On the evening of Friday, September 30, 1994, four-year-old Lindsey Green, the victim in this case, was staying with her mother, Sylvia Kaye Dye,¹ at 414 Stringer Street, the home of Sheila Sanders King. At the time, Dye was temporarily living with Ms. King and King's two young sons. Dye, who planned to go out with her boyfriend for the evening, contacted the victim's father, Jimmy Green, at approximately 6:00 p.m. Green agreed to pick up the victim later in the evening, and Dye arranged for Ms. King to watch the victim until Green arrived.

The Defendant, who shares family ties with Ms. King,² arrived at 414 Stringer Street during the afternoon to help Carl Sanders, King's father, repair a screen door. Danny Gaddis, Dye's boyfriend, also arrived at the home that afternoon after work. After consuming some alcoholic beverages with the Defendant, King, and Carl Sanders, Dye and Gaddis departed at approximately 8:00 p.m. for Ziggy's, a local bar.³

¹ Sylvia Kaye Dye, the victim's mother, and Jimmy Green, the victim's father, shared custody of their daughter. During the week preceding the crime, the victim resided with her father, but the victim was visiting her mother on the weekend that the crime occurred.

² The Defendant's half-brother, David Ware, who shares with the Defendant a common father, is also the half-brother of Sheila Sanders King, with whom he shares a common mother. At trial, Sheila referred to the Defendant as her "stepbrother," but, they are not actually related by blood or marriage.

³ Danny Gaddis testified that he and Dye departed for Ziggy's around 7:30 p.m., while Dye testified that they left at 8:30 p.m.

While at Ziggy's, Dye received a phone call from Ms. King, who told her that the victim's nose had begun to bleed. Ms. King explained that one of her sons had accidentally bumped the victim's nose while the children played. King told Dye that the victim wanted her mother to come home, and Dye agreed to return.

At approximately 10:30 p.m.,⁴ Dye and Gaddis left Ziggy's to go to another local bar. They walked back to 414 Stringer Street, saw the children playing inside the house through the screen door, and departed in their car without being noticed by the children. They then drove to another bar, where they stayed until about 1:30 a.m., at which time they went to a local Waffle House for breakfast.

Somewhere in the vicinity of 2:30 a.m., Dye and Gaddis left the Waffle House and drove directly to 414 Stringer Street.

During the time that Dye and Gaddis were gone, Ms. King's sister, Carla Sanders, and her boyfriend, Paul Crum, arrived at 414 Stringer Street. Crum was delivering some marijuana that King had given him money to buy. King asked Crum to babysit the children while she went out, and he agreed to do so for ten dollars and a pack of cigarettes.

⁴ Gaddis testified that he and Dye stopped by 414 Stringer Street at approximately 9:00 p.m., but he also acknowledged that in his initial statement to the police, he estimated the time to be "about 10:30." He explained, "I don't wear a watch."

Ms. King departed on foot with her father Carl Sanders (who had remained at her home throughout the afternoon and early evening) at approximately 10:45 p.m.⁵ They stopped by Ziggy's, hoping to find Dye and Gaddis, and, not having found them, stopped by a liquor store next door to Ziggy's, then proceeded to the Do Drop In Again, another local bar. While there, King encountered the Defendant. He was having a drink at the bar and seemed "high" to King. Ms. King invited him to spend the night at her house. The Defendant had stayed at her home on a number of previous occasions and in fact had lived for a brief time at 414 Stringer Street approximately one month prior to the date of the crime.⁶ However, Ms. King asked him to move out before Dye and the victim moved into the home because, according to King, "usually when he was drinking he would come to my house and break my window to my door. . . . [i]t was a little too crowded for me." King testified that when the Defendant stayed at her home, he slept "in the floor or on the couch."

Ron Anderson, a "[w]ork acquaintance" of the Defendant, saw the Defendant sitting with King at the Do Drop In Again that evening. He testified that he spoke with the Defendant a couple of times during the evening. According to Anderson, during their second conversation, which occurred shortly before Anderson left, the Defendant stated, "'Don't hurt my sister' . . . in a way where if a person was to say something wrong, it could lead to . . . maybe an argument

⁵ King believed that Dye and Gaddis would return to her home sometime around 11:00 p.m.

⁶ Ms. King testified that the Defendant may have been living at her home only three weeks before the night of the crime.

or something” Anderson stated that he “just took it as somebody being very drunk and just saying something they didn’t realize what they’d said.”

Anderson testified that he believed the Defendant left the bar around 2:15 a.m. Ms. King testified that she left the bar to drive to Alabama with some friends shortly after 2:00 a.m. and stated that she was unsure whether the Defendant was still at the bar when she left. King did not return to 414 Stringer Street until 6:30 or 7:00 a.m.

Paul Crum was therefore the only person who offered testimony about the events at 414 Stringer Street immediately preceding the discovery of the victim’s body. Crum testified that he arrived with Carla Sanders at 414 Stringer Street at 9:30 or 10:00 p.m. He explained that he was looking for the Defendant so he could deliver to the Defendant some marijuana that the Defendant had requested earlier that day. He stated that King suggested that the Defendant was either at Ziggy’s or the Do Drop In Again. Crum departed and went first to Ziggy’s. Crum went next to the Do Drop In Again, where he located the Defendant. He testified that he delivered the marijuana to the Defendant and then went back to 414 Stringer Street.

After Crum arrived, Carl Sanders, Carla Sanders, and Ms. King left the home, leaving Crum alone with the children to watch movies. Crum testified that the victim and one of the boys fell asleep in the living room while watching the movies. He further testified that the Defendant arrived at 414 Stringer Street at approximately 1:30 or 2:00 a.m. Crum stated that he put the children to bed

when the Defendant arrived and that he placed the sleeping victim, who was clothed and wrapped in a comforter, on one of the two twin beds in the bedroom where she normally slept with her mother.

Crum described the Defendant as “[d]runk . . . [w]obbling, slurring when he was talking . . . [a]nd real sick, pale looking” when he arrived at the house. Crum testified that upon arriving, the Defendant went into the kitchen, made a sandwich, ate it, “threw up,” made a phone call,⁷ and then went into the bathroom.

While the Defendant was in the bathroom, Crum sat back down and began to watch a movie. Crum testified that when the Defendant emerged from the bathroom, the Defendant stretched and told Crum that he was going to go lie down. The Defendant went into the same room where the victim was sleeping, and Crum stated that he assumed he “went in there to pass out” on the other twin bed, which was empty. While watching the movie, Crum heard “two little bumps, but . . . really didn’t think nothing [sic] about it.” On cross-examination, he admitted that the bumps could have been a car door shutting because he heard the bumps shortly before Dye and Gaddis arrived.

Approximately forty-five minutes to an hour later, according to Crum, Dye and Gaddis arrived back at 414 Stringer Street. Dye testified that when they arrived, Crum was acting as he normally did. He was “mellowed out, he was calm, he was watching TV and smoking a joint.”⁸ Dye and Gaddis joined Crum in the living room, where they all engaged in conversation. Approximately fifteen

⁷ Crum testified that he could not remember whether the Defendant made one or two phone calls.

⁸ Crum denied smoking marijuana inside the house.

to twenty minutes after arriving, according to Crum, Dye asked where the victim was sleeping. Crum told her that the victim and the Defendant were sleeping in the second bedroom.

Dye went to the bedroom door and attempted to open it, but could not do so because it was locked. She banged on the door, calling the Defendant, and when she got no response, she went into the kitchen to retrieve a knife to try to open the door, which she was unable to do. Crum stated that he went to help her and was successful in unlocking the door with the knife.

