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SJC-09716

COMMONWEALTH vs. LOUIS H. MATHEWS.

Barnstable. December 6, 2007. - March 21, 2008.

Present: Marshall, C.J., Ireland, Spina, Cordy, & Botsford, JJ.

Homicide. Practice, Criminal, Capital case, Assistance of counsel, New trial, Grand jury proceedings, Voluntariness of statement. Constitutional Law, Assistance of counsel. Evidence, Scientific test, Testimony before grand jury, Voluntariness of statement. Deoxyribonucleic Acid. Grand Jury.

Indictment found and returned in the Superior Court Department on August 31, 2004.

The case was tried before Richard F. Connon, J., and a motion for new trial, filed on May 24, 2006, was considered by him.

Stewart T. Graham, Jr., for the defendant.
Thomas G. Shack, III, Assistant District Attorney, for the Commonwealth.

CORDY, J. Shortly after midnight on June 23, 2004, Louis Mathews and Scott Turner left a bar in Mashpee and began walking the short distance to a house where Turner had been staying. Later that morning, Turner's badly battered body was discovered on the lawn of a house located in the same neighborhood. Mathews

was charged with Turner's murder and, following a five-day jury trial, was convicted of murder in the first degree by reason of extreme atrocity or cruelty. He now appeals that conviction, as well as the denial of his motion for a new trial.

On appeal, he asserts that the Commonwealth's introduction of the inconclusive results of deoxyribonucleic acid (DNA) testing at trial created a substantial likelihood of a miscarriage of justice. He also contends that his trial counsel provided ineffective assistance in failing: to object to the introduction of the inconclusive DNA evidence; to move to dismiss the indictment based on alleged misconduct by the Commonwealth in its grand jury presentation; and to move to suppress a statement made by Mathews purportedly given before he had been advised of his Miranda rights. After considering Mathews's arguments, and undertaking a complete review of the trial record pursuant to G. L. c. 278, § 33E, we affirm the conviction and the order denying the motion for a new trial.

1. Trial. We summarize the evidence presented at the trial. In June, 2004, Turner was living with his sister, Linda, at 181 Ninigret Avenue in Mashpee. On June 22, Linda decided to host a cookout for a few friends. Among those invited was Mathews, Linda's former boy friend. Mathews had known Turner for only a short time, but the two had become close. It was Turner who called Mathews to invite him to the cookout that day.

Mathews arrived between 10 A.M. and noon, and those at the small gathering began to drink vodka and beer. They continued to

do so for the remainder of the day. In the early evening, Linda roasted a chicken in the kitchen and the party continued. By 9:30 P.M., the crowd had dwindled. Only Linda, her live-in boy friend Wayne Dougherty, Mathews, and Turner remained. Around that time Mathews and Turner left on foot for Dino's Restaurant and Sports Bar (Dino's), a local establishment, while Linda and Dougherty headed to bed. Mathews was wearing a pair of red shorts when he left the house.

On their way to Dino's, Mathews and Turner stopped at a market to purchase two packs of cigarettes and a small bottle of Sambuca liqueur. After arriving at Dino's, they sat at the bar for the remainder of the evening. Mathews introduced Turner to the bartender as his friend. Each ordered shots of bourbon and beer, leaving the bar only once to go outside for a cigarette. While there, both Mathews and Turner kept to themselves, and seemed to be having a good time.

The bartender observed the two leaving Dino's just past midnight to begin the short walk back to 181 Ninigret Avenue. Both had consumed a great deal of alcohol. At some point during

¹ There was also evidence of cocaine use at the party.

² A test of Scott Turner's blood the next morning revealed a blood alcohol of .33, more than four times the legal limit for driving an automobile. The judge fully and properly instructed the jury with respect to their consideration of evidence that Mathews was intoxicated at the time he allegedly killed the victim. "[A] defendant is entitled, upon request, to an instruction to the effect that if he were so far overcome by intoxicating substances as to be rendered incapable of . . . committing murder with extreme atrocity or cruelty, the jury must return a verdict of murder in the second degree, if they are

this walk, they became involved in a heated discussion. Several witnesses reported seeing a small African-American man (matching Mathews's appearance), and a taller Caucasian man with a ponytail (matching Turner's appearance) arguing along Ninigret Avenue around 1 A.M.

When Mathews arrived back at 181 Ninigret Avenue, he was agitated and excited. He opened the door to the room where Linda and Dougherty were sleeping three times. Each time he yelled to Linda and then slammed the door shut. He shouted, alternatively: "I need your help"; "I'm going to . . . kill your brother"; and "[h]e's trying to leave me." Linda, thinking this exchange was little more than liquor-induced bluster, replied that her brother was a "grown man," who could go wherever he wanted, and went back to sleep.

Turner's body was found at approximately 6:40 A.M. on June 23, by a neighbor on an area of lawn at 152 Ninigret Avenue, approximately 700 feet from Linda's house. A police officer

satisfied beyond a reasonable doubt that all other elements of the crime are present." Commonwealth v. Doucette, 391 Mass. 443, 455 (1984). The jury may take the effects of alcohol into account, as they relate to the defendant's state of mind, Commonwealth v. Rosado, 434 Mass. 197, 206-207 (2001), and whether or not he was indifferent to the victim's pain. See Commonwealth v. Cunneen, 389 Mass. 216, 227 (1983) (listing the factors to be considered when determining whether a murder was committed with extreme atrocity or cruelty).

