

## **APPENDIX**

## APPENDIX

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# United States Court of Appeals For the First Circuit

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No. 19-1581

DIRK GREINEDER,

Petitioner - Appellant,

v.

SEAN MEDEIROS, Superintendent, MCI - Norfolk,

Respondent - Appellee.

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Before

Howard, Chief Judge,  
Torruella and Thompson, Circuit Judges.

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## JUDGMENT

Entered: December 9, 2019

Petitioner Dirk Greineder seeks a certificate of appealability in relation to the district court's denial of his petition for habeas corpus relief under 28 U.S.C. § 2254. After careful review of petitioner's submissions and relevant portions of the record below, we conclude that petitioner has failed to demonstrate that reasonable jurists would find the district court's assessment of his claims debatable or wrong, and petitioner, therefore, has failed to make "a substantial showing of the denial of a constitutional right." 28 U.S.C. § 2253(c)(2); Slack v. McDaniel, 529 U.S. 473, 484 (2000) (certificate of appealability standard).

Petitioner's application for a certificate of appealability is **DENIED**. The appeal is **TERMINATED**.

By the Court:

Maria R. Hamilton, Clerk

cc:  
Catherine J. Hinton  
Susanne G. Reardon

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

CIVIL ACTION NO. 15-12978-RGS

DIRK GREINEDER

v.

SEAN MEDEIROS

ORDER ON REPORT AND RECOMMENDATION  
OF THE MAGISTRATE JUDGE

May 6, 2019

STEARNS, D.J.

Having worked through and considered petitioner's many and lengthy objections, I agree with the careful analysis laid out by Magistrate Judge Dein in her exhaustive Report, and more particularly her conclusion that habeas relief is not warranted in this matter because: (1) a thorough investigation undertaken by the state trial judge on the instructions of and under the oversight of the Supreme Judicial Court (SJC) established that there was no constitutionally significant denial of petitioner's right to a public trial; (2) there was no error in the refusal of the trial judge to recuse himself from that investigation; (3) the SJC's conclusion, that the presentation through a substitute witness of the results of genetic testing performed by a non-testifying analyst did not prejudice the petitioner in violation of the

Confrontation Clause of the Sixth Amendment, was not an unreasonable application of what was and is at best unsettled Supreme Court law, *see* *William v. Illinois*, 567 U.S. 50, 141 (2012) (Kagan, J., dissenting), *also see* *Brech v. Abrahamson*, 597 U.S. 619, 637 (1993);<sup>1</sup> and (4) there is no merit to petitioner's claim of ineffective assistance of counsel. I also agree with the Magistrate Judge that petitioner's various claims of evidentiary error (a

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1 The essence of Confrontation Clause dispute is as follows. At trial, Dr. Robin Cotton, the forensic lab directory of Cellmark Diagnostics, was permitted to offer her statistical opinions based on results of tests conducted by another (nontestifying) analyst. *Cf.* R&R at 56-57 (record reasonably supports the conclusion that Dr. Cotton performed her own independent analysis of the raw test results). While it may well have been error under *Crawford v. Washington*, 541 U.S 36 (2004), to admit the nontestifying analyst's raw results through Dr. Cotton, the Magistrate Judge carefully explained her agreement with the SJC that the error was not prejudicial. R&R at 76-79.

[T]he record establishes that Dr. Cotton was examined about the significance of the allelic calls, and the considerations used in determining whether to treat a peak as an allele or an artifact. In addition, she testified as to what the effect of making different calls would have been on the DNA analysis. In addition, the [d]efendant was able to establish how the data would have changed, in favor of the defendant, if different RFU settings had been used, and the peaks representing alleles on the electropherograms had been eliminated. In short, the consequence of creating an improper DNA profile, and the ways in which errors could occur, which the [d]efendant contends were critical to establish through [the analyst who performed the tests], were, in fact, established through Dr. Cotton's testimony.

*Id.* at 78 (citations omitted).

posttrial change of opinion by a police investigator as to the nature of footprint left at the crime scene, the admission of petitioner's extramarital affairs as evidence of motive, and instances of alleged extrinsic influences on jury deliberation) have no constitutional significance in a habeas context. Consequently, the Report is ADOPTED and the petition is DISMISSED with prejudice.

Petitioner is advised that any request for the issuance of a Certificate of Appealability pursuant to 28 U.S.C. § 2253 of the court's Order dismissing his petition is also DENIED, the court being of the view that no substantial basis of support for an appeal has been demonstrated. In this regard, I add the following observation. The 147-page report compiled by Magistrate Judge Dein may surpass any of the hundreds of fine Reports and Recommendations I have reviewed in my twenty-five years as a federal district judge in its thoroughness and depth of analysis. Petitioner could not have asked for a fairer or more comprehensive review than the one he received.

SO ORDERED.

/s/ Richard G. Stearns  
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

DIRK GREINEDER, )  
 )  
Petitioner, ) CIVIL ACTION  
v. ) NO. 15-12978-RGS  
 )  
SEAN MEDEIROS, Superintendent )  
of MCI-Norfolk, )  
 )  
Respondent. )

**REPORT AND RECOMMENDATION ON PETITION  
FOR WRIT OF HABEAS CORPUS PURSUANT TO 28 U.S.C. § 2254**

September 7, 2018

DEIN, U.S.M.J.

**I. INTRODUCTION**

The Defendant/Petitioner, Dirk Greineder, was convicted on June 29, 2001 by a Norfolk County, Massachusetts jury of first degree murder by deliberate premeditation of his wife, Mabel,<sup>1</sup> who had been found dead on October 31, 1999 in a public park in Wellesley, Massachusetts. He was sentenced to life in prison without the possibility of parole. His conviction, and the denial of his motion for a new trial, were affirmed by the Massachusetts Supreme Judicial Court (“SJC”) on November 4, 2010, Commonwealth v. Greineder, 458 Mass. 207, 936 N.E.2d 372 (2010) (“Greineder I”), and again after remand from the United States Supreme Court on March 14, 2013. Commonwealth v. Greineder, 464 Mass. 580, 984 N.E.2d 804 (2013) (“Greineder II”). In his timely petition for a writ of habeas corpus pursuant to 28 U.S.C. § 2254,

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<sup>1</sup> Mrs. Greineder is referred to in various pleadings as May or Mabel.

Greineder raises seven claims challenging his conviction: 1) violation of his constitutional right to a public trial; 2) violation of his constitutional confrontation right by the admission of test results of a non-testifying DNA expert; 3) ineffective assistance of counsel; 4) violation of his constitutional right to disclosure of exculpatory evidence and a fair trial based on the recantation of the prosecution's footprint expert; 5) violation of his constitutional right to a fair trial based on the admission of evidence of his extramarital sexual activities; 6) violation of his constitutional right to trial by jury based on the jury's exposure to extraneous evidence (the banana experiment) during deliberation; and 7) violation of his constitutional right to trial by jury based on the jury's exposure to extraneous information (stains on the back of his jacket) during deliberation.

For the reasons detailed herein, this court recommends to the District Judge to whom this case is assigned that the petition for writ of habeas corpus be DENIED.

## **II. STATEMENT OF FACTS<sup>2</sup>**

### **Overview of the Underlying Crime**

The Defendant/Petitioner was convicted of first degree premeditated murder of his wife. Detailed facts relating to his claims of error will be discussed below. The following is a general description of the facts the jury could have found, as described by the SJC.

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<sup>2</sup> The record below is found in Respondent's Supplemental Answer ("SA") (Docket No. 16), the three volumes of Respondent's Further Supplemental Answer ("FSA") (Docket No. 19), the pages included in the expanded Further Supplemental Answer ("FSA Supp.") (Docket No. 58-1), the transcripts from pre-trial, trial, and post-trial proceedings submitted to the court on disc ("Tr.") (Docket No. 46); and Petitioner's Addendums to Petition for Writ of Habeas Corpus (Docket Nos. 2-5). The parties' inconsistent citations to the state court record (as opposed to the habeas record) and a very generalized index complicated this court's review of an already complicated record.

Dirk Greineder and his wife had been married for 31 years. Greineder I, 458 Mass. at 209, 936 N.E.2d at 377. On the morning of October 31, 1999, they parked their van at the entrance to the access road to Morses Pond in Wellesley, and walked their German shepherd dog around the park at the pond. Id. William Kear was walking his small dog on the pond access road when Greineder crossed in front of him, having emerged from the woods on a dirt path. Id. Greineder had a backpack and he was walking rapidly with a dog on a leash. Id. at 210, 936 N.E.2d at 377. Greineder asked Kear if he had a cell phone, which he did not, and then asked if Kear would make a telephone call for him. Id. Kear declined, and asked Greineder what had happened, to which Greineder responded that his wife had been attacked, pointing up the path. Id. Greineder said he had a cell phone in his van, and continued to the van, while Kear walked up the path to see if he could help Greineder's wife. Id.

On his way to his van, Greineder passed Rick Magnan and yelled to him, asking if he had a cellular phone. Id. Magnan said he did not, and Greineder continued to his van, where he called the Wellesley police. Officer Paul Fitzpatrick was the first Wellesley police officer to arrive, and Greineder went with him to where his wife lay, followed shortly by the paramedics. Id. There was a significant area of bloodstain on the path, with a drag mark through the blood-stain leading to Mabel's body. Id. She was later pronounced dead at the scene. Id. As the SJC described the victim's injuries:

The cause of death was a horizontal stab wound into the left side of the neck. The wound was large, five and one-half inches long and two and one-half inches wide, caused either by two thrusts with a knife, or movement by the victim during a single thrust. Every muscle on the left side of her neck was damaged, as were the jugular veins, causing rapid exsanguination. A second and potentially fatal stab wound was inflicted horizontally into the left side of her chest, penetrating the pulmonary artery and left lung. However, so little blood was found in the left chest cavity that the wound must have been

inflicted either after death or around the time the victim's body had ceased to function. Other stab wounds, all nonfatal, included one to the victim's lower left chest, two to the back of her head, and three to her forehead.

The victim sustained two other nonfatal wounds. One was a laceration on the back of her head that tore the skin and pushed it, consistent with an impact by a metal object with heft, such as a hammer. The other was a contusion on the left side of her face aligned with a fracture at the base of the skull, consistent with an impact by a padded, blunt object, such as a hand, knee, or foot. Neither of these wounds would have rendered her unconscious.

The victim had an abrasion on her lower back, at the base of the spine. The skin in that area displayed a piling up, as if the victim had been dragged by her shoulders. Her shirt had been pulled up and her pants opened, and blood spatter appeared on her abdomen and lower chest.\* She also had blood spatter on her hands, but she had no defensive wounds. Seminal fluid was not detected on any swabs prepared at the autopsy.

\*The defendant pulled the victim's shirt down and closed her pants in the presence of Officer Fitzpatrick after leading him to her body.

Id. at 210-11, 936 N.E.2d at 377-78.

Greineder gave a number of inconsistent statements to the police and to others. As the

SJC described the relevant facts:

The defendant made several statements on October 31, 1999, the details of which were not consistent. He told a paramedic at the scene that his wife twisted her back throwing a ball to their dog. She stopped walking and the defendant went ahead to retrieve the dog. After putting the dog in the van he returned and found his wife lying in the path.

Officer Fitzpatrick escorted the defendant away from the scene to the circle in the road while police processed the crime scene. The defendant told Fitzpatrick that he and his wife went for a walk and she tripped on something, injuring her back. She told him to go on without him and she would meet him at the entrance to the parking area. When he and the dog reached the gate to the beach, the dog started "acting funny" and it turned back. The defendant followed, and discovered his wife lying in the path. He checked her and found a weak carotid pulse, so he ran to the van to telephone police. About twenty minutes after talking to Fitzpatrick the defendant asked if his wife was dead. Fitzpatrick said she was. Five minutes later the defendant

asked whether Fitzpatrick was going to arrest him. Fitzpatrick said it was not his decision to make.

Sergeant Peter Nahass of the Wellesley police department went to the circle where the defendant and Officer Fitzpatrick were waiting. He observed a reddish stain on the sleeve of the defendant's windbreaker jacket (jacket), all the way down to the wrist, and also on his running shoes. The defendant's hands were clean. He had two scratches on his neck. Nahass asked him what happened. The defendant said he and his wife were walking their dog when she hurt her back throwing a ball to the dog. He told her to wait there while he went ahead with the dog. He turned back at the gate to the pond, which was locked, and the dog ran ahead. When he caught up to the dog, it was licking his wife's face. She was lying in the path. The defendant, who is a doctor, said he tried to take his wife's pulse at the carotid artery. The dog's leash was secured around his wife's waist. He removed the leash, attached it to the dog, then returned to their van and telephoned police. He gave a similar account to Detective Jill McDermott of the Wellesley police, but added that as he first approached his wife lying in the path he realized something was wrong because her pants were open and she had blood on her neck. She had no pulse; but she was warm, so he tried to rouse her.

At the Wellesley police station the defendant told Detective McDermott he had told her everything and was not hiding anything. He then stated, "You asked me for my clothing, and it suddenly scares me." Ten minutes later the defendant said his wife had given him a back rub the night before and would have his skin under her fingernails.

Trooper Martin Foley of the State police noticed at the scene that the defendant's jacket had reddish-brown stains on the chest area, both upper arms and elbows, and that there was a large stain on the left cuff that ended abruptly about two and one-half inches from the end of the sleeve. He also observed a reddish-brown stain on the defendant's sneakers, and a reddish-brown "swipe" on the left lens of his glasses. He observed that the victim's pants were open at the waist and her shirt was pulled up. Detective McDermott had told him of her conversation with the defendant. Foley asked the defendant what he had done the night before. The defendant said he helped his wife with a slide presentation she was working on for a course she was taking to become a nurse practitioner. The defendant said his wife went to bed around 11 p.m., and he retired at 12:30 a.m. Foley asked if they slept in the same bedroom. The defendant said they did. Because of the possibility this might be a sexual assault, Foley asked the defendant if he and his wife had intercourse that morning, the night before, or during the previous week, in the event police found semen. The defendant said he did

not, and offered that they had not been sexually active for a few years because his wife had neck problems.

The defendant described for Foley the course of his walk that morning with his wife, which was similar to the description he gave Officer Fitzpatrick and Detective McDermott. However, the only wound he mentioned seeing was a wound on her forehead, and he made no mention of her neck wound. The defendant said he checked the carotid artery on the right side of her neck. He also said he tried to move her, but he was unable to do so. He said she weighed 120 pounds, and at one time he could lift more than twice that, but she was like dead weight. He then tried to find a jogger with a cellular telephone. He said he thought he saw one, and pointed toward the road that William Kear saw him walk down after crossing the pond's access road at the circle. The defendant said he ran as fast as he could, to the point he felt he would vomit. He then met Kear and asked if he had a cellular telephone. He told Foley that he checked the carotid artery on the left side of his wife's neck when he returned after he telephoned police from their van. He said that was the first time he noticed the wound in her neck. Foley asked the defendant if he had washed his hands, which were clean, and the defendant replied he had not. Foley asked him why he had no blood on his hands, and the defendant was unable to give an explanation.

The defendant told Ilse Stark, his wife's sister, that he and his wife had simultaneous nosebleeds as they were getting ready to go to the pond. He removed a towel from his car, which was in the driveway, and they both used it to stop their nose bleeds. He explained that it was possible that his DNA could have been transferred from the towel to her gloves. He told Stark that his wife twisted her back while they were walking in the park, and she did not want to continue. She insisted that he go ahead without her and exercise the dog. About ten minutes later he returned and discovered his wife lying in the path; he saw a lot of blood. He said he took her pulse and saw that someone had "slit" her neck. He jumped up, saw a jogger, and gave chase. While chasing the jogger he saw a man with a small dog (Kear). He went back and asked the man if he had a cellular telephone.

On November 1, 1999, the defendant told Belinda Markel, Stark's daughter, that he and his wife had intercourse the morning she died. He gave a similar description of events that he had given to Stark. He told her he was concerned that police had searched his house for a glove and took his pants, and they might have fibers from gloves he had once worn. He also told her he was concerned that police photographed him and he had red marks on his neck from shaving. He said his wife's throat had been cut, and she had been hit in the head multiple times.

Id. at 211-14, 936 N.E.2d at 378-80.

Physical evidence was seized by police from the scene, as well as during two searches of the Defendant's home on November 1 and 12, 1999. Id. at 215-17 & n.2, 936 N.E.2d at 381 & n.2. These included a brown right-hand glove, a two-pound Estwing drilling hammer, and a folding knife, which were found in a storm drain in the road where William Kear saw the Defendant walk down and back, and a matching brown left-hand glove in the storm drain outside the gate to the entrance of the pond's access road, near where the Defendant had parked his van. Id. at 215, 936 N.E.2d at 381. An identical pair of gloves were seized from a doghouse behind the Defendant's home. Id. at 216, 936 N.E.2d at 381. As detailed below, the gloves found in the storm drains, the hammer and knife tested positive for blood. Id. at 215-16, 936 N.E.2d at 381. There was evidence at trial linking the gloves and hammer to a hardware store in Wellesley, F. Diehl & Son, and linking Greineder to having purchased nails from the store minutes after the hammer was sold. Id. at 216, 936 N.E.2d at 381.

At trial, there was considerable testimony, as detailed more fully below, concerning the blood patterns and DNA testing which the prosecution asserted (and Defendant challenged) linked the Defendant to the crime. Id. at 216-19, 936 N.E.2d at 381-83. In addition, there was expert testimony that fibers from the left-hand glove found in the drain, from the gloves found in the doghouse at the Defendant's home, and from scrapings of the Defendant's fingernails, were consistent. Id. at 216, 936 N.E.2d at 381.

The Commonwealth also put into evidence testimony that Greineder engaged in extra-marital sexual activity with prostitutes, and used his computer to set up sexual encounters. Id. at 214-15, 936 N.E.2d at 380. There was some evidence that the Defendant's wife used his

computer just days before her death. Id. at 215, 936 N.E.2d at 380. As detailed below, the prosecution sought the admission of such sexual activity to establish motive, while Greineder challenged its admission as being highly prejudicial. Id. at 239-42, 936 N.E.2d at 397-98.

The defense presented ten witnesses over six days, and the Defendant testified on his own behalf. Id. at 218, 936 N.E.2d at 382. He denied killing his wife and said that he was happily married with his family being the center of his life. Id. The Defendant testified further that he engaged in extramarital sexual activity because his wife suffered from severe back and neck problems, and could not continue with normal sexual relations. Id. He denied that such activity was a motive for murder. Id.

The Defendant also presented expert testimony challenging the Commonwealth's expert DNA testimony. Id. at 218, 936 N.E.2d at 382-83. He challenged the police and expert work as being shoddy, and presented alternative explanations for the blood patterns as well as other expert findings. Id. at 218-19, 936 N.E.2d at 383. The defense developed facts to support a theory that there was DNA from a stranger found at the scene, and the Defendant introduced evidence of two recent unsolved murders at recreational areas in Norfolk County. Id. at 218, 936 N.E.2d at 383.

#### Procedural History

Greineder was indicted on February 29, 2000 by a Norfolk County grand jury for the murder of Mabel Greineder, on October 31, 1999, in violation of Mass. Gen. Laws ch. 265, § 1. (SA 4). A jury trial was held before the Honorable Paul A. Chernoff, beginning on May 21, 2001. (SA 8). On June 29, 2001, the jury found the Defendant/Petitioner guilty of first degree murder

based on deliberate premeditation. He was sentenced to life imprisonment without the possibility of parole. (SA 9).

Greineder filed a timely appeal of his conviction with the SJC, which was stayed after he filed a motion for a new trial on August 1, 2005. (SA 11). The motion for a new trial subsequently was amended, and Judge Chernoff held evidentiary hearings and ultimately denied the motion in opinions dated May 5, 2006 and October 31, 2007. (FSA 1108, 1246). In or about April 2009, Greineder filed a “Consolidated Direct Appeal and Appeal from Denial of Amended Motion for New Trial” in the SJC. (SA 34). Following oral argument, the SJC remanded the case to the trial judge to make written findings in response to questions concerning the Defendant’s claim that the courtroom had been improperly closed to the public during jury selection. (See FSA 1499). Over the Defendant’s objection, the trial judge did not recuse himself and held an evidentiary hearing, filed answers to the SJC’s questions, and included a statement of his own memory of events. (Id.). The trial judge concluded that the public had not been affirmatively excluded from the jury selection process. (See FSA 1507). As noted above, the SJC affirmed Greineder’s conviction and the denial of his motion for a new trial on November 4, 2010.

#### Greineder I.

The United States Supreme Court vacated the judgment against Greineder and granted his petition for a writ of certiorari on June 29, 2012. The Supreme Court ordered that the SJC reconsider Greineder’s objection to the admission of expert DNA testimony without the testimony of the analyst who performed the actual testing as being violative of his Confrontation Clause rights in light of Williams v. Illinois, 567 U.S. 50, 132 S. Ct. 2221, 183 L. Ed. 2d 89 (2012). See Greineder v. Massachusetts, 567 U.S. 948, 133 S. Ct. 55, 183 L. Ed. 2d 699 (2012). Following

further briefing, the SJC affirmed Greineder's conviction on May 14, 2013. Greineder II. The Supreme Court denied his subsequent petition for certiorari. Greineder v. Massachusetts, 571 U.S. 865, 134 S. Ct. 166, 187 L. Ed. 2d 114 (2013).

Greineder filed a motion for a post-verdict jury inquiry and new trial on March 14, 2014 alleging that evidence was improperly considered by the jury during deliberations. (FSA 2843). The trial judge having retired, the motion was considered, and denied, by the Honorable Raymond J. Brassard on July 24, 2014. (SA 482). In a decision dated December 30, 2014, Greineder's application for leave to obtain further appellate review of the denial of his motion for a new trial was denied by a Single Justice of the SJC on the grounds that it did not present "a new and substantial question which ought to be determined by the full court." (SA 590, 592). This timely habeas petition followed.

### **III. STANDARD FOR HABEAS REVIEW**

The standard of review to be applied to Greineder's habeas corpus petition is set forth in 28 U.S.C. § 2254(d), as amended by the Antiterrorism and Effective Death Penalty Act of 1996 ("AEDPA"). The standard allows a federal court to grant a writ of habeas corpus only if the underlying state court adjudication "(1) resulted in a decision that was contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of the United States; or (2) resulted in a decision that was based on an unreasonable determination of the facts in light of the evidence presented in the State court proceeding." 28 U.S.C. § 2254(d). "The petitioner must also show that the state court's error had a 'substantial and injurious effect' on the jury's verdict." Lucien v. Spencer, 871 F.3d 117, 122 (1st Cir. 2017) (citation omitted).

In undertaking its analysis, “a habeas court must determine what arguments or theories supported . . . the state court’s decision; and then it must ask whether it is possible fairminded jurists could disagree that those arguments or theories are inconsistent with the holding in a prior decision of [the Supreme] Court.” Wetzel v. Lambert, 565 U.S. 520, 524, 132 S. Ct. 1195, 1198, 182 L. Ed. 2d 35 (2012) (quoting Harrington v. Richter, 562 U.S. 86, 102, 131 S. Ct. 770, 786, 178 L. Ed. 2d 624 (2011)). Moreover, “[i]n this context, ‘clearly established law’ signifies ‘the holdings, as opposed to the dicta of [the Supreme] Court’s decisions.’” Howes v. Fields, 565 U.S. 499, 505, 132 S. Ct. 1181, 1187, 182 L. Ed. 2d 17 (2012) (quoting Williams v. Taylor, 529 U.S. 362, 412, 120 S. Ct. 1495, 1523, 146 L. Ed. 2d 389 (2000)).

A writ of habeas corpus is only appropriate “under the ‘contrary to’ clause if the state court applies a rule different from the governing law set forth in [Supreme Court] cases, or if it decides a case differently than [the Supreme Court has] done on a set of materially indistinguishable facts.” Bell v. Cone, 535 U.S. 685, 694, 122 S. Ct. 1843, 1850, 152 L. Ed. 2d 914 (2002); Linton v. Saba, 812 F.3d 112, 122 (1st Cir. 2016). By contrast, “a state court adjudication constitutes an unreasonable application of clearly established federal law if the state court identifies the correct governing legal principle from the Supreme Court’s then-current decisions but unreasonably applies that principle to the facts of the prisoner’s case.” Tran v. Roden, 847 F.3d 44, 48 (1st Cir. 2017) (internal quotation marks, punctuation and citation omitted). An unreasonable application is more than just error, entailing “some increment of incorrectness beyond error[.]” McCambridge v. Hall, 303 F.3d 24, 36 (1st Cir. 2002) (en banc) (citation omitted); accord Bell, 535 U.S. at 694, 122 S. Ct. at 1850. The “increment of incorrectness beyond error” “must be great enough to make the decision unreasonable in the independent

and objective judgment of the federal court.” Brown v. Ruane, 630 F.3d 62, 67 (1st Cir. 2011) (quoting McCambridge, 303 F.3d at 36). Moreover, under this analysis, “a state court is afforded deference and latitude.” Hensley v. Roden, 755 F.3d 724, 731 (1st Cir. 2014) (citation omitted).

Finally, “[a] state court’s determination that a claim lacks merit precludes federal habeas relief so long as fairminded jurists could disagree on the correctness of the state court’s decision. Thus to obtain federal habeas relief, a petitioner must show the state court’s ruling on the claim was so lacking in justification that there was an error well understood and comprehended in existing law beyond any possibility for fairminded disagreement.” Tran, 847 F.3d at 49 (internal quotation marks, punctuation and citations omitted).

Applying these principles to the instant case compels the conclusion that Greineder’s habeas petition should be DENIED.