Once inside the room, Dye and Crum noticed that neither the Defendant nor the victim were in the beds. On the bed where the victim had slept, there was what appeared to be a wet urine stain,⁹ and the bedclothes were in disarray. Dye testified that Crum looked under the bedclothes for the victim, and when “[h]e shook the covers . . . , [the victim’s] clothing . . . fell out into the floor [I]t was her top and shorts and her panties was [sic] still in the shorts.” In addition, beige men’s pants containing the Defendant’s wallet were later found between a twin bed and the dresser, which sat between the two twin beds in Dye’s room, and a pair of red men’s underwear, which apparently was not noticed initially, was later

⁹ A Federal Bureau of Investigations (FBI) agent testified that “urine could potentially be present in [the] stained areas” of the sheet. The tests run by the FBI did not conclusively determine that the stain was urine, and assuming the stain was urine, the testing done did not match the stain with any particular person.

Furthermore, the FBI tested the sheet for seminal fluid. Danny Gaddis, who testified that he had engaged in sexual intercourse with Dye on the bed, was included as a potential donor. The Defendant, however, was not mentioned as a potential donor for the fluid.

found at the foot of the bed where the victim had slept. The owner of the underwear was never identified.¹⁰

¹⁰ The police collected the beige pants and the underwear four days after the crime. Both Gaddis and Crum denied owning the underwear. Although Sheila Sanders King pointed out the underwear to police as possibly belonging to the Defendant, King, who often washed the Defendant's clothes during the time that he lived at her home, stated that she had never actually seen the underwear in the possession of the Defendant.

Dye walked across the room and opened the door to the utility room, which was adjacent to the bedroom. On the floor of the utility room were the Defendant and the victim. Both were nude.¹¹ The Defendant was lying on his back, and the victim was lying on her stomach a few inches away with her head closest to his feet. According to Dye, the victim “was purple,” her “mouth was already blue,” and her body was cool or cold to the touch.¹² Dye kicked the Defendant several times, but he did not respond or move.

Gaddis, upon hearing Dye’s reaction to the scene, rushed into the room and scooped up the victim. He and Dye rushed out of the house with the child. As they left, according to Gaddis, they saw Carl Sanders “come out of the middle of nowhere” on the sidewalk leading to the house. Sanders grabbed the victim’s arm and released it when Dye and Gaddis told him they were in a hurry.¹³ Dye and Gaddis jumped into their car and sped the child to the emergency room of a nearby hospital.

At the hospital, according to Dr. Susan Hayes, the emergency room doctor, the victim was already “blue from lack of oxygen.” She had no pulse or heart rate. She was intubated in an attempt to induce breathing. Dr. Hayes testified

¹¹ At trial, David Ware, the Defendant’s half-brother, testified that it was common for the Defendant to sleep nude after returning home inebriated at night.

¹² Gaddis testified that the victim was “cold.”

¹³ Carl Sanders testified that when he touched the victim, she “wasn’t cold, but she was cool.”

that when she intubated the victim, the child was very limber, and there were no signs of rigor mortis. After all attempts to resuscitate the victim failed, the victim was pronounced dead at 3:24 a.m.

Dye then requested that Dr. Hayes check the victim for signs of sexual abuse. Dr. Hayes complied. She stated at trial, “[H]er vagina was torn, her rectum was torn. It was the most horrible thing I’d ever seen.” The child was also bruised on her labia, around her rectum, and on her upper thighs. Although there was not a large amount of blood on the child, there were indicia of internal bleeding. Dr. Hayes testified that the injuries to the child were consistent with the results of a rape, and more specifically, penetration by an adult male’s penis. However, Dr. Hayes also testified that she did not do a thorough examination of the child because she feared she might disturb evidence and interfere with the medical examiner’s job.

Crum testified that after Dye and Gaddis departed 414 Stringer Street with the victim, he dialed Carla Sander’s number because it was the only number which came to his mind at the time, and he then immediately ran to Carla’s house and banged on the door, telling Carla to call 911 “because Paul Ware killed Lindsay Green.” Crum testified that he next left in his car to find Dye, Gaddis, and the victim because he believed that Dye and Gaddis had left the house on foot. However, he soon realized that they had left in a car and decided instead to return to 414 Stringer Street.

At the house, Crum found Carl Sanders and the Defendant, who was “standing there in a daze, like he didn’t know what was going on.” According to Crum, the Defendant was wearing a different pair of pants from those that he wore when he had arrived at the house earlier in the evening. Crum also testified that the Defendant had “a couple drops of blood on him . . . like somebody took a pin or something and jabbed him once or twice around his face” Crum soon went back outside to wait for the police to arrive.

Officer Choquette of the Chattanooga Police Department testified that he and his partner, Officer Baker, were called to Stringer Street in the early morning hours of October 1, 1994. He testified that he saw a white male, whom he later determined to be Paul Crum, standing on the corner of Stringer Street. He stated that he asked Crum, who was “shaking uncontrollably,”¹⁴ whether Crum had called the police, to which Crum answered, “No.” Choquette further testified that when he later asked Carla Sanders whether she had called 911, she also denied having called. Choquette then departed.

After searching the block for the correct house, Choquette arrived at 414 Stringer Street and again met Crum, who emerged from the home as the officers arrived. At this point, according to Choquette, Crum, still “shaking uncontrollably,” either asked whether “the baby was dead” or told the officers that the child was dead. Baker stated that Crum initially told the officers that the victim “had fallen and that she looked dead.” Crum also explained that the child

¹⁴ Officer Baker testified that Crum “seemed visibly disturbed” and that he “seemed to be very agitated, nervous, almost scared.”

had been taken to the hospital. Crum told the officers that “he needed [them] to go in and see if [they could] find [the Defendant].” According to Choquette, Crum informed them that the Defendant “had run around to the back of the house and was on his way to Whitwell.”

The officers went into the home and found the Defendant in the laundry room lying in a pile of clothes wearing what Choquette believed was either a pair of jeans or possibly some sort of pants and no shirt. Choquette testified that after waking him up, the officers handcuffed the “very drunk” Defendant, who “started asking what was going on.” Upon being told that the officers were taking him to the police station, the Defendant “just started going off cussing and stuff.” Despite Crum’s testimony that the “officers found [the Defendant] hiding” in the laundry room and that the Defendant resisted arrest,¹⁵ Choquette maintained that the Defendant did not resist arrest, but rather simply needed assistance to walk out of the house because he was “staggering.”

Officer Baker, who transported the Defendant to the police station, testified that during the ride, the Defendant alternated between acting passively and becoming angry and belligerent. He testified that at one point, while at the police station, the Defendant “lunged forward at me out of the chair and I had to use both hands to stop him . . . and kind of pushed him back down into the chair.” Baker described the Defendant’s appearance as follows:

¹⁵ Crum stated, “[H]e was just stiff as a board, wouldn’t move.”

I recall he had on a, I believe it was a white shirt, a light colored shirt, and there were two, there were, I don't remember exactly how many spots but there were some red spots on it that appeared to be blood.¹⁶ . . . [H]e had on dark colored pants. Other than that, . . . he was disheveled. He looked like he was intoxicated.

At the police station, the Defendant submitted to blood alcohol level testing at approximately 1:30 in the afternoon on October 1, 1994, and the tests indicated that approximately ten and a half hours after the victim was transported to the hospital, the Defendant had a blood alcohol level of .04 percent. Dr. Cleland Blake, a medical expert at trial, estimated that this meant the Defendant would have had a blood alcohol level of approximately .20 or .21 percent eleven hours earlier.¹⁷ Detective Michael Mathis of the Chattanooga Police Department testified at trial that he spoke with the Defendant at the police station on the night of the crime. According to Mathis, after being advised of his rights, the Defendant stated, "I was drunk and I don't remember anything."

At trial, Dr. Frank King, the medical examiner, presented evidence accumulated during the postmortem examination of the victim. He reported that

¹⁶ In testing done on the shirt by the F.B.I., a small amount of human blood was found in some of the stains on the shirt. However, the F.B.I. was unable to develop a conclusive profile of the donor of the blood either because "there was insufficient DNA present or it was too degraded to make a determination as to who the potential source of that human blood was."

