NOTICE: All slip opinions and orders are subject to formal revision and are superseded by the advance sheets and bound volumes of the Official Reports. If you find a typographical error or other formal error, please notify the Reporter of Decisions, Supreme Judicial Court, John Adams Courthouse, 1 Pemberton Square, Suite 2500, Boston, MA, 02108-1750; (617) 557-1030; SJCReporter@sjc.state.ma.us

SJC-11504

COMMONWEALTH vs. MICHAEL J. SULLIVAN.

Middlesex. April 10, 2014. - August 15, 2014.

Present: Ireland, C.J., Spina, Cordy, Gants, & Duffly, JJ.<sup>1</sup>

Homicide. <u>Practice, Criminal</u>, Capital case, New trial. Evidence, Scientific test, Exculpatory.

I<u>ndictments</u> found and returned in the Superior Court Department on April 24, 1986, and May 14, 1986, respectively.

A motion for a new trial, filed on March 9, 2012, was heard by Kathe M. Tuttman, J.

A request for leave to appeal was allowed by <u>Spina</u>, J., in the Supreme Judicial Court for the county of Suffolk.

Robert J. Bender, Assistant District Attorney (<u>Steven C.</u> <u>Hoctor</u>, Assistant District Attorney, with him) for the Commonwealth.

Dana Alan Curhan for the defendant.

SPINA, J. The defendant, Michael J. Sullivan, was convicted by a jury in Superior Court of murder in the first

<sup>&</sup>lt;sup>1</sup> Chief Justice Ireland participated in the deliberation on this case prior to his retirement.

degree and armed robbery arising out of the brutal stomping death of Wilfred McGrath. We affirmed the defendant's convictions on direct appeal. <u>Commonwealth</u> v. <u>Sullivan</u>, 410 Mass. 521, 533 (1991). Since then, the defendant has sought postconviction relief both in State and Federal courts.<sup>2</sup> At issue in this case is the defendant's most recent motion for a new trial. As a result of the reexamination by a private forensic laboratory of certain physical evidence from the defendant's trial, which revealed that the victim's blood was not present on a jacket purportedly worn by the defendant during the killing, the defendant filed a motion for a new trial based

 $<sup>^2</sup>$  The defendant filed his first motion for a new trial in 1993 alleging ineffective assistance of counsel. The motion was denied by the trial judge, and the defendant's subsequent application for leave to appeal the ruling was denied by a single justice of this court. In 1996, the defendant filed a petition for a writ of habeas corpus in the United States District Court for the District of Massachusetts, which also was The defendant pursued further litigation of the denied. petition in the United States Court of Appeals for the First Circuit, which ordered in 2002 that any further Federal proceedings be stayed to allow the defendant to exhaust certain claims in State court. The defendant thereafter filed a second motion for a new trial in Superior Court in 2008 and, along with that motion, requested funds to permit further scientific testing of a jacket belonging to the defendant and a hair found in the pocket of that jacket. The defendant's motion for a new trial was denied on the merits by a judge in the Superior Court, and the defendant's subsequent application for leave to appeal was denied by a single justice of this court. In 2010, the defendant renewed his request for funds for testing of the jacket. The judge denied the motion for funds but allowed the motion for retesting once informed that the Committee for Public Counsel Services Innocence Program was willing to provide funds for scientific analysis in a private laboratory.

on newly available evidence. The motion judge<sup>3</sup> granted the defendant's motion, and the Commonwealth sought leave to appeal from a single justice of this court. The Commonwealth's application was granted, and the Commonwealth argues on appeal that the motion judge erred in concluding that the jacket was a key piece of corroborative evidence in the case against the defendant and that the newly available evidence arising from the retesting of the jacket casts real doubt on the justice of the defendant's conviction. We agree with the motion judge, and we affirm the order granting the defendant's motion for a new trial.

1. <u>Facts</u>. The facts surrounding the killing of the victim are set forth in detail in <u>Sullivan</u>, 410 Mass. at 522-523. We summarize those facts here and supplement them with other relevant facts from the trial record and the facts found by the motion judge to be significant with respect to the defendant's motion for a new trial, all of which are supported by the record.