#### **IV. CLAIMS REGARDING ALLEGED CLOSURE OF THE COURTROOM**

##### **A. Relevant Facts**

In his direct appeal from his conviction for first degree murder, Greineder claimed, inter alia, that the jury selection proceedings had violated his right to a public trial under the First and Sixth Amendments because the individual voir dire had taken place in a courtroom that was closed to the public and the trial judge had failed to make any findings to justify the closure. (SA 51-55). Greineder based this claim on a statement the trial judge had made on May 21, 2001, at the start of the individual voir dire, to the effect that the jury selection proceedings had been moved from the main courtroom to Courtroom 8 “for the purposes of conducting a *non-public* individual voir dire of the jurors.” (SA 51-52 (emphasis added)). Greineder also

noted that during the pretrial proceedings that took place on May 18, 2001, the trial judge had remarked that he “had met with members of the media ‘who have an interest in being present during the *public* part of this case.’” (SA 52 n.2 (emphasis added) (quoting Tr. 5/18/01 (FSA 3) at 3)). Thus, Greineder argued that “[t]he trial court barred the public from attending individual voir dire, thereby violating [his] constitutional right to a public trial.” (SA 53).

The SJC initially determined that the trial record lacked sufficient facts to support a meaningful consideration of Greineder’s claim regarding the alleged closure of the courtroom. (SA 26). Accordingly, on October 23, 2009, the SJC issued an order remanding the matter to the trial judge for the purpose of making specific factual findings relating to that issue. (Id.). While the SJC stated that the findings could be made with or without holding an evidentiary hearing, it provided the trial judge with nine questions concerning the jury selection proceedings, and requested that he address those questions in his findings, along with any other topics that he deemed relevant. (Id.).

#### **Initial Response to the SJC’s Remand Order**

On October 28, 2009, five days after the SJC issued its remand order, the trial judge filed a written response based solely on his memory of the events surrounding the jury selection proceedings that had taken place more than eight years earlier. (SA 26; FSA 1400-05, 1495). However, within hours of filing his response, the trial judge received a faxed letter from Thomas Farmer, a former newspaper reporter who had covered the trial and appeared to have a different memory regarding some of the matters at issue. (FSA 1499). The trial judge immediately contacted the SJC to inform it of the letter, and to request that no action be taken on his response until he had an opportunity to meet with the parties in open court. (SA 26; FSA 1499).

Subsequently, on November 20, 2009, Greineder filed a motion for an evidentiary hearing, as well as a motion to recuse or disqualify the trial judge from conducting an evidentiary hearing or making findings of fact regarding the closure of the courtroom during jury selection. (SA 18; FSA 1409-10; 1491). On November 23, 2009, the trial judge held a conference with the parties in open court. (FSA 1493). During the conference, the judge denied Greineder's motion to recuse, but allowed the motion for an evidentiary hearing. (FSA 1493-96). As the trial judge explained in his written "Disposition of the Defendant's Motion to Recuse and Disqualify the Trial Judge from These Proceedings" dated November 27, 2009:

This judge takes very seriously a request that he recuse himself, especially since such a request has been an extreme rarity, perhaps once in thirty years.

Looking within, I, as a matter of conscience, will remain an objective decision maker. I do not pre-judge matters and I am not inflexible to new ideas and information. Rather, I am known as an open minded person who understands human frailty, including his own.

On an objective basis, this should not be a matter where my impartiality should be questioned. It is not unusual for a judge to be asked to review, re-examine, or reconsider a finding or ruling. When appropriate, I have changed or modified findings and rulings over the years. The fact finding required here to respond to the questions posed by the Supreme Judicial Court is relatively narrow. In view of the faxed letter and the affidavits filed to date, I am most interested in hearing live testimony on the issues and I know of no reason why my impartiality should be questioned. Since the Supreme Judicial Court has remanded this matter to me, personal knowledge of the facts giving rise to these matters should not be an issue.

(FSA 1496 (footnotes omitted)).

In his habeas petition, Greineder argues that the trial judge's refusal to recuse himself, even though the judge allegedly had prejudged the facts in his initial response to the SJC and was a percipient witness to the relevant events, deprived Greineder of a full and fair hearing in the state court, and warrants a new evidentiary hearing in this court with respect to his public

trial claim. (Pet. Mem. (Docket No. 6) at 46-52). He argues further that various witnesses, including the judge's former law clerk, were improperly influenced by having had access to the statement that Judge Chernoff had provided to the SJC before holding the evidentiary hearing. (E.g., Pet. Mem. at 48-49).

**Second Response to the SJC's Remand Order**

The evidentiary hearing before the trial judge took place over the course of three days in January and February 2010. (FSA 1499). It involved live testimony from twenty-one percipient witnesses, including Thomas Farmer. (FSA 1499-1500). In addition, the judge accepted a written affidavit from a witness for the Petitioner who was unavailable to testify in court. (FSA 1500). On February 16, 2010, the trial judge issued a "Second Response to the Order of the Supreme Judicial Court." (FSA 1499-1507). Therein, the trial judge explained that the evidentiary hearing had served to refresh his memory of the relevant events, and that his findings based on the evidence alone deviated from his present memory "on only a few points." (FSA 1500). He further explained that he had prepared his Second Response in order to first answer each of the questions posed by the SJC "based only on the credible evidence from the hearing[,]" and then to discuss his "current refreshed memory of the past events." (*Id.*). In his Response, the trial judge distinguished between the evidence presented during the hearing and his own memory of events. (FSA 1499-1507). The following summarizes the findings and recollections that are relevant to Greineder's habeas petition.

As the trial judge described in his Second Response to the SJC's remand order, Greineder's trial generated substantial national interest, which drew numerous media outlets to the courthouse. (FSA 1503). In order to discourage a circus-like atmosphere during the trial,

the judge decided to hold a meeting with members of the media prior to the start of the jury selection process. (Id.). Counsel for the parties were also invited to attend. (Id.). During the meeting, the trial judge reviewed existing court rules prohibiting the videotaping, photographing or identifying by name of any of the prospective or empaneled jurors. (FSA 1502-03). According to the judge, these rules meant, as a practical matter, that “the video people and still camera people were not going to be able to work in a courtroom which was filled with prospective jurors, nor were they going to be able to work in the vicinity of an individual *voir dire* hearing whether it was in the main courtroom or another courtroom.” (FSA 1503). At the time of the meeting, however, no decision had yet been made as to whether to hold the individual voir dire at sidebar in the main courtroom, or whether to hold it in a separate courtroom. (FSA 1502-03). As detailed, infra, the trial judge eventually decided to hold the individual voir dire in a separate courtroom.

The trial judge acknowledged that there were some members of the press who believed or were under the impression that they could not attend the individual voir dire proceedings. (FSA 1502). In particular, Mr. Farmer wrote in his letter to the court that he remembered the trial judge telling the media that the courtroom would be closed to them, and that they could appeal that ruling to a single justice. (FSA 1503). The trial judge stated that he had no such memory, and that there were witnesses who testified to the contrary during the evidentiary hearing. (FSA 1502-03). Moreover, the trial judge found, based on the testimony from the evidentiary hearing, that “no court officer or court employee affirmatively denied entry of individual persons to observe the *voir dire* proceedings[,]” and that “the judge did not issue any order, oral or written, barring the press or any other segment of the public from the individual

*voir dire.*" (FSA 1502). The judge concluded, based on the evidence, that members of the press who believed the courtroom was closed to them had not attended the meeting with the media, and had "received that information from an unknown source, probably from Mr. Farmer[.]" (Id.).

The trial judge acknowledged that he had referred to the "public part of the proceedings" during a conference with the parties on May 18, 2001, but he noted that his statement had occurred before any decision was made regarding the location of the individual voir dire. (FSA 1503; see also FSA 1390). He also acknowledged that he had characterized the individual voir dire proceedings as "nonpublic *voir dire*" during the first day of the jury selection process. (FSA 1503). As the judge explained in his Second Response to the SJC's remand order:

In retrospect, I was referring to the fact that the many video and still photo media people, who were visible inside and outside of the courthouse and intended to video the trial for national consumption, were not going to be working either in a courtroom filled with jurors or in one hosting only an individual *voir dire*. On Monday, I was also keeping my options open to exclude people from the courtroom should any of the prospective jurors feel inhibited when answering sensitive questions. I did not have to exercise that option and no one was excluded.

(FSA 1503-04). Greineder argues that it does not matter what the trial judge meant or intended by his statements because "any member of the media hearing the judge's remarks would have reasonably believed, in accordance with common sense understanding of the English language, that the jury *voir dire* was a 'non-public' part of the trial, meaning that the public, including the media, was excluded[.]" (Pet. Mem. at 60).

The trial judge recalled that the decision to conduct the individual voir dire in Courtroom 8 rather than at sidebar in the main courtroom was reached and announced sometime between the end of the day on May 18, 2001 and the start of empanelment proceedings on

May 21, 2001. (See FSA 1506). The trial judge stated that he decided to use Courtroom 8 for the individual voir dire because the use of a sidebar would have required the prosecutor, defense counsel, Greineder, the clerk and the judge to stand for nearly two days. (Id.). Greineder's counsel assented to this procedure, and the Petitioner did not object. (Id.).

The jury selection process commenced on Monday, May 21, 2001. (See FSA 1444-47). Initially, all of the prospective jurors were brought into the main courtroom where they were sworn in, the parties introduced themselves, and the trial judge spoke to them. (FSA 1505). The judge explained that the main courtroom would be used as a "staging area" where the prospective jurors could spread out. (Id.). He also told the prospective jurors that they would be asked to fill out a questionnaire, which would be distributed to them in the main courtroom. (FSA 1504-05). The trial judge found, based on all of the credible evidence presented at the evidentiary hearing, that the main courtroom remained open to both the public and the press. (FSA 1505). Greineder has not challenged this finding in connection with his habeas petition. He contends only that the "closure of the individual jury voir dire violated his right to [a] public trial[.]" (Pet. Summary Mem. (Docket No. 57) at 6).

The individual voir dire began in the midmorning of May 21, 2001. (FSA 1504-05). In order to facilitate the process, panels of prospective jurors were moved from the main courtroom to benches located in a public corridor behind Courtroom 8. (See FSA 1402, 1501). A court officer then escorted each prospective juror into Courtroom 8 through a rear door. (FSA 1504). The juror was seated in a chair at the witness stand, which had been placed next to the judge's bench facing the court reporter, counsel and a spectator section. (FSA 1504, 1509). After the individual voir dire examination was completed, the juror was escorted back out

through the rear door, and the next prospective juror was brought into the courtroom. (See FSA 1500, 1504).

In his Second Response to the SJC, the trial judge provided the following description of Courtroom 8 as it appeared at the time of the empanelment proceedings:

Room 8 is a public courtroom; however, it is so situated that it seldom attracts the general public. It measures twenty-four by twenty-five feet and its four benches accommodate about twenty people and there is room for an additional ten single chairs. There is a public corridor between the rear door to Room 8 and the two rear doors of the main courtroom. When the judge is on the bench in Room 8, few people would enter through the rear door and proceed past the sidebar to the judge's left. When the witness box is moved to the side of the bench as it was in the instant case, there is little room to the left of the witness box to accommodate foot traffic. With jurors sitting on benches in the corridor between courtrooms and the narrowed path to the spectator section past the movable witness stand, I conclude that the rear door was not accessible to the public during the individual *voir dire*. The front door of Courtroom 8 was accessible to the public. It faces the spectator seats, leads to a landing from which a narrow steep staircase descends to the public corridor just outside the Civil Clerk's Office. A painted sign on the wall near the foot of the staircase directs the public to Room 8 and includes a sketch of a hand pointing up the staircase.

(FSA 1501). Although there was some conflicting testimony regarding the presence of a piece of white paper on the door of Courtroom 8, the trial judge found, based on "all of the credible evidence," that "there was no sign on the door stating that entry was not permitted" at the time of Greineder's trial. (Id.).

The hearing evidence established that a number of individuals were present in Courtroom 8 along with the prospective juror who was seated in the witness stand. They included the Defendant, his counsel, an intern working for the defense, three prosecutors, one or two staff members from the prosecutor's office and court personnel. (FSA 1500). The trial judge found that on occasion, "a few unidentified persons who may well have been members of

the public" were present in Courtroom 8 as well. (*Id.*). However, he determined that no press personnel were present during the individual voir dire, and that two members of the press were seated outside the glass doors of the courtroom because they believed they were not permitted inside during individual questioning, although they could observe what was happening within the room. (*Id.*). Similarly, the judge found that two of Greineder's children were absent during the individual voir dire proceedings, although there was conflicting evidence as to whether a third child, Britt Cavaletto, attended portions of those proceedings. (FSA 1500-01). While all three of the Petitioner's children testified that someone who was not a court employee had instructed them not to attend the jury empanelment, the trial judge found it "probable" based on the evidence presented at the hearing that Ms. Cavaletto had "spent some time in Room 8 during the individual *voir dire*." (*Id.*).

The trial judge recalled from his own memory of the events that he had seen "one or two males in the spectator seats" at times during the course of the individual voir dire proceedings. (FSA 1501). He concluded that they must have been members of the public because he did not recognize them as court employees or as individuals associated with one of the trial teams. (*Id.*). In addition, the judge recalled seeing a woman seated in the first row of the spectator section during much of the voir dire, but he could not say whether she was Britt Cavaletto or a member of the general public. (*Id.*). The trial judge emphasized that if Ms. Cavaletto was absent from Courtroom 8 during the individual voir dire proceedings, it was due to communications from someone other than a court employee, and "not because of instructions from a staff member or a posted sign." (FSA 1500-01).

The SJC had requested information regarding any empanelment proceedings that had taken place in Courtroom 10 following the conclusion of the proceedings in Courtroom 8. (See FSA 1506). In his Second Response to the remand order, the trial judge explained that after the completion of the individual voir dire proceedings, jury selection for the Greineder case had resumed in Courtroom 10. (*Id.*). Greineder does not contend that Courtroom 10 was closed or that the proceedings that occurred there deprived him of his constitutional right to a public trial. Indeed, the trial judge found, based on the hearing testimony, that members of Greineder's family, the press and the public were present in Courtroom 10, along with the parties and prospective jurors who remained following the individual voir dire. (*Id.*).

After responding to the specific questions posed by the SJC, the trial judge concluded his Second Response as follows:

The October 2009 ORDER from the Supreme Judicial Court invited me to consider "other topics that he deems relevant." I appreciate that opportunity. In ruling on motions for a new trial, trial judges sometimes draw upon their own observations at trial when considering the evidence developed at the post-trial hearing. Out of an abundance of caution, I did not do that here. Rather, I have tried my very best to separate my independent memory from the evidence of the memories of the other percipient witnesses. Twenty-two men and women have memories of long ago events that cannot be reconciled. The matrix in Appendix III is intended to illustrate the irreconcilability of some of the testimonial evidence.

I can summarize the core findings as follows. (1) There were no press members inside Courtroom 8 during the individual *voir dire*. Although there was no judicial order, staff person, or sign that barred their entry, some media members heard from a non-court source that the proceedings were closed. (2) Some Greineder family members heard from a non-court source over the weekend preceding the *voir dire* that they could not or should not attend the individual *voir dire*. (3) Although there was no judicial order, staff person or sign that barred entry, only a few members of the public attended the individual *voir dire*. (4) Neither one of the attorneys complained of the process.

(FSA 1507).

**The SJC's Decision on Appeal**

On appeal, Greineder raised a number of arguments in support of his claim that his constitutional right to a public trial had been violated by the closure of Courtroom 8 during the individual voir dire proceedings. The SJC addressed each of these arguments and clearly explained its reasoning.

First, Greineder argued that the trial judge's findings were equivocal, and that the SJC should conclude, based on the entirety of the record, that no members of the public were present during those proceedings. Greineder I, 458 Mass. at 225, 936 N.E.2d at 387. Next, he urged the SJC to find that the individual voir dire had been closed to the public based on the trial judge's statements distinguishing the "public" part of the case from the "non-public" proceedings in Courtroom 8, and certain evidence that was presented during the evidentiary hearing. Id. at 226, 936 N.E.2d at 388. In addition, Greineder argued that the absence of the public and the media from Courtroom 8 was attributable to the court even though there was no written order excluding them from the individual voir dire. Id. at 230, 233, 936 N.E.2d at 390, 392. Finally, he challenged the trial judge's failure to recuse himself from the evidentiary hearing, and argued that he was prejudiced because the trial judge had prejudged the facts in his first response to the SJC's remand order. Id. at 234-35, 936 N.E.2d at 393. Following an extensive review of the trial judge's findings, and consideration of each of Greineder's numerous arguments, the SJC held that the voir dire had not been closed to the public in violation of the Petitioner's constitutional rights. See id. at 219-35, 936 N.E.2d at 383-94.

In reviewing Greineder's challenge to the individual voir dire, the SJC explained that it would not disturb the trial judge's subsidiary findings of fact "unless they are shown to be the result of a 'clear abuse of discretion or . . . were clearly erroneous.'" Id. at 225, 936 N.E.2d at 387 (quoting Commonwealth v. Torres, 437 Mass. 460, 469, 772 N.E.2d 1046 (2002)). Like in the case of a motion for a new trial, the Court "extend[ed] special deference to the action of [the] motion judge who also was the trial judge[.]" Id. Moreover, because Greineder's appeal raised constitutional issues, the SJC stated that it would exercise its "own judgment on the ultimate factual and legal conclusions." Id. at 225-26, 936 N.E.2d at 387. The Court explained:

Whether the public was present is a subsidiary question of fact. Neither the presence nor the absence of members of the public during jury voir dire is determinative of the question before us. The Sixth Amendment does not require members of the public to attend the trial. It prohibits their exclusion by the State, except in limited circumstances. The ultimate question of fact before us is whether there was a court order or other official action that excluded the public (or the media) from room 8. We review the judge's findings that members of the public and Britt were present under the "clear abuse of discretion" and "clearly erroneous" standards.

Id. at 226, 936 N.E.2d at 387-88 (internal citations omitted).

Greineder contends, in his present petition, that the SJC's formulation of the issue was erroneous because it ignored the fact that a courtroom may be closed even in the absence of official action. (Pet. Summary Mem. at 8). However, as detailed below, this court finds that the SJC's conclusion, based on its "independent judgment" that Courtroom 8 was not closed to the public or the media, in the constitutional sense, during the individual voir dire of prospective jurors was not an unreasonable determination of the facts, nor was it contrary to or an unreasonable application of Supreme Court law. Greineder I, 458 Mass. at 234, 936 N.E.2d at 393.

The SJC divided its discussion into sections addressing the facts, and Greineder's objections thereto, relating to (i) whether the public was present in the courtroom during the individual voir dire, id. at 225-30, 936 N.E.2d at 387-90, (ii) whether the absence of members of the public was attributable to the court, id. at 230-33, 936 N.E.2d at 390-92, and (iii) whether the media had been excluded from any portion of the voir dire. Id. at 233-34, 936 N.E.2d at 392-93. This court follows that organization in laying out these facts.

#### The Presence of the Public

The SJC concluded "that the judge's findings that members of the public and [the Defendant's daughter] Britt attended portions of the individual voir dire in room 8 were neither the result of a clear abuse of discretion nor clearly erroneous." Id. at 230, 936 N.E.2d at 390. In so concluding, the SJC addressed each of the Defendant's objections and considered all of the evidence that the Defendant believed warranted a different result. See id. at 226-27, 936 N.E.2d at 388. Specifically, but without limitation, the SJC first rejected Greineder's assertion that the trial judge's use of the word "non- public" to describe the individual voir dire proceedings meant that the public had been excluded from Courtroom 8. Id. at 227, 936 N.E.2d at 388. As an initial matter, the SJC noted that when this argument had been raised in Greineder's direct appeal, the Court had determined that the use of the word alone was not conclusive, and had remanded the matter for further factual development by the trial judge in order to allow the SJC to conduct a meaningful review of the Petitioner's public trial claim. Id. The SJC also noted that, upon remand, the trial judge had provided an explanation for his comments. As the SJC stated:

The judge has now explained his use of the word "non-public," stating he never intended to exclude the public and he did not order room 8 closed.

He used the word “non-public” to describe the measures taken to ensure that jurors would be encouraged to give candid answers to questions on voir dire without fear of criticism, ridicule, or reprisal, and to describe his exclusion of cameras from the court room during individual voir dire of prospective jurors.

Id. Additionally, the SJC noted that the use of a written jury questionnaire “was itself a ‘non-public’ measure, as the judge used that term[,]” because the responses to the written questions would only be seen by the parties and the trial judge. Id. at 227, 936 N.E.2d at 389. Accordingly, the SJC concluded that “[i]n these circumstances, the judge’s choice of the word ‘non-public’ may have been unfortunate, but we will not presume that he meant the voir dire proceeding itself was closed to the public.” Id. at 228, 936 N.E.2d at 389.

Next, the SJC addressed Greineder’s argument that the evidence presented at the evidentiary hearing should compel the Court to conclude that the voir dire was closed to the public. The SJC noted that there was conflicting evidence as to whether members of the public were present during the proceedings in Courtroom 8, and that the resolution of such conflicts was a matter for the trial judge. Id. The SJC also found it significant that there had been two bench conferences during the course of the voir dire, when no prospective jurors were present in the courtroom. Id. As the SJC reasoned, “[t]he only reason to have a bench conference in the absence of a prospective juror would be to discuss a sensitive matter outside the hearing of the public so that it would not later be repeated publicly and possibly compromise the impartiality of the jury.” Id. Based on this evidence, the SJC concluded that “there has been no showing that” the judge’s credibility determination “was an abuse of discretion or clearly erroneous.” Id.

The SJC also considered, but rejected, Greineder’s contention that a newspaper article describing the first day of the jury selection process as being “closed to the public” invalidated

the trial judge's conclusion that the courtroom had not been closed to the public. Id. at 228-29, 936 N.E.2d at 389-90. The SJC found that the article had not been presented as an exhibit at the evidentiary hearing, constituted hearsay, and conflicted with the undisputed fact that the initial jury selection proceedings, which had taken place in the main courtroom, as well as the proceedings that had taken place in Courtroom 10, had been open to the public. Id.

Greineder argued that in a case that had attracted so much public attention, it was not plausible that so few people would have attended the voir dire, and the only reasonable explanation was that the courtroom had been closed. Id. at 226, 936 N.E.2d at 388. The SJC determined that there was "no merit" to this argument. Id. at 229, 936 N.E.2d at 389-90. Thus, the SJC noted that Mr. Farmer "testified that reporters 'traditionally did not cover jury selection.'" Id. at 229, 936 N.E.2d at 390. Additionally, the Court found it significant that most of the prospective jurors' responses to questions were not available to the public because they were set forth in the written jury questionnaire. Id. It determined, as a result, that the voir dire proceedings were "far from being keenly interesting to an onlooker[,"] and there was "nothing implausible about a general lack of interest in this portion of the trial." Id.

The SJC similarly found no merit to Greineder's argument that the Norfolk Superior Court had a long-standing practice of excluding the public from the jury selection process, as described in the case of Commonwealth v. Cohen, 456 Mass. 94, 921 N.E.2d 906 (2010). Id. As an initial matter, the Court noted that while evidence of the practice had been used to impeach the testimony of the acting chief court officer during the evidentiary hearing, it had not been admitted for any substantive purpose. Id. It further found that even if Greineder had made substantive use of that evidence, it would have been undermined by evidence that the policy

was not followed in this case. Id. Thus, as the SJC determined:

Here, in contrast to the *Cohen* case, there was no testimony that a sign had been placed outside room 8 declaring it closed to the public, and there was no evidence that a court officer was stationed outside room 8 turning away members of the public. There was no evidence that anyone had been asked to leave room 8 or had been removed. Farmer testified, without contradiction, that members of the media had in fact attended the initial and concluding portions of jury selection in the main court room and in room 10, respectively. Britt testified that she attended the final phase of jury selection in room 10. Both the acting chief court officer and the assistant clerk testified without contradiction that the “policy” of exclusion varied from judge to judge. There was no evidence that this judge had followed such a policy either in this case or in any case. The judge stated that he did not authorize any exclusionary sign or barrier; that he used both doors to room 8 each day and saw no sign or barrier; and if he had seen anything barring entry to the court room he would have had it removed. We conclude that the judge would have acted well within his discretion to give no credence to the evidence of such a policy if it had been admitted for substantive purposes.

Id. at 229-30, 936 N.E.2d at 390 (internal citation omitted).

In connection with his appeal, Greineder urged the SJC to resolve the conflicts in the testimony as to whether Britt Cavaletto was present in Courtroom 8 during the individual voir dire. Id. at 227, 936 N.E.2d at 388. The Court declined to do so, ruling that this was a matter for the trial judge to resolve. Id. at 230, 936 N.E.2d at 390. It further determined that Greineder had failed to show that the trial judge abused his discretion when he found, based on all the evidence, that “it is probable that [Ms. Cavaletto] spent some time in Room 8 during the individual voir dire[,]” or that his finding in this regard was clearly erroneous. Id. Thus, having considered all of the arguments proffered by Greineder, the SJC did not disturb the trial judge’s finding that members of the public, including Britt, attended portions of the individual voir dire in Courtroom 8. Id.

**Exclusion of the Public**

The SJC engaged in a lengthy discussion regarding Greineder's assertion that "although there was no written order excluding the public from room 8, the absence of the public is attributable to the court." See id. at 230-33, 936 N.E.2d at 390-92. As the Court described Greineder's argument on this issue:

[Greineder's] focus is on the judge's finding that [his children,] Kirsten Greineder Engel (Kirsten) and Colin Greineder (Colin), were told by an unknown, noncourt person over the weekend of May 19 to 20, 2001, that they "could not or should not attend the individual voir dire" (emphasis added). [Greineder] argues that this person must have been counsel because the judge recalled that he probably made the decision to use room 8 for the voir dire on Friday, May 18, after court hours, and he probably made his decision known to both counsel on the same day to give attorneys reasonable notice of his decision. He further argues that the judge must have told counsel the voir dire would be closed to the public because that is what the Greineder children understood, and it was directly contrary to counsel's instruction that they attend the entire trial.