³ One of the witnesses who observed the victim and Mathews arguing also saw the victim throw a bottle in the street very close to where she was standing. The police subsequently recovered pieces of a broken Sambuca liqueur bottle.

responding to the scene noticed that Turner had suffered severe facial and head trauma. His hands were outstretched over his head, his black jeans were pulled down, his pockets were turned out, and his boots were tied together, apparently to facilitate the dragging of the body. Bloodstains located by investigators indicated that he had been dragged from an area closer to 181 Ninigret Avenue. The blood spatter evidence found in the area suggested that the victim was struck with a club-like instrument numerous times, including when he was lying on the ground.

A thirty-inch long branch, between one and one and one-half inches in diameter and weighing approximately one and one-half pounds, was eventually found in the woods near 181 Ninigret Avenue. The branch had bloodstains and dried hairs on it. DNA testing revealed that the blood on the branch matched the victim's blood, leading the police to conclude that it was the murder weapon. An autopsy revealed that the victim suffered multiple fractures of the jaw, nose, temporal bone, and lower skull. These injuries were caused, at least in part, by ten or more blows to the head with the branch. The cause of death was blunt trauma to the head and face, resulting in brain bruising, hemorrhaging, and swelling.

Linda awoke around 4 A.M. on the morning of June 23, to use the bathroom. As she walked through her living room, she encountered Mathews sitting on a white ottoman. She asked him where her brother was, and Mathews told her that "he must have got lucky; he left with two Jamaicans and some girl." Shortly

thereafter, Linda returned to bed. She awoke again around 6 A.M., and found Mathews sitting in a recliner in the living room. He got up and started pacing back and forth, muttering, "Got to go, got to go." Linda's boss, Michael Mayne, arrived at approximately 7 A.M. to drive her to work, and Mathews asked for a ride across town to Mashpee Village. Mayne agreed, and Mathews and Linda got into his red pickup truck. Both Linda and Mayne noted that Mathews's face had dried blood on it, which appeared to have dripped from a recently opened scab on the bridge of his nose.

After Mayne pulled out of the driveway of 181 Ninigret Avenue, he proceeded down the road toward 152 Ninigret Avenue. Police cruisers were present, and the area had all of the obvious markings of a crime scene. As they drove by, Mathews took a quick look at the scene, and then shielded his face. His behavior caught the attention of an investigating officer, who noted the registration number of the vehicle.

Mayne drove Mathews to 28 Wampanoag Drive in Mashpee Village, the residence of Shauna Mathews, his former wife, and her housemate Shannon Price. Price saw Mathews come in early on the morning of June 23, and head to the bathroom. She noted that he was acting in an unusual fashion, and observed him leaning over the bathtub rinsing out some red clothing.

⁴ Officers subsequently found the red shorts that Mathews had worn on the evening of June 22. They were wet and in a pile of dirty clothes.

Meanwhile, the police continued their investigation at the crime scene. As Dougherty left 181 Ninigret Avenue and headed for work, he too noticed the ongoing investigation. He walked up the street, spoke with the investigating officers, and identified the victim as Turner. At the time, Dougherty was wearing a white T-shirt that had two small red spots on it. The police asked if they could have the shirt for testing, and Dougherty complied with their request.

Later on that same morning, Mathews was taken into custody on an unrelated charge. At the Mashpee police station, he was met by Trooper Richard Cosgrove of the Massachusetts State police and Detective Robert R. Waterfield of the Mashpee police department. Mathews was given Miranda warnings, which he waived, and agreed to speak to the officers. Mathews told them that he and the victim left Dino's separately, and that he arrived back at 181 Ninigret Avenue about 11:30 P.M., where he fell asleep watching television. According to Mathews, he later awoke when Turner returned to the house and asked him for money. Mathews refused to give Turner any money, at which time Turner became

⁵ The T-shirt tested positive for blood, and DNA testing of the two spots revealed that each included a mixture of blood from several different sources. One of the spots was a mixture of DNA from at least three different individuals; the other was a mixture from at least four individuals. DNA testing indicated that Mathews was not a source of this blood, and yielded inconclusive results when compared to Turner's DNA. The major DNA contributor to one of the blood stains on Dougherty's shirt, however, was determined to be a "potential contributor" to the DNA found under the victim's fingernails. There was no evidence admitted as to the identity of this potential DNA contributor.

angry and "shoved" him in the back. After this, Mathews admitted yelling into Linda's room about wanting to "kill [Linda's] brother," but claimed that Turner then left as a passenger in an automobile, perhaps with a "girl from Dino's." Mathews made no mention of any "Jamaicans."

The Commonwealth also presented testimony from a crime scene investigator employed by the State police crime laboratory (crime lab). His testimony focused on the results of multiple orthotolidine tests, which are screening tests to determine whether blood is present in or on a given substance. The results indicated that blood was present in a series of significant locales. The white ottoman where Linda found Mathews at 4 A.M on the morning of June 23, tested positive for the presence of blood, as did the blue recliner where he was sitting two hours later. The passenger seat of Mayne's pickup truck, where Mathews sat that morning, tested positive for the presence of blood, as

⁶ Mathews admitted to rinsing off his red shorts when he got to 28 Wampanoag by taking a shower with them on, but claimed that he was getting steak, grease and barbecue sauce from the cookout off of them. The only evidence of cooking at the "cook out" was that Linda roasted a chicken in her kitchen in the early evening.