¹⁷ Blake explained that his estimation was based on the average rate at which a person metabolizes alcohol, but also emphasized that different people metabolize alcohol at sometimes widely varying rates.

the cause of death was mechanical asphyxia, meaning that the victim was “unable to breathe due to a mechanical interference in normal breathing.” In addition to numerous other injuries which the medical examiner described and explained in detail, the victim sustained a contusion on the small of her back which was “consistent with that part of [her] body pressing against a broad or flat surface.” King explained that “[t]he only way for this to happen is for that part of the back to be up against something with some pressure applied.”

Also significant to the issues in this case were certain hairs found on and inside the child’s body. During the autopsy, Dr. King recovered a reddish hair¹⁸ which was stuck to the victim’s lip, a dark brown body hair which was “partly touching . . . the mucosa of the rectum and partly touching the skin of the anus,” and a reddish pubic hair from the victim’s pharynx. With regard to the dark brown hair, he testified,

It would take direct contact and a little pressure applied to get that hair to stick to the mucosal lining in the rectum. . . . Any handling of the body, moving of the body from one place to another, examination of the body by a person or persons could potentially be sources of contamination to supply loose hair

Furthermore, Dr. King testified that the pubic hair found in the victim’s pharynx was highly unusual. He explained that a “normal, breathing, living person would . . . not [be expected] to tolerate a hair in this location” because any intrusion into this area would trigger a cough reflex.

Dr. King testified that rigor mortis “tends to start showing up first in the area of the jaw, in the area of the small muscles of the extremities.” With regard to the

¹⁸ The Defendant was characterized as having red or auburn hair.

victim, he stated, “[G]iven her size, her lack of clothing and temperature where she was found, . . . I could estimate maybe she had been dead one to two hours or less. I think that certainly after . . . two to four hours she . . . should certainly have some rigor mortis developing in her jaw muscles,” which could be detected by an emergency room doctor.

Dr. Cleland Blake, a defense witness who reviewed the data and evidence collected in the case, reached a slightly different conclusion regarding the time of death. He testified that the first change in the postmortem period is livor mortis, or settling. He explained,

That means if a body is laying on its back, blood tends to settle downward so that the back would be more purplish or pink, depending on how long its [sic] been.

The longer the period of time, the more intense purple it gets on the deep end or lower part of the body. If the body is stomach or face down, then the purple or pink color would be on that side.

He further testified that

[t]he first time, the first period that livor [mortis] would be noticeable in a white skin would be something upwards of two hours, an hour and a half to two hours, to see any degree of livor [mortis] for any person. Nobody could appreciate it earlier than one hour. It may take as long as two and a half hours to become apparent.

In addition, Blake testified that based on the circumstances of the case,¹⁹ he would estimate that the child had been dead for three hours to be perceived

¹⁹ The hypothetical posed to Dr. Blake was as follows:

[T]he ambient air temperature was 72 degrees; there was carpet on the floor, as well as dirty clothes, it was a laundry room; [the victim was] presented at the hospital at 3:10; the child’s mother, the child’s mother’s boyfriend, both handled the child, both of them described her as cold; and she then presented at the hospital . . . after about a seven- or eight-minute automobile ride. The entire time, the mother testified that she was attempting CPR, cardiopulmonary resuscitation.

However, the actual temperature of the room in which the victim was found was never determined.

as “cool.” He also stated that in order for her to be perceived as “cold,” she had to have been dead for “[a]t least two hours,” but he emphasized that he was being conservative in his opinion.

Blake further testified that under the circumstances,

[i]n a child, rigor [mortis] would not be apparent before two hours . . . and if rigor [mortis] starts out, anything starts, has a starting point, and it’s a matter of degree, it’s a matter of progression to the maximum stiffness that that body and that temperature is capable of achieving. . . . [A]ny movement of the child, any picking up of the child, draping, twisting, handling, moving, transport will begin to break that early rigor that has started, so it does not become noticeable for a longer time. . . . So in transporting a child in a situation like this, rigor [mortis] may not be apparent at all until after three or more hours.

Finally, Blake testified that the victim “could very well have been deceased at the time” she was injured, depending upon whether she was “mopped off or cleaned up by the pathologist or the assistants.” He stated that he would have expected to have seen more blood on her, even if she was deceased at the time of the sexual assault.

Dr. King stated that he believed all injuries were inflicted on the victim before her death, but agreed that since the injuries occurred before death, he would have expected some bleeding consistent with the injuries. King testified that had the victim died before the injuries occurred, there would have been less bleeding.

Dr. King also noted some petechial hemorrhages inside the victim’s mouth, which he stated could be consistent with either asphyxia or low oxygen, or

“aggressive resuscitation, placement of endotracheal tube.” However, he concluded, “[I]n this case, the petechial hemorrhages inside the upper inner gum by themselves don’t prove anything. . . . It’s the overall pattern with the other injuries present that make it mechanical asphyxia.” Having noted no evidence of oral rape during his examination of the victim, he concluded, “I cannot say there was oral penetration in this case.” Furthermore, no seminal fluid was found in or on the child’s body. Dr. King stated that the injuries could have been caused by the insertion of any blunt object²⁰ and testified that he could not state with certainty that an adult male penis penetrated the child, although he indicated he believed that the child had been “brutally raped.”

Special Agent Chris Hopkins of the FBI Hair and Fibers Unit testified about the hairs found at the crime scene and those found in and on the victim’s body. He identified the hair which was found in the victim’s pharynx as a “red Caucasian pubic hair” which had been “naturally shed.” He also discussed “at least ten red Caucasian pubic hairs” which were taken from the sheet on the bed where Crum testified he had placed the sleeping victim. Hopkins also described these hairs as being “naturally shed.” He testified that pubic hairs are naturally shed “just from putting on and off your underwear, taking [on and off] your clothes, maybe in the shower, those kind of activities” and agreed that pubic hairs may be naturally shed when one person rubs against another. The hairs on the sheet were significant because, as Hopkins explained,

²⁰ Officers who investigated the crime scene photographed a red, plastic soda bottle in the bathroom sink which was essentially the same size and diameter as the penis of an adult male.

[W]hen hair or fibers fall on a piece of evidence, they tend not to stay there very long. . . . [I]f there is no activity in [a] bed, then you would expect the hairs to stay there because there is no reason for them to move around, but if someone is using that bed on a regular basis, . . . you wouldn't expect those hairs to stay there.

He also stated, "I would not expect to find that many pubic hairs in [a] bed that has just been slept in."

Hopkins concluded that all hairs, the hair from the victim's pharynx and those from the sheet, were "consistent with originating from the [D]efendant." However, he also testified that hair comparison is "not a means of personal positive identification," and therefore he could not state conclusively whether the hairs belonged to the Defendant. He did state that Carl Sanders, Danny Gaddis, and Paul Crum were each eliminated as being potential sources of the pubic hairs.

Hopkins also testified that the hair found on the victim's lip was red in color and was likely a chest hair. He stated that the hair removed from the victim's anus was a brown Caucasian body hair and therefore was "not suitable for comparison." He explained,

The only two regions, the only two types of hairs that are suitable for comparison purposes are . . . head hairs and pubic hairs. . . . Hairs, other hairs than head hairs and pubic hairs, these body area hairs or hairs on your arms or your legs, they tend to look like other people's hair, so there's not a significant association that can be made when comparing those hairs.

Another perplexing bit of evidence was presented at trial by Special Agent Keith Howland of the FBI. He testified that human blood was found on a bean bag chair in the laundry room. Howland stated,

I identified the human blood on [the chair] and had DNA profiles developed, but at that time I could not draw a conclusion. Subsequent to my transfer from the laboratory, additional samples of known standards were sent in and I understand that some comparisons were made to an individual named [Carl] Sanders, but I did not perform those DNA tests.²¹

In addition, Mike Taylor, the officer who videotaped the crime scene in the early morning hours of October 1, 1994, testified about a dark stain²² on the bedspread in the master bedroom, which also appeared on the videotape of the crime scene that was presented to the jury. This stain was never tested.