Id. at 230-31, 936 N.E.2d at 390-91. However, the SJC was not persuaded by these arguments. In particular, the Court rejected Greineder's suggestion that the trial judge's communication of his decision to use Courtroom 8 meant that the judge told counsel that the voir dire would be closed. Id. at 231, 936 N.E.2d at 391. It noted that Greineder's trial counsel had no memory of any such statements by the trial judge. Id. Nor did he have any recollection of telling the Petitioner's children that the voir dire would be closed or that they could not attend. Id. Similarly, the SJC noted that Greineder had no memory of his counsel telling him that the voir dire proceedings would be closed. Id. While Greineder's son Colin could not recall whether he was told not to attend the voir dire, or whether he was told he did not need to attend the trial until the jury had been selected, he recalled that the source of the communication was either his father or his sister Britt. Id. at 231-32, 936 N.E.2d at 391.

The SJC recognized that there was evidence supporting Greineder's argument. For example, but without limitation, defense counsel testified that he thought that having Greineder's children present throughout the trial would be an important signal to the jury that they were supporting their father, and Greineder's daughter Kirsten had testified that she did not travel to Massachusetts until May 23, 2001 because defense counsel had told her that she could not attend the voir dire. Id. at 232, 936 N.E.2d at 391. The SJC concluded that the trial judge was not required to credit this testimony, and that there were other reasonable explanations for Colin's and Kirsten's failure to travel from out of state to attend the jury selection proceedings. Id. For example, but without limitation, given the professional hardship attendance would have caused the out-of-state-children, a decision could have been made that having them present for the individual voir dire, which averaged slightly over four minutes per prospective juror, was of de minimus value. Id. The SJC also considered Greineder's argument that the trial judge had improperly failed to credit Britt's testimony that the courtroom was closed. Id. at 232-33, 936 N.E.2d at 392. However, as the SJC described in its opinion, some of Britt's testimony about the courtroom being closed arose for the first time on cross-examination, her testimony that there was a sign that the courtroom was closed was contradicted even by Mr. Farmer, her testimony regarding actions allegedly undertaken by court officers was contradicted by the fact that none of the three officers was physically in a position to have done or said what Britt testified to, and her testimony was inconsistent with other evidence in the record, including the testimony of witnesses who recalled seeing her in the courtroom at the individual voir dire. See id. Therefore, the SJC ruled that the trial judge had acted appropriately in declining to credit her testimony. Id.

The SJC held further,

The judge found, based on the hearing evidence, that there was no oral or written order barring the media or any other segment of the public from the individual voir dire. He also found that, based on all the evidence, Britt and members of the public attended portions of the voir dire; that no one was prevented from entering room 8, and no one was asked to leave room 8. There was no evidence that anyone had stayed outside room 8 during the voir dire because of knowledge of a court house policy that excluded spectators from jury selection proceedings. Spectators who did attend were noticed and they were not asked to leave, which, in the circumstances of this case, strongly suggests that there was no closure of the court room in the constitutional sense. Compare and contrast *Commonwealth v. Cohen* (No. 1), 456 Mass. 94, 109, 921 N.E.2d 906 (2010) (existence of spectators bold enough to gain admission does not convert officially closed court room into open one). We have exercised our own independent judgment, and we are satisfied that the defendant has failed to show that the public, including Britt, was excluded from the voir dire in the constitutional sense.

Id. at 233, 936 N.E.2d at 392.

#### Exclusion of the Media

Next, the SJC addressed Greineder's argument "that the media had been excluded from the voir dire, and although there was no written order to that effect, the exclusion was attributable to the court." Id. Although the trial judge found that no member of the media had been present for any portion of the voir dire, he concluded that the absence of the media was not due to any official action, but was likely the result of misinformation that had been received from Mr. Farmer. Id. at 234, 936 N.E.2d at 393. The SJC determined that his findings in this regard "were not clearly erroneous or an abuse of discretion." Id. The SJC also concluded that the courtroom had not been closed to the media in the constitutional sense during the individual voir dire. Id.

According to the SJC, no member of the media who provided testimony at the evidentiary hearing, with the exception of Mr. Farmer, indicated that the judge or any court

personnel had prevented the media from attending the individual juror voir dire. Id. at 233, 936 N.E.2d at 392-93. While Mr. Farmer stated that the trial judge had told the media, during the meeting on May 18, 2001, that the voir dire would be closed, the trial judge denied making any such statements, and stated that Mr. Farmer was mistaken. Id. As the SJC emphasized, the trial judge further determined that

he could not have told the members of the media on the morning of Friday, May 18, 2001, that the voir dire would be closed because the trial record shows that no decision had even been made as of the end of that day whether there would be a “traditional individual voir dire at side bar” in the main court room, or whether it would be moved to a different court room.

Id. at 234, 936 N.E.2d at 393. The judge’s findings on this matter were consistent with the testimony of the lead prosecutor, who stated that there was no discussion of closing the courtroom at the meeting with the media on May 18, 2001, although the judge did address restrictions on photographs of prospective jurors and the dissemination of identifying information. Id. They were also consistent with the testimony of the judge’s law clerk, who testified that it was the judge’s usual practice to put important rulings in writing or on the record, and that the closure of a courtroom would have qualified as such a ruling. Id.

The SJC also found it significant that the media were present in the main courtroom for the initial phase of jury selection on May 21, 2001. Id. At that time, the trial judge assured prospective jurors that they would not be identified by the media, and that their written questionnaires would not be available to the public. Id. However, he said nothing about closure or absence of the media from any aspect of the trial. Id.

The trial judge had declined to credit Mr. Farmer’s testimony on the subject of closure, and “concluded that the defendant failed to show that the media were excluded from the voir

dire in the constitutional sense.” Id. He further found, with support from the record, that the absence of the media during the individual voir dire proceedings was “most likely because of misinformation received from [Mr.] Farmer.” Id. at 234, 936 N.E.2d at 393. After exercising its “independent judgment as to this issue,” the SJC concluded that “room 8 was not closed to the media, in the constitutional sense, during the individual voir dire of prospective jurors.” Id.

#### **Motion to Recuse**

In a final effort to overturn the trial court’s ruling that his constitutional rights were not violated during the individual voir dire, Greineder argued that the judge erred by failing to recuse himself on the grounds that he had prejudged the facts in his first response to the remand order. Id. at 234-35, 936 N.E.2d at 393. In evaluating Greineder’s challenge to the denial of his motion for recusal, the SJC applied the following standard:

When deciding a question of recusal, a judge must first consult his or her own emotions and conscience. If the judge passes “the internal test of freedom from disabling prejudice,” the judge must then attempt an “objective appraisal” of whether the proceeding is one in which the judge’s impartiality might reasonably be questioned. *Lena v. Commonwealth*, 369 Mass. 571, 575, 340 N.E.2d 884 (1976). See Code of Judicial Conduct, S.J.C. Rule 3:09, Canon 3(E)(1), as appearing in 440 Mass. 1319 (2003) (“A judge shall disqualify himself or herself in a proceeding in which the judge’s impartiality might reasonably be questioned ...”). Recusal is a matter that rests in the first instance in the discretion of the judge. *Commonwealth v. Coyne*, 372 Mass. 599, 602, 363 N.E.2d 256 (1977). To show that the judge abused his discretion a defendant ordinarily must show that “the judge demonstrated a bias or prejudice arising from an extrajudicial source, and not from something learned from participation in the case.” *Commonwealth v. Atkinson*, 442 Mass. 410, 415, 813 N.E.2d 506 (2004), citing *Liteky v. United States*, 510 U.S. 540, 551, 114 S.Ct. 1147, 127 L.Ed.2d 474 (1994).

Id. at 235, 936 N.E.2d at 393-94. The SJC determined that the trial judge had properly applied this test. Id. at 235, 936 N.E.2d at 394. Thus, the SJC reviewed the steps the trial had taken, including examining his own conscience and confirming that he could remain fair and impartial.

Id. The trial judge had buttressed this conclusion by explaining that judges are often required to reexamine their own findings and rulings, and that the issuance of his first response did not disqualify him from further consideration of the issue. Id. The SJC then considered the fact that Greineder had failed to offer any evidence that would have called the trial judge's impartiality into question, and held that there was "no evidence of bias or prejudice from an extrajudicial source." Id. at 235, 936 N.E.2d at 394. Accordingly, the Court was "satisfied that the judge did not abuse his discretion in denying the motion to recuse himself." Id.

This court will address the merits of the recusal issue first before addressing the merits of the underlying courtroom closure arguments. Additional facts will be provided below where appropriate.

**B. The Trial Judge's Decision Not to Recuse Himself was not Contrary to or an Unreasonable Application of Supreme Court Law**

In addition to challenging the legal standard applied by the state court in connection with its ruling on the issue of closure of the courtroom, Greineder challenges the factual findings as being an unreasonable determination of the facts in light of the evidence presented. (See Pet. Mem. at 54-65; Pet. Summary Mem. at 6-11). It is a basic principle of habeas review that "[a] state court's factual findings are presumed to be correct unless the petitioner rebuts the presumption with clear and convincing evidence[,]" and that "[t]his presumption applies to determinations made by both state trial and appellate courts." Gaskins v. Duval, 640 F.3d 443, 452 (1st Cir. 2011), and cases cited. Greineder argues as a preliminary matter that the state court factual findings cannot be trusted, since Judge Chernoff made the factual findings and was biased. Therefore, the initial question is whether Judge Chernoff's failure to recuse himself violated Greineder's constitutional rights. For the reasons detailed herein, this court concludes

that the decision not to recuse was not contrary to nor an unreasonable application of Supreme Court law, and that the state court's factual findings about the closure of the courtroom are entitled to deference.

#### **Constitutional Standard for Recusal**

It is well established that “[a] fair trial in a fair tribunal is a basic requirement of due process.” In re Murchison, 349 U.S. 133, 136, 75 S. Ct. 623, 625, 99 L. Ed. 942 (1955); see also United States v. Marquez-Perez, 835 F.3d 153, 157 (1st Cir. 2016). “Fairness of course requires an absence of actual bias in the trial of cases. But our system of law has always endeavored to prevent even the probability of unfairness.” In re Murchison, 349 U.S. at 136, 75 S. Ct. at 625; see also 28 U.S.C. § 455(a) (a federal judge must be disqualified if the judge’s “impartiality might reasonably be questioned”). However, “most matters relating to judicial disqualification do not rise to a constitutional level.” Caperton v. A.T. Massey Coal Co., Inc., 556 U.S. 868, 876, 129 S. Ct. 2252, 2259, 173 L. Ed. 2d 1208 (2009) (internal quotation marks and citation omitted). Rather, “the Due Process Clause of the Fourteenth Amendment establishes a constitutional floor, not a uniform standard[,]” and the standards for recusal are usually “answered by common law, statute, or the professional standards of the bench and bar.” Bracy v. Gramley, 520 U.S. 899, 904, 117 S. Ct. 1793, 1797, 138 L. Ed. 2d 97 (1997).

“[T]he floor established by the Due Process Clause clearly requires a ‘fair trial in a fair tribunal,’ before a judge with no actual bias against the defendant or interest in the outcome of his particular case.” Id. at 904-05, 117 S. Ct. at 1797 (internal citations omitted). Moreover, there “are circumstances ‘in which experience teaches that the probability of actual bias on the part of the judge or decisionmaker is too high to be constitutionally tolerable.’” Caperton, 556

U.S. at 877, 129 S. Ct. at 2259 (quoting Withrow v. Larkin, 421 U.S. 35, 47, 95 S. Ct. 1456, 1464, 43 L. Ed. 2d 712 (1975)). Accord Rippo v. Baker, 137 S. Ct. 905, 907, 197 L. Ed. 2d 167 (2017) (question is “whether, considering all the circumstances alleged, the risk of bias was too high to be constitutionally tolerable.”). Nevertheless, the fact that the judge has made a preliminary assessment of facts does not in and of itself require recusal. Withrow, 421 U.S. at 56, 95 S. Ct. at 1469. As the Supreme Court has recognized:

Judges repeatedly issue arrest warrants on the basis that there is probable cause to believe that a crime has been committed and that the person named in the warrant has committed it. Judges also preside at preliminary hearings where they must decide whether the evidence is sufficient to hold a defendant for trial. Neither of these pretrial involvements has been thought to raise any constitutional barrier against the judge's presiding over the criminal trial and, if the trial is without a jury, against making the necessary determination of guilt or innocence. Nor has it been thought that a judge is disqualified from presiding over injunction proceedings because he has initially assessed the facts in issuing or denying a temporary restraining order or a preliminary injunction. It is also very typical for the members of administrative agencies to receive the results of investigations, to approve the filing of charges or formal complaints instituting enforcement proceedings, and then to participate in the ensuing hearings. This mode of procedure does not violate the Administrative Procedure Act, and it does not violate due process of law. We should also remember that it is not contrary to due process to allow judges and administrators who have had their initial decisions reversed on appeal to confront and decide the same questions a second time around.

Id. at 56–57, 95 S. Ct. at 1469 (footnote omitted) (Court rejects contention that administrative agency is precluded from instituting proceedings and then adjudicating cases where it was involved in the investigation of facts).

The Supreme Court’s “precedents apply an objective standard that, in the usual case, avoids having to determine whether actual bias is present. The Court asks not whether a judge harbors an actual, subjective bias, but instead whether, as an objective matter, ‘the average judge in his position is “likely” to be neutral, or whether there is an unconstitutional “potential

for bias.”” Williams v. Pennsylvania, 136 S. Ct. 1899, 1905, 195 L. Ed. 2d 132 (2016) (quoting Caperton, 556 U.S. at 881, 129 S. Ct. at 2262). The inquiry is “whether, under a realistic appraisal of psychological tendencies and human weakness, the interest poses such a risk of actual bias or pre-judgment that the practice must be forbidden if the guarantee of due process is to be adequately implemented.” Caperton, 556 U.S. at 883-84, 129 S. Ct. at 2263 (internal quotation marks and citation omitted); see also Liteky v. United States, 510 U.S. 540, 558, 114 S. Ct. 1147, 1158-59, 127 L. Ed. 2d 474 (1994) (Kennedy, J., concurring) (“[A] judge should be disqualified only if it appears that he or she harbors an aversion, hostility or disposition of a kind that a fair-minded person could not set aside when judging the dispute” or has a “deep-seated predisposition” to ensure that one side should prevail).<sup>3</sup>

As detailed herein, the state courts’ analysis was consistent with federal law, and the affirmation of the decision of Judge Chernoff not to recuse himself was not contrary to or an unreasonable application of Supreme Court law.

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<sup>3</sup> Pursuant to 28 U.S.C. § 455(b)(1), a federal judge must recuse him or herself where he or she “has a personal bias or prejudice concerning a party, or personal knowledge of disputed evidentiary facts concerning the proceeding[.]” It has long been stated by the courts that any such bias or prejudice must stem from an “extrajudicial source” and not from information learned through judicial proceedings. See Liteky, 510 U.S. at 544, 114 S. Ct. at 1152. Liteky addressed the issue whether the extrajudicial source rule also applies to disqualifications under 28 U.S.C. § 455(a), which requires a federal judge to “disqualify himself in any proceeding in which his impartiality might reasonably be questioned.” The Court ruled that it did apply, but that it was not controlling “[s]ince neither the presence of an extrajudicial source necessarily establishes bias, nor the absence of an extrajudicial source necessarily precludes bias[.]” Liteky, 510 U.S. at 554-55, 114 S. Ct. at 1157. The SJC in Greineder cited to Liteky and the fact that in Judge Chernoff’s case there was “no evidence of bias or prejudice from an extrajudicial source.” Greineder I, 458 Mass. at 235, 936 N.E.2d at 394. Since the conclusion that there was no evidence of bias or prejudice was not dependent on a distinction between facts Judge Chernoff learned through a judicial proceeding as opposed to from an extrajudicial source, the scope and application of the extrajudicial source rule will not be discussed further.

**The State Court Decisions Complied With Due Process**

The SJC recognized that the standard to be applied in evaluating a decision to recuse was an objective one, and that, in addition to cases involving actual bias, a judge must disqualify him or herself in a proceeding in which the judge's impartiality might reasonably be questioned. Greineder I, 458 Mass. at 235, 936 N.E.3d at 393-94. While relying on the Code of Judicial Conduct, the standard applied by the SJC was consistent with the requirements of due process discussed above. Thus, the standard applied was not "contrary to" Supreme Court precedent.

Similarly, the decisions of Judge Chernoff and the SJC that recusal was not necessary were not an unreasonable application of Supreme Court law. The SJC, on its own initiative, determined that the record on appeal was not sufficient to determine whether the courtroom had been closed during jury selection. Significantly, this is not a situation where the trial judge attempted to avoid the issue in any way, or took any steps to prevent the Defendant from obtaining the information. Under these circumstances, there is no evidence of any bias on the part of Judge Chernoff as of the time that the SJC remanded the matter to him for factual findings.

The SJC asked Judge Chernoff to respond to questions, and expressly stated that he did not need to hold an evidentiary hearing. Promptly upon learning that Mr. Farmer, a newspaper reporter, had a different memory of events, Judge Chernoff withdrew his initial response to the SJC and set up an evidentiary hearing. This willingness to hear from others is further evidence that Judge Chernoff was not attempting to limit the record and that he had an open mind to the facts that might be developed.

Judge Chernoff allowed the Defendant to call any witnesses that he wanted at the evidentiary hearing, and allowed him to cross-examine all witnesses, except for the judge. The judge carefully detailed all the evidence, distinguished his personal memories from the testimony of others, and explained that there were inconsistencies. The SJC was presented with a complete factual record, not one that was colored or limited by the judge's own perceptions. (See FSA 1499-1512). The factual findings were supported by the testimony of numerous witnesses, and not just the judge. This is not a situation where the trial judge "was willing to forsake the role of impartial arbiter and instead assume the role of advocate[.]" See Harrison v. McBride, 428 F.3d 652, 669-70 (7th Cir. 2005) (where trial judge actively initiated investigations into evidence, and made a number of statements dismissing defendant's evidence, the record established that the judge was biased and had "a personal interest in protecting his name and the judiciary").

While Greineder contends that the judge "prejudged" the issue, as evidenced by his first response to the SJC (Pet. Mem. at 47), the record is unambiguous that the SJC asked him to make findings with respect to nine questions or topics, and that the SJC did not require that he hold an evidentiary hearing. (FSA 1499). The fact that Judge Chernoff thought about the questions presented to him by the SJC does not constitute bias or prejudice. Similarly, the fact that Judge Chernoff contacted his former law clerk to find out what she remembered did not require recusal. Despite Greineder's description of her testimony as "awkward" because of the confidentiality obligations of a law clerk (Pet. Mem. at 48), the record reflects that a concern about confidentiality was appropriate since the law clerk was being asked about her conversation with the judge with whom she had clerked. In any event Judge Chernoff waived any such

privilege, the law clerk testified both as to her conversations with the judge and to her memory of events, and she was subject to cross-examination. (Pet. Mem. at 48-49; Tr. 2/1/10 (FSA 46) at 4-48). There is nothing sinister about the judge trying to answer the SJC's questions fully. Despite the Defendant's conclusory assertions to the contrary, there is no evidence that Judge Chernoff refused to consider testimony that was inconsistent with his memory, or that he would not have accepted the conclusion that the courtroom had been closed if presented with clear evidence to that effect.

Finally, even a cursory comparison of the instant case with Hurles v. Ryan, on which Greineder relies, establishes that the recusal decision was appropriate. 752 F.3d 768 (9th Cir. 2014). Hurles was convicted of capital murder and sentenced to death. He had moved unsuccessfully to have the judge who presided over his trial, sentencing and post-conviction proceedings recuse herself. Id. at 788. In denying the motion to recuse, the trial judge made findings about her own conduct based on her "untested memory and understanding of the events." Id. at 791. That ruling was affirmed on appeal, without an evidentiary hearing, and the habeas court denied the defendant's request for an evidentiary hearing as well. Id. at 792. The Ninth Circuit remanded the matter to the District Court for an evidentiary hearing, finding that the record was insufficient to determine whether Hurles had enjoyed "a fair trial in a fair tribunal" as required by due process. Id. As the court held, the trial judge "did not hold an evidentiary hearing or provide another mechanism for Hurles to develop evidence in support of his claim," nor did she give Hurles an opportunity to contest the judge's version of events that had taken place years before. Id. at 790. Instead, the trial judge "accepted her factual assertions as true and relied on them to conclude that 'a reasonable and objective person would not

find partiality.” Id. Under such circumstances, the Ninth Circuit held that habeas court did not have enough information to conclude that the trial judge should not have recused herself, or that her factual findings about the events were entitled to any deference. Id. at 790-91.

In the instant case, Judge Chernoff held a hearing, allowed the Defendant to put forth all of his evidence, and made detailed findings, explaining the witnesses’ testimony as well as his own memory. The evidence supports the finding that Judge Chernoff was not biased in connection with establishing the facts concerning the alleged closure of the courtroom, and that the SJC was presented with a complete factual record.

Significantly, the issue presented – the potential closure of the courtroom – does not present such a situation that “experience teaches that the probability of actual bias on the part of the judge or decisionmaker is too high to be constitutionally tolerable.” Caperton, 556 U.S. at 877, 129 S. Ct. at 2259 (quoting Withrow, 421 U.S. at 47, 95 S. Ct. at 1464). The judge’s personal integrity was not being challenged and the issue presented was straightforward, although made more difficult by the passage of time. In sum, the analysis and determination undertaken by the state courts were consistent with Supreme Court law.

This court also finds no merit in Greineder’s contention that he is entitled to a further evidentiary hearing in this court in light of the inadequacies in the state proceeding. Even assuming, arguendo, that such inadequacies had been found to exist, and that an evidentiary hearing could be held in connection with a habeas proceeding, but see Garuti v. Roden, 733 F.3d 18, 22-23 (1st Cir. 2013), no evidentiary hearing is warranted in this case. Before any evidentiary hearing is held, a habeas judge must “consider whether such a hearing could enable an applicant to prove the petition’s factual allegations, which, if true, would entitle the

applicant to federal habeas relief.” Teti v. Bender, 507 F.3d 50, 62 (1st Cir. 2007). Greineder has not indicated that new evidence exists which would alter the factual record developed below — there is simply no indication that a “hearing is likely to elicit the factual support” for his contention that the courtroom was closed, beyond that which the trial judge already admitted into evidence. See id.; see also Companonio v. O’Brien, 672 F.3d 101, 113 (1st Cir. 2012) (“Where a federal evidentiary hearing would essentially replicate the state court record, the district court is on shaky ground in ordering the hearing.” (internal quotation marks and citation omitted)).

Finally, Greineder argues that even if his objections to the trial judge presiding over the evidentiary hearing fail, he nevertheless is entitled to a de novo review by the federal habeas court because the SJC did not consider the Waller factors in determining whether the courtroom was properly closed. (Pet. Mem. at 52-53). In Waller v. Georgia, the Supreme Court held that the right to an open trial may give way where: (1) the party seeking to exclude the public establishes “an overriding interest that is likely to be prejudiced” by a public trial; (2) the closure is “no broader than necessary to protect that interest”; (3) the trial court has considered “reasonable alternatives to closing the proceeding”; and (4) the trial court “make[s] findings adequate to support the closure.” 467 U.S. 39, 48, 104 S. Ct. 2210, 2216, 81 L. Ed. 2d 31 (1984). However, if no closure of the trial courtroom occurs, there is no need to consider the elements of the test set forth in Waller. See United States v. Negron-Sostre, 790 F.3d 295, 305 (1st Cir. 2015) (Waller test was not applied where the court (erroneously) found that there was no courtroom closure). In light of the state court findings in the instant case, there was no reason for the state courts or this court to consider the Waller factors either.

In sum, the state courts' rulings that Judge Chernoff did not need to recuse himself, and that Greineder had a fair hearing on the issue of the closure of the courtroom, is not contrary to or an unreasonable application of Supreme Court law. Similarly, the rulings were not based on an unreasonable determination of the facts in light of the evidence presented. Therefore, the state courts' factual findings about the closure of the courtroom are entitled to deference.

**C. The State Courts' Findings of Fact Are Not Unreasonable**

Greineder's principal contention is that the findings by the trial judge and the SJC are simply wrong. Thus, he argues that "[t]he individual *voir dire* was, in fact, closed to the public" (Pet. Mem. at 54), "[t]he courtroom was, in fact, closed to the media" (id. at 56), and "[t]he courtroom was, in fact, closed to members of the defendant's family and the general public." (Id. at 61). The SJC decision addresses each of the Defendant's arguments, and details the evidence on which it relied in assessing the trial judge's findings as well as in making its own individualized assessment regarding the alleged closure of the courtroom. Greineder has not established that the factual determinations were objectively unreasonable, nor has he refuted the factual determinations by clear and convincing evidence. Therefore, the factual findings of the trial and appellate state courts should not be disturbed.

As the First Circuit has explained:

The AEDPA allows relief from a state court judgment if that judgment is based on an unreasonable determination of the facts. 28 U.S.C. § 2254(d)(2). Under this standard, "the state court's factual findings are entitled to a presumption of correctness that can be rebutted only by clear and convincing evidence to the contrary." *Ouber [v. Guarino*, 293 F.3d 19, 27 (1st Cir. 2002)]; *see also Sanna v. Dipaolo*, 265 F.3d 1, 7 (1st Cir. 2001) (explaining that the standard applies only to the determination of "basic, primary, or historical facts"). Unless the petitioner can carry this heavy burden, a federal habeas court must credit the state court's findings of fact-and that remains true when those findings are made by a state appellate court as well as when

they are made by a state trial court. *E.g., King v. Bowersox*, 291 F.3d 539, 540 (8th Cir. 2002); *Everett v. Beard*, 290 F.3d 500, 507 (3d Cir. 2002).