In the early morning hours of March 7, 1986, the victim, Wilfred McGrath, was murdered by kicking and stomping in the apartment of an individual named Gary Grace. <u>Id</u>. The victim's body was looted for drugs, money, and jewelry, including a watch

 $<sup>^{3}</sup>$  As the trial judge had retired, the motion judge was not the trial judge.

and gold chains. <u>Id</u>. at 523. The victim's body was then transported in the trunk of the defendant's car and left in an alley behind an abandoned grocery store, where it was discovered close to eighteen hours later, after midnight on March 8. At trial, none of these facts was disputed. The defendant granted in his closing argument that the key issue in dispute was whether the defendant was present and participated in the beating and robbery of the victim.

At trial, the prosecution and the defense each presented the testimony of a witness who admitted to being present during the killing. However, the witnesses' respective accounts of the killing "diverged sharply." <u>Id</u>. at 522-523. One witness testified that the defendant kicked and stomped the victim to death. <u>Id</u>. The other testified that the defendant was not even present at the scene. Id. at 523.

Grace served as the key prosecution witness. See <u>id</u>. at 522. The jury heard evidence that Grace had entered into a plea agreement with the Commonwealth which provided that in exchange for truthful testimony at the defendant's trial, the Commonwealth would withdraw the indictments charging murder and armed robbery then pending against Grace for his involvement in the killing of McGrath and instead seek an indictment charging accessory after the fact, to which Grace would plead guilty and

for which the Commonwealth would recommend a sentence of six to seven years. Id. at 523-524.

Over four days of testimony, including almost two days of cross-examination, Grace testified in detail to the circumstances of McGrath's death. He testified that on the evening of March 6, 1986, he slept alone in his apartment and was awakened by a knock at his door at approximately 7 or 8 <u>A.M.</u> The defendant, along with Emil Petrla and Steven Angier, all people Grace knew, had arrived at Grace's apartment. Accompanying them was the victim, whom Grace testified he had not met before. Grace testified that the defendant was wearing sneakers, jeans, and a purple jacket. Petrla was wearing dress shoes, dress pants, a white sweater, and a black jacket. Angier was wearing sneakers, sweat pants, and a sweat shirt. Grace was initially wearing only his underclothes when he answered the door but subsequently put on pants, a shirt, and a pair of sneakers.

As Grace began to wash up in the bathroom of his apartment, the other four men sat in Grace's kitchen, drinking beer and using cocaine as the defendant and the victim discussed a potential arrangement for the sale of drugs. At different points, the defendant and Petrla each informed Grace that they were planning to rob the victim. Despite Grace's requests that they not do so in his apartment, Petrla wrapped a belt around his hand and struck the victim in the head three times. The victim then either was pulled or fell to the floor. Grace also testified that once the victim was on the floor, Petrla kicked the victim three to four times. The defendant then commenced kicking and stomping the victim's head repeatedly, even after the victim was unconscious, and despite Grace's, and eventually Petrla's, attempts to stop him.

Grace further testified that after the beating, the victim lay unconscious on the floor and appeared dead. There were puddles of blood on the floor, blood on the walls, and blood on the stove. Grace testified that the defendant at one point ripped gold chains off the victim's neck with such force that the victim's body was lifted off the ground. The defendant, Petrla, and Angier also searched the victim's pockets, splitting the cash they found among the three of them. According to Grace's testimony, Petrla also took a gold watch from the victim's body.

Grace then insisted that the men remove the victim's body from his apartment. Grace, Petrla, and Angier wrapped the body in a quilt from Grace's bed along with towels from Grace's bathroom while the defendant went outside to move his car. The three men then helped the defendant empty his trunk, and with the defendant in the driver's seat, Petrla, Angier, and Grace placed the victim's body in the trunk.

According to Grace's testimony, the defendant drove the car with Petrla riding in the passenger seat, Grace behind the defendant, and Angier behind Petrla. The four men drove together first to the area behind the abandoned grocery store where Petrla, Angier, and the defendant removed the body from the trunk, and then they drove to a car wash where the four men attempted to clean the interior and exterior of the car. After leaving the car wash, while still driving, the defendant removed one of his sneakers and threw it out the window. He attempted to throw the other one out, but Petrla stopped him from drawing attention to the car.