Other evidence presented at trial concerned Paul Crum's background and behavior near the time of the crime. Crum testified that as a child, he was sexually, mentally, and physically abused by his father. He also stated that in September of 1994, he told the Defendant, whom he had known as a friend, that he "was wanting to receive [psychiatric] help because I didn't ever want to have the feeling or even think about [sexually abusing] my kids."²³ He testified, "I just, I told [the Defendant] that I was real scared that as I got older, the thoughts and all that, you know, probably be, you know, wanting to do to my kids, and I

²¹ No further testimony regarding this evidence was offered at trial.

²² The attorney examining Taylor characterized it as being "dark red-brown" in color, but Taylor simply stated that it "just appeared to be a stain."

²³ At the time of the trial, Crum and Carla Sanders, his girlfriend, had two young children who lived with their mother at Carl Sander's home. Crum had also fathered a daughter with another woman; the daughter lived with her mother. Crum was living out of his car and staying periodically with friends and family.

just didn't want to have that feeling or thought." He testified that shortly after this crime, he sought psychiatric help and checked himself into a treatment facility, where he stayed very briefly.

Wilma Jean Pack, from whom Crum had once rented a room, testified about artwork done by Crum which Crum had given her eleven year old son. The drawings contained images of skulls and skeletons. Pack also testified that Crum once showed her son a picture in a magazine of Disney characters engaging in sex. Crum admitted to having done so, but explained that he did not intend to show the child that particular picture; he stated that the Disney picture appeared at the bottom of a page in a tattoo magazine which he was showing the boy. Crum also admitted to having smoked marijuana with the boy, but he claimed that he did so only after the child's parents had granted him permission to smoke with the child.

Finally, both David Ware, the Defendant's half-brother, and his wife, Carol Ware, testified that Crum had visited their home on October 1, 1994, the day following the crime. David Ware testified that Crum was "fidgety," and Carol Ware stated that Crum was "walking funny." She stated, "He was very protective of his private area. He was stiff legged." Both David and Carol Ware testified that Crum "had his hands in his pants adjusting himself quite often," as though he was experiencing some irritation in his crotch area.

I. SUFFICIENCY OF THE EVIDENCE

The Defendant first argues that the evidence is insufficient to support the jury's finding that he was guilty of felony murder and rape of a child. The Defendant argues that the evidence presented at trial showed that "Paul Crum . . . had far more of an opportunity to commit these crimes because it was uncontroverted that he was with [the victim] from 10:45 p.m. until she was found by her mother shortly before 3:00 a.m." The Defendant points to specific evidence introduced at trial to support his assertion, including, among other evidence, the testimony by Dr. Cleland Blake regarding the time of death of the victim, the failure of investigators to test the stain on the master bed, the failure of investigators to examine Carl Sanders and Paul Crum for evidence immediately after the crime, the lack of evidence on the Defendant's body, the brown hair found inside the victim's rectum, and Crum's admission that he feared he would sexually abuse his own children.

Tennessee Rule of Appellate Procedure 13(e) prescribes that "[findings] of guilt in criminal actions whether by the trial court or jury shall be set aside if the evidence is insufficient to support the finding by the trier of fact beyond a reasonable doubt." Tenn. R. App. P. 13(e). "Questions concerning the credibility of the witnesses, the weight and value to be given the evidence, as well as all factual issues raised by the evidence, are resolved by the trier of fact, not this Court." State v. Pappas, 754 S.W.2d 620, 623 (Tenn. Crim. App. 1987) (citing State v. Grace, 493 S.W.2d 474, 476 (Tenn. 1973)). Nor may this Court re-weigh or re-evaluate the evidence in the record below. State v. Evans, 838 S.W.2d

185, 191 (Tenn. 1992) (citing State v. Cabbage, 571 S.W.2d 832, 836 (Tenn. 1978)).

A jury verdict approved by the trial judge accredits the State's witnesses and resolves all conflicts in favor of the State. Id. (citing State v. Williams, 657 S.W.2d 405, 410 (Tenn. 1983)). On appeal, the State is entitled to the strongest legitimate view of the evidence and all inferences therefrom. State v. Tuggle, 639 S.W.2d 913, 914 (Tenn. 1982) (citing Cabbage, 571 S.W.2d at 835). Because a verdict of guilt removes the presumption of innocence and replaces it with a presumption of guilt, the accused has the burden in this Court of illustrating why the evidence is insufficient to support the verdict returned by the trier of fact. McBee v. State, 372 S.W.2d 173, 176 (Tenn. 1963); see also Evans, 838 S.W.2d at 191 (citing Grace, 493 S.W.2d at 476); Tuggle, 639 S.W.2d at 914.

In the case at bar, a great deal of circumstantial evidence was introduced. Despite some evidence suggesting that the Defendant may not have committed the crime, there was clearly substantial evidence presented at trial indicating that the Defendant did commit the crime: Most obvious is evidence presented that the Defendant and the victim were discovered nude together in a room locked from the inside. Additionally, although the two medical experts who testified at trial differed in their estimations of the victim's time of death, Dr. King concluded that the victim had been dead "one to two hours or less," a time period which corresponds with the time that the Defendant was present in the home. Finally, an FBI agent testified based on hair comparison that hair found on the bed sheet

where the victim slept and the hair inside the victim's pharynx all "were consistent with originating from the Defendant."

This is but a small sampling of the evidence presented at trial which points to the Defendant as the perpetrator. It is simply not within our purview to weigh this evidence against other evidence favorable to the Defendant. We must instead give great deference to the findings of the jury. Therefore, viewing the evidence in light most favorable to the prosecution, we conclude that there was sufficient evidence from which a reasonable person could have determined the Defendant's guilt, and we therefore affirm the conclusion of the jury.

II. BRADY VIOLATION

The Defendant next contends that the State withheld from the defense exculpatory information, which resulted in an unfair trial. He argues that the State did not disclose before trial (1) "the color and description of [the] hair found in the victim's anus"; (2) the discovery of Carl Sanders's blood on the Defendant's pubic hair; (3) a statement made by Paul Crum to Officer Baker that he had heard a cry on the night of the murder; and (4) a statement made by Jimmy Green, the victim's father, to Assistant District Attorney Lee Davis that he had made phone calls to 414 Stringer Street between 9:00 and 10:00 p.m. on the night of the murder which were never answered.

In Brady v. Maryland, the United States Supreme Court established the prosecution's duty to furnish the accused with exculpatory evidence that is material to either the accused's guilt or innocence or to the potential punishment

which may be imposed. 373 U.S. 83 (1963). In order to establish a due process violation under Brady v. Maryland, a defendant must demonstrate the following:

1. The defendant must have requested the information (unless the evidence is obviously exculpatory, in which case the State is bound to release the information whether requested or not);
2. The State must have suppressed the information;
3. The information must have been favorable to the accused; and
4. The information must have been material.

State v. Edgin, 902 S.W.2d 387, 389 (Tenn. 1995).

In order to establish that exculpatory evidence is “material,” a defendant must show that “the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict.”

Kyles v. Whitley, 514 U.S. 419, 435 (1995); see also Edgin, 902 S.W.2d at 390.

There must be a “reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different.” Edgin, 902 S.W.2d at 390 (quoting Kyles, 514 U.S. at 435). The Court in Kyles urged that the cumulative effect of the suppressed evidence be considered to determine materiality. 514 U.S. at 436.

The State is not required to disclose information that the accused already possesses or is able to obtain, State v. Marshall, 845 S.W.2d 228, 233 (Tenn. Crim. App. 1992), or information which is not possessed by or under the control of the prosecution or another governmental agency. Id. Under Brady, the individual prosecutor has a duty to learn of any favorable evidence known to others acting on the government’s behalf in the case, including the police. Kyles, 514 U.S. at 437.