Rashad v. Walsh, 300 F.3d 27, 35 (1st Cir. 2002). Thus, “a decision adjudicated on the merits in a state court and based on a factual determination will not be overturned on factual grounds unless objectively unreasonable in light of the evidence presented in the state-court proceeding[.]” Miller-El v. Cockrell, 537 U.S. 322, 340, 123 S. Ct. 1029, 1041, 154 L. Ed. 2d 931 (2003). Nevertheless, “[e]ven in the context of federal habeas, deference does not imply abandonment or abdication of judicial review. Deference does not by definition preclude relief. A federal court can disagree with a state court’s credibility determination and, when guided by AEDPA, conclude the decision was unreasonable or that the factual premise was incorrect by clear and convincing evidence.” Id. Finally, the habeas court can supplement the facts “with other record facts consistent with the SJC’s findings.” Yeboah-Sefah v. Ficco, 556 F.3d 56, 62 (1st Cir. 2009) (quoting Healy v. Spencer, 453 F.3d 21, 22 (1st Cir. 2006)).

As detailed above, the SJC addressed each of Greineder’s challenges, which he repeats in his habeas petition, and its findings are supported by the record. This court has reviewed the record as well, and finds no reason not to give the state courts’ findings the presumption of correctness provided in AEDPA.

Without minimizing the significance of any of the evidence on which Judge Chernoff and the SJC relied, this court does find most compelling the fact that there were two bench conferences during the individual voir dire in Courtroom 8 when no prospective jurors were present. Specifically, the trial transcript from the individual voir dire on the first day, May 21, 2001, contains the following colloquy after questioning of a potential juror:

THE JUROR: Sure.

THE COURT: Thank you.

(Juror exits courtroom)

THE COURT: Mr. Murphy?

MR. MURPHY: Your Honor, may I make a challenge to that juror?

THE COURT: Why is that? I'm sorry, you want to challenge her?

MR. MURPHY: Yes.

THE COURT: I will hear you.

[Statement of reasons for recusal by Mr. Murphy]

THE COURT: Mr. Grundy?

MR. GRUNDY: I don't have anything to add -- well, Your Honor, I might add that it might not be such a bad idea ....

THE COURT: I will excuse her.

MR. GRUNDY: Your Honor, may we approach the side bar?

THE COURT: Yes.

BENCH CONFERENCE

MR. GRUNDY: Your Honor, I feel a little uncomfortable with the Court's terminology with respect to the photographs as tasteful because, quite frankly, they are going to be anything but.

There was a very, very severe neck wound deep, deep into the neck. I mean, half of her head is all but severed. It is an important evidentiary fact from the Commonwealth's perspective, and I wouldn't be surprised if from the defense's perspective as well.

[continued discussion about showing the photographs to the jury]

THE COURT: A juror in the jury room can feel to look at it close up or not. In any event, it will be presented in a tasteful way. I thank you for giving me a heads up on this. I will pose the questions a little differently.

MR. MURPHY: I would say that I think whatever distance the jury sees them from there, they are graphic photographs of very serious wounds.

THE COURT: Okay.

AFTER BENCH CONFERENCE

THE CLERK: Panel No. 5, Juror No. 1 ....

(Juror enters courtroom).

(Tr. 5/21/01 (FSA 3) at 174-78).

On the second day of the individual voir dire, the transcript reflects that after a potential juror exited the courtroom, there was some discussion between the judge and counsel. The Court stated "The jurors are having their lunch at this juncture. Mr. Grundy, could you be heard on your issue at this point at the sidebar?" to which he replied "Yes, Your Honor." (Tr. 5/22/01 (FSA 4) at 199). Thus, while not as clear as the above quoted colloquy on Day 1, it appears that there was a need for a sidebar conference on Day 2 of the individual voir dire as well.

As the SJC found, "[t]he only reason to have a bench conference in the absence of a prospective juror would be to discuss a sensitive matter outside the hearing of the public so that it would not later be repeated publicly and possibly compromise the impartiality of the jury." Greineder I, 458 Mass. at 228, 936 N.E.2d at 389. This court also finds the fact of the need for side bar conferences to be strong evidence that there were members of the public present in the courtroom during the individual voir dire examinations.

The trial judge and the SJC both weighed the conflicting evidence and explained their analyses with respect to the access of the public and the media to the courtroom. Much of that analysis is detailed above and need not be repeated here. The SJC carefully analyzed all objections raised by Greineder, and considered the evidence that the Defendant felt was compelling. The fact that “the record evidence can be interpreted to support a different version” is not a sufficient basis for the federal habeas court to supplant the SJC’s reasoning. Companonio, 672 F.3d at 111. Greineder’s “counter-arguments do not show that the state courts’ determination of the facts was unreasonable.” Torres v. Dennehy, 615 F.3d 1, 5 (1st Cir. 2010).

**D. The State Court Decision Was Not Contrary to or an Unreasonable Application of Supreme Court Law.**

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Finally, Greineder argues that the SJC applied the wrong standard by focusing on the role of the court in closing the courtroom. As detailed above, the state court found that while there were members of the public who attended the individual voir dire, no members of the media attended. Moreover, some members of the public and the media may not have attended because of incorrect information they may have received from sources other than court personnel. As the SJC ruled, and the Defendant does not dispute, “[n]either the presence nor the absence of members of the public during jury voir dire is determinative” of the issue whether Greineder’s constitutional rights were violated. Greineder I, 458 Mass. at 226, 936 N.E.2d at 387. Moreover, it is undisputed that “[t]he Sixth Amendment does not require members of the public to attend the trial.” Id. Greineder takes exception to the SJC’s further ruling that the Sixth Amendment prohibits the exclusion of the public “by the State, except in limited circumstances” and its statement that “[t]he ultimate question of fact before us is

whether there was a court order or other official action that excluded the public (or the media) from room 8.” Id. at 226, 936 N.E.2d at 387-88. Greineder argues that the SJC’s “formulation ignored the principle that a courtroom may be closed, **in fact**, even if not intentionally closed by formal court order.” (Pet. Reply Mem. (Docket No. 40) at 1 (emphasis in original)). As detailed herein, the Supreme Court has never ruled that a Defendant’s constitutional rights were violated when the public or media elected not to attend a court proceeding due to misinformation obtained from third parties. In light of the absence of any conduct attributable to any court personnel, the SJC’s decision that the courtroom was not closed “in the constitutional sense” is not an unreasonable application of Supreme Court law. Greineder I, 458 Mass. at 234, 936 N.E.2d at 393.

The Sixth Amendment provides that “[i]n all criminal prosecutions, the accused shall enjoy the right to a . . . public trial[.]” U.S. Const. amend. VI. There is no question the right to a public trial “extends to the States” and is aimed at protecting the accused. Presley v. Georgia, 558 U.S. 209, 212, 130 S. Ct. 721, 723, 175 L. Ed. 2d 675 (2010). “In addition to ensuring that judge and prosecutor carry out their duties responsibly, a public trial encourages witnesses to come forward and discourages perjury.” Waller, 467 U.S. at 46, 104 S. Ct. at 2215. The Supreme Court has expressly held that “the Sixth Amendment right to a public trial extends to the *voir dire* of prospective jurors.” Presley, 558 U.S. at 213, 130 S. Ct. at 724. Accord Press-Enterprise Co. v. Super. Ct. of Cal., Riverside Cty., 464 U.S. 501, 104 S. Ct. 819, 78 L. Ed. 2d 629 (1984). “That is so because ‘[j]ury selection is the primary means by which a court may enforce a defendant’s right to be tried by a jury free from ethnic, racial or political prejudice . . . or

predisposition about the defendant's culpability.'" Negron-Sostre, 790 F.3d at 301 (quoting Owens v. United States, 483 F.3d 48, 63 (1st Cir. 2007)) (alterations in original).

Greineder argues that the standard the SJC applied in determining whether the courtroom was closed to the public and media "constituted an unreasonable application of the principles of *Waller*, *Press-Enterprise*, and *Presley* to the facts of this case." (Pet. Mem. at 53-54). This court disagrees. None of those cases considered whether an unconstitutional closure under the Sixth Amendment may occur without a court order or other conduct, sanctioned or otherwise, by a court-affiliated actor. Moreover, this court finds that the SJC's decision is consistent with rulings by the Courts of Appeals, which have focused on the role of the trial judge in determining whether a courtroom was closed in the constitutional sense.

In Press-Enterprise, a trial judge had ordered that the individual voir dire examination of potential jurors be closed to the public and the press, and denied a motion by the press to release a transcript of those proceedings after they had been concluded. 464 U.S. at 503-04, 104 S. Ct. at 820-21. The Supreme Court ruled that the trial judge had erred by closing the voir dire proceedings without first making specific findings that the closure was "necessitated by a compelling governmental interest, and [was] narrowly tailored to serve that interest." Id. at 509-11, 104 S. Ct. at 823-25 (quoting Globe Newspaper Co. v. Super. Ct., 457 U.S. 596, 606-07, 102 S. Ct. 2613, 2620, 73 L. Ed. 2d 248 (1982)). In doing so, the Court held that "the public trial right extends beyond the accused and can be invoked under the First Amendment." Presley, 558 U.S. at 212, 130 S. Ct. at 723 (describing Press-Enterprise). It also held that "the voir dire of prospective jurors must be open to the public under the First Amendment." Id. Significantly,

however, the Press-Enterprise Court had no occasion to address whether the closure might have been deemed unconstitutional in the absence of a court order or other judicial action.

The Supreme Court's rulings in Waller and Presley shed no further light on the extent to which official action is needed to effect an unconstitutional closure. In Waller, the Court held that the accused's right to a public trial under the Sixth Amendment extends beyond the trial itself to encompass a pretrial suppression hearing. 467 U.S. at 43, 104 S.Ct. at 2214. It further ruled that the trial judge was not justified in ordering the suppression hearing in that case closed to the public without first making the findings necessary to support the closure. Id. at 48-49, 104 S. Ct. at 2216-17. However, because the closure occurred as a result of a court order, the Court had no reason to consider whether the closure would have been unconstitutional in the absence of the order or other official action. See id. at 42, 104 S. Ct. at 2213 (describing trial court's order closing the suppression hearing "to all persons other than witnesses, court personnel, the parties, and the lawyers"). In Presley, the Supreme Court held that the defendant's Sixth Amendment right to a public trial had been violated when the trial court excluded the public from the voir dire of prospective jurors without considering reasonable alternatives to closure. 558 U.S. at 213-15, 130 S. Ct. at 724-25. Again, there was no question in Presley that the trial judge had been directly responsible for the closure. See id. at 210-11, 130 S. Ct. at 722. Therefore, it was unnecessary for the Supreme Court to address the issue raised in this case. It is not possible to conclude from these cases that the SJC's formulation of the issue raised by Greineder's public trial claims was contrary to or an unreasonable application of clearly established federal law. See Smith v. Dickhaut, 836 F.3d 97, 107 (1st Cir. 2016) ("If federal law is not clearly established by the Supreme Court, then per force the state court

decision cannot be either contrary to or an unreasonable application of clearly established federal law" (internal quotation marks and citations omitted)); Carey v. Musladin, 549 U.S. 70, 77, 127 S. Ct. 649, 654, 166 L. Ed. 2d 482 (2006) (finding that "the state court's decision was not contrary to or an unreasonable application of clearly established federal law" where no holdings from the Supreme Court addressed the issue before the state court).

The SJC's determination in formulating this issue that a "court order or other official action" is significant in assessing whether there was an unconstitutional closure of a courtroom is consistent with rulings from a number of Circuit Courts of Appeals. For example, both the Tenth and Eleventh Circuits have held that "[t]he denial of a defendant's Sixth Amendment right to a public trial requires some affirmative act by the trial court meant to exclude persons from the courtroom." Capshaw v. United States, 618 F. App'x 618, 623 (11th Cir. 2015); United States v. Al-Smadi, 15 F.3d 153, 154 (10th Cir. 1994). Moreover, the Second Circuit determined that the Sixth Amendment right to a public trial was implicated where the trial judge was initially unaware of limitations on access to the courtroom, but "ultimately ratified" those limitations "by concluding that they were constitutionally permissible." See United States v. Smith, 426 F.3d 567, 572 (2d Cir. 2005).

As Greineder points out in his papers, "[m]ere inadvertence" or inaction by the trial court "does not invariably preclude the finding of a Sixth Amendment violation." United States v. Greene, 431 F. App'x 191, 196, 2011 WL 2420185, at \*4 (3d Cir. June 17, 2011); see also Negron-Sostre, 790 F.3d at 304 ("That the courtroom closure was the result of inaction by the judge, rather than an affirmative order, is not dispositive."). "Nonetheless, courts of appeals have [routinely] examined whether the trial judge either initiated or ratified the closure in

order to pinpoint to whom such inadvertence is attributable.” Greene, 431 F. App’x at 196, 2011 WL 2420185 at 4. Furthermore, even in cases where the exclusion of the public from the courtroom could not be attributed to the trial judge, courts have focused on the role of court personnel in determining whether a Sixth Amendment violation occurred. For example, in Negron-Sostre, the First Circuit found it critical that although the defense lawyers were partly to blame for closing the courtroom to the defendant’s family members during jury selection, a courtroom closure occurred “through the actions of a CSO familiar with the court’s regular practice” of excluding the public from those proceedings unless the attorneys made alternative arrangements beforehand. Negron-Sostre, 790 F.3d at 304. Thus, in finding that a closure of the courtroom had occurred during the jury selection process, the First Circuit emphasized that “the closure was attributable to court personnel at least as much as to the attorneys” and that the trial court had “clearly erred in finding that the attorneys were wholly responsible for the family members’ exclusion from voir dire.” Id. at 305. For this reason as well, the SJC’s formulation of the issue before it on appeal as being whether any closure was due to “a court order or other official action” was not contrary to or an unreasonable application of clearly established federal law.

For all these reasons, this court recommends that Greineder’s claim that his constitutional rights were violated in connection with the alleged closure of the courtroom during the individual voir dire be denied.<sup>4</sup>

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<sup>4</sup> In light of this conclusion, this court will not address the issue whether the procedure undertaken by Judge Chernoff was “the functional equivalent of a sidebar” so that there was, in fact, no complete closure of the courtroom implicating Greineder’s Sixth Amendment rights. See Wilder v. United States, 806 F.3d 653, 660-61 (1st Cir. 2015). Similarly, the court will not address the issue, raised in Greineder’s Supplemental Memorandum of Law (Docket No. 63), whether the closure of the courtroom would

## V. CONFRONTATION CLAUSE ISSUES

### A. Overview

Greineder contends that his right to confront witnesses, as guaranteed by the Sixth Amendment of the United States Constitution, was violated when Dr. Robin Cotton, the forensic laboratory director of Cellmark Diagnostics, was allowed to testify as to details of DNA test results obtained by staff analyst Wendy Magee and reviewed by Dr. Jennifer Reynolds or Dr. Lew Maddox, none of whom testified at trial, and also was permitted to express a statistical opinion based on those test results. In Crawford v. Washington, 541 U.S. 36, 124 S. Ct. 1354, 158 L. Ed. 2d 177 (2004), the Supreme Court abrogated Ohio v. Roberts, 448 U.S. 56, 100 S. Ct. 2531, 65 L. Ed. 2d 597 (1980), and ruled that, regardless of its reliability, under the Sixth Amendment testimonial evidence is inadmissible unless the witness appears at trial, or, if the witness is not available, there was a prior opportunity for cross-examination. Crawford, 541 U.S. at 68, 124 S. Ct. at 1374. The SJC in Greineder I found Crawford to be applicable, even though it was decided almost three years after Greineder's trial, because his direct appeal was still pending at the time of the decision. 458 Mass. at 237, 936 N.E.2d at 395. Greineder relies on Crawford, and its progeny, in support of his habeas petition. While the Commonwealth agrees that Crawford applies, it disagrees with Greineder on the merits and contends that the Confrontation Clause issues have been procedurally defaulted.

Dr. Cotton testified, based on the DNA test results developed by the nontestifying analyst, that the Defendant's DNA matched the DNA found on the knife and two gloves

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require a new trial in the absence of proof of basic unfairness. See Weaver v. Massachusetts, 137 S. Ct. 1899, 198 L. Ed. 2d 420 (2017).

recovered from the crime scene. She also testified to the statistical likelihood that someone other than the Defendant was the source of the matching DNA. Greineder I, 458 Mass. at 217-18, 235-36, 936 N.E.2d at 381-82, 394; Greineder II, 464 Mass. at 581-82, 984 N.E.2d at 806. Both on direct appeal and on remand from the Supreme Court, the SJC distinguished between Dr. Cotton's factual testimony and opinion testimony. The SJC held that no violation of Greineder's constitutional rights had occurred in connection with allowing Dr. Cotton to testify as to her expert opinions. The SJC further concluded that while allowing Dr. Cotton to testify as to the DNA test results was in error, and a violation of Greineder's confrontation rights, the admission had not prejudiced the Defendant. Greineder II, 464 Mass. at 602, 984 N.E.2d at 821.

As an initial matter, there is some disagreement as to what the SJC was classifying as opinion versus fact testimony. A review of Dr. Cotton's testimony establishes that she was not asked for her opinion during her direct examination, but, rather, offered all of her testimony as straightforward facts. (See, e.g., Tr. 6/7/01 (FSA 15) at 39-47; see generally Tr. 6/6-8/01 (FSA 14-16)). Greineder challenges the distinctions made by the SJC (see Pet. Mem. at 109-13), and argues that "focusing on the line between fact and opinion is something of a fool's errand in the context of forensic DNA analysis." (Id. at 112). The SJC, however, expressly "rejected the premise that, in DNA analysis, there is no meaningful distinction between the opinion and the underlying fact finding." Greineder II, 464 Mass. at 587, 984 N.E.2d at 810 (internal quotation marks and citation omitted). The Court labeled "data indicating the presence of certain alleles that match a defendant's DNA profile" as facts, and "evidence of the statistical significance of the match" as opinion. Id. at 587 & n.9, 984 N.E.2d at 810 & n.9; see also id. at 599, 984 N.E.2d at 819 ("There is a clear distinction between the allelic information that establishes genetic

makeup and the statistical significance of the data that establishes how frequently a genetic combination appears in the population at large. . . . [I]t is the statistical significance of a DNA match that is of greatest use to a jury; information about the prevalence of a particular gene combination gives meaning to the underlying fact of allelic presence.”). In addition, the SJC clearly recognized, albeit without discussion, that Dr. Cotton’s testimony “that the defendant’s DNA matched the DNA on items recovered from the crime scene” constituted her expert opinion. Id. at 603, 984 N.E.2d at 821. Therefore, the references herein to Dr. Cotton’s expert opinions will refer to her testimony regarding the matching of the DNA and the statistical significance of the match.

This court concludes that the Supreme Court law as to the admissibility of Dr. Cotton’s opinion testimony is, at most, unsettled and, therefore, the SJC’s decision that Dr. Cotton was permitted to offer her opinions was not contrary to well-settled federal law. Further, as the SJC recognized, Dr. Cotton’s extensive factual testimony was admitted in violation of Greineder’s Sixth Amendment rights as it was testimonial hearsay. The issue, therefore, is whether the violation of his constitutional rights was prejudicial. The SJC’s conclusion that the Defendant had ample opportunity to cross-examine a knowledgeable witness and that the admission of the testimony was not prejudicial should not be disturbed in this habeas review.

#### B. Trial Testimony

Dr. Robin Cotton was called by the Commonwealth as its DNA expert. Her testimony was based on work done by staff analyst Wendy Magee and the reports she generated, which had been reviewed by others. While Magee was on the Commonwealth’s witness list, she ultimately was not called as a witness. (Tr. 6/6/01 (FSA 14) at 209). At trial, defense counsel

objected to “Dr. Cotton’s testifying about the data in this case given the fact that she hasn’t done any of the work on it.” (Id. at 208). Counsel did not raise any express claim of a constitutional violation.<sup>5</sup> In addition, defense counsel objected to Dr. Cotton testifying as to the statistical calculations done to determine how common a particular DNA profile is in the general population on the grounds that she was not an expert in population genetics, and was not qualified to make the comparisons. (E.g. id. at 197-200, 202; Tr. 6/7/01 (FSA 15) at 41-44). Again, there was no challenge on a constitutional basis.<sup>6</sup>

Dr. Cotton testified over the course of three days. She testified regarding procedures used by and conditions at Cellmark, the method used to create DNA profiles, as well as the results of DNA testing done by Magee, among other things. It is undisputed that Dr. Cotton did not personally review the raw data used by Magee in developing the DNA profiles or comparisons. Greineder II, 464 Mass. at 595 n.16, 984 N.E.2d at 816 n.16. As a result, this left her vulnerable on certain points relating to how the profiles were created, which were explored on cross-examination. As the SJC noted:

Unfiltered or raw data shows all peaks detected by the machine, whereas an analyst may limit the DNA peaks that a computer detects. Providing an expert with unfiltered data puts the expert in the best position to formulate

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<sup>5</sup> Defense counsel referred to “an SJC case directly on point” – Commonwealth v. Senior. (Tr. 6/6/01 (FSA 14) at 208). While no citation is referenced in the transcript, the case of Commonwealth v. Senior, 433 Mass. 453, 744 N.E.2d 614 (2001), was decided on March 13, 2001, a few months before Greineder’s trial. In Senior, the defendant, charged with vehicular homicide, challenged the acquisition and introduction of his blood alcohol test as conducted by hospital personnel. However, none of his objections related in any way to his confrontation rights under the Sixth Amendment. See id. at 456-62, 744 N.E.2d at 616-21. This court has not located any other case of the same name which might have been relied on by defense counsel.

<sup>6</sup> As detailed infra, the SJC concluded that for purposes of Greineder’s constitutional claim, there had been no objection at trial to Dr. Cotton’s testimony regarding statistics.

an independent opinion and to respond to questions concerning the risk that evidence was fabricated or manipulated.

Id. Moreover, as the SJC noted, the analyst must use his or her independent judgment in creating a DNA profile by assessing whether the DNA test results contain “artifacts,” or false indications of allelic presence. Id. at 596 n.17, 984 N.E.2d at 816 n.17. Nevertheless, according to the SJC, “the fact that a nontestifying analyst may use his or her independent judgment in generating a DNA profile does not indicate that the resulting data are inherently unreliable or that an expert cannot be meaningfully cross-examined about the process of DNA analysis.” Id.

Dr. Cotton testified “as to the details and results of DNA tests conducted by Magee” and to her own statistical analyses. See Greineder I, 458 Mass. at 236, 936 N.E.2d at 395. The SJC observed that “the record reflects that Dr. Cotton reviewed the nontestifying analyst’s work, including six prepared reports, and then conducted an independent evaluation of the data. . . . She then expressed her own opinion, and did not merely act as a conduit for the opinions of others.” Greineder II, 464 Mass. at 595, 984 N.E.2d at 816 (footnote omitted). Defendant contends that this factual finding is not supported by the record. (See Pet. Mem. at 105-07). However, the record reflects that Dr. Cotton did review the profiles, and was asked to, and did, conduct her own calculations using different assumptions during her testimony. (See, e.g., Tr. 6/7/01 (FSA 15) at 45-49, 82-84). She also made her own comparisons of the DNA profiles and expressly testified that while she was relying on the work of others, she was also relying on her own evaluation of the data. (See Tr. 6/7/01 (FSA 15) at 54-59, 82; Tr. 6/8/01 (FSA 16) at 28). To the extent that Dr. Cotton could not answer questions because she did not have the raw data, defense counsel was permitted to and did cross examine her with the use of hypotheticals. (See, e.g., Tr. 6/8/01 (FSA 16) at 11-15, 106-11). Finally, the record reflects that Dr. Cotton

made it clear when she was relying on the work of others, when she did an independent review of the data, when she was doing her own calculations, and when she could not answer the question because she did not have the raw data. (See, e.g., Tr. 6/6/01 (FSA 14) at 210, 217-19, 224-25; Tr. 6/7/01 (FSA 15) at 28, 53-59, 196, 244-45). The SJC's general description of Dr. Cotton's testimony as having a component of individual evaluation of the data is amply supported by the record.

As described by the SJC, Dr. Cotton testified to the following on direct examination:

Samples containing a single source of DNA on the defendant's shirt and the plastic bag (containing the two other plastic bags) found at the scene of the crime, respectively, were from the victim. The victim's DNA profile matched at nine loci the profile of the primary contributor of a mixture of DNA in a sample taken from the defendant's backpack. Samples on the defendant's jacket and sneakers were consistent with the victim's DNA.

The only conclusion that could be drawn from DNA tests on swabbings from the hammer was that the victim could not be excluded as the source.

DNA tests on swabbings from the knife indicated a mixture with a primary female source and a secondary male source. The test results were consistent with the DNA profiles of both the victim (whose DNA profile matched the knife sample at eight loci) and the defendant, a Caucasian (whose DNA profile matched the knife sample at four loci). A statistical analysis based on the match at four loci indicated that one in 1,400 unrelated African-Americans and one in 2,200 unrelated Caucasians would be included with the defendant as possible secondary contributors.