⁷ Orthotolidine tests are relatively straightforward. Investigators take a small piece of filter paper, touch that paper to a suspected stain, and then test the paper with two chemicals. If blood was present, the filter paper will immediately change color. The presence of blood can often be detected even if it has been rinsed off the surface being tested. This court has allowed the introduction of the results of very similar tests for occult blood in Commonwealth v. Beldotti, 409 Mass. 553, 561-562 (1991), and Commonwealth v. Yesilciman, 406 Mass. 736, 744-745 (1990).

did the corresponding floor area in the truck. The bathtub, shower curtain, and the bathroom carpet in front of the bathtub at 28 Wampanoag Drive all tested positive for the presence of blood, as did the red shorts that Mathews had worn the previous night and early that morning. Swabs obtained from Mathews's hands also revealed the presence of blood.

Defense counsel responded to this testimony by questioning the significance of orthotolidine testing, and the sufficiency of the investigation into the blood evidence. He elicited testimony that the test only confirmed that blood was present, not whose blood or even what type of blood it was. He characterized the test as "a dinosaur, [part of] the dark ages," in his questioning of the crime scene investigator, and got him to confirm that the test was only a "good first step," best supplemented with further forensic analysis, including DNA testing.

The Commonwealth subsequently introduced testimony from a DNA chemist also employed by the crime lab. She conducted DNA testing on samples that were collected by the crime scene investigators. The majority of the results were inconclusive in one way or another. For example, DNA testing of the blood sample from Mathews's red shorts was "inconclusive" when the results were compared with his DNA, and the DNA of the victim. According to the chemist's testimony, the significance of an inconclusive result is "that there was just not enough DNA information in the DNA profile that we obtained to either include or exclude those two individuals." DNA testing of the blood found on the murder

weapon established that it belonged to the victim, but the chemist was unable to obtain a DNA profile from the other end of the branch from which the weapon was wielded. DNA tests of the swabs taken between the fingers of Mathews's right hand, between the fingers of his left hand, from his right palm, and from underneath the fingernails of his hand revealed a mixture of DNA from at least two sources. The results indicated that the major contributor of the DNA was Mathews. The DNA profile of the minor contributor, however, yielded "inclusive" results when compared with the DNA of the victim, also meaning that "the minor profile in the mixture didn't contain enough DNA to make a conclusion, either an inclusion or exclusion of the DNA profile of Scott Turner."

The State chemist also tested swabbings from underneath the victim's fingernails, and found that they contained a mixture of DNA from at least three individuals. The major contributor was found to be the victim himself, the minor profiles in the mixture were inconclusive as to Mathews, but the source of one profile may have been from the person who was the major DNA contributor

⁸ In the transcript of her testimony, the State chemist uses the term, "inclusive," and "inconclusive" apparently to mean the same thing. In explaining an "inconclusive" result, she testified that it meant that "there was just not enough DNA information in the DNA profile . . . to either include or exclude" an individual. Similarly, in explaining the phrase "inclusive result," she testified that it meant that the "profile in the mixture didn't contain enough DNA in order to make a conclusion, either an inclusion or an exclusion of the DNA profile" of the individual.

to one of the blood spots on Dougherty's T-shirt. See note 5, supra.

The chemist indicated that not all the blood samples (or other evidence) gathered at the scene were in fact tested for DNA because time and manpower shortages required that her judgment be used in deciding which samples should be tested. On cross-examination, defense counsel underscored the failure of the DNA tests to link Turner and Mathews: the tests could neither establish that Turner's blood was found on Mathews, nor that Mathews's blood was found on Turner. The cross-examination of another Commonwealth witness revealed that the testing of Dougherty's white T-shirt had not been completed until just before the trial actually started, suggesting that the police had quickly focused on Mathews and neglected to investigate other possible suspects thoroughly.

In their closing arguments, both defense counsel and the prosecutor referenced the DNA evidence. Defense counsel pointed out that although Mathews was bleeding from his nose, the Commonwealth did not find his blood at the scene of the murder or on the victim, and that while the Commonwealth tested the DNA of the blood found on Mathews's hands, it did not belong to the victim. Defense counsel also stressed that the source of the major DNA profile on Dougherty's white T-shirt -- someone other than Mathews -- was determined to be a potential contributor to one of the minor profiles of DNA found under the victim's fingernails. The prosecutor responded, "[T]he DNA did not

exclude Scott Turner as possibly a potential contributor to the DNA on the defendant's hands. They simply said there wasn't enough there to confirm that. But it was not an exclusion. And remember carefully during your deliberations because that is important."

2. Discussion. a. DNA evidence. Mathews claims that the introduction of "inconclusive" (or "inclusive," see note 8, supra) DNA evidence at his trial was highly prejudicial and created a substantial likelihood of a miscarriage of justice. His trial counsel did not object to the introduction of that evidence. A review of the trial transcript indicates that Mathews's trial counsel welcomed the testimony of the DNA chemist, as part of an overarching trial strategy. Mathews now contends that this strategy, and the resultant decision not to object to the inconclusive DNA evidence, amounted to ineffective assistance of counsel. We disagree.