With regard to the hair found in the victim's rectum, the Defendant argues that

the defense was never notified of any examination by the FBI of the brown hair removed from the victim's anus. Accordingly Defendant Ware was precluded from submitting the hair along with a known sample of Paul Crum's hair which was already in the State's possession for a comparison by an independent laboratory. The defense was also precluded from obtaining a hair expert of its own for testimony in the instant trial

At trial, but outside the hearing of the jury, defense counsel Hallie McFadden stated, "This [hair] is something that's listed in their inventories, but we haven't ever seen it. We haven't seen a photograph of it. We don't know anything about this hair except that it was collected from the anal orifice." The State replied that the hair was in the possession of a hair analyst from the FBI who was to be a witness in the trial, that the State had provided the defense with results from all tests run by the Tennessee Bureau of Investigation and the FBI, that this particular hair was not tested because it was deemed unsuitable for comparison by the FBI,²⁴ and that the evidence receipt of Detective Mike Mathis, which had been in the possession of defense counsel for approximately one year, stated that a hair was collected from the victim's anal orifice on October 1, 1994 during the autopsy of the victim.²⁵

We cannot agree that there was a Brady violation in this instance. The defense received information that a hair was recovered from the victim's anal

²⁴ See discussion infra of issue regarding admissibility of DNA evidence.

²⁵ The evidence receipt is included in the record, but there is no indication on the receipt as to precisely when it was turned over to the defense.

area prior to trial. Not only was the hair listed “in . . . inventories,” as defense counsel admitted, but the defense also received a copy of the test results from the FBI which indicate that no testing was done on the hair. Moreover, despite knowledge of the existence of the hair, the defense never made any pretrial request to have the hair independently tested. We conclude that the State fulfilled its obligation by furnishing information about the hair to the defense

before trial. Certainly, the State may not now be blamed for the failure of the defense to request independent testing or explore the issue further before trial.

Furthermore, even assuming that a Brady violation occurred concerning the hair, we are unconvinced that the hair constitutes exculpatory evidence. The hair was deemed unsuitable for testing and as such, was never linked to any one individual. Additionally, even if the hair had been matched to any one person, the uncleanliness of the home where the victim's body was found greatly reduces the probative value of evidence that a hair was found inside the victim's rectum. Photographs and testimony presented at trial indicate that the house at 414 Stringer Street was unkempt and unclean. There were many items strewn about the floors, dirty dishes throughout the house, and dirty clothes on the laundry room floor. Because it is evident that the floors had not been recently vacuumed at the time of the crime, it is quite conceivable that hair from a number of visitors to the home was present on the floors of the home. It is also quite conceivable that a hair from the floor of the home could have become embedded in the victim's orifice during the course of a brutal rape or even possibly during the transport of her body after the crime.

The Defendant also alleges three other Brady violations which we conclude are unsupported by the record. He first argues that the State did not notify the defense that the blood of Carl Sanders was found on the Defendant's pubic hair. The only evidence of this allegation in the record is an affidavit by David Ross, Ph.D., filed on September 10, 1997, in which Ross states,

On April 10, 1997, I was present at a lecture given by Assistant Hamilton County District Attorney, Lee Davis, lead prosecutor in the

case against Paul William Ware, to my Psychology and Law class from the University of Tennessee During the lecture Lee Davis stated that a blood sample found on a pubic hair of Paul Ware belonged to Carl Sanders, father of Sheila Sanders, in whose home the homicide of Lindsey Green allegedly took place.

The Defendant also alleges that Paul Crum made a statement to Officer Baker shortly after the crime that, while at 414 Stringer Street, he heard a cry on the night that the victim was killed. However, in subsequent statements and testimony, neither Crum nor Baker mentioned this fact. Finally, the Defendant contends that District Attorney Davis had a conversation with Jimmy Green, the victim's father, in which Green stated that he may have made unanswered phone calls to 414 Stringer Street on the night of the murder. However, this fact was mentioned only briefly during the trial out of the hearing of the jury by Davis, who stated that after further conversation with Green, Green concluded that he did not feel "comfortable saying [under oath] that he remember[ed] when he made a phone call or didn't make a phone call." Green was never called to testify.

We are unconvinced that the foregoing evidence is exculpatory; nor can we conclude that this evidence is material. Therefore, this issue is without merit.

III. ADMISSIBILITY OF DNA EVIDENCE

In his third assignment of error, the Defendant argues that the trial court improperly allowed testimony regarding mitochondrial deoxyribonucleic (mtDNA) analysis, which resulted in an unfair trial. In allowing the evidence, the trial court denied a motion to suppress filed by the Defendant, who argued that the process was not sufficiently scientifically reliable to be used in court. No actual admissibility hearing was conducted before trial. The court entertained testimony

regarding mitochondrial DNA evidence both at trial and at the hearing on the motion for new trial. The DNA evidence presented at trial concerned the results of analysis by the FBI of hairs from the case, specifically, the hair found in the victim's pharynx and hair from the bed sheet where Crum testified he had placed the sleeping victim.

The legislature has provided that the results of "DNA analysis" are generally admissible in evidence without the necessity of expert testimony proving that DNA evidence is trustworthy and reliable, provided that the offered testimony comports with the Tennessee Rules of Evidence. Tenn. Code Ann. § 24-7-117. "DNA analysis" is defined in the statute as "the process through which deoxyribonucleic acid (DNA) in a human biological specimen is analyzed and compared with DNA from another biological specimen for identification purposes." Id.

As a preliminary matter, we note that this is apparently the first case in which the admissibility of mitochondrial DNA evidence has been presented as an issue in the appellate courts in Tennessee. Mitochondrial DNA analysis is a method of DNA testing which was apparently first implemented in the FBI Laboratory in June of 1996.²⁶ It is based on the Polymerase Chain Reaction (PCR) method of DNA analysis, which is routinely used in laboratories and widely accepted in courts across the country as scientifically reliable.²⁷ The database

²⁶ The trial in this case took place in late August and early September of 1996.

²⁷ The PCR method of DNA analysis has been held to be trustworthy, reliable and admissible into evidence pursuant to Tennessee Code Annotated § 24-7-117(b)(1). State v. Begley, 956 S.W. 2d 471, 477-78 (Tenn. 1997).

for comparison of results of the mitochondrial testing is still being developed. At the time of the trial, according to the testimony of Special Agent Wilson of the FBI, the database utilized by the FBI consisted of 742 individuals, 319 “of African descent” and 423 “of European or Caucasian descent.”

Mitochondrial DNA testing was performed on certain hairs which were recovered as evidence. Agent Wilson testified that the hair recovered from the victim’s throat and a hair from the bed sheet were compared with saliva from the Defendant. Analysis of the samples determined that all three samples shared a common sequence. Testing also determined that the sequence in the three samples did not match that of blood taken from the victim.

On cross-examination, Wilson clarified the findings; he explained that the two hairs shared 600 bases, while the victim’s blood sample shared 593 bases with the other samples. He stated that “[t]he average number of differences between any two Caucasian individuals is approximately six.” While he maintained that the sample hairs were consistent with having originated with the Defendant, he also stated that the tests could not show that the sample hairs belonged to the Defendant to the exclusion of all others.

In reaching his conclusions, Wilson did not assign a frequency rate to the results of the mtDNA tests which were performed in this case, stating instead only that the sequence had not before been observed in the FBI’s database of 742 individuals. Wilson testified,

All I’m saying is we have a database of a certain size, and this particular sequence has not been observed before.

I am not saying that it's a particular frequency, one over this or that, because it cannot be expressed that way because the database is not large enough at the present, in its present form, present size to be able to assign a frequency, you know, like one percent or whatever.

This . . . event would have to be observed many more times in order to assign it a frequency, so what we do is state a fact.

By affidavit filed June 30, 1997, Agent Wilson indicated that FBI protocol for mtDNA testing had changed since the time of the trial in this case. He stated that although mtDNA analysis was initially limited to head and pubic hairs, mtDNA analysis has since been expanded to include testing of hairs which are typically "not considered suitable for significant microscopic comparison," including, in certain instances, body hairs. However, he also stated that "two factors contributed to the decision on which hairs to type in the Ware case: the probative value of the hairs, and the suitability for microscopic comparison."