The right-hand glove found with the hammer and knife also contained a mixture of DNA, with a female as the primary source and a male as the secondary source. The victim's DNA profile matched the glove sample at thirteen loci, and the defendant's profile matched at eight loci. A statistical analysis of the match between the victim's profile and the glove sample indicated that only "one in 2.4 times to the eighteenth" power (2.4 quintillion) unrelated African-Americans, and only "one in one times ten to the eighteenth" power (one quintillion) unrelated Caucasians would duplicate this match. The victim was Caucasian. A statistical analysis indicated that one in 680 million unrelated African-Americans, and one in

170 million Caucasians would be included with the defendant as possible secondary contributors.

The left-hand glove found in the storm drain near where the defendant parked his van contained a DNA mixture, but it could not be determined if one contributor was a female. The defendant's DNA profile matched the glove sample at seven loci. A statistical analysis indicated one in fifteen million unrelated African-Americans, and one in 680,000 Caucasians would be included with the defendant as possible contributors.

Greineder I, 458 Mass. at 217-18, 936 N.E.2d at 382.

The defense challenged this DNA evidence both through submission of its own expert testimony and through the cross-examination of Dr. Cotton. Id. at 218, 936 N.E.2d at 382. On cross-examination, Dr. Cotton “acknowledged that Cellmark’s threshold of forty relative fluorescent units (RFUs) was lower than that recommended by manufacturers of equipment used by Cellmark, as well as the threshold set by the Federal Bureau of Investigation (FBI) for its DNA laboratory.” Id. at 218, 936 N.E.2d at 382-83 (footnote omitted). An RFU is a measure of the amount of amplified DNA present in a test sample. Id. at 218 n.3, 936 N.E.2d at 382 n.3. On cross-examination the Defendant elicited evidence that test results were less reliable using lower thresholds, and that if the settings recommended by the manufacturer and FBI had been used, the evidence would have been more favorable to the Defendant. Id. at 238-39, 936 N.E.2d at 396.

The defense also developed through its own experts, as well as through the cross-examination of Dr. Cotton, that the test results indicated the presence of DNA from a stranger. Id. at 218, 936 N.E.2d at 383. In addition, a defense expert testified that the Defendant’s DNA could have been “transferred” to various items from a casual exchange between him and his wife. Id. Thus, two expert defense witnesses “explained that the defendant’s alleles could

have been transferred first to the victim from the bloody towel they shared to suppress their nose bleeds, and then from the victim to the gloves and other items held by the stranger who killed the victim.” Id.

**C. The Holding of Greineder I**

In his direct appeal, Greineder challenged Dr. Cotton’s testimony as violating his Sixth Amendment rights. As noted above, Crawford was decided while the appeal was pending. In connection with Dr. Cotton’s opinion testimony, the SJC asserted that there had been no objection at trial, so it would be reviewed “under the standard of a substantial likelihood of a miscarriage of justice.” Id. at 236, 936 N.E.2d at 394. Nevertheless, as discussed below, the SJC reached the merits of the objection and found that there was no constitutional violation in connection with the admission of Dr. Cotton’s opinion testimony.

In Greineder I, the SJC ruled that under Massachusetts law, an expert was permitted to offer an opinion, based on hearsay, if the particular hearsay is independently admissible and is the kind of evidence on which experts customarily rely as a basis for opinion testimony. Id. According to the SJC, “[s]uch testimony does not violate the Sixth Amendment because the expert witness is subject to cross-examination about her opinion, as well as the risk of evidence being mishandled or mislabeled, or of data being fabricated or manipulated, and as to whether the expert’s opinion is vulnerable to these risks.” Id. (internal quotation marks and citation omitted). Dr. Cotton’s opinion testimony, therefore, was appropriately admitted according to the SJC, even though it was based on hearsay. Id. at 236, 936 N.E.2d at 394-95.

The SJC further ruled that, under Massachusetts law, the underlying facts on which the expert relies cannot be admitted into evidence through the expert’s direct testimony, since it is

hearsay.<sup>7</sup> Consequently, the SJC held that it was error for Dr. Cotton to testify on direct examination as to the details and results of DNA tests conducted by Magee, because that was testimonial hearsay under Crawford. Id. at 236-37, 936 N.E.2d at 395. The Court rejected the Defendant's request that it review the effect of the improper admission of testimony "under the harmless beyond a reasonable doubt standard because the error is of constitutional magnitude." Id. at 237, 936 N.E.2d at 395. See Delaware v. Van Arsdall, 475 U.S. 673, 684, 106 S. Ct. 1431, 1438, 89 L. Ed. 2d 674 (1986) ("harmless beyond a reasonable doubt" standard applicable where a constitutional objection is properly preserved).<sup>8</sup> The Court ruled that "the adequacy of the objection has to be assessed in the context of the trial as a whole." Greineder I, 458 Mass. at 237, 936 N.E.2d at 395 (internal quotation marks and citation omitted). Since "the defendant's objection to the testimony did not precisely raise the constitutional question," the Court reviewed the error "under the prejudicial error standard." Id. The SJC concluded that there was no prejudicial error in the admission of the DNA test results themselves, since the data was

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<sup>7</sup> Under Massachusetts law, such underlying facts may be admitted on cross-examination because, according to the SJC, by cross-examining, the defendant waives his confrontation rights. Greineder II, 464 Mass. at 600, 984 N.E.2d at 819. This court does not need to reach the issue whether this approach violates a defendant's confrontation rights, and this court declines to do so. As detailed herein, this case presents the issue whether erroneously admitted factual hearsay requires that the habeas petition be allowed.

<sup>8</sup> As detailed more fully below, in the context of a habeas review, the Supreme Court has defined the appropriate standard of review for a constitutional error as being "whether the error had substantial and injurious effect or influence in determining the jury's verdict. Under this standard, habeas petitioners may obtain plenary review of their constitutional claims, but they are not entitled to habeas relief based on trial error unless they can establish that it resulted in 'actual prejudice.'" Brecht v. Abrahamson, 507 U.S. 619, 637, 113 S. Ct. 1710, 1722, 123 L. Ed. 2d 353 (1993) (internal citation omitted). A federal habeas court "is bound to uphold a state court judgment, notwithstanding a preserved constitutional error, as long as the error did not have 'a substantial, injurious effect on the jury's verdict.'" Medina v. Matesanz, 298 F.3d 98, 101 (1st Cir. 2002) (quoting Sanna v. Dipaolo, 265 F.3d 1, 14 (1st Cir. 2001)).

an integral part of Greineder's defense, and was going to be the subject of inquiry by the defense in any event. Id. at 239, 936 N.E.2d at 396-97. As the SJC explained:

Defense counsel gave his opening statement immediately after the prosecutor's opening. In his opening counsel stated that Cellmark found an unknown human's DNA on the victim's blue left-hand glove. He quoted from a Cellmark report, and let the jury know that a significant part of the defense would be the failure of the "police and the prosecutors" to "conduct a fair and objective search for the truth. They never sought out other suspects." He also promised the jury they were "going to hear a lot about DNA testing in the course of this case."

Cellmark had been using a standard minimum interpretation threshold setting on its computer software of forty RFUs for "inclusion" of someone as a possible DNA source. Cellmark raised its threshold to sixty RFUs during testing of items in this case. Counsel challenged the reliability of Cellmark's test results by attacking its decision to use the forty RFU and the sixty RFU thresholds, and he highlighted the interpretive difficulties when using low RFU thresholds. On cross-examination, defense counsel elicited from Dr. Cotton that the FBI used a threshold of 200 RFUs, and the manufacturers of the equipment Cellmark used had recommended a setting of 150 RFUs. Counsel elicited testimony from Dr. Cotton that if Cellmark used a setting of sixty RFUs instead of forty RFUs for tests done on the brown left-hand glove found in the storm drain near the defendant's parked van, five of the ten "peaks" representing alleles on the electropherograms, or computer print-outs of DNA test results, would have been eliminated, and her statistical calculation would change, inferentially in favor of the defendant. Similarly, using the equipment manufacturer's recommended setting of 150 RFUs, Cellmark would have obtained only two detectable alleles; and at the FBI's setting of 200 RFUs, there would have been no detectable results.

Counsel elicited from Dr. Cotton that Cellmark had concluded that the defendant was "excluded" as a contributor of the DNA on one sample taken from the hammer. She further admitted that if Cellmark's tests on the knife had been at the FBI's threshold of 200 RFUs, the only alleles detected would have been those of the victim.

As trial counsel predicted in his opening statement, there was evidence of a stranger's DNA on the victim's left-hand glove. Dr. Cotton testified to a total of five alleles on that glove indicating possible DNA from more than two people. In addition, an allele inconsistent with the DNA profiles of both the defendant and the victim was found in a sample taken from the right-hand glove found with the hammer and the knife.

Defense counsel made extensive use of the data prepared by Magee in his cross-examination of Dr. Cotton. This cross-examination buttressed two pillars of the defense, namely, the unreliability of Cellmark's testing procedures, which necessarily affected the credibility of Dr. Cotton's opinion as to the high probability of the defendant's being a contributor to the DNA on the knife and brown gloves, and the defense theory that a third party committed the murder.

As discussed above, Dr. Cotton's opinion was admissible, and experienced defense counsel prepared and pursued two effective strategies as a response to the very high likelihood her opinion would be admitted. One strategy was to reduce some of the sting of Dr. Cotton's opinion; the other was to elicit support for his third-party culprit defense. Both strategies depended entirely on the use of Magee's data in cross-examination of Dr. Cotton. Moreover, counsel benefited from not having Magee testify because it enabled him to frustrate Dr. Cotton's testimony at points where she simply had no knowledge about analytical choices that Magee made in producing the electropherograms, which probably reflected negatively on Dr. Cotton's credibility. The data were an integral part of the defense, and it was going to be the subject of inquiry by the defense whether Magee testified or not.

We conclude that, in the context of this case, there was no prejudice in the admission of Magee's DNA test results. Cf. *Commonwealth v. Nardi*, 452 Mass. 379, 395-396, 893 N.E.2d 1221 (2008) (admission of nontestifying medical examiner's findings during opinion testimony of pathologist was unpreserved error, but evidence was "equally, if not more, important to the defense," and thereby deemed not to create substantial likelihood of miscarriage of justice).

Id. at 238-39, 936 N.E.2d at 395-97.

**D. Development of Sixth Amendment Law**

Following Crawford (and Greinerder I), the Supreme Court continued to address a defendant's confrontation rights under the Sixth Amendment. As noted above, in Crawford the Court held that regardless of its reliability, the Confrontation Clause bars "admission of testimonial statements of a witness who did not appear at trial unless he was unavailable to testify, and the defendant had had a prior opportunity for cross-examination." Crawford, 541 U.S. at 53-54, 124 S. Ct. at 1365-70. The Supreme Court continued to struggle with the critical definition of

“testimonial statements” because “[i]t is the testimonial character of the statement that separates it from other hearsay that, while subject to traditional limitations upon hearsay evidence, is not subject to the Confrontation Clause.” Davis v. Washington, 547 U.S. 813, 821, 126 S. Ct. 2266, 2273, 165 L. Ed. 2d 224 (2006).

Following Crawford, in Melendez-Diaz v. Massachusetts, 557 U.S. 305, 129 S. Ct. 2527, 174 L. Ed. 2d 314 (2009), a majority of the Court ruled that notarized drug certificates reporting the results of the forensic analysis of purported drugs constituted testimonial statements subject to the Confrontation Clause. Id. at 310, 129 S. Ct. at 2532. Therefore, the certificates could not be admitted into evidence without the testimony of the analyst who conducted the examination. Id. at 311, 129 S. Ct. at 2532. Of significance to the instant case, the Supreme Court in 2011 then decided Bullcoming v. New Mexico, 564 U.S. 647, 131 S. Ct. 2705, 180 L. Ed. 2d 610 (2011). As explained in the majority (5-4) opinion,

The question presented is whether the Confrontation Clause permits the prosecution to introduce a forensic laboratory report containing a testimonial certification – made for the purpose of proving a particular fact – through the in-court testimony of a scientist who did not sign the certification or perform or observe the test reported in the certification. **We hold that surrogate testimony of that order does not meet the constitutional requirement. The accused’s right is to be confronted with the analyst who made the certification, unless that analyst is unavailable at trial, and the accused had an opportunity, pretrial, to cross-examine that particular scientist.**

Id. at 652, 131 S. Ct. at 2710 (emphasis added). Thus, the Court held, “the [Confrontation] Clause does not tolerate dispensing with confrontation simply because the court believes that questioning one witness about another’s testimonial statements provides a fair enough opportunity for cross-examination.” Id. at 662, 131 S. Ct. 2716. Thus, under Bullcoming, it appears that Dr. Cotton’s testimony regarding the testing done by Magee was inadmissible.

Significantly, Bullcoming did not address the question presented by the Massachusetts approach to expert opinion testimony — whether an expert could offer an opinion based on his or her analysis without admitting the factual basis for that opinion. Nevertheless, Justice Sotomayer, in her concurring opinion in Bullcoming, stressed that the case did not involve one “in which an expert witness was asked for his independent opinion about underlying testimonial reports that were not themselves admitted into evidence” and remarked that “[w]e would face a different question if asked to determine the constitutionality of allowing an expert witness to discuss others’ testimonial statements if the testimonial statements were not themselves admitted as evidence.” Bullcoming, 564 U.S. at 673, 131 S. Ct. at 2722 (Sotomayor, J., concurring in part).<sup>9</sup> As a result, the SJC later concluded in Greineder II “that Bullcoming did not undermine our bifurcated approach to safeguarding a defendant’s confrontation right, in which we admit an expert’s opinion testimony but exclude its hearsay basis on direct examination.” 464 Mass. at 589, 984 N.E.2d at 811-812.

This open question was addressed in 2012, when the Supreme Court decided Williams v. Illinois, 567 U.S. 50, 132 S. Ct. 2221, 183 L. Ed. 2d 89 (2012). The issue presented there, as expressed in the plurality opinion, was whether Crawford “precludes an expert witness from testifying in a manner that has long been allowed under the law of evidence. Specifically, does Crawford bar an expert from expressing an opinion based on facts about a case that have been

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<sup>9</sup> Justice Sotomayer also acknowledged that “this is not a case in which the person testifying is a supervisor, reviewer, or someone else with a personal, albeit limited connection to the scientific test at issue” but, rather, that the witness who testified in Bullcoming “had no involvement whatsoever in the relevant test and report.” Bullcoming, 564 U.S. at 672-73, 131 S. Ct. at 2722 (Sotomayor, J., concurring in part).

made known to the expert but about which the expert is not competent to testify?" Id. at 56, 132 S. Ct. at 2227. While the Supreme Court Justices all agreed that an expert could offer an opinion without testifying as to the underlying facts, they differed significantly in their analysis as to whether the admission of facts through the expert was a constitutional violation. Nevertheless, as detailed below, this court concludes that in light of the recognition of a distinction between opinion testimony and testimony regarding the underlying facts, it cannot be said that the SJC's bifurcated approach – allowing the non-analyst to offer an opinion without introducing the factual basis for that opinion – is contrary to or an unreasonable application of federal law.

Williams involved a bench trial for rape, in which an expert testified that she matched a DNA profile produced by Cellmark, an outside laboratory, to a profile the state police laboratory had produced using a sample of the defendant's blood. Williams, 567 U.S. at 56, 132 S. Ct. at 2227. As the Supreme Court explained, in addition to testifying as to the comparison of DNA, the expert testified as follows:

On direct examination, the expert testified that Cellmark was an accredited laboratory and that Cellmark provided the police with a DNA profile. The expert also explained the notations on documents admitted as business records, stating that, according to the records, vaginal swabs taken from the victim were sent to and received back from Cellmark. The expert made no other statement that was offered for the purpose of identifying the sample of biological material used in deriving the profile or for the purpose of establishing how Cellmark handled or tested the sample. Nor did the expert vouch for the accuracy of the profile that Cellmark produced.

Id. at 56-57, 132 S. Ct. at 2227. It is undisputed that all of the Justices, including the dissent, held that the expert could opine whether two DNA samples match each other. See id. at 70-72, 132 S. Ct. at 2235-36 (plurality opinion); at 88, 132 S. Ct. at 2245-46 (Breyer, J. concurring); at

103, 132 S. Ct. at 2255-56 (Thomas, J. concurring in the judgment); and at 129, 132 S. Ct. at 2270 (Kagan, J. dissenting). The dispute arose whether “the expert went astray when she referred to the DNA profile provided by Cellmark as having been produced from semen found on the victim’s vaginal swabs.” *Id.* at 57, 132 S. Ct. at 2227. While a majority of the Court held that the expert’s testimony regarding this underlying fact was admissible, the Justices offered varied and contradictory bases for their ruling. As the Greineder II Court accurately explained Williams:

The *Williams* Court held that the admission of statements that disclosed information about underlying DNA testing performed by a nontestifying analyst that formed the basis of the expert opinion did not violate the Sixth Amendment. [*Williams*, 132 S. Ct.] at 2228, 2240, 2244. The five Justices that reached this conclusion, however, differed in their reasoning. The plurality (four Justices) determined that the expert’s basis evidence was not offered for its truth. *Id.* at 2228, 2231-2232, 2235, 2239-2240. Therefore, the underlying facts that formed the basis of the opinion were admissible under *Crawford* because *Crawford* “does not bar the use of testimonial statements for purposes other than establishing the truth of the matter asserted.” *Id.* at 2235, quoting *Crawford, supra* at 59-60 n.9, 124 S.Ct. 1354. Justice Thomas determined that admission of the expert’s testimony to the underlying basis of her expert opinion did not violate the Sixth Amendment because the nontestifying analyst’s report was not testimonial; therefore, he concurred in the judgment. *Id.* at 2255, 2259-2260 (Thomas, J., concurring in the judgment). Justice Thomas differed from the plurality in that he concluded that the expert’s basis testimony was, in fact, introduced for its truth. *Id.* at 2258-2259 (Thomas, J., concurring in the judgment). This view, that “[t]here is no meaningful distinction between disclosing an out-of-court statement so that the factfinder may evaluate the expert’s opinion and disclosing that statement for its truth,” *id.* at 2257 (Thomas, J., concurring in the judgment), was shared by the four Justices writing in dissent. *Id.* at 2268-2269 (Kagan, J., dissenting). The four dissenters also determined that the laboratory report that included the DNA test results ostensibly offered for the limited purpose of explaining the basis of the expert opinion was testimonial and, therefore, statements that implicated it were admitted in violation of the confrontation clause. *Id.* at 2265, 2273 (Kagan, J., dissenting). Importantly, however, the dissent concluded:

“There was nothing wrong with [the expert's] testifying that two DNA profiles—the one shown in the ... report and the one derived from [the defendant's] blood—matched each other; that was a straightforward application of [the expert's] expertise. Similarly, [the expert] could have added that *if* the ... report resulted from scientifically sound testing of [a DNA sample recovered from the victim], *then* it would link [the defendant] to the assault. What [the expert] could not do was what she did: indicate that the ... report *was* produced in [a particular] way....” *Id.* at 2270 (Kagan, J., dissenting).

Thus, no member of the Supreme Court plainly concluded that the expert opinion testimony was improper. See *id.* at 2235-2236 (plurality opinion), 2245-2246 (Breyer, J., concurring), 2255 (Thomas, J., concurring in the judgment), 2270 (Kagan, J., dissenting).

Greineder II, 464 Mass. at 590-92, 984 N.E.2d at 812-13.

Specifically, the plurality in Williams gave two, “independent” rationales for its ruling that the admission of the facts on which the expert relied was not a violation of the Confrontation Clause. 567 U.S. at 57, 81-82, 132 S. Ct. at 2228, 2242. The first was that the challenged testimony “was not admitted for the truth of the matter asserted, and it is settled that the Confrontation Clause does not bar the admission of such statements.” *Id.* at 57, 132 S. Ct. at 2227-28. This conclusion was found by the plurality to be “entirely consistent with Bullcoming and Melendez-Diaz,” where forensic reports were, in contrast, introduced into evidence “for the purpose of proving the truth of what they asserted: in Bullcoming that the defendant’s blood alcohol level exceeded the legal limit and in Melendez-Diaz that the substance in question contained cocaine.” *Id.* at 79, 132 S. Ct. at 2240. In Williams, on the other hand, the plurality concluded that “[n]othing comparable happened” since “the Cellmark report was not introduced into evidence” and the “expert witness referred to the report not to prove the truth of the matter asserted in the report, *i.e.*, that the report contained an accurate profile of the perpetrator’s DNA but only to establish that the report contained a DNA profile that matched

the DNA profile deduced from the petitioner's blood." Id.<sup>10</sup> In Greineder's case, however, the underlying facts were undeniably admitted through Dr. Cotton for the truth of the matter asserted.

"As a second, independent basis" for the plurality's opinion, the plurality concluded that the Cellmark testing information could have been admitted without violating the Confrontation Clause because it did not meet the characteristics of the "abuses that the Court has identified as prompting the adoption of the Confrontation Clause[]," with such characteristics being that "(a) they involved out-of-court statements having the primary purpose of accusing a targeted individual of engaging in criminal conduct and (b) they involved formalized statements such as affidavits, depositions, prior testimony, or confessions." Id. at 58, 82, 132 S. Ct. at 2228, 2242. In Williams, the DNA profile was created "to catch a dangerous rapist who was still at large, not to obtain evidence for use against petitioner, who was neither in custody nor under suspicion at that time. Similarly, no one at Cellmark could have possibly known that the profile that it produced would turn out to inculpate petitioner – or for that matter, anyone else whose DNA profile was in a law enforcement database." Id. at 84-85, 132 S. Ct. at 2243-44. As the plurality explained further, "[u]nder these circumstances, there was no prospect of fabrication and no incentive to produce anything other than a scientifically sound and reliable profile." Id. at 85, 132 S. Ct. at 2244 (internal quotation omitted).

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<sup>10</sup> All of the other Justices rejected the plurality's conclusion that the statements concerning the underlying DNA samples were not admitted for the truth of the matter asserted. 567 U.S. at 103, 132 S. Ct. at 2256 (Thomas, J. concurring); id. at 125-26, 132 S. Ct. at 2268 (Kagan, J. dissenting).

Justice Thomas rejected this “primary purpose” test as “lack[ing] any grounding in constitutional text, in history, or in logic.” Id. at 113-14, 132 S. Ct. at 2261-62. The dissent also rejected the plurality’s “primary purpose” test, asserting that “[w]here that test comes from is anyone’s guess” as it derives neither from the text nor the history of the Confrontation Clause. Id. at 135, 132 S. Ct. at 2273. In Greineder’s case, the SJC recognized that “[a]lthough the precise contours of the ‘primary purpose’ test are arguably in flux following Williams,” Greineder “was targeted as a suspect at the time Cellmark conducted DNA testing,” and “the DNA testing was conducted for the purpose of obtaining evidence for later use at trial.” Greineder II, 464 Mass. at 594 n.15, 984 N.E.2d at 815 n.15

In sum, in Williams, the majority of the Court concluded, albeit for different reasons, that there was no Confrontation Clause violation by an expert opining as to the DNA match, even though the expert referenced (and thereby gave some credence to) the underlying DNA profile created by a non-testifying analyst. The Supreme Court granted Greineder’s certiorari petition and sent the case back to the SJC so that it could reconsider its ruling in light of Williams.

#### E. Greineder II

On remand from the Supreme Court, the SJC concluded that “Williams does not require us to change our jurisprudence.” Greineder II, 464 Mass. at 581, 984 N.E.2d at 806. Applying Williams to the facts before it, the Greineder Court held that the Massachusetts evidentiary rules were not inconsistent with Williams, and provided even greater protection than defendants are afforded under the Sixth Amendment. Id. at 592-93, 984 N.E.2d at 814. As the SJC explained, “Williams does not interpret the confrontation clause to exclude an expert’s

independent opinion testimony, even if based on facts or data not in evidence and prepared by a nontestifying analyst. Moreover, where five Justices concluded that admission of underlying facts that formed the basis of an expert's opinion did not offend the confrontation clause, Williams allows even more than an expert's independent opinion in evidence." Id. at 593, 984 N.E.2d at 814 (internal citations omitted). Thus, the SJC confirmed its earlier opinion that "[e]xpert opinion testimony, even that which relies for its basis on the DNA test results of a nontestifying analyst not admitted in evidence, does not violate a criminal defendant's right to confront witnesses against him under . . . the Sixth Amendment[.]" Id. at 603, 984 N.E.2d at 821.

The SJC further, however, also confirmed its prior holding that the admission of "Dr. Cotton's testimony regarding the DNA analyst's test results was admitted in error" and was testimonial hearsay under Crawford. Id. at 594 n.15, 984 N.E.2d at 815 n.15; Greineder I, 458 Mass. at 237, 936 N.E.2d at 395 ("[w]e agree with the defendant that the nature of the hearsay was testimonial in the Sixth Amendment sense"). While under Massachusetts rules of evidence, the Defendant could have elicited the factual basis for the expert's opinion on cross-examination, "this evidence elicited on direct examination was admitted in error." Greineder II, 464 Mass. at 602, 984 N.E.2d at 821. Nevertheless, the SJC confirmed its ruling "that the defendant was not prejudiced by the erroneous admission." Id. The SJC found that given that Dr. Cotton was an expert in biology and DNA, as well as Cellmark's forensic laboratory director, she was "in the best position to speak to the testing processes at Cellmark and the resultant DNA profiles generated." Id. at 596, 984 N.E.2d at 817. Moreover, the SJC noted, Dr. Cotton was in a much better position than the expert in Williams, who did not even work for Cellmark, to

testify as to the details of Cellmark's DNA testing procedures. Id. at 597, 984 N.E.2d at 817. In light of the extensive cross-examination undertaken by defense counsel of the knowledgeable witness, and for the reasons the Court had previously detailed in Greineder I, "the confrontation clause's purpose – to ensure fair criminal trials based on reliable evidence – was served." Id. at 599, 984 N.E.2d at 818. The SJC again confirmed Greineder's conviction and the denial of his motion for a new trial. Id. at 603, 984 N.E.2d at 821.