When "evaluating a defendant's claim of ineffective assistance of counsel in a capital case, we consider whether there was error at trial and, if so, whether that error was likely to have influenced the jury's conclusion." Commonwealth v. Gaboriault, 439 Mass. 84, 90 (2003). See Commonwealth v. Candelario, 446 Mass. 847, 854 (2006); Commonwealth v. Wright, 411 Mass. 678, 682 & n.1 (1992). "Throughout the course of a trial, defense counsel is called on to make numerous tactical decisions." Commonwealth v. Scott, 428 Mass. 362, 369 (1998), quoting Commonwealth v. Carlos, 38 Mass. App. Ct. 929, 932

(1995). We have noted that, in retrospect, "[i]t is far too easy to examine a transcript and point to ways to 'do it better.'" Commonwealth v. Degro, 432 Mass. 319, 333 (2000). We therefore give deference to those tactical decisions, unless they were "manifestly unreasonable when made." Commonwealth v. Coonan, 428 Mass. 823, 827 (1999), quoting Commonwealth v. Martin, 427 Mass. 816, 822 (1998). A list of post hoc, subjective critiques of trial counsel's decisions is insufficient to demonstrate ineffective assistance, absent a showing that trial counsel engaged in an unreasonable strategy that likely influenced the jury's conclusions. Commonwealth v. Scott, supra. Mathews cannot make such a showing.

Trial counsel presented a multipart defense on behalf of his client. First, he criticized the Commonwealth's investigation of the murder by eliciting testimony suggesting that the crime scene was insufficiently examined, that investigators improperly concentrated on Mathews to the exclusion of all other suspects, and that orthotolidine testing relied on by the Commonwealth should have been merely the first step leading to further DNA testing that was not done on a number of the samples collected.

⁹ As this court held in Commonwealth v. Bowden, 379 Mass. 472, 485-486 (1980), and later in Commonwealth v. Cordle, 412 Mass. 172, 176 (1992), the defendant may assert, as a defense, that the Commonwealth conducted an insufficient investigation of the alleged crime. This was one of the defenses asserted here, and defense counsel requested and received the following jury instruction on that issue:

"Now [the jury] may consider the failure on the part of the Commonwealth to conduct scientific tests or otherwise

Second, trial counsel sought to show that, despite evidence that Mathews was bleeding only hours after the murder and that the victim's blood was found throughout the crime scene, there was a complete lack of physical or forensic evidence tying him to the murder. Third, he attempted to demonstrate that Linda and Dougherty either played a role in the murder, or were engaged in a cover-up to protect the true culprit. Trial counsel's decision not to object to the testimony of the DNA chemist furthered this defense strategy.

With respect to his challenge to the adequacy of the investigation, defense counsel first elicited testimony from the

follow standard procedures during the police investigation as a factor . . . in evaluating the evidence presented to you in this case.

"With respect to this factor, you should consider three questions: No. 1, whether the omitted tests or other actions were standard procedure or steps that would otherwise normally be taken under the circumstances. And No. 2, whether the omitted tests or the actions could reasonably have been expected to lead to significant evidence of the Defendant's guilt or innocence. And third, whether the evidence provides a reasonable and adequate explanation for the omission of the tests or other actions.

"If you find that any omissions in this investigation were significant and not adequately explained, you may consider whether the omissions tend to affect the quality or reliability of the evidence presented to you by the Commonwealth.

"Alternatively, you may consider whether the omissions tend to show the existence of police bias against the Defendant in conducting the investigations."

¹⁰ Defense counsel also elicited testimony that supported the theory that the victim actually met a "girl" at Dino's, and left 181 Ninigret Avenue with her early on the morning of June 23.

crime scene investigator that orthotolidine tests were merely a "good first step" in forensic testing, often used to determine which materials should be collected for subsequent DNA testing. He then established that thirty-four items tested positive for the presence of blood and were collected for further testing. Finally, he elicited testimony from the DNA chemist that, given the time and resource constraints on the State crime lab, only twenty-one of the thirty-four items collected were tested, and the results of the samples that were tested were largely "inconclusive." He further established that the major contributor of the DNA found on Dougherty's T-shirt later in the morning of the murder was a potential contributor to the DNA found underneath the victim's fingernails, yet, despite this seemingly relevant potential link, the Commonwealth was unable to identify the source of that DNA. He elaborated on this point in his cross-examination of a crime lab administrator, pointing out that the Commonwealth had not cross-checked the DNA profile found on Dougherty's T-shirt and under the victim's fingernails against the national Combined DNA Index System (CODIS) until just before the trial began. Thus, testimony regarding the DNA testing

¹¹ "CODIS [Combined DNA Index System] is a computer software program that operates local, State, and national databases of DNA profiles from convicted offenders, unsolved crime scene evidence, and missing persons. . . . CODIS software enables State, local, and national law enforcement crime laboratories to compare DNA profiles electronically, thereby . . . identifying suspects by matching DNA profiles from crime scenes with profiles from convicted offenders." National Institute of Justice, U.S. Dep't of Justice, Using DNA to Solve Cold Cases 9 (July 2002).

allowed defense counsel to argue in his closing that the Commonwealth conducted "bad investigatory work," particularly by "focus[ing] on one person to the exclusion of all others" in the face of physical evidence suggesting that another individual may have been involved. The chemist's testimony also allowed trial counsel to press the second prong of his defense by showing that, despite the relatively large amount of blood-related evidence recovered, none of the DNA testing could reliably link Mathews to the murder.