Wilson explained,

A crucial aspect of these investigations . . . is the question of how probative the evidence may be. . . . In the Ware case, information provided to the FBI Laboratory indicated that the victim . . . was found naked in an unkempt laundry room floor. Her body was then moved by family members and medical personnel prior to autopsy. Accordingly, the finding of extraneous hairs would be expected to be found on an unkempt laundry room floor. However, the finding of a pubic hair in the victim's throat can be attributed to contact that is not merely casual. Moreover, the fact that the cause of death was asphyxiation adds additional probative value to the discovery of the foreign pubic hair in the throat. . . . [The] finding [of pubic hairs on the sheet] is probative because the victim was . . . asleep on the bed prior to the attack.²⁸

²⁸ Wilson mistakenly stated in his affidavit that the brown body hair was found "on the victim's buttocks." He also mistakenly stated, "[H]airs from Ware would not be expected to be found in the home where the attack took place, because Ware did not live there and was not a regular visitor."

On August 28, 1996, during the trial, the defense filed an affidavit by Dr. William M. Shields, a geneticist, who stated,

On the basis of discovery, examination of the protocol, and publications listed in that protocol, it is my opinion that mitochondrial DNA typing as proposed by the Federal Bureau of Investigation, is not yet sufficiently reliable to be scientifically reliable. The major problem is that critical pieces of the validation process have yet to be done or have been done with insufficient sample sizes to be statistically reliable.

Although Shields did not testify at trial,²⁹ he did testify at the hearing on the motion for new trial, where he reiterated and expanded the statements made in his affidavit. Shields stated that at the time of the hearing, he was a scholar in residence at the University of Virginia law school, where he guest-lectured and co-taught classes in advanced evidence, “in particular, [concerning] the issues surrounding scientific evidence, both in toxic torts and DNA typing.” He also stated that he had “been involved since 1990 in exploring the use of DNA typing in forensic situations.”

²⁹ Shields testified that he was available to testify at the trial and in fact listened to most of the testimony presented at trial. Defense counsel testified at the hearing on the motion for new trial that Shields was not called as a witness because:
[W]e made a legal decision that by the affidavit which Dr. Shields submitted, and that based on Daubert, that the State had not made their threshold showing of meeting the . . . test of validation [for admissibility]. . . . When we submitted that affidavit, we believe [sic] that the State had an obligation to respond to that. The Court ruled against us on that. . . . [T]he DNA evidence was coming in. . . . We stood on our legal position for appellate purposes, so we had no obligation to put that evidence before the jury.

He further testified that at the time of the hearing, he was consulting in a case in federal court in the Ninth Circuit which involved the forensic use of mtDNA.³⁰ He testified that he had read affidavits by FBI agents which were submitted in the Ninth Circuit case and compared their findings to those of the FBI agents who testified in the trial in the case sub judice. He concluded that the FBI protocol differed in the two cases:

[The agent testifying in the Ninth Circuit case] says that they should do a mitochondrial DNA analysis on an unassociated hair. Agent Wilson [who testified in the present case] stated over and over again that their protocol was not to do such analysis. . . .³¹ What [this] indicated to me . . . is that it's consistent with the notion that the protocol changes, depending upon how a change in the protocol will help or hurt the prosecution.

In addition, Shields submitted as an exhibit to his testimony letters, which Shields stated had been published, from Dr. Frederic Whitehurst, a supervisory special agent of the FBI. The letters outline “various violations, Brady violations, and apparent and obvious errors in testimony by special agents in the FBI lab.”

He also testified about an article published in 1993 in the International Journal of Legal Medicine entitled, “The Application of Mitochondrial DNA Typing to the Study of White Caucasian Genetic Identification.” He testified that the article noted that in a sample of one hundred people, “somewhere between 12 and 20 pairs actually matched, and . . . there were actually four individuals [included in

³⁰ According to the testimony of Dr. Shields, the Ninth Circuit case took place after the case sub judice.

³¹ In this case, analysis of “unassociated hairs” would have included analysis of the brown body hair found in the victim’s rectum.

the 12 to 20 pairs] in that database that matched each other, all four.” He concluded,

What you’re looking at is a piece of DNA that allows one to discriminate amongst individuals, but until there’s a database that allows you to look at how frequently these kinds of matches are going to occur, to talk about identity is certainly misleading. . . . This database shows that you can’t get identity out of this particular kind of analysis.

Shields also testified that the International Journal of Legal Medicine was one of the publications in which the FBI attempted to legitimate their studies on mtDNA analysis. He testified that he had difficulty locating the journal and was not able to obtain a copy of the article until the day before the trial because only twenty-five libraries in the world subscribe to the journal. He stated, “[i]f you’re going to publish something in a peer review journal, it should be a journal that has wide circulation. The average medical journal or the average biological journal, the average genetics journal is found in thousands of libraries.” He emphasized that the scientific community cannot evaluate a validation study that has been published in a journal which is not widely circulated.

Finally, Shields testified that the sample sizes against which tests were run by the FBI were inadequate and concluded that mtDNA analysis had not been adequately tested within the scientific community to qualify as reliable. He concluded,

The so-called validation studies haven’t been distributed widely enough, in my opinion, for there to be a, quote, significant number of [scientists with significant expertise who would agree that the forensic use of mitochondrial DNA testing has not been scientifically validated]. I think that there’s a small pool of individuals who even know how mitochondrial DNA is done, and an even smaller pool who know how it’s presented in the courtroom.

Prior to the adoption of the Tennessee Rules of Evidence, courts in Tennessee generally followed the test which had been set forth in the case of Frye v. United States, 293 F. 1013 (D.C. Cir. 1923), in analyzing the admissibility of scientific evidence. The test set forth in Frye was essentially that scientific evidence was admissible only if it had “gained general acceptance in the particular field in which it belongs.” Id. at 1014.

In 1997 the Tennessee Supreme Court held that Tennessee’s adoption of Rules 702 and 703 as part of the Rules of Evidence superseded the general acceptance test set forth in Frye. McDaniel v. CSX Transp. Inc. 955 S.W.2d 257, 265 (Tenn. 1997). Tennessee Rule of Evidence 702, “Testimony by experts,” states,

If scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise.

Tenn. R. Evid. 702. Tennessee Rule of Evidence 703, “Bases of opinion testimony by experts,” states,

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence. The court shall disallow testimony in the form of an opinion or inference if the underlying facts or data indicate lack of trustworthiness.

Tenn. R. Evid. 703. As our supreme court stated in McDaniel, under these rules,

a trial court must determine whether the evidence will substantially assist the trier of fact to determine a fact in issue and whether the

facts and data underlying the evidence indicate a lack of trustworthiness. The rules together necessarily require a determination as to the scientific validity or reliability of the evidence. Simply put, unless the scientific evidence is valid, it will not substantially assist the trier of fact, nor will its underlying facts and data appear to be trustworthy, but there is no requirement in the rule that it be generally accepted.

McDaniel, 955 S.W.2d at 265.

Finally, we note that “[i]n general, questions regarding the admissibility, qualifications, relevancy and competency of expert testimony are left to the discretion of the trial court. The trial court’s ruling in this regard may only be overturned if the discretion is arbitrarily exercised or abused.” Id. at 263-64 (citing State v. Ballard, 855 S.W.2d 557, 562 (Tenn. 1993)).

We first note that it is somewhat questionable whether the DNA testimony presented was such as to substantially assist the jury to determine a fact in issue.

We nevertheless conclude that the trial judge did not abuse his discretion in admitting the results of the mitochondrial DNA tests into evidence. At trial, Wilson testified that “mitochondrial DNA is extensively studied. . . . It’s very well understood and characterized.” He also testified that mtDNA is “widely used” to “identify the remains of servicemen that have been killed in Vietnam or Korea.”