#### F. Procedural Default

The Respondent contends that Greineder's objection to the admission of Dr. Cotton's opinion testimony was procedurally defaulted because there was no objection made at trial, and the SJC stated in Greineder I that it was going to review the matter under the substantial likelihood of a miscarriage of justice standard. (See Resp. Mem. (Docket No. 27) at 22-26). Thus, according to the Respondent, the court should not review the habeas claim on the merits, since it was decided by the state court on an independent ground (the lack of objection). (Id.). Furthermore, the Respondent contends that although the SJC addressed the merits of the claim on remand from the Supreme Court, that should not be viewed as eliminating the procedural default because "[t]he SJC was simply responding to the question raised by the Supreme Court." (Id. at 25). For the reasons detailed herein, however, this court concludes that the SJC addressed the merits of Greineder's claim both in Greineder I and on remand from the Supreme Court, and, therefore, there is no procedural bar to the habeas court reaching the merits of Greineder's claim.

"When a state-law default prevents the state court from reaching the merits of a federal claim, that claim can ordinarily not be reviewed in federal court." Ylst v. Nunnemaker, 501 U.S.

797, 801, 111 S. Ct. 2590, 2593, 115 L. Ed. 2d 706 (1991). “Procedural default of federal claims in state court is an independent and adequate state-law ground barring habeas relief, . . . so long as the state regularly follows the rule and has not waived it by relying on some other ground[.]” Jewett v. Brady, 634 F.3d 67, 76 (1st Cir. 2011) (internal citations omitted). Under Massachusetts law, “a claim not raised is waived” and is deemed to be procedurally defaulted. Gunter v. Maloney, 291 F.3d 74, 78-79 (1st Cir. 2002); see Hodge v. Mendonsa, 739 F.3d 34, 44 (1st Cir. 2013) (“We have held, with a regularity bordering on the monotonous, that the Massachusetts requirement for contemporaneous objections is an independent and adequate state procedural ground, firmly established in the state’s jurisprudence and regularly followed in its courts.”) (quoting Janosky v. St. Amand, 594 F.3d 39, 44 (1st Cir. 2010))). It is also firmly established that the appellate court’s review of a conviction under a “substantial risk of miscarriage of justice” standard does not in and of itself constitute a decision on the merits. “Limited review of this sort ‘does not work a waiver of the contemporaneous objection requirement.’” Lynch v. Ficco, 438 F.3d 35, 45 (1st Cir. 2006) (quoting Horton v. Allen, 370 F.3d 75, 81 (1st Cir. 2004)).

On the other hand, the state court may waive a procedural default and elect to resolve a claim on the merits, even despite the lack of objection below. See Jackson v. Amaral, 729 F.2d 41, 44-45 (1st Cir. 1984), and cases cited. “If the last state court to be presented with a particular federal claim reaches the merits, it removes any bar to federal court review that might otherwise have been available.” Phoenix v. Matesanz, 189 F.3d 20, 25-26 (1st Cir. 1999) (quoting Ylst, 501 U.S. at 801, 111 S. Ct. at 2593); see also Lee v. Corsini, 777 F.3d 46, 55 (1st Cir. 2015) (habeas review available when there has been a resolution of a claim on the merits by

the state's highest court); Clarke v. Spencer, 582 F.3d 135, 143-44 (1st Cir. 2009) (where Massachusetts Appeals Court addressed defendant's claim on the merits, despite lack of objection at trial, there was no bar to federal habeas review), and cases cited.

In the instant case, the SJC found that trial counsel had not objected to the opinion testimony, but had objected to the admission of the underlying facts. Greineder I, 458 Mass. at 236-237, 936 N.E.2d at 394-95. It does not appear that the Commonwealth had argued on appeal that the issue had not been preserved. (See SA 139-45). Nor does the SJC seem to have considered whether the objection made to the factual testimony should be sufficient to preserve the objection to the opinion evidence as well. (See Pet. Reply Mem. at 13 n.10). In any event, despite referencing the standard of a substantial likelihood of a miscarriage of justice, the SJC in Greineder I fully explored the merits of the Defendant's objection, and ruled that the opinion testimony did "not violate the Sixth Amendment[.]" Greineder I, 458 Mass. at 236, 936 N.E.2d at 394. Similarly, in its lengthy opinion on remand from the Supreme Court, the SJC did not assert, although it clearly could have, that its decision was based on the absence of an objection. Instead, the SJC fully explored the merits of Greineder's objection to the admission of both Dr. Cotton's opinion testimony as well as the (erroneously admitted) factual basis for those opinions. Since the SJC addressed the merits of Greineder's federal constitutional claim, there is no bar to federal habeas review on the grounds of procedural default.

**G. The SJC's Decision Was Not Contrary To Nor An Unreasonable Application Of Clearly-Established Federal Law**

Greineder argues that Dr. Cotton's testimony violated his Sixth Amendment rights because her testimony about the DNA test results merely "parroted" Magee's reports. (Pet.

Reply Mem. at 13-15). As discussed supra, this court has found that the SJC's conclusion that Dr. Cotton conducted some independent evaluation is amply supported by the record. In any event, the SJC clearly ruled that "Dr. Cotton's testimony concerning the details of the nontestifying analyst's DNA test results (illustrated by charts marked as chalks) was admitted in error." Greineder II, 464 Mass. at 582, 984 N.E.2d at 806. Consequently, the Defendant does not need to prove that his constitutional rights were violated by the admission of such testimony — they clearly were.

The question whether the SJC's decision that this constitutional violation prejudiced Greineder will be discussed infra. The remaining issue is whether the SJC's conclusion that an expert's opinion testimony can be admitted, even if the expert did not conduct the underlying analysis on which the opinion is based, is contrary to or an unreasonable application of clearly-established federal law. This court concludes that it is not. At most, the federal law is unclear (and thus not clearly established), or it expressly permits the testimony. The admission of Dr. Cotton's expert opinions is not grounds for habeas relief.

As detailed fully above, in Williams, all of the Justices agreed that an expert can offer his or her opinion comparing DNA despite not having created the underlying DNA profiles. Moreover, a majority of the Justices, albeit for different reasons, held that a non-analyst expert can also testify as to the veracity of (at least some) of the underlying data. The SJC appropriately concluded that the Massachusetts approach to the admission of expert testimony was consistent with Williams. Despite its "confusing" status, "[t]he holding in Williams indicates that the admission of an expert opinion based on a scientific DNA report prepared by another does not violate the right to confrontation." Mattei v. Medeiros, Civil Action No. 17-10869-WGY, 2018

WL 2994402, at \*4 & n.2 (D. Mass. June 13, 2018), appeal docketed, No. 18-1644 (1st Cir. July 6, 2018) (habeas petition denied where state court had ruled that a defendant's rights under the Confrontation Clause were not violated by a DNA analyst's opinion testimony that was based on work conducted by another, non-testifying analyst).

The denial of Greineder's habeas petition on this ground also is consistent with Barbosa v. Mitchell, 812 F.3d 62 (1st Cir. 2016). There, the First Circuit rejected a habeas petitioner's claim that the admission of an expert's opinion that the victim was a possible source of the DNA extracted from bloodstains on the defendant's boot and pant leg violated his Sixth Amendment confrontation rights, even though the testifying expert relied on work done by a non-testifying witness. Id. at 63, 65. As the First Circuit held, "by blessing the admission of almost identical testimony by a DNA expert, the Court's actual holding in Williams might well be read as telling us that [petitioner] is not, with respect to this issue, being held 'in custody in violation of the Constitution,' 28 U.S.C. § 2254(a)[.]" Id. at 67; see also Jackson v. Palmer, No. 2:16-CV-13704, 2017 WL 4225446, at \*6 (E.D. Mich. Sept. 22, 2017) ("Although the holding in the plurality opinion in Williams might not qualify as clearly established federal law, it certainly suggests that there is no clearly established federal law which holds that a defendant's right to confrontation is violated when an expert witness testifies to forming an independent opinion after reviewing a report prepared by another expert who does not testify" – habeas petition denied). For the same reasons, this court concludes that the SJC decision that Greineder's Sixth Amendment rights were not violated by the admission of Dr. Cotton's expert opinions was not contrary to or an unreasonable application of clearly established Supreme Court law.

**H. The SJC's Conclusion That Greineder Was Not Prejudiced Was Supported By The Record**

The SJC “conclude[d] that, in the context of this case, there was no prejudice in the admission of Magee’s DNA test results.” Greineder I, 458 Mass. at 239, 936 N.E.2d at 397.<sup>11</sup> As the Supreme Court has explained the appropriate standard for habeas review:

For reasons of finality, comity, and federalism, habeas petitioners “are not entitled to habeas relief based on trial error unless they can establish that it resulted in ‘actual prejudice.’” *Brech*, 507 U.S., at 637, 113 S.Ct. 1710 (quoting *United States v. Lane*, 474 U.S. 438, 449, 106 S.Ct. 725, 88 L.Ed.2d 814 (1986)). Under this test, relief is proper only if the federal court has “grave doubt about whether a trial error of federal law had ‘substantial and injurious effect or influence in determining the jury’s verdict.’” *O’Neal v. McAninch*, 513 U.S. 432, 436, 115 S.Ct. 992, 130 L.Ed.2d 947 (1995). There must be more than a “reasonable possibility” that the error was harmful. *Brech*, *supra*, at 637, 113 S.Ct. 1710 (internal quotation marks omitted). The *Brech* standard reflects the view that a “State is not to be put to th[e] arduous task [of retrying a defendant] based on mere speculation that the defendant was prejudiced by trial error; the court must find that the defendant was actually prejudiced by the error.” *Calderon v. Coleman*, 525 U.S. 141, 146, 119 S. Ct. 500, 142 L.Ed.2d 521 (1998) (*per curiam* ).

Davis v. Ayala, 135 S. Ct. 2187, 2197-98, 192 L. Ed. 2d 323 (2015). Moreover, habeas relief cannot be awarded “unless the harmlessness determination [by the state court] itself was unreasonable. And a state-court decision is not unreasonable if fairminded jurists could disagree on its correctness. [Greineder] therefore must show that the state court’s decision to reject his claim was so lacking in justification that there was an error well understood and

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<sup>11</sup> The SJC declined to apply “the harmless beyond a reasonable doubt” standard applied to a preserved violation of a defendant’s Confrontation Clause rights, because Greineder’s objection to the testimony did not precisely raise the constitutional question. *Id.* at 237, 936 N.E.2d at 395; see United States v. Saad, 888 F.3d 561, 568 (1st Cir. 2018) (court must determine if violation of defendant’s Confrontation Clause rights “was harmless beyond a reasonable doubt.”). The Defendant has not raised the issue of the appropriate standard of review, although he does speak about “the SJC’s harmlessness evaluation[.]” (See Pet. Mem. at 113). This court does not need to determine the appropriate standard of review by the state court. In the context of a habeas petition, the petitioner must establish that “actual prejudice” resulted from the constitutional violation. *Brech*, 507 U.S. at 637, 113 S. Ct. at 1722.

comprehended in existing law beyond any possibility for fairminded disagreement.” Id. at 2199 (internal punctuation, quotations, and citations omitted). Greineder has not met this burden.

As an initial matter, it cannot be disputed that the DNA evidence was of importance in this trial. While there was other evidence which supported the guilty verdict, the DNA evidence linked the Defendant to evidence found at the crime scene. As Greineder persuasively argues:

The Commonwealth clearly understood the importance of the inculpatory DNA test results on the three key items of evidence. It presented those results through Cotton in great detail, allele-by-allele, using blown-up charts to display the partial matches to the jury while Cotton was reporting them. The Commonwealth even distributed color copies of those charts to the individual jurors to help them follow along. There was nothing haphazard or impromptu about the Commonwealth’s presentation of this evidence. It was designed to maximize its impact upon the jury. During their deliberations, the jurors twice specifically requested (and received) those same DNA results charts to assist them in reaching a verdict. It is likely that the Commonwealth would have gone [to] the expense of preparing extensive chalks, and then spent the jury’s time (hours of testimony) painstakingly walking through all the DNA data, if that was going to be irrelevant to the jury’s evaluation of the case? Of course not. The Commonwealth went to those lengths precisely because they were important. The Commonwealth introduced the detailed, step-by-step data in order to have the jury view the Cellmark analysis and Dr. Cotton’s statistical “opinion” as rigorously scientific.

(Pet. Mem. at 114).

Furthermore, it is clear that a majority of the Supreme Court has expressly recognized that even a very knowledgeable surrogate does not “meet the constitutional requirement” that an accused have the opportunity to confront the witnesses against him. Bullcoming, 131 S. Ct. at 2710, 2713. Nevertheless, while substituting a witness may not satisfy the Confrontation Clause’s strictures, it may prevent a defendant from suffering the “actual prejudice” required to warrant habeas relief.

There can be no question that Dr. Cotton was able to testify about DNA testing and the Cellmark laboratory protocols. The only evidence that Greineder identifies as missing in Magee's absence was her "allelic calls or the decisions Magee made to filter out some electropherogram peaks, but not others[.]" (Pet. Reply Mem. at 15). Dr. Cotton allegedly was unable to be cross-examined about these points because she had never reviewed the raw data. (Id.). Nevertheless, the record establishes that Dr. Cotton was examined about the significance of the allelic calls, and the considerations used in determining whether to treat a peak as an allele or an artifact. In addition, she testified as to what the effect of making different calls would have been on the DNA analysis. (See, e.g., Tr. 6/7/01 (FSA 15) at 234-41). In addition, the Defendant was able to establish how the data would have changed, in favor of the defendant, if different RFU settings had been used, and the peaks representing alleles on the electropherograms had been eliminated. Greineder I, 458 Mass. at 238, 936 N.E.2d at 396. In short, the consequence of creating an improper DNA profile, and the ways in which errors could occur, which the Defendant contends were critical to establish through Magee, were, in fact, established through Dr. Cotton's testimony.<sup>12</sup>

The Defendant further argues that if the underlying data had not been admitted through Dr. Cotton, her testimony would not have been as persuasive, and the defendant could have "developed a devastating attack in closing argument on the Commonwealth's key expert witness." (Pet. Mem. at 114-15). In addition, the Defendant argues, he may have elected not

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<sup>12</sup> In connection with the Defendant's motion for a new trial on the grounds of ineffective assistance of counsel, defense counsel testified that Defendant's experts had reviewed the raw data, and that counsel had made the strategic decision not to call Magee to testify. (FSA 1268).

to elicit this data on cross-examination, or presented it through another witness. (Id. at 115).

“In short” according to the Defendant, “the entire trial might have proceeded quite differently, and much more favorably for the defense, had the DNA data (which even the SJC recognized was wrongly admitted) had not been presented to the jury.” (Id.).

This court finds these arguments unpersuasive. As an initial matter, it should be remembered that the trial took place before Crawford. If there was a recognized Confrontation Clause issue, it is just as likely that the Commonwealth would have called Magee as a witness, since she was on the witness list. Moreover, the Defendant’s key theory, that a third person committed the crime, was dependent in many ways on the DNA evidence showing that a third person may have been responsible for some of the alleles. The SJC’s conclusion that the Defendant would have introduced the DNA evidence in any event is amply supported by the record.

Finally, as detailed more fully above, the SJC gave careful consideration to whether the admission of the DNA evidence was prejudicial to the Defendant. The Court carefully reviewed the role of the evidence in both the Commonwealth’s case, and in the defense’s, and examined the scope of the cross-examination. This court cannot conclude that the harmlessness conclusion by the SJC was, in itself, unreasonable. For these reasons this court recommends that the habeas petition, to the extent that it is based on Confrontation Clause issues, be denied.

## **VI. CLAIMS OF INEFFECTIVE ASSISTANCE OF COUNSEL**

### **A. Procedural Background**

Following his conviction, Greineder moved for a new trial on various grounds. On May 8, 2006, after several days of evidentiary hearings, the trial judge issued a decision addressing the first claim raised by Greineder, namely “the alleged exposure of the jury to extraneous information by virtue of an incident in which a member or members of the deliberating jury used one of the trial exhibits, a dimpled brown work glove, to produce a distinctive bruise on an unpeeled banana.” (FSA 1108, 1247). For the reasons discussed infra, the motion was denied. (See FSA 1108-1120). Judge Chernoff then considered the remaining issues raised by the (amended) motion for a new trial, including, without limitation, claims of ineffective assistance of counsel. (FSA 1246). The claims of ineffective assistance of counsel included objections to trial counsel’s handling of DNA evidence, as well as several challenges which the judge characterized as “non-expert issues.” (FSA 1246, 1248). The judge held evidentiary hearings on May 30, 2006, July 5, 2006, August 14, 2006 and September 13, 2006. (FSA 1249). He also considered extensive affidavits submitted by the parties, as well as oral and written arguments. (FSA 1246). On October 31, 2007 Judge Chernoff issued comprehensive and detailed “Findings of Fact, Rulings of Law, and Order on Defendant’s Amended Motion for a New Trial.” (FSA 1246-1313). After considering all of Greineder’s arguments, the motion for a new trial was denied. The SJC considered all of Greineder’s claims anew, and affirmed the denial of the motion for a new trial in Greineder I.

In his habeas petition, the Defendant reargues the merits of his motion for a new trial. The habeas court’s review, however, is constrained by the standards of the AEDPA. For the

reasons detailed herein, this court concludes that the state courts' decisions that there was no ineffective assistance of counsel is not contrary to nor an unreasonable application of Supreme Court law. Moreover, the trial judge's findings of fact are amply supported by the record.

**B. Standard of Review – Ineffective Assistance of Counsel**

The well-recognized standard for ineffective assistance of counsel is set forth in Strickland v. Washington, 466 U.S. 668, 104 S. Ct. 2052, 80 L. Ed. 2d 674 (1984). As the Strickland court held, to establish a claim of ineffective assistance of counsel:

First, the defendant must show that counsel's performance was deficient. This requires showing that counsel made errors so serious that counsel was not functioning as the "counsel" guaranteed the defendant by the Sixth Amendment. Second, the defendant must show that the deficient performance prejudiced the defense. This requires showing that counsel's errors were so serious as to deprive the defendant of a fair trial, a trial whose result is reliable. Unless a defendant makes both showings, it cannot be said that the conviction ... resulted from a breakdown in the adversary process that renders the result unreliable.

Id. at 687, 104 S. Ct. at 2064; see also Knowles v. Mirzayance, 556 U.S. 111, 122, 129 S. Ct. 1411, 1419, 173 L. Ed. 2d 251 (2009) ("defendant must show both deficient performance by counsel and prejudice in order to prove that he has received ineffective assistance of counsel") (citing Strickland, 466 U.S. at 687, 104 S. Ct. at 2064). "Under the first prong of Strickland, there is a 'strong presumption' that counsel's strategy and tactics fall 'within the range of reasonable professional assistance,' and courts should avoid second-guessing counsel's performance with the use of hindsight." Knight v. Spencer, 447 F.3d 6, 15 (1st Cir. 2006) (quoting Strickland, 466 U.S. at 689, 104 S. Ct. at 2065). "It is only where, given the facts known at the time, counsel's choice was so patently unreasonable that no competent attorney would have made it, that the ineffective assistance prong is satisfied." Id. (quotations and citations omitted). "Performance

is measured against an objective standard of reasonableness, and it is constitutionally deficient only if no competent attorney would have acted as counsel did.” Companonio v. O’Brien, 672 F.3d 101, 110 (1st Cir. 2012) (internal punctuation, quotations and citations omitted). The court must “start from the presumption that counsel has rendered adequate assistance and made all significant decisions in the exercise of reasonable professional judgment.” Id. (quotations and citations omitted).

“Under the prejudice prong, not all errors by counsel are sufficient to meet the standard of a reasonable probability that, but for the counsel’s errors, the result of the proceeding would have been different.” Knight, 447 F.3d at 15. The probability must be “sufficient to undermine confidence in the outcome,” and the burden is a “heavy” and “highly demanding” one. Id. (internal quotations and citations omitted). “A defendant’s failure to satisfy one prong of the Strickland analysis obviates the need for a court to consider the remaining prong.” Id.

“Surmounting Strickland’s high bar is never an easy task.” Harrington v. Richter, 562 U.S. 86, 105, 131 S. Ct. 770, 788, 178 L. Ed. 2d 624 (2011) (quoting Padilla v. Kentucky, 559 U.S. 356, 371, 130 S. Ct. 1473, 1485, 176 L. Ed. 2d 284 (2010)). It is even more difficult in the context of a habeas petition – since both the § 2254(d) and Strickland standards that apply are “highly deferential” to the state court, “when the two apply in tandem, review is ‘doubly’ so[.]” Id. Thus, in connection with a habeas review, “the question is not whether counsel’s actions were reasonable. The question is whether there is any reasonable argument that counsel satisfied Strickland’s deferential standard.” Id.

In the instant case, the SJC applied the standard under Mass. Gen. Laws ch. 278, § 33E, applicable in appeals of first degree murder convictions, to Greineder’s claims of ineffective

assistance of counsel. See Greineder I, 458 Mass. at 248, 936 N.E.2d at 402. Thus, the SJC “review[ed] counsel’s performance to determine if there was an error, and whether it created a substantial likelihood of a miscarriage of justice.” Id. This standard is more favorable to the defendant than the Strickland standard detailed above. See id.; Knight, 447 F.3d at 10-11. Therefore, Greineder cannot (and does not) argue that the SJC applied the wrong standard in reviewing his claim. Rather, his contention is that the state court’s application of this standard was unreasonable and that the factual findings are unsupportable. These arguments are not persuasive.

### C. DNA Issues

Following his conviction, Greineder obtained new expert opinions from Arthur J. Eisenberg, Ph.D. and Charles Brenner, Ph.D. Based on the information obtained from these experts, Greineder claimed that his trial counsel was ineffective for failing to move to strike Cellmark’s DNA evidence prior to trial as being scientifically unreliable under Commonwealth v. Lanigan, 419 Mass. 15, 25-26, 641 N.E.2d 1342, 1348-49 (1994) — which is the Massachusetts equivalent of the test for the reliability of scientific evidence as set forth in Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993). In addition, Greineder challenged trial counsel’s failure to hire an expert to challenge Cellmark’s statistical calculations at trial. Greineder also claimed that trial counsel was ineffective for failing to replace Dr. Christie Davis, who was scheduled to appear on Greineder’s behalf but who had been “strongly criticized” shortly before trial in a recent case in Australia, and whose credibility had been challenged by a court in California. Finally, Greineder challenged trial counsel’s decision not to seek a continuance, and thereby run the risk that one of the Defendant’s daughter’s, who was

shortly to be married to a man who was convinced of the Defendant's guilt, would no longer appear in support of her father. Both the trial judge and the SJC addressed Greineder's claims, item by item. They applied the appropriate standard in determining that trial counsel's strategic decisions did not constitute ineffective assistance of counsel. There is no basis to disturb those conclusions in this habeas review.

### 1. Relevant Facts

#### Trial Counsel's Testimony

As detailed above, the trial judge held a number of evidentiary hearings in connection with the Defendant's motion for a new trial. This included extensive testimony from trial counsel, Martin Murphy, about his knowledge of the DNA evidence and his trial strategies. (FSA 1256-69). In his preparation of this case, Murphy consulted frequently with William Thompson, who had been identified by an attorney at the Innocence Project "as the most knowledgeable attorney in the country on cutting edge DNA issues." (FSA 1258). Thompson, in turn, had also referred Murphy to several others to assist with the DNA evidence, including Dr. Christie Davis, a molecular biologist. (*Id.*). Murphy also consulted frequently with Dr. Davis, who was expected to testify as the defense's lead DNA expert at the trial scheduled to begin on May 21, 2001. (FSA 1259). Although she did not testify, Dr. Davis sat with Murphy and assisted him at trial. (FSA 1268). Murphy also retained Marc Taylor, a forensic scientist, to conduct DNA transfer experiments to help provide "an innocuous explanation for the presence of the defendant's DNA on key pieces of evidence[.]" (FSA 1259-60). Murphy did not know whether the test results would be favorable to the defense, or, if so, whether they would be admissible. (FSA 1260). Murphy also retained Dr. Daniel Krane, an associate professor of biological sciences

at Wright State University with a Ph.D. in biochemistry to further support the transfer theory, as well as to give his opinion of the DNA evidence after independent analysis of the raw data. (FSA 1261). Murphy did extensive legal research, factual research, and investigations into Cellmark and Dr. Cotton, including reviewing their role in prior cases. (FSA 1261-65). As detailed below, Murphy also considered all of the issues Greineder now challenges, and made strategic choices after consultation with, and with the support of, the various experts the defense had retained.

In addition to establishing an innocent explanation for the presence of Greineder's DNA on key pieces of evidence, Murphy "believed that the third party DNA in Cellmark's raw data created a powerful argument for reasonable doubt" and enabled him to argue to the jury "that the real killer remained at large." (FSA 1259-60). Murphy was aware of the serious weaknesses in Cellmark's evidence, and considered how to explore those weaknesses at trial. (See FSA 1260-62). During trial, "Murphy highlighted the unreliability of Cellmark's test results by comparing them to the results that would have been produced if the DNA had been analyzed under the standards used by the FBI. Murphy argued to the jury that Cellmark's analysis was unreliable and biased, and emphasized that the amount of DNA attributed to the defendant was quite small and could be explained by the DNA transfer theory. Finally, Murphy emphasized the 'stranger' alleles present in the raw data." (FSA 1269).