The four men then stopped at a liquor store to purchase beer, and then at an apartment to purchase cocaine. At approximately 10:30  $\underline{A}$ .M., they arrived at the defendant's apartment, which he shared with his sister, Kathy Sullivan. Grace further testified that later that afternoon, he saw the defendant, Petrla, and the defendant's sister, Kathy, go into a bedroom in the apartment. When they emerged fifteen to twenty minutes later, Kathy was crying. While she was washing dishes over the sink, the defendant told her not to worry and to "stick by your brother no matter what." Finally, Grace testified that after the killing, he saw Petrla wearing the victim's watch and that Petrla then told him of his plan to sell the watch for cocaine. Testimonial evidence presented at trial tended to corroborate Grace's version of the events surrounding the victim's death. First, the investigation had established that the night before his death, the victim had been out at a local bar called Mallet where he was with the defendant's sister, Kathy. The victim and Kathy went to some other bars with an acquaintance before being dropped off by a friend of the victim's at Kathy's apartment at approximately  $3:30 \ \underline{A}.\underline{M}$ . on March 7. At  $3:30 \ \underline{A}.\underline{M}$ ., Kathy's niece, Kimberly Sullivan, called the apartment and spoke to Kathy. Kimberly then arrived at the apartment sometime between  $3:30 \ and 4 \ \underline{A}.\underline{M}$ . Kathy, Kimberly, and the victim sat in the living room until the victim departed at approximately  $6 \ \underline{A}.\underline{M}$ .

Although Kimberly did not see the defendant during that time, she saw that the defendant's bedroom door was closed, and she saw Kathy's young son, whom the defendant had been babysitting that evening. Kimberly also testified that she saw the victim leave the apartment at approximately 6  $\underline{A}$ . $\underline{M}$ . and that she saw the defendant leave sometime after that. She testified that it was light out when the defendant left, although she was not certain whether the defendant left shortly after the victim or closer to two hours later at 8  $\underline{A}$ . $\underline{M}$ . Kimberly further testified that hours later, around 10:30  $\underline{A}$ . $\underline{M}$ ., the defendant returned to the apartment with Grace, Petrla, and Angier. According to Kimberly's testimony it appeared that the four men arrived together, and they were carrying beer with them. She also testified that Grace and Angier were wearing sneakers on their feet and that Petrla was wearing dress shoes. Unlike Grace, however, Kimberly testified that the defendant was wearing boots while he was in the apartment, although she also testified that the defendant usually wore boots, and she did not have a strong memory of what he had on his feet when she saw him arrive at the apartment.

Evidence regarding the victim's activities leading up to his death, combined with Kimberly's testimony, provided an explanation as to how the victim could have come to be in the presence of the defendant in the early morning of March 7 when he arrived at Grace's apartment. Additionally, Kimberly's testimony was consistent with Grace's as to the time that the men arrived at the apartment, what the men were wearing on their feet, and the fact that they were carrying beer with them. Like Grace, Kimberly also testified that later in the afternoon on March 8, she saw her aunt, Kathy, washing dishes in the kitchen with tears in her eyes and heard the defendant say to her, "Don't worry about it."

Physical evidence presented to the jury also corroborated certain details of Grace's testimony. The medical examiner testified that the victim was likely killed between 6 A.M. and

10  $\underline{\mathbb{A}}$ .  $\underline{\mathbb{M}}$ . on March 7 and that two distinct wound patterns appeared on the victim's skull. On one side were wounds consistent with the victim having been kicked with a dress shoe, and on the other side were more severe blows consistent with a sneaker. Additionally, Grace testified that at one point the defendant was stomping the victim's head so intensely that he was using two feet, almost standing on the victim's head. This testimony was corroborated by an injury that the medical examiner described as almost a puncture wound or a "cut out" consistent with the heel of a sneaker on the right side of the victim's skull.

Certain blood evidence in the apartment and the car was also consistent with Grace's testimony. Grace testified that the defendant kicked the victim with such force that at one point the defendant had to steady himself against the stove. The State chemist who processed Grace's apartment testified that the underside of the stove handles tested positive for blood. Additionally, trace evidence of blood was found in several places in the defendant's car, including on the steering wheel, on the turn signal lever, on both the brake and accelerator pedals, on the passenger seat on the back of the headrest, and on the passenger side window and door frame. The State chemist also testified that he identified what appeared to be an imprint consistent with the sole of a sneaker on the quilt in which the victim's body had been wrapped. He opined that the imprint appeared to him to be consistent with the sole of the sneakers Angier was wearing upon his arrest. The instep of Angier's left sneaker also tested positive for trace evidence of blood.