This testimony indicates that mitochondrial DNA analysis also meets the Frye standard of being generally accepted in its field.

However, even assuming that the DNA evidence was improperly admitted into evidence, we are convinced that the any error caused by admission of the evidence was harmless. See Tenn. R. App. P. 36(b); Tenn. R. Crim. P. 52(a).

Regardless of its accuracy or inaccuracy, Wilson's testimony did not impart a substantial amount of discernible information to the jury. Absent a frequency rate or some similar interpretation of the test results, the testimony does not provide a strong basis for scientific conclusion by a layperson. The only result that an individual untrained in the analysis of DNA could reach after hearing Wilson testify is that the common DNA sequence shared by the hairs tested and the Defendant's saliva had never before been noted in the 742 individuals that comprised the FBI's then-current database. Moreover, other scientific evidence presented at trial which was more clearly interpreted for the jury (including testimony by Hopkins, the hair comparison expert), although also inconclusive, points to the Defendant as the donor of the hairs at issue. Thus, based upon all circumstances, we conclude that this issue did not result in reversible error.

IV. ADMISSIBILITY OF EVIDENCE OF SATANIC WORSHIP

The Defendant next argues that the trial court erred by disallowing evidence that Paul Crum engaged in Satanic worship. Initially, we note that the trial court did allow both the State and the defense to introduce a number of examples of Paul Crum's artwork. The drawings and paintings contained images of what appeared to be skulls, skeletons, the grim reaper, a dagger through a rose into a heart, a severed arm dripping with blood with a rose falling from the fingers of the hand, a burning cross, and demons. Crum denied that any of the pictures were Satanic in nature and offered alternative explanations of the meaning of the pictures. Crum was also questioned about his appearance and

dress at the time of the crime, and Crum admitted to wearing crosses and chains.

Witnesses testified out of the presence of the jury about Crum's interest in Satanic worship. Nancy Egeland, whose brother is married to Crum's sister, testified that Crum once told her that he had sacrificed a dog because voices told him to do it. She also testified that while she and her husband were visiting Crum's sister one evening, the group decided to watch a video about devil worship. She stated that Crum walked past the room where they were watching the video and said to his sister, "Don't be showing that to people and discussing me." She also testified that on five or six different occasions, she had heard Crum refer to a picture of Jesus as "dog" ("God" spelled backwards). In addition, she testified that Crum told her when the Defendant vomited on the night of the crime, "it was like a cool breeze, and it was like a demon had left [Crum's] body and entered [the Defendant's] body because when [the Defendant] started puking, it was like . . . somebody was in there throwing it out his mouth." Finally, she testified that Crum's sister had once told her that when Crum's youngest child was born, "he was born with spinal meningitis, and . . . [Crum] gave Satan his soul so [the child] wouldn't die; and that he had also gave [sic] [the child's] soul to Satan . . . and that they were supposed to do an exorcism on him and he didn't want it done because he was afraid if he did, then Satan would take [the child]."

Amy Cook, a friend of Sheila Sanders King and Carla Sanders who handcrafted leather items to sell, testified out of the presence of the jury that Crum had approached her during the summer of 1994 about making a leather

bracelet for him. She testified that he told her he had a ring bearing the number six and an ankle bracelet bearing the number six. He wanted a black bracelet also bearing the number six to complete the triad. Cook testified, "I took it to mean it's the mark of the beast, six-six-six" Cook also stated that Crum told her that "he listens to the devil, [the devil] comes and tells him what to do." According to Cook, Crum claimed to "go[] by the laws of Lucifer."

The Defendant argues that he should have been allowed to further explore Crum's involvement in Satanic devil worshiping for the purpose of further impeaching Crum's credibility and advancing the Defendant's theory that Crum was the perpetrator of the offense.

The Defendant was able to bring to the jury's attention substantial information about Crum's interest in Satanic worship and other questionable character traits and activities of the witness. The admission of additional evidence of a similar nature was largely discretionary with the trial judge, and the trial judge's decision concerning such matters should not be disturbed on appeal absent a clear abuse of that discretion. From our review of the record, we cannot conclude that the trial judge abused his discretion by disallowing such further evidence.

V. BIAS BY THE TRIAL COURT

The Defendant argues that the trial judge demonstrated bias against him in favor of the State in the presence of the jury. He points to three brief comments made by the trial judge during the trial to support this contention.

Under Tennessee law, “[i]t is well-established that a trial judge has broad discretion in controlling the course and conduct of the trial, and that in exercising that discretion, he or she must be careful not to express any thought that might lead the jury to infer that the judge is in favor of or against the defendant in a criminal trial.” State v. Cazes, 875 S.W.2d 253, 260 (Tenn. 1994) (citing State v. Caughron, 855 S.W.2d 526, 536 (Tenn. 1993)). After a thorough examination of the record in the case sub judice, we are unable to agree that the trial judge demonstrated bias against the Defendant. We conclude that the trial judge acted appropriately within his discretion. Although we are unable to find any error on the part of the trial court, if any error was made, we are satisfied that it was harmless. See Tenn. R. App. P. 36(b); Tenn. R. Crim. P. 52(a).

VI. CUMULATIVE ERRORS

In his sixth claim of error, the Defendant insists that the cumulative effect of errors made at the trial level deprived him of a fair trial. He argues that “[t]he jury in the instant case was never permitted to hear a plethora of evidence favorable to the Defendant.” Viewing the record as a whole, having evaluated each issue individually and collectively, we conclude that the Defendant was not denied a fair trial.

VII. SENTENCING

Rather than receiving the death penalty as requested by the State, the Defendant was sentenced to life without parole for the felony murder. The trial court later imposed concurrent twenty-five-year sentences for the rape convictions, to be served consecutively to the sentence of life without parole. The Defendant now challenges the imposition of consecutive sentences in his case.

When an accused challenges the length, range, or the manner of service of a sentence, this Court has a duty to conduct a de novo review of the sentence with a presumption the determinations made by the trial court are correct. Tenn. Code Ann. § 40-35-401(d). This presumption is “conditioned upon the affirmative showing in the record that the trial court considered the sentencing principles and all relevant facts and circumstances.” State v. Ashby, 823 S.W.2d 166, 169 (Tenn. 1991).

In conducting a de novo review of a sentence, this Court must consider: (a) the evidence, if any, received at the trial level and the sentencing hearing; (b) the

presentence report; (c) the principles of sentencing and arguments as to sentencing alternatives; (d) the nature and characteristics of the criminal conduct involved; (e) any statutory mitigating or enhancement factors; (f) any statement that the defendant made on his own behalf; and (g) the potential or lack of potential for rehabilitation or treatment. State v. Smith, 735 S.W.2d 859, 863 (Tenn. Crim. App. 1987); Tenn. Code Ann. §§ 40-35-102, -103, -210.

If our review reflects that the trial court followed the statutory sentencing procedure, imposed a lawful sentence after having given due consideration and proper weight to the factors and principals set out under the sentencing law, and that the trial court's findings of fact are adequately supported by the record, then we may not modify the sentence even if we would have preferred a different result. State v. Fletcher, 805 S.W.2d 785, 789 (Tenn. Crim. App. 1991).

We first find that the trial judge in this case conducted on the record an analysis of the enhancing and mitigating factors and of the principles of sentencing, thereby fulfilling his role in the sentencing process. Our standard of review is thus de novo with a presumption that the determinations of the trial judge are correct.

In ordering consecutive sentences, the trial judge found that two factors under Tennessee Code Annotated § 40-35-115 applied in this case. He first determined that the Defendant is a "dangerous offender whose behavior indicated little or no regard for human life, and no hesitation about committing a crime in

which the risk to human life is high.” Tenn. Code Ann. § 40-35-115(4). He also found that factor (5) applied:

The defendant is convicted of two (2) or more statutory offenses involving sexual abuse of a minor with consideration of the aggravating circumstances arising from the relationship between the defendant and victim . . . , the time span of the defendant’s undetected sexual activity, the nature and scope of the sexual acts and the extent of the residual, physical and mental damage to the victim

Id. § 40-35-114(5).