Finally, defense counsel attempted to show that Linda and Dougherty may have participated in a cover-up to conceal the identity of the culprit and frame Mathews. To that end, he established that the investigators canvassed and used canines to search for potential evidence after the murder, but did not locate the murder weapon at that time. Instead, eight days after the murder Linda and Dougherty informed investigators that they had discovered some additional blood evidence in their home, which proved not to be the case. However, when investigators arrived they happened to find the branch that was used as the murder weapon in a thicket of bushes only fifty feet from 181 Ninigret Avenue. In addition, he elicited testimony that two weeks after the murder, Linda and Dougherty telephoned police to report that they had discovered a black shirt (alleged by Linda to be in the victim's possession on the night of the murder) tucked in a recliner where Mathews was sitting on the morning of June 23. This was the same recliner that investigators had

searched extensively for blood evidence that same morning without uncovering the shirt.

Defense counsel used this and other evidence to suggest that Linda and Dougherty may have collaborated on the stories they told to police, and to imply that Linda and Dougherty concealed evidence in the immediate wake of the murder, only to later "rediscover" that evidence to ensure that Mathews remained the focus of the investigation. The DNA testimony furthered this theory, by demonstrating that because the forensic evidence did not reliably link Mathews to the murder, the Commonwealth's case relied almost entirely on circumstantial evidence shaped largely by two people who may have been involved in it or its cover-up. As trial counsel asserted in his summation, "[T]here [were] so many bits of [physical] evidence and pieces, none of which connect him" to the murder. Thus, the jury were left with the choice of whether to believe the testimony of Linda and Dougherty, both of whom defense counsel extensively discredited.

"Where, as here, the claim is that defense counsel committed a tactical error, the defendant must demonstrate that defense counsel's tactical judgment was manifestly unreasonable."

Commonwealth v. Finstein, 426 Mass. 200, 203 (1997). This is a high burden, because "[o]nly 'strategy and tactics which lawyers of ordinary training and skill in the criminal law would not consider competent' are manifestly unreasonable." Commonwealth v. Levia, 385 Mass. 345, 353 (1982). After a complete review of the record, it is apparent that the tactical decisions of defense

counsel, particularly as they related to the admission and use of the DNA evidence, were calculated, reasonable, and competent, and that a strong defense was put forward on Mathews's behalf.

Mathews alternatively contends that, regardless of the effectiveness of his counsel's performance, the admission of inconclusive DNA evidence created a substantial likelihood of a miscarriage of justice. In support of his argument, he relies almost entirely on a footnote in Commonwealth v. Curnin, 409 Mass. 218, 222 n.7 (1991), where this court noted that "[i]n certain circumstances, the results of a DNA test may be inconclusive. If so, the consequences of the test are inadmissible." We conclude that the cited language, when considered both in its historical and textual context, does not support a conclusion that the DNA evidence should have been excluded in this case.

In 1991, when Commonwealth v. Curnin, supra, was decided, the investigatory and evidentiary potential of DNA testing was apparent, but the reliability of the tests were still shrouded in a cloud of judicial skepticism. We noted at the time that no DNA testing process had yet come to be widely accepted as reliable in the courts of the Commonwealth, though we assumed that that time would come. Indeed, the court reversed the convictions in the Curnin case because DNA evidence had been admitted in the absence

¹² For a description of DNA testing, see Commonwealth v. Rosier, 425 Mass. 807, 809-817 (1997); Commonwealth v. Curnin, 409 Mass. 218, 227-231 (1991) (Appendix).

of sufficient evidence establishing that the testing followed a "generally accepted or obviously logical procedure." Id. at 223. We have since held that the two most common DNA forensic testing methods -- known as restriction fragment length polymorphism (RFLP) and polymerase chain reaction (PCR) -- are scientifically valid and reliable. See Commonwealth v. Vao Sok, 425 Mass. 787, 799-803 (1997) (finding PCR methodology reliable); Commonwealth v. Lanigan, 419 Mass. 15, 26-27 (1994) (finding "ceiling principle" reliable). We have also held that short tandem repeats testing (STR) is a reliable method. Commonwealth v. Rosier, 425 Mass. 807, 811-813 (1997). In Commonwealth v. Lanigan, supra at 27, we noted that "[t]his is a rapidly developing field, and new understanding may be expected as more studies and tests are conducted. Judges must be willing and able to adapt to these changes." The contours of our jurisprudence have changed accordingly.

In 1997, in Commonwealth v. Vao Sok, supra at 789, 799, we concluded that a judge's decision that PCR-based DNA testing was scientifically valid under the principles set forth in Commonwealth v. Lanigan, 419 Mass. 15, 25-27 (1994) (thus admitting DNA evidence at trial) was subject to de novo review

¹³ For an extensive discussion of the difference between RFLP and PCR testing, see Commonwealth v. Vao Sok, 425 Mass. 787, 790-792 (1997).

¹⁴ For an extensive discussion of the methodology involved in STR testing, see Commonwealth v. Rosier, supra at 811.