#### **Scientific Evidence**

In connection with his motion for a new trial, Greineder submitted three affidavits from Arthur J. Eisenberg, PhD, a molecular biologist and former chairman of the United States DNA

Advisory Board to the Director of the FBI.<sup>13</sup> (See Pet. Mem. at 115-16; FSA 1269-70). These affidavits were carefully reviewed by the trial judge, who recognized that, in Dr. Eisenberg's opinion, "Cellmark's test results in this case were scientifically unreliable[,]" its "mixture validation studies were inadequate to ensure that an analyst can reliably determine whether a peak is a true allele or stutter in a mixed sample[,]" Cellmark "lacked validation studies on LCN samples and provided no scientific justification for the use of interpretation levels as low as 40 RFU[,]" "Cellmark's results were unfairly and unscientifically biased against the defendant[,]" and the Cellmark analyst "violated Cellmark guidelines for interpreting peaks in stutter positions[.]" (FSA 1270-71). The trial judge further acknowledged Dr. Eisenberg's opinion that if a 100 RFU threshold had been applied, the Defendant would not have been identified as a contributor to the knife or the left work glove DNA, and the results of the right brown work glove should have been deemed inconclusive. (FSA 1272). The trial judge also addressed the fact that, in Dr. Eisenberg's opinion, Cellmark's results based on peaks of less than 100 RFUs were not scientifically reliable and should not have been admissible at trial. (*Id.*). Finally, the trial judge addressed Dr. Eisenberg's opinion that, contrary to the defense theory at trial, it was unlikely that a stranger contributed to the alleles on the knife and brown work gloves, although he was of the opinion that a stranger contributed to other alleles. (*Id.*).

The defense also submitted the affidavit of Charles Brenner, PhD,<sup>14</sup> a consultant in forensic mathematics and a member of the American Academy of Forensic Sciences and the

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<sup>13</sup> Dr. Eisenberg's affidavits can be found beginning at FSA 714.

<sup>14</sup> Dr. Brenner's affidavit can be found beginning at FSA 620.

International Society of Forensic Genetics. (Id. at 1273). As the trial judge recognized, Dr. Brenner opined that “Cellmark’s statistical calculation was scientifically invalid[,]” “erroneous[,]” and “greatly exaggerated the likelihood that the defendant was a contributor to the DNA samples at issue.” (Id.).

In opposition to the motion for a new trial, the Commonwealth filed an affidavit from Dr. Cotton<sup>15</sup> responding to, and rejecting, the challenges made to Cellmark’s policies, procedures and findings. (See FSA 1273-75). Dr. Cotton further attested to the fact that challenges to Cellmark’s validation studies, standard operating procedures and RFU thresholds had been rejected by the courts in various cases. (FSA 1273-74). Dr. Cotton opined that defense counsel was “thoroughly prepared on the DNA issues and conducted the most pointed cross-examination of any lawyer who has cross-examined her.” (FSA 1275).

The Commonwealth also filed the affidavit of Joanne Sgueglia, the Technical Manager of Forensic Biology for the Massachusetts State Police Crime Laboratory.<sup>16</sup> (FSA 1275). “Sgueglia conducted an independent review of the Cellmark electropherograms for the knife sample, left-hand brown glove, and right-hand brown glove with no knowledge of the known profiles[,]” and opined “that the Cellmark data submitted at trial was reliable.” (Id.).

## **2. Failure to Move to Exclude DNA Evidence**

Greineder argues that his trial counsel was constitutionally ineffective because he did not file a pre-trial Lanigan/Daubert motion to exclude Cellmark’s DNA evidence as scientifically

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<sup>15</sup> Dr. Cotton’s affidavit can be found beginning at FSA 1044.

<sup>16</sup> Ms. Sgueglia’s affidavit can be found beginning at FSA 1065.

unreliable. The evidence is clear that Murphy investigated the option of filing such a motion, and made a strategic decision, “after consultation with several DNA experts and after a thorough investigation of the law and facts bearing on the admissibility of Cellmark’s work.” (FSA 1294). Dr. Thompson, “one of the country’s most knowledgeable attorneys on DNA issues,” concurred in the decision. (FSA 1296). Judge Chernoff and the SJC applied the appropriate standard of review, recognizing that “counsel has the duty to make reasonable investigations of relevant law and facts.” Strickland, 466 U.S. at 690-91, 104 S. Ct. at 2066. (See FSA 1294 (Judge Chernoff rules that “Defense counsel has a duty to conduct an independent investigation of the forensic, medical, or scientific evidence on which the Commonwealth intends to rely to prove the defendant’s guilt.”)). See also Greineder I, 458 Mass. 249, 936 N.E.2d at 403 (same). Having conducted a thorough investigation, defense counsel’s strategic choices “are virtually unchallengeable[.]” Strickland, 466 U.S. at 690-91, 104 S. Ct. at 2066. Contrary to Greineder’s claim that “Judge Chernoff’s conclusion that Murphy’s decision to eschew a motion challenging the admissibility of Cellmark’s test results was defensible for tactical reasons is completely beyond the pale” (Pet. Mem. at 136), the record amply supports the strategic decision.

As the SJC recognized, it was more than likely that such a motion would fail, as “courts in Massachusetts and elsewhere had found issues of RFU, sample size, mixtures, and stutter to bear on the weight of DNA test results, rather than their admissibility.” Greineder I, 458 Mass. at 249, 936 N.E.3d at 403. After considering and analyzing the evidence, Judge Chernoff concluded that he “would most likely have rejected a Lanigan challenge to Cellmark’s test results in this case, despite the serious issues raised by Dr. Eisenberg.” (FSA 1299). While Greineder

argues that this conclusion is “an unreasonable determination of the facts in light of the state court record” (Pet. Mem. at 135), he has offered no facts to support this contention other than his belief that a Lanigan challenge should have been allowed. The SJC accepted the trial judge’s assessment as to the likelihood of success of a Lanigan motion. Greineder I, 458 Mass. at 250, 936 N.E.3d at 404. This court finds no error. As the SJC explained:

The affidavit of the defendant's expert filed with the amended motion for a new trial opined that there is no scientific justification for a laboratory arbitrarily to lower its RFU threshold from one hundred, which was based on internal validation studies, to forty, which was not. The judge rejected this opinion. He noted that the defendant's expert based his opinion in part on his informal survey of nine laboratories that were unwilling to perform LCN (i.e., low copy number, or small amount) mixture analysis at low RFUs, but he noted that this survey did not establish that such analysis is scientifically unreliable, and the defendant presented nothing in the scientific literature supporting the notion that the use of a threshold below one hundred RFUs is categorically invalid. In addition, the judge credited evidence that Cellmark scientists conducted validation studies in which they observed that good data were obtained at a threshold of forty RFUs, and that Cellmark validated stutter values for each individual locus. The judge further noted that, since the trial of this case, we have upheld trial court findings that Cellmark has conducted validation studies indicating that analysts could reliably interpret test results, at least with respect to single sources of DNA and mixtures yielding strong evidence of a primary contributor, based on readings as low as forty RFUs. See, e.g., *Commonwealth v. Gaynor*, *supra* at 265, 267, 820 N.E.2d 233.

The defendant's expert stresses the difficulty of interpreting LCN mixtures, compared to single source samples of DNA, and contends that Cellmark's guidelines and standard operating procedures are inadequate in guiding analysts in this task. The judge found that Cellmark analysts are capable of considering and accounting for issues of stutter and dropout based on their experience and expertise.

The judge found that any question as to possible analyst bias, like the other issues raised by the defendant's expert, went to the weight of Cellmark's test results, not their admissibility. See *Commonwealth v. Gaynor*, *supra* at 263–267, 820 N.E.2d 233; *Commonwealth v. Vao Sok*, 425 Mass. 787, 806 n. 27, 683 N.E.2d 671 (1997). We conclude that the judge did not abuse his

discretion or commit other error of law in concluding that the defendant probably would not have prevailed on a pretrial *Lanigan* motion.

Id. at 249-50, 936 N.E.2d at 403-04.

Judge Chernoff also explored the reasons given by counsel for not filing the motion besides the fact that it was not likely to prevail. Thus, he considered Murphy's argument that successfully challenging the RFU threshold used by Cellmark would eliminate the stranger alleles on the knife and brown work gloves. (FSA 1295-96). While there were stranger alleles above 100 RFU on other evidence, Judge Chernoff found that "it was reasonable to believe that the presence of stranger alleles on the knife and the brown work gloves would bear more significance to a jury in assessing reasonable doubt." (FSA 1296). Counsel also considered the fact that bringing the pre-trial motion would educate the prosecution about the weaknesses in the DNA evidence. As Judge Chernoff explained, "Murphy was aware from his research that Dr. Cotton typically did not review the electronic data before testifying, and he did not want to provide her with the incentive to do so prior to trial." (Id.). In fact, Murphy had chosen "not to call Wendy Magee because he preferred to leave the jury with the impression of one Cellmark witness who had not reviewed the underlying data." (FSA 1268). Judge Chernoff, applying the appropriate standard, concluded that the strategic decision not to file a pre-trial motion challenging the admission of DNA evidence was not manifestly unreasonable when it was made. (FSA 1296). The SJC concluded that "[t]he judge's conclusion was supported by the record and was not an abuse of discretion." Greineder I, 458 Mass. at 249, 936 N.E.2d at 403. There is no basis to reverse that conclusion, especially in light of the "doubly deferential" standard this habeas court must apply.

### 3. Handling of DNA Evidence at Trial

Greineder raises several other objections to the way that defense counsel handled the DNA evidence at trial. All of the objections were considered by both Judge Chernoff and the SJC, and the state courts applied the appropriate standard in determining that Murphy's strategic decisions did not constitute ineffective assistance of counsel. Greineder has not met the high burden needed to obtain habeas relief.

Greineder challenges counsel's decision not to replace Dr. Davis with another forensic scientist to testify that Cellmark's testing was scientifically unreliable. In addition, he challenges counsel's decision not to seek a continuance to have time to obtain a new expert. As noted above, defense counsel decided not to call Dr. Davis as a witness after her credibility was seriously compromised by decisions issued by several other courts. Murphy also was concerned that the challenge to her credibility could also affect the admissibility of electropherograms she had printed (FSA 1267), and that Dr. Davis' opinion was wavering after hearing Dr. Cotton's testimony that the "stranger" DNA at one particular allele might actually be an artifact. (See FSA 1264, 1268). Murphy elected not seek a continuance because he believed that the serious weaknesses in the prosecution's DNA evidence could be established through the testimony of Dr. Krane and Taylor, as well as a rigorous cross-examination of Dr. Cotton. (FSA 1267, 1302). Moreover the Defendant, who was in custody, was anxious for the trial to begin. (FSA 1267). In addition, "and perhaps more importantly" as Judge Chernoff found, Murphy was concerned that "the support of one of the defendant's daughters, Kirsten, was flagging as she approached her wedding in August because her soon-to-be husband did not believe in the innocence of the defendant." (Id.). After considering all the relevant facts, the trial judge

concluded that the decision not to seek a continuance was a strategic decision that was not manifestly unreasonable.<sup>17</sup> In addition, Judge Chernoff found, counsel had accurately assessed the importance of having the Defendant's children attend trial, as evidenced by "the intense media coverage before and during the trial, which often focused on the children and their demeanor." (FSA 1302). Finally, Judge Chernoff ruled that it was not ineffective assistance of counsel to proceed without Dr. Davis, since counsel was able to challenge Cellmark's DNA evidence through other witnesses and the cross-examination of Dr. Cotton. (FSA 1303).

Greineder also challenges defense counsel's decision not to hire an expert to counter Cellmark's statistical analysis. (FSA 1266-67). Judge Chernoff found that "Murphy believed that there was no need to call a statistics expert because no alternative statistical analysis of the raw data would significantly reduce the probability of a match to the defendant. In addition, if the jury were persuaded by the defense's DNA transfer theory, the statistical probability of a match would be irrelevant." (FSA 1267). He discussed the statistics issue with his experts before making the decision not to retain an expert to challenge the testimony at trial. (FSA 1301-02). The trial judge concluded that the decision was not "manifestly unreasonable," especially given the other evidence against the Defendant. (FSA 1302). While Greineder argues that Judge Chernoff's justification for the decision not to call an expert is "not supported by the record"

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<sup>17</sup> Greineder argues, without citation, that "Murphy admitted that he never asked Kirsten if she would refuse to attend her father's trial if a continuance were necessary, and his fears on that front were entirely speculative, hence unreasonable." (Pet. Mem. at 137). The SJC found that Murphy had made the decision after consulting the defendant and his family. *Greineder I*, 456 Mass. at 252, 936 N.E.2d at 405. In fact, Murphy did testify that he made the decision after consulting the Defendant, who was concerned about Kirsten's continued support, Kirsten herself, and the other children. (Tr. 8/14/06 (FSA 42) at 94-95). The fact that Kirsten did not affirmatively say that she was unwilling to be present to support her father at trial does not negate the validity of the concerns of the Defendant and his counsel. (See *id.* at 95).

(Pet. Mem. at 137), he has not established that it was not a rational decision made after consideration of all the alternatives.

Judge Chernoff concluded:

An attorney representing a client in a murder case for 18 months preceding trial and during six weeks of trial makes numerous decisions which, after an unfavorable verdict, may be the subject of "Monday morning quarterbacking." Strategies and choices which were well thought out may prove unsuccessful and, with the verdict in mind, Mr. Murphy may well believe he should have done certain things differently. Nonetheless, the actions which are the subject of the defendant's ineffective assistance of counsel claims did not fall below the standard of competence expected from an ordinary fallible defense lawyer and do not warrant a new trial.

(FSA 1304 (internal citation omitted)). The SJC agreed, and reviewed, in detail, both Judge Chernoff's findings and rulings, as well as Greineder's objections thereto. As the SJC ruled:

Counsel previously had retained Dr. Dan E. Krane, associate professor of biological sciences at Wright State University, who also runs a DNA research laboratory there, to duplicate the testimony of Dr. Davis, but from an academic perspective. Counsel arranged to have Dr. Krane spend approximately twenty-four hours over two days with Dr. Davis regarding her analysis of the DNA testing done by Cellmark. Dr. Krane then offered testimony about shortcomings in Cellmark's DNA test procedures. He testified as to other matters, including the "stranger" DNA and DNA transfer issues. Dr. Davis never testified, and was released as a witness by counsel on June 21, after Dr. Krane testified.

Counsel also challenged Cellmark's test results in his cross-examination of Dr. Cotton over a period of nearly two days with a thorough command of the facts, the science, and Cellmark's electronic data. Dr. Davis sat next to him at counsel table during the entire testimony of Dr. Cotton.

The defendant contends that the electropherograms prepared by Dr. Davis to illustrate the "stranger allele defense" were excluded, and as a result the third party culprit component of the defense "fell flat." Although the electropherograms were not admitted as exhibits, counsel was able to extract from Dr. Cotton that there was DNA from more than two people on the victim's left-hand glove and the right-hand glove found with the hammer and knife. Dr. Krane also testified that he detected DNA inconsistent with both the victim and the defendant on the victim's left-hand glove and the right-hand

glove found with the hammer and knife. He further testified that he detected an allele inconsistent with both the victim and the defendant, not previously reported, in the spatter on the victim's abdomen, on the hammer (inconsistent only with the defendant), the knife, the plastic bag, and the left-hand glove found in the storm drain near the place where the defendant parked his van.

Defense counsel was able to accomplish what he needed without the testimony of Dr. Davis, whose credibility was problematic. The electropherograms were merely cumulative of more compelling evidence. Indeed, any value in the electropherograms would have depended entirely on the cross-examination of Dr. Cotton and the testimony of Dr. Krane. Without their testimony, a jury would not know what to make of such exhibits, which were subject to interpretation. The third-party culprit defense did anything but "fall flat," and the decision to proceed only with Dr. Krane was not manifestly unreasonable.

Counsel's failure to request a continuance in the trial to secure a replacement for Dr. Davis was determined by the judge to have been a decision that was not manifestly unreasonable. The judge found that a continuance would have taken the trial date beyond Kirsten's early August wedding date, and counsel did not want to lose her support at trial for the defendant, a delicate matter in view of her future husband's lack of support for the defendant. Before making this decision counsel consulted the defendant and family members of the defendant.

The defendant faults counsel for failing to retain a statistics expert to challenge Cellmark's calculations. The judge found that before deciding not to hire such an expert defense counsel consulted his team of experts, including Thompson, and he made a reasoned decision that testimony from such an expert would not significantly reduce the probability that the defendant was a source of DNA on various exhibits, and where there was other strong evidence of guilt. More significantly, it would distract the jury from the defendant's DNA transfer theory, which would render any statistical calculation irrelevant. The judge concluded that counsel's decision was not manifestly unreasonable, and we agree.

We have considered all aspects of the defendant's argument on this issue and conclude that the judge's findings and conclusions about counsel's strategic decisions are grounded in the record, and his conclusions that counsel's decisions were not manifestly unreasonable are not an abuse of his discretion.

Id. at 251-53, 936 N.E.2d at 404-05. The Defendant has failed to establish that Murphy's strategic decisions were "so patently unreasonable that no competent attorney would have made [them]." Knight, 447 F.3d at 15. For these reasons, this court recommends that the request for habeas relief based on a claim of ineffective assistance of counsel due to the handling of DNA evidence be denied.

**D. Failure to Move to Suppress Nails Receipt**

In his motion for a new trial, Greineder claimed that trial counsel was ineffective "for failing to file a motion asking the Court to reconsider or supplement its pretrial ruling and suppress the nails receipt as improperly seized under a general warrant." (FSA 1279-80). The trial judge considered all of his arguments, and determined that, regardless whether such a motion would have been successful, Greineder had failed to establish that the admission of the nails receipt created a substantial likelihood of a miscarriage of justice. (FSA 1283). The SJC agreed. Greineder I, 458 Mass. at 253, 936 N.E.2d at 405-06. Under federal law, to succeed on a claim of ineffective assistance of counsel, in addition to proving deficient performance, the Defendant must establish prejudice – i.e., "that there is a reasonable probability that the trial would have had a more favorable outcome if trial counsel had acted differently." Companonio, 672 F.3d at 110. The court does not need to address both prongs of the ineffectiveness claim (deficiency and prejudice): "[w]here it is more efficient to dispose of an ineffectiveness claim on prejudice grounds, a court should follow that course." Ortiz-Graulau v. United States, 756 F.3d 12, 17 (1st Cir. 2014). Greineder has failed to establish that the state courts' conclusion that there was no prejudice was contrary to or an unreasonable application of federal law. Therefore, there is no basis for habeas relief on this ground.

The facts, briefly, are as follows. On November 12, 1999, the police executed a search warrant at Greineder's home. (FSA 1251). Greineder moved to suppress items seized pursuant to the warrant on the grounds that the warrant failed to describe the items to be seized with particularity. (Id.). The trial judge ruled that "with respect to computer files, receipts, and evidence of financial transactions, the warrant was indeed a general warrant, but the particularity with which items were described in the accompanying affidavit cured any constitutional defect in the warrant itself." (Id.). The judge's decision included a footnote that stated "Although not specifically argued by the defendant, this Court would also conclude that the other items seized, including . . . the Diehl Hardware and Home Depo receipts . . . would fall under the scope of the warrant." (Id.). The nails receipt was not specifically referenced in the affidavit. (FSA 1281).

At trial, the Commonwealth entered into evidence a receipt for the purchase of nails that had been found in the Defendant's home. (FSA 1252). Defense counsel objected on the ground that such late disclosure unfairly prejudiced the defendant, but did not renew his motion to suppress. (Id.). It did not seem probative to counsel at the time, except to show that the Defendant shopped at Diehl's in Wellesley. (Id.).

As Judge Chernoff found further:

During the trial, the significance of the nails receipt changed dramatically when the Commonwealth notified Murphy that it intended to examine all the cash register tapes at Diehl's for September 3, 1999. The Commonwealth discovered that an Estwing hammer, the same model as the alleged murder weapon, had been purchased at Diehl's on September 3, within minutes of the nails purchase and at the same cash register. On June 5, 2001, Murphy objected to this late-disclosed evidence but did not seek to suppress it specifically as the product of a general warrant under the Court's October 18, 2000 decision. Murphy probably thought that the constitutional issue of the general warrant had already been ruled upon and did not specifically think

about the nails receipt in Fourth Amendment terms at that moment and he may have made no conscious evaluation of whether to ask the court to reconsider the motion to suppress. The Court denied Murphy's motion to exclude the nails receipt based on its late production. The Commonwealth introduced the nails receipt along with the testimony of the keeper of records for Diehl's that the store sold only one Estwing hammer in September of 1999, as the next transaction at the same register as the purchase of nails reflected in the receipt seized from the defendant's home.

(Id.). The Defendant's son Colin Greineder, a medical student, testified that he had bought six boxes of nails at a store in Wellesley shortly before the murder and left them on his father's work bench, which was the purchase reflected in the receipt. (FSA 1283).

In connection with the motion for a new trial, Judge Chernoff concluded that he did not know whether he would have allowed a motion to suppress the receipt. As the judge explained, “[o]n the one hand, this Court may well have concluded that the nails receipt was admissible as within the scope of the warrant as narrowed by the affidavit.” (FSA 1281). “Thus, defense counsel’s conclusion that the Court had already ruled the nails receipt admissible was not unreasonable, and if asked to reconsider the matter, this Court may well have concluded that the receipt should not be suppressed.” (Id.). On the other hand, the judge acknowledged that he may have “found that seizure of the nails receipt was not within the scope of the warrant and that there was no plain view rationale for the seizure,” in which case “the Court might have allowed a motion by defense counsel to suppress the receipt itself, but not necessarily its contents.” (FSA 1282). “Regardless of which way this Court ultimately would have ruled,” the trial judge concluded that “counsel’s failure to file a motion to suppress the nails receipt cannot be deemed to constitute ineffective assistance of counsel warranting a new trial.” (Id.). Greineder was unable to show “that there was a reasonable possibility that the verdict would have been different without the excludable evidence” and the court was

“persuaded that [its admission] did not materially influence the guilty verdict.” (FSA 1283). In the trial judge’s view, the receipt “simply was not a key piece of evidence implicating the defendant[.]” (FSA 1283-84).

The SJC agreed with this conclusion. As the Court held:

The judge found that, although the nails receipt created a strong inference that the defendant purchased the Estwing hammer minutes after the nails purchase, the defendant’s son testified that he had purchased the nails. More important, the judge found that the receipt was not a key piece of evidence. There was evidence that the defendant previously had purchased items at the hardware store, which sells the type of gloves involved here as well as Estwing hammers, and the judge noted the strength of the Commonwealth’s case, including “the DNA evidence linking him to the knife and [the brown gloves], the blood spatter and transfer evidence and absence of blood on the defendant’s hands and the cuffs of his jacket, the blood pattern on his glasses, the fiber evidence, the consciousness of guilt evidence [the defendant’s statements], and the myriad other pieces of circumstantial evidence in the case.”

We need not decide the question of the motion to suppress because we agree that regardless of its resolution, there was no substantial likelihood of a miscarriage of justice.

Greineder I, 458 Mass. at 253-54, 936 N.E.2d at 406.

Greineder contends that the state court’s determination that there was no prejudice was an unreasonable determination of the facts. (Pet. Mem. at 146). In support of this conclusion, Greineder contends that in his closing argument, the prosecutor argued that the nails evidence was “important” and that the receipt played an important role in the Commonwealth’s circumstantial case by seeking to tie Greineder to a hammer that might have been a murder weapon. (Id. at 147). However, a review of the closing arguments compels a different result.

A fair reading of the Commonwealth's closing establishes that the government did not believe that the nails receipt was critical evidence, although it did further the Commonwealth's contention that Greineder purchased the hammer. In its closing, the Commonwealth discussed motive, the overall theory of the case, the Defendant's inconsistent statements, the physical layout of the woods, the lack of blood on the Defendant's hands, and the Defendant's reaction to events. (Tr. 6/26/01 (FSA 33) at 54-73). The Commonwealth argued about the lack of fingerprints, blood spatter patterns, and the (un)likelihood of the simultaneous nosebleeds on which the Defendant based his blood transfer theory. (Id. at 73-81). The Commonwealth challenged the defense's explanation of the presence of the Defendant's alleles on various items, and Professor Krane's testimony in general, and argued that the transfer theory "would be novel to the science at this point in time." (Id. at 81-87). The prosecutor then discussed the blood spatter on the Defendant's glasses and the swipe mark which the Defendant could not explain. (Id. at 87-88). He argued that the murderer was wearing gloves, and that the Defendant's hands were clean. (Id. at 88-89). He further argued that the blood pattern on the Defendant's cuffs was consistent with a person wearing gloves, and that the jurors should determine whether there was a pattern of the dimpled gloves on the inner left lapel area of the jacket. (Id. at 88-89).

The Commonwealth then argued:

Ladies and gentlemen, I would suggest to you that taken in conjunction with what occurred at that scene where those items were found, the fact that the Defendant has those exact same gloves in his doghouse, the fact that, ladies and gentlemen, he bought gloves the same day as the hammer, one of twelve that Diehl's sold in a three year period, one of the four that they sold in a year, the only one that was sold that particular month was sold two-and-a-half minutes afterwards by the same clerk, the very next transaction **is an important consideration.**

And I suggest to you that when Colin tried to point out the nails – I hope and believe that he did buy some nails at some point – but as much as Mr. Murphy would like you to rely upon judgments of both the victim's and the Defendant's children, I would suggest to you that, obviously, they are clearly biased. They have only one parent left. They have a reason to want to believe what they want to believe.

Just as they were questioned and spoken to after the death of their mother, they consistently said what a wonderful marriage it was, and how there wasn't a hint of infidelity and never could be. That's what was presented to them. That's what they wanted to believe.

And I would suggest to you, ladies and gentlemen, in light of what was going on in their life, and in light of the evidence, that that is proof beyond a reasonable doubt. But, ladies and gentlemen, you have more. You have much more, because in addition to that glove on the right hand -- the left hand glove, just 30 feet from his van, is inconsistent with any kind of mere chance. The fact that he has those same gloves at his house is inconsistent with any mere chance.