Having carefully reviewed the record in this case, we are doubtful as to whether factor (5) is applicable. We believe that based on the language of the statute, the legislature intended that factor (5) should generally be reserved for cases involving ongoing sexual abuse. In the case at hand, there apparently was no consequential “time span of the defendant’s undetected sexual activity.” Based upon the evidence adduced at trial, the acts which warrant application of this factor likely occurred within minutes of one another and certainly could not have been separated by more than an hour or two. There was no evidence of an ongoing sexual relationship between the Defendant and the victim. Therefore, standing alone, the application of factor (5) in the present case would likely not appear to justify the imposition of consecutive sentences.

If this factor does apply, it would seem to justify ordering the two twenty-five-year sentences to be served consecutive to each other, rather than concurrent with each other but consecutive to the sentence for murder. The legislature apparently intended this factor to authorize consecutive sentences for multiple child sex crimes. However, based upon the facts presented at trial concerning the crime itself, we have no difficulty in affirming the trial court’s

determination that the Defendant is a “dangerous offender.” Thus, considering that factor (5) was applied in conjunction with factor (4), we conclude that consecutive sentences were statutorily warranted in this case.

We must also, however, consider the mandates of our supreme court regarding consecutive sentences. Our supreme court has determined that “consecutive sentences cannot be imposed unless the terms reasonably relate to the severity of the offenses committed and are necessary in order to protect the public from further serious criminal conduct.” State v. Wilkerson, 905 S.W.2d 933, 938 (Tenn. 1995). As previously stated, we have reviewed the record and conclude that it supports the trial court’s decision. However, with regard to the factor of protecting society from further criminal acts by the offender, it may be argued that there can be no necessity to further protect society from an offender sentenced to life imprisonment without parole, and that consecutive sentencing would therefore never satisfy this criteria in such a case. While this argument certainly bears logic,³² we observe that our supreme court has declined to give the claim merit, denying permission to appeal in several cases in which an additional sentence has been ordered served consecutive to a sentence of life imprisonment without parole. See, e.g., State v. Robinson, 930 S.W.2d 78, 85 (Tenn. Crim. App. 1995), perm. to appeal denied (Tenn. 1996); State v. Leon Barnett Collier, No 03C01-9602-CR-00072, 1997 WL 9722 (Tenn. Crim. App., Knoxville, Jan. 13, 1997), perm. to appeal denied (Tenn. 1997); State v. Sammie Lee Taylor, No. 02C01-9501-CR-00029, 1996 WL 580997 (Tenn. Crim. App., Jackson, Oct. 10, 1996), perm. to appeal denied (Tenn. 1997). Furthermore, the

³² The legislature has provided that a person sentenced to life without parole shall never be eligible to be released on parole. Tenn. Code Ann. § 40-35-501(h)(2).

supreme court has upheld running a sentence consecutive to a sentence of death. State v. Black, 815 S.W.2d 166, 191 (Tenn. 1991). Rather than attempting further analysis, we defer to the guidance of our supreme court and to the discretion of the trial judge and affirm the imposition of consecutive sentences in this case.

VIII. NEWLY DISCOVERED EVIDENCE

Finally, the Defendant contends that the trial court erred by failing to declare a mistrial or halt jury deliberations for the newly discovered testimony of Donna Pickett. After closing arguments and after the jury retired to begin deliberations, the defense came forth with a new witness, Donna Pickett. Defense counsel Hank Hill received word from his office that Pickett had telephoned for the first time that morning. In open court, but outside the presence of the jury, the defense filed a motion to hear new evidence. The trial court denied the motion, but allowed the defense to preserve the new testimony for the record at a later date.

On September 12, 1996, Donna Pickett testified for the record out of the presence of the jury and after completion of the trial. She explained that she is the Defendant's aunt by marriage and that her husband is also related to Carla Sanders and Sylvia Kaye Dye. Pickett stated that Crum and Carla Sanders visited her home on the day following the discovery of the victim's body. She testified that while there, Crum proceeded to tell her and her husband the story of what happened on the night of the victim's murder. According to Pickett, Crum claimed that after the Defendant went into the bedroom with the victim, he

decided to check on the victim. When Crum was unable to find her, he began searching the house for her and for the Defendant, who had also disappeared from the bedroom. Crum told Pickett that he then discovered the two in the laundry room and that when he opened the door to the room, the Defendant, who was apparently passed out, still maintained an erection. Crum told her that, not knowing what to do, he then went outside and retrieved Carl Sanders from his truck.³³ Crum claimed that when he and Sanders went back inside the house, Sanders picked up the victim and carried her to a light “to see her because [they] knew something was wrong.” Crum said “that [Carl Sanders] looked at the baby and said, She’s dead. He said, This baby is dead He looked up at me and I looked at him and I said, We’ve got to put her back.” They put the child back as they found her. Then, Sanders went back to his truck while Crum sat on the porch “to figure out what [he was] going to do.” Dye and Gaddis arrived shortly afterwards, Crum went back inside the house, and because Crum “didn’t know how to tell [Dye]” about the victim, the three of them “smoked a joint” together before Dye began to look for her child. According to Pickett, Crum told her, “[I’m] sitting there with her and . . . I’m just starting to fall to pieces thinking, oh, my goodness, this is just unreal” Pickett explained that she did not offer her testimony earlier because she was not present at the trial and was unaware of what testimony had been presented. She also stated that her husband told her to “mind [her] own business” because if she became involved in the case, his whole family would “hate” her.

³³ Apparently, Sanders was inside his truck parked on the street in front of 414 Stringer Street. It is unclear from Pickett’s testimony why Sanders was there.

We first note that “[t]he decision to grant or deny a new trial on the basis of newly discovered evidence is a matter which rests within the sound discretion of the trial court.” State v. Goswick, 656 S.W.2d 355 (Tenn. 1983). Thus, our standard of review is abuse of discretion. State v. Meade, 942 S.W.2d 561, 565 (Tenn. Crim. App. 1996). “In seeking a new trial based on newly discovered evidence, the defendant must first establish (1) reasonable diligence in attempting to discover the evidence; (2) the materiality of the evidence; and (3) that the evidence would likely change the result of the trial.” Id. (citing Goswick, 656 S.W.2d at 358-60). Moreover, “[i]t is true that newly discovered impeachment evidence will not constitute grounds for a new trial, as a general rule. But if the impeaching evidence is so crucial to the defendant’s guilt or innocence that its admission will probably result in an acquittal, a new trial may be ordered.” State v. Singleton, 853 S.W.2d 490, 496 (Tenn. 1993).

The testimony by Pickett in this case is impeachment testimony offered to contradict Crum’s version of the events on the night of the murder. Therefore, to justify ordering a new trial, we must find that the evidence is so crucial that “its admission will probably result in an acquittal.” Id. We decline to so find.

The materiality of the testimony is questionable. Although Pickett’s testimony does present a new version of the events surrounding the victim’s death, the testimony does not show that the Defendant is any less culpable. To determine that this testimony would likely result in an acquittal, we must first accept the testimony as true. We must then accept the premise that because Paul Crum lied about the discovery of the victim, he or someone else, perhaps

Carl Sanders, raped and killed the victim. We find it difficult to accept such a theory. Accepted as true, this testimony shows that the victim was moved, not that evidence was destroyed or removed, or that anyone other than the Defendant committed the crime. We are thus unable to agree that this evidence is so crucial that the trial judge erred by not granting a new trial for the Defendant. This issue is therefore without merit.

Accordingly, the judgment of the trial court is affirmed.

DAVID H. WELLES, JUDGE

CONCUR:

GARY R. WADE, PRESIDING JUDGE

THOMAS T. WOODALL, JUDGE