Finally, the chemist testified regarding a purple jacket that was obtained from the defendant's sister-in-law on the day of his arrest and which Grace identified as the same one the defendant was wearing during the killing. First, the chemist testified that blood was detected on both cuff areas of the jacket. Second, he testified that a hair was found in a pocket of the jacket and that the hair was, in his opinion, "consistent" with that of the victim. This physical evidence served to tie the defendant to the scene of the killing and could have corroborated Grace's claim that the defendant ripped chains from the victim's neck and went through his pockets after the beating.

However, not all of the evidence presented to the jury corroborated Grace's testimony. Emil Petrla testified on behalf of the defendant. Petrla had no plea arrangement with the Commonwealth and his own trial for murder in the first degree for the killing of the victim had not yet taken place. Nonetheless, Petrla waived his right under the Fifth Amendment to the United States Constitution to avoid self-incrimination and testified that although he was present during the killing of

the victim, neither the defendant nor Angier was present, and Grace was in fact the person who delivered the kicks that ultimately crushed the victim's skull.<sup>4</sup>

Petrla's testimony comported with the timeline established by the police investigation and other testimony, yet his version of events was quite different from that presented by Grace. Petrla testified that on the evening of March 6 the defendant was babysitting his nephew, so Petrla borrowed the defendant's car.<sup>5</sup> From the evening of March 6 until the early morning of March 7, Petrla and Grace were together. Petrla picked up Grace at his apartment, and the two drove first to Mallet, where Grace purchased cocaine; then to a liquor store; and then back to Grace's apartment, where they remained for the evening.

Sometime between 5:30 and 6  $\underline{\underline{A}}$ . $\underline{\underline{M}}$ . on March 7, the two men left Grace's apartment and drove toward the defendant's apartment in order to return the car to the defendant before he

<sup>5</sup> Petrla testified that at the time of the killing, Petrla had been staying with the defendant in the Sullivan apartment and that the defendant had given Petrla the second set of keys to his car, permitting Petrla to use the car whenever the defendant did not need it himself.

<sup>&</sup>lt;sup>4</sup> Petrla also submitted an affidavit in support of the defendant's motion for a new trial in which he stated that, "[t]o this day," he maintains that his trial testimony was "true and accurate." After the defendant's trial, Petrla entered a plea of guilty to a charge of murder in the second degree based on his own involvement in the killing, and Petrla remains in prison. He further stated in his affidavit, "I have nothing to gain by making something up that is not true about [the defendant's] involvement or lack of involvement in the killing."

needed it for work. As they drove toward the defendant's apartment, Grace noticed the victim waiting by a taxicab stand. Petrla testified that he did not know the victim, but that Grace called him by name and invited him into the car. The three men then reversed direction and returned to Grace's apartment, where Grace asked the victim to provide him with cocaine. The victim did so, and Grace went into his bathroom to use the cocaine.

Petrla testified that Grace then emerged from the bathroom screaming at the victim about the poor quality of the cocaine. The victim and Grace then began screaming at each other, and punches were thrown, at which point Grace was knocked to the ground. Petrla testified that in order to help Grace, he grabbed a nearby belt, wrapped it around his hand, and punched the victim in the head, which knocked him to the ground near the stove. Petrla then kicked the victim a few times, at which point Grace became so enraged that he began kicking and stomping the victim's head repeatedly until Petrla stopped him. Petrla testified that after the beating, Grace was the one who searched the victim's pockets, taking cocaine, money, and the victim's gold chains and watch, and that Grace and Petrla alone disposed of the body using the defendant's car.

According to Petrla, after he and Grace left the body behind the abandoned grocery store and proceeded to the car wash where they cleaned the defendant's car, the two men returned to the neighborhood of the Sullivan apartment where they encountered the defendant and Angier outside on the street. The four men then proceeded together into the Sullivan apartment, and all four used cocaine in the defendant's bedroom. After Grace botched an attempt to use cocaine intravenously, resulting in blood spraying on the defendant's ceiling, the defendant asked him to leave the apartment. According to Petrla, Grace did not return to the Sullivan apartment that day. Petrla testified that some days later, however, he accompanied Grace to the apartment of a woman named Rosemary Squires-Clark to whom Grace sold the victim's watch.