"because a trial judge's conclusion will have applicability beyond the facts of the case before him." Commonwealth v. Vao Sok, supra at 797. Since then, we have concluded that "a judge's determination on the reliability of scientific testimony is no different from other evidentiary decisions by a trial judge that are reviewed on appeal under an abuse of discretion standard." Canavan's Case, 432 Mass. 304, 311 (2000). Thus, in the years following Commonwealth v. Curnin, supra, this court has become more deferential to the determinations of a trial judge regarding the admissibility of the results of scientific testing.

Additionally, the excerpt from Commonwealth v. Curnin, supra, relied on by Mathews is dicta. The issue in that case was the "rationality of the process" that yielded the conclusion that only one Caucasian in 59,000,000 would have DNA components matching those found on the victim's nightgown. Id. at 222. The footnote cited by Mathews addressed only the admissibility of DNA testing evidence in the foreseeable, but yet to occur, event that DNA testing processes and statistical analyses came to be accepted: positive results would be admitted only if the jury were told of the likelihood of a DNA match occurring; negative results could be admitted without any showing of likelihood; and "[i]n certain circumstances, the results of a DNA test may be inconclusive, [and, if so] are inadmissible." Id. at 222 n.7. The broader point, however, was that the admissibility of DNA test results should be determined on a case-by-case basis. Id. at 222.

The circumstances here demonstrate the wisdom of a case-by-case approach. The defense in this case appropriately "call[ed] into question the integrity of the police investigation," and most pointedly its use of forensics. Commonwealth v. Bowden, 379 Mass. 472, 485, 486 (1980). See Commonwealth v. Cordle, 412 Mass. 172, 177 (1992) (holding "failure of the police to conduct certain tests is a permissible ground on which to build a defense"). When faced with such a suggestion, the prosecutor is entitled to introduce testimony to demonstrate that tests were performed, and results (even if inconclusive) were obtained. Had defense counsel objected, the judge would have been well within his discretion to admit the testimony of the DNA chemist as probative on this issue. The chemist simply informed the jury

¹⁵ The question whether inconclusive DNA testing results would have been admissible (over objection) had the defendant not questioned the sufficiency of the Commonwealth's investigation is not before us. The few State courts to address the issue have split on whether such evidence should be admitted. See, e.g., State v. Harvey, 151 N.J. 117, 185 (1997), cert. denied, 528 U.S. 1085 (2000) (allowing admission of inconclusive DNA evidence and holding that the probative "effect of the evidence is that the DNA test results showed that defendant could not be excluded as a contributor"); State v. Woodall, 182 W. Va. 15, 22 (1989) (finding inconclusive DNA evidence inadmissible because it lacked probative value).

The issue is primarily one of relevance. "Generally, a trial judge is accorded 'substantial discretion in deciding whether evidence is relevant,' and whether relevant evidence should be excluded if it is less probative than prejudicial." Commonwealth v. Talbot, 444 Mass. 586, 589 n.2 (2005), quoting Commonwealth v. Tobin, 392 Mass. 604, 613 (1984). "The judge's decision will stand absent palpable error." Commonwealth v. Talbot, *supra*. A trial judge's determination of the relevance of DNA test results is no different from other evidentiary decisions, and we will afford that decision substantial deference.

that the significance of an inconclusive result is "that there was just not enough DNA information in the DNA profile we obtained to either include or exclude" Mathews (or Turner) as a potential match. Given these circumstances and the integral role the DNA evidence played in the defense counsel's strategy, we cannot conclude that the DNA evidence should have been excluded, nor can we conclude that its admission created a substantial risk of a miscarriage of justice.

b. Grand jury abuse. After the jury verdict, appellate counsel filed a motion for a new trial on the following grounds:

(1) the Commonwealth improperly advised the grand jury of Mathews's invocation of his right to remain silent and to seek the advice of an attorney; (2) the Commonwealth knowingly provided false and deceptive evidence to the grand jury; (3) the Commonwealth withheld exculpatory evidence from the grand jury; and (4) trial counsel was ineffective in failing to move to dismiss the indictment for grand jury abuse. That motion was denied.

In reviewing the claims raised in Mathews's motion for a new trial, we must determine whether the Commonwealth's alleged misconduct before the grand jury created a substantial likelihood of a miscarriage of justice. See Commonwealth v. Bly, 444 Mass. 640, 648 (2005) ("assertions of unpreserved error offered as the basis of a claim of ineffective assistance of counsel are evaluated in a case of murder in the first degree under a substantial likelihood of a miscarriage of justice standard").

Ultimately, the defendant must demonstrate that trial counsel would have been successful had he filed a motion to dismiss. Cf. Commonwealth v. Cutts, 444 Mass. 821, 830 (2005) (failure to file motion to suppress does not amount to ineffective assistance unless motion would have been successful).

Generally, a court will not inquire into the quality of evidence heard by a grand jury unless "extraordinary circumstances" are present. Commonwealth v. Freeman, 407 Mass. 279, 282 (1990), quoting Commonwealth v. Lammi, 310 Mass. 159, 163-164 (1941). "The court has previously identified two such extraordinary circumstances where judicial inquiry is warranted: (1) when it is unclear that sufficient evidence was presented to the grand jury to support a finding of probable cause to believe that the defendant committed the offense charged in the indictment; and (2) when the defendant contends that the integrity of the grand jury proceedings somehow has been impaired." Commonwealth v. Freeman, supra.