Certain evidence presented at trial also corroborated Petrla's version of events. The defense presented the testimony of both Rosemary Squires-Clark and her seventeen year old son, John Squires, regarding the victim's watch. John Squires testified that he knew Grace and that Grace approached him and offered to sell him the watch, at which point Squires told Grace that he was interested in purchasing it, but that Grace would have to come back when his mother was home. Additionally, Squires-Clark testified that she purchased the watch from Grace, not Petrla, and that at the time she purchased it, Grace came into her bedroom alone with the watch and stated to her, "Don't tell anybody I got it off him, I don't want to hurt anybody's feelings." Evidence was further presented that Squires-Clark

identified Grace as the person who sold her the watch in a photographic array soon after she turned the watch over to the police. Additionally, the jury heard evidence that two of Grace's bloody fingerprints were found on the inside of the passenger-side window of the defendant's car. This evidence corroborated Petrla's testimony that he was driving the defendant's car with Grace riding in the passenger seat, and it undermines Grace's testimony that he rode in the rear of the car on the driver's side.

Petrla's testimony also was undermined by certain evidence presented at trial. The prosecution elicited from Petrla on cross-examination that in the year between the killing and the defendant's trial, Petrla and the defendant had been housed in the same jail, on the same floor. Petrla testified that he and the defendant ate their meals together and spent recreation time together, and that since the trial had commenced he and the defendant had spoken daily about its progress. Therefore, the prosecution raised the inference that Petrla and the defendant had concocted a plausible alternative version of events to exculpate the defendant. However, no evidence was presented to explain why Petrla would testify falsely on behalf of the defendant only to admit to his own involvement in a brutal robbery and killing. Additionally, Petrla admitted that he was wearing dress shoes when the victim was killed. However, he testified that Grace was wearing work boots, not sneakers. Petrla also testified that Grace did not return to the Sullivan apartment on the afternoon of March 7. However, Grace's testimony was consistent with Kimberly Sullivan's regarding seeing Kathy Sullivan in tears while washing dishes that afternoon.

Ultimately, the parties each acknowledged that the case came down to an evaluation of the credibility of the two key witnesses: Grace and Petrla. In closing, defense counsel began by seeking to undermine the strength of the evidence related to the defendant's purple jacket, asking why, if the defendant were truly the killer, there was not more blood on the jacket in light of the amount of blood at the scene, and why the defendant would not have disposed of the jacket between the time of the killing on March 7 and his arrest on March 24. Further, defense counsel sought to undermine the chemist's testimony that the hair in the jacket pocket was consistent with the victim's by describing numerous weaknesses in hair comparison methodology and reminding the jury that the hair had not been compared to any other people with whom the defendant had contact, such as his sister or niece or girlfriend. Counsel used the remainder of closing to emphasize the reasons that the jury should not credit Grace's testimony and reminded the jury that unlike

Grace, Petrla had no plea arrangement and testified against his own penal interest.

The prosecution, in contrast, spoke at length about the reasons to believe Grace over Petrla. The prosecutor emphasized that Grace had given consistent statements regarding the major details of the crime from his first statement the day he was arrested, to a letter he wrote approximately one month later detailing the killings, and throughout his lengthy trial testimony. The prosecutor also described Petrla's testimony as a "chain of incredible coincidences." Further, the prosecution repeatedly emphasized the consistency between Grace's version of events and the physical evidence, including the blood on the rear of the headrest and the door jambs of the defendant's car, the bloody footprint on the quilt found with the victim's body which appeared consistent with Angier's sneakers, and the blood on the cuffs of the purple jacket and the hair found in the pocket which the prosecution argued tied the defendant directly to the crime.

Ultimately, the jury appear to have credited Grace's testimony over Petrla's as they found the defendant guilty of armed robbery and murder in the first degree.

2. <u>Newly available evidence</u>. In 2011, the defendant's motion for scientific testing of the purple jacket was granted. The jacket was analyzed once again by the State police crime

laboratory, and cuttings of the jacket cuffs as well as the hair fragment were submitted to a private laboratory for scientific analysis, including the comparison of deoxyribonucleic acid (DNA) profiles.

The State police crime laboratory reported that it retested the cuffs of the jacket and that the cuffs screened negative for the presence of blood. The private laboratory also tested the cuffs for the presence of blood, and it compared a DNA sample from the victim with DNA found on the jacket. Like the State police crime laboratory, the private laboratory found that the cuffs screened negative for the presence of blood. Additionally, although the substance on the cuffs contained a mixture of two DNA profiles, the private laboratory excluded the victim as the source of either profile. Moreover, the laboratory reported that attempts to match the hair found in the pocket to a sample of the victim's hair were "inconclusive" due to a mixture of two or more DNA profiles on the hair fragment. By comparison, at trial, the forensic chemist from the State police crime laboratory testified that the cuffs of the jacket tested positive for blood and that in his opinion the hair fragment found in the pocket "was consistent with" that of the victim.

On the basis of the new test results, the defendant filed a motion for a new trial arguing that the test results cast real

doubt on the justice of the defendant's conviction in light of the importance of the forensic evidence in a case such as this where the jury were asked to assess the competing credibility of two eyewitnesses. The judge granted the defendant's motion on the basis that had these new test results been available at the time of trial, they would likely have eliminated the purple jacket as evidence linking the defendant to the crime, and the defendant would have been able to argue that there was no physical evidence tying him directly to the killing. Consequently, in a case that came down to two competing eyewitness accounts of the killing, the physical evidence stemming from the purple jacket, which was the only physical evidence tying the defendant to the scene, likely was a "real factor" in the jury's deliberations such that its elimination would cast real doubt on the justice of the defendant's conviction.

3. <u>Discussion</u>. In a motion for a new trial based on new evidence, the defendant must show that the evidence is either "newly discovered" or "newly available"<sup>6</sup> and that it "casts real

<sup>&</sup>lt;sup>6</sup> Newly discovered evidence is evidence that was unknown to the defendant or counsel and not reasonably discoverable by them at the time of trial. <u>Commonwealth</u> v. <u>Grace</u>, 397 Mass. 303, 306 (1986). Newly available evidence is evidence that was unavailable at the time of trial for a reason such as a witness's assertion of a privilege against testifying or, as here, because a particular forensic testing methodology had not yet been developed or gained acceptance by the courts. See, e.g., Commonwealth v. Mathews, 450 Mass. 858, 870-871 (2008);

doubt" on the justice of the defendant's conviction." See <u>Commonwealth</u> v. <u>Cintron</u>, 435 Mass. 509, 516 (2001); <u>Commonwealth</u> v. <u>Grace</u>, 397 Mass. 303, 305 (1986). New evidence will cast real doubt on the justice of the conviction if there is a substantial risk that the jury would have reached a different conclusion had the evidence been admitted at trial. <u>Grace</u>, <u>supra</u> at 306. The standard is not whether the verdict would have been different, but whether the evidence probably would have been a "real factor" in the jury's deliberations. Id.

Such fact-specific analysis requires a thorough knowledge of trial proceedings. <u>Id</u>. Therefore, we afford special deference to the rulings of a motion judge who was also the trial judge. <u>Id</u>. at 307. Where, as here, the motion judge was not the trial judge and the motion judge did not make credibility determinations arising from an evidentiary hearing, we consider ourselves in as good a position as the motion judge to review the trial record. See <u>Commonwealth</u> v. <u>Raymond</u>, 450 Mass. 729, 733 (2008). See also <u>Commonwealth</u> v. <u>LeFave</u>, 430 Mass. 169, 176 (1999). Nevertheless, we review a judge's decision on a defendant's motion for a new trial based on the common-law claim of newly discovered evidence for a "significant error of law or other abuse of discretion." Grace, supra at

<u>Commonwealth</u> v. <u>Cintron</u>, 435 Mass. 509, 518 (2001). "The standard applied to a motion for a new trial based on newly available evidence is the same as applied to one based on newly discovered evidence." <u>Cintron</u>, <u>supra</u> at 516.

307. See <u>Cintron</u>, 435 Mass. at 517 ("In the absence of a constitutional error, the granting of a motion for a new trial on the ground of newly discovered evidence rests in the sound discretion of the judge"). We will reverse a judge's ruling on appeal only if the decision is "manifestly unjust." Commonwealth v. Moore, 408 Mass. 117, 125 (1990).

Here, the Commonwealth does not dispute that the results of the scientific analysis by the private laboratory constitute "newly available evidence" in the requisite sense. Therefore, we consider only whether the motion judge abused her discretion in concluding that the test results cast real doubt on the justice of the defendant's conviction. We conclude that she did not.