Trooper Cosgrove and Detective Waterfield testified before the grand jury investigating Turner's murder on Tuesday, August 31, 2004. Each testified to his involvement in and knowledge of the ongoing murder investigation, including their conclusion that Mathews was the last person seen with the victim. Cosgrove testified that the blood trail at the scene indicated that the victim's body was dragged to the spot where it was found from an area closer to Linda's house at 181 Ninigret Avenue. He also testified that Mathews woke up Linda in the early morning hours

of June 23, 2004, and shouted that he was going to kill her brother. Although both Waterfield and Cosgrove questioned Mathews together on June 23, 2004, only Waterfield testified regarding what Mathews told them, including that he had been with the victim in the hours before the murder, during which time he admitted telling Linda that he was "going to . . . kill" her brother. Waterfield then testified that they told Mathews that they knew something had happened between him and the victim the night before, and that Mathews responded by invoking his right to silence and saying that "he needed to talk to a lawyer." The prosecutor immediately said, "[w]ell, just strike that part of it." And, moments later, he asked a clarifying question of Waterfield, whether Mathews was well "within his rights not to proceed with the interview and . . . to request a lawyer," to which Waterfield answered, "Yes."

Reference to a defendant's invocation of his right to silence and his right to counsel implicates the "integrity of the grand jury proceedings," Commonwealth v. Freeman, supra, and justifies further inquiry. There is no doubt that Waterfield's testimony regarding Mathews's silence and his request for counsel

¹⁶ One of the grand jurors later asked Waterfield whether Mathews had explained how he got blood on his hands, or why he was washing his shorts. Waterfield answered, "No." The juror responded, "He wouldn't give any answers to any of that information"? Waterfield answered, "No," and the assistant district attorney immediately noted, "And that's certainly within his rights, not to say anything," to which Waterfield responded, "Right."

was improper. See Commonwealth v. Callagy, 33 Mass. App. Ct. 85, 88-89 (1992) (noting "strong disapproval of [testimony] informing a grand jury that a suspect elected to exercise his right to remain silent"). Cf. Commonwealth v. Teixeira, 396 Mass. 746, 752 (1986) (holding that, in context of criminal trial, "defendant's right to remain silent cannot be compromised by prosecutorial comments that cast aspersions on its exercise"). Our analysis does not, however, end there. As this court noted in Commonwealth v. King, 400 Mass. 283, 290 (1987), "we have never ordered the dismissal of an indictment for [prosecutorial] misconduct in the absence of prejudice."

Thus, the question becomes whether the disputed statement, "viewed in the context of all the evidence presented to the grand jury, 'probably made a difference' in their decision to indict him." Commonwealth v. Freeman, supra at 283, quoting Commonwealth v. Mayfield, 398 Mass. 615, 621-622 (1986). In some circumstances, such improper testimony may involve a serious risk of prejudice, but this is not such a case. The evidence properly presented was more than adequate to meet the Commonwealth's burden of probable cause. In light of this evidence, we cannot conclude that Waterfield's improper testimony "probably made a difference" in the grand jury's decision to indict. Commonwealth v. Freeman, supra. The testimony, therefore, did not give rise

¹⁷ It is also apparent that the testimony was not deliberately elicited by the assistant district attorney. The potential effect of the improper testimony was also mitigated to some extent by the fact that the assistant district attorney

to a substantial likelihood of a miscarriage of justice, and trial counsel was not ineffective in failing to seek dismissal of the indictment on this ground.

Next, Mathews contends that the Commonwealth knowingly presented the grand jury with false and deceptive evidence. He points out that the timeline described by Waterfield in his testimony and the police report filed by Cosgrove are divergent.

Waterfield told the grand jury that Mathews's police interview terminated after Mathews was informed that swabbings of his hands tested positive for blood. By contrast, the police report indicates that Mathews's hands were not swabbed until after the interview was concluded. Additionally, a grand juror asked Waterfield whether the defendant "explained how the blood got on his hands or why he was washing the shorts [in an odd manner]." Waterfield testified that the defendant did not offer an explanation, despite evidence in the police report that Mathews informed his interviewers that he cleaned his shorts because they "were covered in BBQ sauce, grease, and steak from the cookout."

quickly moved to strike the improper statements.

¹⁸ Put in context, the factual discrepancy is quite minor. The swabs from Mathews's hands were not tested until a later date, when they did test positive for the presence of blood. Blood evidence did, however, play a large role in the police interview of Mathews. Toward the end of the questioning, another police officer spoke privately with Cosgrove, and informed him that the shorts that Mathews was wearing the previous night, and the bathtub where he was washing the shorts, both tested positive for the presence of blood. When that conversation ended, Cosgrove told Mathews that he knew something had happened between him and the victim the night before, and informed him of the positive blood tests. Mathews then terminated the interview.