The results of the reexamination of the purple jacket by both the State crime laboratory and a private forensic laboratory demonstrated first that the cuffs tested negative for the presence of blood, and second that DNA on the cuffs definitively was not that of the victim. Third, the "inconclusive" results of the attempted DNA comparison between the hair found in the jacket pocket and the victim's hair mean that the hair cannot be identified as that of the victim.

The results of this new testing justify the grant of the defendant's motion for a new trial for several reasons. First, the results relate to the central issue in this case: whether

the defendant was present during the killing of the victim. This is not like cases in which evidence, although new, was relevant to only a tangential matter. See, e.g., <u>Commonwealth</u> v. <u>Staines</u>, 441 Mass. 521, 531-534 (2004) (new evidence tending to prove alleged third-party culprit had driven defendant's car on one occasion did not warrant new trial where evidence did not shed light on central question of who had placed cocaine behind dashboard of defendant's car). Further, the purported blood on the defendant's cuffs and the hair in defendant's pocket were not merely cumulative of other physical evidence presented at trial. They were different in kind because they served as the sole pieces of physical evidence indicating the defendant had been in the presence of the victim during the killing. See Cintron, 435 Mass. at 518.

Additionally, the evidence presented against the defendant at trial was not otherwise so compelling as to render this new evidence unlikely to have been a real factor in the jury's deliberations. Compare <u>Raymond</u>, 450 Mass. at 731, 734 (new evidence that key prosecution witness may have had plea agreement at time of testimony did not warrant new trial where other evidence against defendant, including defendant's own confession, was "overwhelming"). Here, the defendant presented testimony of an eyewitness who not only described a very different version of events but also testified against his own penal interest, waiving his rights and implicating himself in a murder and armed robbery. Additionally, the defense presented the testimony of two witnesses who undermined a key aspect of Grace's story -- that he had nothing to do with taking and selling the victim's watch. Moreover, physical evidence also tied Grace himself to the killings, including his bloody fingerprint on the inside passenger side of the defendant's car, and his own admission that he was wearing sneakers, which the medical examiner opined were the sort of shoes that could have delivered the severe blows to the right side of the victim's skull.

Finally, the new evidence that neither the victim's blood nor DNA was found on the cuffs of the defendant's jacket justifies the grant of a new trial because it does more than merely impeach the forensic chemist who testified for the prosecution. Rather, the new evidence negates a key piece of physical evidence that the prosecution relied on in arguing that the jury should credit Grace's testimony. Had the evidence from the private laboratory been available at the time of Grace's trial, it would not merely have served to cast doubt on the reliability of the methods used to test other surfaces for the presence of blood. It effectively would have eliminated a key piece of physical evidence linking the defendant to the killing. Therefore, this new evidence is more than mere impeachment evidence, which, alone, is usually insufficient to warrant a new trial. See Commonwealth v. Sleeper, 435 Mass. 581, 607 (2002).

We acknowledge, as did the motion judge, that much of the evidence the Commonwealth presented against the defendant remains, and that the Commonwealth may have been able to carry its burden to prove beyond a reasonable doubt that the defendant committed murder in the first degree even without the evidence of the purple jacket. However, our inquiry is not whether the verdict may have been different, but whether the evidence in question probably served as a real factor in the jury's deliberations. Grace, 397 Mass. at 306. In light of this, we cannot ignore the fact that but for the purple jacket, the jury would not have been presented with any physical evidence connecting the defendant's person to the crime scene or the victim's blood. Without the purple jacket, the defendant could have argued at closing that not one piece of physical evidence linked the defendant directly to the killing of the victim. Combined with the testimony of defense witnesses, this fact may have been sufficient to raise a reasonable doubt in the minds of the jury. At the very least, the evidence was probably a real factor in the jury's deliberations because it was one of the pieces of physical evidence that the prosecution pointed to more than once in closing as a basis on which to credit Grace's testimony over that of Petrla.

Therefore, we conclude that the motion judge did not abuse her discretion in ruling that physical evidence arising from the purple jacket served as a "real factor" in the jury's deliberations such that the new test results cast real doubt on the justice of the defendant's conviction. The judgment granting the defendant's motion for a new trial is affirmed.

So ordered.