The statements may have been inaccurate, but not grossly so. "[I]t is not enough for dismissal of an indictment that false or deceptive evidence was presented to the grand jury. Two further elements normally must be shown. First, our cases have required a showing that false or deceptive evidence was given to the grand jury knowingly and for the purpose of obtaining an indictment. . . . Second, the defendant must show that the presentation of the false or deceptive evidence probably influenced the grand jury's determination to hand up an indictment." Commonwealth v. Mayfield, supra at 621. This is a heavy burden, Commonwealth v. LaVelle, 414 Mass. 146, 150 (1993), and one the defendant plainly fails to meet. The record is devoid of evidence that the prosecutor's questions, or Waterfield's responses, were presented to the grand jury in bad faith. Nor do we find any evidence that the factual discrepancies were knowing or purposeful. In fact, the context suggests otherwise: One of "the disputed comments [was] made in response to a grand juror's question; [it was] not offered gratuitously by the police officer or by the prosecutor." Commonwealth v. Freeman, supra at 283. The other discrepancy was minor, as both the detective and the prosecutor confused the blood evidence found on Mathews's shorts with the blood evidence later found on his hands. See note 19, infra. The Commonwealth, therefore, engaged in nothing more than small factual missteps, well short of the "reckless disregard of the truth . . . [that] could warrant dismissal of an indictment." Commonwealth v.

Mayfield, supra at 621. Additionally, given the evidence presented against Mathews, there is no indication that the potentially misleading evidence had any effect on the grand jury's decision to return an indictment. Therefore, Mathews has failed to show that the Commonwealth's alleged misconduct before the grand jury presented a substantial risk of a miscarriage of justice.

Last, Mathews claims that the prosecutor withheld from the grand jury crucial evidence regarding the presence of two blood spots on the T-shirt of Dougherty on June 23. "Prosecutors are not required in every instance to reveal all exculpatory evidence to a grand jury." Commonwealth v. LaVelle, supra at 150, quoting Commonwealth v. McGahee, 393 Mass. 743, 746 (1985). Even assuming such evidence was exculpatory, the Commonwealth must only present exculpatory evidence "that would greatly undermine either the credibility of an important witness or evidence likely to affect the grand jury's decision." Commonwealth v. Clemmey, 447 Mass. 121, 130 (2006), quoting Commonwealth v. Wilcox, 437 Mass. 33, 37 (2002). Small bloodstains on Dougherty's T-shirt plainly do not rise to that level. Had trial counsel filed a

¹⁹ Evidence regarding both Mathews's explanation why he was washing his shorts on the morning of June 23, and evidence concerning the blood stains on Dougherty's T-shirt were introduced at trial. Despite being presented with this evidence, the jury found Mathews guilty beyond a reasonable doubt. Logically, the "failure to disclose the same evidence to a grand jury seeking only probable cause would have had a negligible effect on [the grand jury's] decision to indict" (emphasis in original). Commonwealth v. LaVelle, 414 Mass. 146, 151 n.2 (1993).

motion to dismiss the indictment based on this contention, it would not have been successful. There is no substantial likelihood of a miscarriage of justice.

c. Mathews's statement. Mathews contends that his trial counsel was ineffective for not filing a motion to suppress a statement he made to the police in a custodial interview on June 23, 2004.

At trial, Cosgrove testified that he participated in a custodial interview of Mathews with Waterfield around 10 A.M. on June 23, 2004. According to that testimony, Waterfield read Mathews his Miranda rights before questioning began, Mathews understood those rights, and voluntarily chose to speak with the officers. At that point, Cosgrove informed Mathews that while he had been brought to the police station on an outstanding warrant, the officers wanted to talk to him about something else. Mathews responded, that he "thought that [to be the case]," and the hour-long interview followed. This version of events differs slightly from the police report, which indicated that Miranda warnings were given only after Mathews told the officers that he "figured" they wanted to talk to him about something else. Given that Cosgrove's sworn testimony at trial would likely have mirrored any testimony at a potential suppression hearing, it is not likely that trial counsel would have been successful if he had filed a motion to suppress Mathews's statement that he "thought that [to be the case]." However, even had he been successful in excluding that brief comment, we cannot conclude that the

admission in evidence of such an excerpt from an hour-long interview created a substantial likelihood of a miscarriage of justice.

3. Conclusion. We have examined the record under the standard set by G. L. c. 278, § 33E, to determine whether there is any basis to set aside or reduce the verdict, regardless of whether such grounds were raised on appeal. We conclude that the evidence supported Mathews's conviction of murder in the first degree by extreme atrocity or cruelty, and that there is no basis on which to reduce that verdict or order a new trial.

Judgment affirmed.

Order denying motion for a new trial affirmed.

²⁰ Mathews also claims that his original comment "let the cat out of the bag," and the statements given in his subsequent hour long interview were tainted and inadmissible. While we "presume that a statement made following the violation of a suspect's Miranda rights is tainted, and . . . require the prosecution [to] show more than the belated administration of Miranda warnings in order to dispel that taint," Commonwealth v. Prater, 420 Mass. 569, 580 (1995), quoting Commonwealth v. Smith, 412 Mass. 823, 836 (1992), the Commonwealth was not given this opportunity because no motion to suppress was filed. Nonetheless, the testimony at trial was sufficient to remedy any potential concern. The presumption of taint may be overcome by showing that any pre-Miranda statement "did not incriminate the defendant, or, as it is more colloquially put, the cat was not out of the bag." Commonwealth v. Prater, *supra*, quoting Commonwealth v. Osachuk, 418 Mass. 229, 235 (1994). The "focus and ultimate goal" of this analysis is "a determination of the voluntariness of the later confession," or, stated differently, whether the defendant felt that he had "nothing more to lose" by continuing to speak with the police. Commonwealth v. Prater, *supra* at 581, 583. The content of the defendant's statement indicates that he did not feel as though he had "nothing more to lose," because he denied his involvement in the murder throughout the next hour.