(Id. at 89-91 (emphasis added)). The Commonwealth then went into a discussion about the fiber evidence linking the Defendant to the gloves, and to the significance of the victim's body position and wounds. (Id. at 91-93). Finally, the Commonwealth argued that “the Defendant's greatest defense here is that you don't want to believe that an upstanding physician, with good standing in his profession, loved by his children, could commit such a crime.” (Id. at 93). There was no further mention of the nails receipt at all. (Id. at 93-95).

A fair reading of this closing supports Judge Chernoff's finding, as adopted by the SJC, that the nails receipt was not “a key piece of evidence,”<sup>18</sup> and its admission, even assuming that

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<sup>18</sup> Absent any explanation as to why the Defendant would have gone back to the cash register to buy a hammer separately, it seems to this court that the jury could have considered the receipt to mean virtually anything, if it considered the receipt at all. There were no nails found at the crime scene. The jury could have thought that the Defendant would not have called attention to himself by going back to

such admission was in error, was not prejudicial. The state courts' holdings that the failure to move to strike this testimony was not ineffective assistance of counsel should not be disturbed.

**E. Failure to Move to Suppress Testimony About Car Search**

As his last claim under the heading of ineffective assistance of counsel, Greineder challenges Murphy's failure to move to suppress Officer McDermott's testimony about having seen a dirty towel (as opposed to a bloody towel to which the Defendant testified) on the floor of Greineder's car as being fruit of an unlawful search of the Toyota Avalon. The trial judge concluded that defense counsel made a strategic decision not to move to exclude the testimony, and that it was not a manifestly unreasonable decision. (FSA 1285-86). The SJC reviewed the evidence and "conclude[d], as did the judge, that counsel's decision to forgo any challenge to the fruits of the search of the Toyota was a reasonable tactical decision and was not manifestly unreasonable." Greineder I, 458 Mass. at 255, 936 N.E.2d at 407. Greineder argues that the failure to move to suppress and strike Officer McDermott's testimony was "grossly negligent" and that counsel did not, in fact make a strategic decision not to move to strike or suppress the testimony. (Pet. Mem. at 153-54).<sup>19</sup> However, a review of Murphy's testimony amply supports the trial judge's and the SJC's findings of fact. There is no basis to disturb the state courts' conclusion that there was no ineffective assistance of counsel.

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purchase separate items moments apart. In any event the evidence was clearly not of sufficient import as to warrant a new trial, even if it was erroneously admitted (which remains an open question).

<sup>19</sup> The Petitioner's citation to page 28 of the transcript of May 30, 2006 (FSA 40) was clearly a typographical error. (See Pet. Mem. at 154). The reference should have been to the second day of Murphy's testimony on this subject, July 5, 2006 (FSA 41), at 28.

The facts are fairly straightforward. The police executed a search warrant on the Defendant's home on November 1, 1999. Greineder I, 458 Mass. at 254, 936 N.E.2d at 406. At that time, Greineder's car was parked in the driveway. Id. The Defendant represented to his counsel that there was a bloody towel on the floor of the Toyota on November 1, 1999 that he and his wife had used in connection with their nosebleeds on the day of the murder. Id. It was a white towel with a "Ritz-Carlton logo" on it. Id. The Defendant believed police had searched the Toyota but neglected to seize the towel. Id. Neither the search warrant return nor the police report indicated that the police had entered the car during the search. Id. The Defendant gave the towel to his counsel on November 5, 1999. Id. "The towel was important to the defense because it corroborated statements he had made, and it supported the defense's DNA transfer theory." Id.

There was a pretrial hearing on a motion to suppress. Id. At that time, Trooper Foley testified that while the police had seen a bloodstained towel in the Toyota, they had not seized the towel. Id. Defense counsel "felt this testimony helpful because it corroborated the defendant's statement about the bloody towel, and it supported the defense argument that police conducted a sloppy investigation." Id. at 254, 936 N.E.2d at 406-07. The identity of the officers who had seen the towel in the car was not disclosed at the suppression hearing. Id. at 254, 936 N.E.2d at 407.

The SJC summarized the events at trial and Judge Chernoff's ruling as follows:

At trial, Detective McDermott testified that she *searched* the defendant's Toyota on November 1, 1999, and observed a white towel inside. However, she described the towel as brown and dirty, not bloodstained, and it did not have a Ritz-Carlton logo. Although surprised by Detective McDermott's testimony, counsel did not move to strike it as the fruit of an unlawful search. Instead, counsel believed this testimony could be exploited by

eliciting further testimony that McDermott failed to seize or photograph the towel, and by highlighting the inconsistencies given by Detective McDermott and Trooper Foley.

The defendant argues that counsel should have moved to suppress the fruits of the Toyota search, and to strike Detective McDermott's testimony because the Toyota was not within the curtilage of the house. The judge concluded that Detective McDermott's search of the Toyota was unlawful, and the Commonwealth does not dispute this conclusion.... [T]he search warrant that issued on November 1, 1999, did not extend to the Toyota, and the Commonwealth could offer no valid reason for conducting a warrantless search of the Toyota.

The judge concluded, however, that although counsel recognized that the fruits of the search of the Toyota could be suppressed, he deliberately chose not to move to exclude Detective McDermott's testimony for tactical reasons. He further concluded that counsel's decision was not manifestly unreasonable. See *Commonwealth v. Cutts*, 444 Mass. 821, 831, 831 N.E.2d 1279 (2005) (counsel had strategic reasons for not challenging admissibility of statements).

Counsel in fact highlighted the inconsistencies just described in his cross-examination of Detective McDermott and Trooper Foley, and he argued the point forcefully in closing. In his closing, the prosecutor did not focus on the towel, and instead disputed the defense theory of simultaneous nosebleeds and the defense theory of DNA transfer.

We conclude, as did the judge, that counsel's decision to forgo any challenge to the fruits of the search of the Toyota was a reasonable tactical decision and was not manifestly unreasonable.

Id. at 254–55, 936 N.E.2d at 407.

As noted above, Greineder challenges the conclusion that trial counsel made a strategic decision not to move to strike Officer McDermott's testimony. He cites to Murphy's answer to the last question on re-direct examination by new defense counsel following two days of testimony on the subject in connection with the motion for a new trial. The colloquy was as follows:

Q. Did you consider moving to strike her surprise testimony after you heard it, based upon her testimony regarding her observations in the Avalon as being the fruit of an unconstitutional search?

A. I don't believe I did.

(Tr. 7/5/06 (FSA 41) at 28). However, Greineder ignores the context in which this question and answer were made.

In his testimony leading up to this question and answer, Murphy testified that he learned that the car had been searched when Sergeant Foley testified at the suppression hearing in the summer of 2000 that two Wellesley police officers had seen a bloody towel on the floor of the Avalon on November 1st, but had not seized the towel. (Tr. 5/30/06 (FSA 40) at 85-86). As Murphy testified:

So from my standpoint leading up to the trial, I thought that this was actually a piece of evidence that favored the defendant in a couple of ways. It was corroboration of his account because two police officers had reported to Sergeant Foley that ... they had seen the towel.

And I thought that it was also evidence that would support the defense theory that the police had failed to do a proper job in a number of ways in connection with the investigation of the case.

They hadn't taken any photos on the night of the first. They had this important piece of evidence ... it's the night of the murder – it was within twenty-four hours [of] a murder, and they see a blood-stained towel in a car and they don't take it. I thought that that ... had the potential to be powerful evidence for the defendant to show that the police hadn't done the kind of work that would be expected of them.

....

I believed strongly that Sergeant Foley's testimony corroborated what Dr. Greineder had told a number of people, that is the simultaneous nose bleeds.

And I also believed that that testimony undermined the Commonwealth's view that the account that Dr. Greineder had given of these two nose bleeds was kind of a crazy, made-up thing.

(Id. at 86-87). Further, as Murphy testified, other than Sgt. Foley's testimony, the defense had no other testimony to corroborate the Defendant's story that he had a towel in the car that both he and his wife had used after both having nosebleeds. (Tr. 7/5/06 (FSA 41) at 8-9). Thus, up until trial, there was no thought of trying to keep out the police observations of the towel, since it was helpful to the defense. (Id. at 9-10).

Murphy testified that because of the testimony at the motion to suppress, going into trial he believed that either there would be helpful testimony from the Commonwealth's own witnesses about the towel, or that he had "a very clear record" with which to impeach any contradictory evidence. (Id. at 23-24). Thus, when Officer McDermott testified in contradiction to Sgt. Foley's testimony, Murphy testified that he "thought that it presented some opportunities to exploit for the defense[.]" (Id. at 27).

For these reasons, Murphy testified, as quoted above, that he did not consider moving to strike the surprise testimony. It was not because, as Defendant now argues, the thought never crossed his mind, but rather because there was a positive use to which he could put the testimony. This is made clear by the very next question, asked by the Commonwealth on recross-examination, after the colloquy on which the Defendant relies. Specifically, this was Murphy's testimony:

Q. (by Mr. Cosgrove) Mr. Murphy, relative to Jill McDermott's testimony, you said that you thought it offered opportunities to exploit for the defense. If you recall what those opportunities were and what your thought process was at that time, can you elaborate a little for us, please.

A. Yes. I mean my sense was that it was a good thing for the defense for there to be inconsistencies between the accounts that the police officers gave of that search because part of the general defense in the case was that there were a number of failures in connection with the police investigation of the case. I think one of the failures that we tried to point out was the failure to take any photographs on the evening or in the early morning hours of November 1. And so the fact that -- if photographs had been taken, there would have been a record of what was in the Avalon or not in the Avalon. So I thought that it offered an opportunity along that avenue. I think even more important, I thought it offered the opportunity to present to the jury an instance where there was a direct contradiction between the testimony of the two essentially lead officers in the case, the lead officer for Wellesley and the lead officer for the State Police. And that's really why I emphasized that passage from Sgt. Foley's suppression hearing testimony in my closing argument.

(Id. at 29-30). In short, there is ample record support for the state courts' conclusion that defense counsel made a strategic decision not to move to strike Officer McDermott's testimony. Similarly, there is ample support for the conclusion that the strategic decision was not manifestly unreasonable. Without limitation, the decision allowed favorable evidence about the existence of a towel to get to the jury, as well as impeachment evidence that some police thought it had been a bloody towel. It highlighted deficiencies in police work and supported the idea that the evidence was not so clear cut — even the police could disagree. The decision that defense counsel's conduct of the trial was not ineffective assistance of counsel is not contrary to or an unreasonable application of Strickland.

## VII. RECANTATION OF FOOTPRINT TESTIMONY

### A. State Court Rulings

Greineder contends that his “constitutional right to disclosure of exculpatory information and his right to a fair trial based on reliable evidence” were violated when, after trial, State Police Sergeant Rebeiro changed her opinion that a footprint (labeled F7) at the crime scene that she had identified at trial as being Greineder’s heel mark, was, in fact, that of the toe of the Defendant’s right sneaker. (Pet. Mem. at 156).<sup>20</sup> As the SJC explained, Rebeiro’s original trial testimony, along with other expert evidence, had “enabled the prosecutor to state in his opening and argue in his closing that the defendant dragged the victim by walking backward and pulling on the upper portion of her body.” Greineder I, 458 Mass. at 244-45, 936 N.E.2d at 400. Viewing the print as a toe print, however, was arguably consistent with Greineder’s testimony concerning his presence near his wife’s body. (See FSA 1309).

These issues were presented to the trial judge in connection with the Defendant’s motion for a new trial. Judge Chernoff did not expressly address the constitutional issues, finding that the Defendant had framed the issue as one of recanted testimony. (FSA 1305). Under both Massachusetts state law and the law of the First Circuit, Judge Chernoff ruled, recantation of a material witness’ testimony is treated as a matter of newly discovered

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<sup>20</sup> In connection with his motion for a new trial, the Defendant filed the affidavit of William Bodziak, a forensic consultant in the area of footwear impressions, who opined that the footprint in question represented the toe, not the heel, of the Defendant’s right sneaker, that the sneaker prints were oriented with the toe facing north and the heel facing south, contrary to Rebeiro’s trial testimony, and that Rebeiro was incorrect when she testified that the footprint evidence was consistent with the defendant having dragged the victim’s body to where it was eventually found. (FSA 1278). On May 9, 2007, Rebeiro filed an affidavit stating that she concurred with Bodziak that the mark represented the toe area, not the heel, of the defendant’s right sneaker. (*Id.*).

evidence. (FSA 1306 (citing, *inter alia*, Commonwealth v. Waters, 410 Mass. 224, 228-231 (1991), and United States v. Huddleston, 194 F.3d 214, 221 (1st Cir. 1999))). He described the standard of review as follows:

A defendant seeking a new trial on the ground of newly discovered evidence must establish that the evidence was unknown to the defendant and was not reasonably discoverable at the time of trial, and that the evidence casts real doubt on the justice of the conviction. Commonwealth v. Shuman, 445 Mass. 268, 271-272 (2005). The evidence must be material and credible and carry a measure of strength in support of the defendant's position. *Id.* at 272. The decision to deny or grant a motion for a new trial based on newly discovered evidence is committed to the sound discretion of the court. *Id.* The court's determination is not based on its conclusion as to the defendant's guilt or innocence; rather, the question is whether the newly discovered evidence if admitted at trial would have been a real factor in the jury's deliberations, such that there is a substantial risk that the jury would reach a different conclusion if exposed to the evidence. Commonwealth v. Weichell, 446 Mass. 785, 798 (2006); Commonwealth v. Shuman, 445 Mass. [268], 272 [2005]; Commonwealth v. Cintron, 435 Mass. 509, 516 (2001); Commonwealth v. Markham, 10 Mass. App. Ct. 651, 654 (1980). A motion judge who was also the trial judge is in the best position to determine the probable impact on a jury hearing the new evidence with all of the other evidence. Commonwealth v. Cintron, 435 Mass. at 517. In evaluating the impact of newly discovered evidence, the judge is entitled to make use of his knowledge and observations of what occurred at trial. Commonwealth v. Grace, 397 Mass. 303, 306 (1986).

(FSA 1307).

The trial judge refused to adopt a "more favorable" standard articulated by the Seventh Circuit, in Larrison v. United States, 24 F.2d 82, 87-88 (7th Cir. 1928), which allowed a new trial for false testimony if the jury "might" have reached a different verdict, recognizing that the Seventh Circuit, itself, had recently overruled Larrison. (FSA 1305-06 & n.10). In addition, he noted, the First Circuit had also rejected Larrison in Huddleston. (FSA 1306). After rejecting the Larrison standard, Judge Chernoff also noted in a footnote, without further explanation, that "[b]ecause there is neither a hint of wrongdoing nor of bad faith, the Court does not feel

compelled to impose a strict due process standard of review, application of which might well result in an order for a new trial.” (FSA 1306 n.11).<sup>21</sup> As detailed below, the SJC held that the trial judge had applied the correct standard of review. Greineder I, 458 Mass. at 245, 936 N.E.2d at 401.

The trial judge rejected the Commonwealth’s argument that the change in Rebeiro’s testimony was immaterial, and carefully reviewed the role the evidence had played at trial. (FSA 1307-09). As the trial judge found, “[i]t is abundantly clear from the trial record that the Commonwealth’s view of the footprint evidence, which was effectively presented and persuasively argued to the jury, was that the positioning of the back of the defendant’s heel mark facing away from the center of the path and towards the grassy area evidenced that the defendant had dragged the victim’s body from the center of the path to its final resting place off of the path.” (FSA 1308). In light of “uncontroverted evidence” that the victim, after being struck, had been dragged off the path to a grassy area where other blows were struck, an “important issue” at trial was who had dragged the victim. (FSA 1308-09). The judge explained that there were two pieces of evidence that directly supported the Commonwealth’s theory that it was the Defendant – transfer blood on his jacket which was consistent with holding the victim from behind, and the alleged “heel print in the drag mark with the back of the print facing the grass” which the Commonwealth argued “was consistent with dragging a substantial weight.” (FSA 1309). The change in testimony negated the second link, and offered “a measure

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<sup>21</sup> As described more fully below, this appears to be a statement by Judge Chernoff that the Larrison standard might be applicable if there was wrongdoing on the part of the government.

of support for the defendant's version of events: that his footprints were left in the path as he approached the victim to determine her condition and render assistance." (FSA 1309).

Judge Chernoff then addressed the question of "whether the change in Rebeiro's opinion, if admitted at trial, would have been a real factor in the jury's deliberations, such that there is a substantial risk that the jury would reach a different conclusion if exposed to the evidence." (FSA 1309). After reviewing the evidence, he concluded that the changed opinion "weaken[ed], but [did] not negate, the Commonwealth's argument at trial that the defendant dragged the victim's body off the path." (FSA 1309-10). The Commonwealth could have relied on the testimony that most foot traffic on the path did not leave identifiable footprints, and/or argued that the Defendant dragged the victim in a different manner, to support its theory that the Defendant moved the victim. (FSA 1310, 1311).

The trial judge also reviewed the other "substantial evidence which placed the defendant at the scene as the bloodshed event was unfolding." (FSA 1310). This included blood spatter evidence on Greineder's sneakers, jacket sleeve, and the pocket, knee, and cuff of his jeans, which "strongly supports the theory that he was the dragger and thus the murderer." (SA 1310). Other evidence that supported the finding that the Defendant was present during the dragging and murder included "the swipe transfer blood stain on the defendant's glasses coupled with the pattern of dots on the lens which the jury may well have found were a blood stamp pad type of impression from the murder glove[.]" (FSA 1310-11). In light of all this additional evidence, the trial judge concluded that Rebeiro's new opinion, that it was a toe print, "would not have been a real factor in the jury's deliberations[.]" (FSA 1310).

The trial judge also concluded that even if the Commonwealth's argument that the Defendant dragged the body had been weakened by having the footprint identified as a toe print, and not a heel print, "it would not have been a real factor in the jury's deliberations, given all the evidence at trial of the defendant's complicity in his wife's murder." (FSA 1311). In fact, the judge explained, "[t]he jury could have discounted all the footprint evidence and still found beyond a reasonable doubt that the defendant killed his wife." (FSA 1312). He summarized the evidence as follows:

For example, there were numerous pieces of evidence linking the defendant to the brown work gloves, stained with the victim's blood, which were found in the storm drains. The evidence included the absence of blood on the defendant's hands despite the fact that he attempted to take the victim's carotid pulse and her neck was slashed; the absence of blood on the cuffs of his otherwise blood-stained jacket and the abrupt elliptical ending of the bloodstain on the sleeves; the presence of his DNA on one of the gloves; the fibers found under his fingernails; the fact that he was seen leaving the area of the storm drain where one of the gloves and the murder weapons were recovered; the fact that the other glove was recovered from a drain next to where the defendant's car was parked; the dot impression on his glasses matching the glove; the fact that a plastic bag at the murder scene came from the defendant's kitchen but contained no fingerprints; and the fact that similar gloves were secreted inside the roof of his dog house.

Further, the defendant was linked to the knife by the presence of his DNA on that weapon and the fact that he was seen leaving the area of the storm drain where the knife and hammer were recovered. The defendant was also tenuously linked to the hammer through the nails receipt. There was some consciousness of guilt evidence, including the defendant's inconsistent statements to police and inconsistent testimony, and the statements the defendant made to family members about the presence of his DNA at the crime scene. In addition, there was motive evidence that the defendant was pursuing sexual activities outside the marriage and his wife may have discovered those activities. Finally, and perhaps most compelling, there was the evidence of blood spatter on the defendant's shoes, pants, and jacket, as well as the blood smear on his glasses and the numerous transfer stains on his jacket.

(FSA 1311-12).

Based on this evidence, and his “knowledge and observation of the events at trial,” Judge Chernoff concluded “that there is no substantial risk that the jury would have reached a different conclusion if it learned that F7 represents the defendant’s toe, not his heel.” (FSA 1312-13). He found that while the change in Rebeiro’s testimony was “significant,” it did not “cast real doubt on the justice of the defendant’s conviction.” (FSA 1313). Consequently the judge, in his discretion, declined to order a new trial based on newly discovered evidence. (FSA 1313).

The SJC affirmed the denial of the motion for new trial, which it ruled was “addressed to the sound discretion of the [trial] judge” and would “not be reversed unless [the trial judge’s ruling] is manifestly unjust.” Greineder I, 458 Mass. at 245, 936 N.E.2d at 400. As before, the SJC accorded “special deference” to the motion judge’s actions where the judge was also the trial judge. Id. at 245, 936 N.E.2d at 400-01. The SJC concluded that the trial judge had applied the correct standard of review. Id. at 245, 936 N.E.2d at 401 (citing Commonwealth v. Weichell, 446 Mass. at 785 (quoting Commonwealth v. Grace, 397 Mass. at 305-06)). Since the trial judge had appropriately relied on his knowledge of the trial proceedings, applied the correct standard and “considered this newly discovered evidence in light of specific strengths of the Commonwealth’s case, concluding that it ‘does not cast real doubt on the justice of the defendant’s conviction[,]’” the SJC concluded that there was “no abuse of discretion or other error of law.” Id. at 246, 936 N.E.2d at 401.

#### **B. Greineder’s Federal Claims Were Adjudicated on the Merits**

The Defendant contends that since the state courts did not address the federal constitutional issues that he presented, he is entitled to a de novo review, as opposed to the

deferential standard of review mandated by the AEDPA, 28 U.S.C. § 2254(d). For the reasons detailed below, this court concludes that although the state courts did not expressly address Greineder's constitutional claims, they did decide his federal claims on the merits. Therefore, the AEDPA deferential standard of review applies.

"Under AEDPA, 'the level of deference owed to a state court decision on federal habeas review hinges on whether the state court ever adjudicated the relevant claim on the merits or not.'" Junta v. Thompson, 615 F.3d 67, 71 (1st Cir. 2010) (quoting Clements v. Clarke, 592 F.3d 45, 52 (1st Cir. 2010)) (additional citation and internal punctuation omitted). Pursuant to 28 U.S.C. § 2254(d), if the state court has adjudicated the claim on the merits, the federal habeas court must defer to the state court's adjudication unless it was contrary to, or involved an unreasonable application of clearly established federal law or resulted in a decision that was based on an unreasonable determination of the facts. Id. "In contrast, a state court decision that does not address the federal claim on the merits falls beyond the ambit of AEDPA, and the habeas court reviews such a claim *de novo*." Id. (internal quotation and citations omitted).

"A matter is 'adjudicated on the merits' if there is a 'decision finally resolving the parties' claims, with res judicata effect, that is based on the substance of the claim advanced, rather than on a procedural, or other, ground." Id. at 72 (quoting Teti v. Bender, 507 F.3d 50, 56 (1st Cir. 2007)). The critical question is "whether the substance of [the Petitioner's] federal claims was addressed." Id. at 73. In the instant case, there is no question that the trial judge addressed the merits of Greineder's claim in a lengthy and fulsome analysis with res judicata consequences. Nevertheless, Greineder argues that Judge Chernoff expressly avoided his federal claims, pointing to the footnote in Judge Chernoff's decision, quoted above, in which he

stated that, in the absence of wrongdoing or bad faith on the part of the government, he did not feel the situation compelled him “to impose a strict due process standard of review,” which might have resulted in an order for a new trial. (FSA 1306 n.11). However, this footnote, while not very clear, seems to simply reaffirm that Judge Chernoff was, in fact, addressing Greineder’s federal due process claims—he was just applying a different standard than the Defendant believed was appropriate.

As an initial matter, the footnote followed the judge’s discussion of Huddleston, 194 F.3d at 221, in which the First Circuit established the appropriate standard of review to be applied when the government’s use of false testimony was unknowing or unwitting.<sup>22</sup> The Huddleston court based its decision on its analysis of United States Supreme Court cases. Id. at 220. The trial judge’s reliance on Huddleston and the federal standard of review compels the conclusion that Greineder’s federal constitutional claims were addressed. See Johnson v. Williams, 568 U.S. 289, 304-06, 133 S. Ct. 1088, 1098-99, 185 L. Ed. 2d 105 (2013) (Supreme Court reverses ruling that state court had not adjudicated habeas petitioner’s federal claims where the state court relied on a state court case which, in turn, analyzed federal cases addressing federal constitutional issues).

Furthermore, this conclusion was not negated by the due process reference in the footnote. The Huddleston court left open the question whether, if the government acted knowingly in allowing perjured testimony to go forward, the Larrison standard, which “comes

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<sup>22</sup> While the cases, and this discussion, use false testimony and perjury interchangeably, there is no evidence in the record that Rebeiro intentionally testified falsely at trial. Rather, the evidence is that she simply changed her opinion.

perilously close to creating a per se rule that mandates a new trial" should apply. Huddleston, 194 F.3d at 220. Thus, the footnote, recognizing the distinction between situations where the government acts wrongfully or in bad faith from those in which the government acts unwittingly, is evidence that the trial judge was relying on Huddleston and, thereby, addressing Greineder's federal claims.

In light of the detailed analysis of Greineder's claims, and the court's analysis of the impact the changed testimony would have on the verdict – an analysis that in substance addressed Greineder's claims of a due process violation in the conduct of his trial – the AEDPA deferential standard should apply.

### C. The Appropriate Standard of Review

Greineder contends that the court should apply a "Brady-type analysis" to Rebeiro's changed testimony, and determine whether there was "a reasonable probability that, had the recantation been available to the defense prior to trial, the result of the proceeding might have been different." (Pet. Mem. at 167). See Brady v. Maryland, 373 U.S. 83, 83 S. Ct. 1194, 10 L. Ed. 2d 215 (1963); see also United States v. Agurs, 427 U.S. 97, 103, 96 S. Ct. 2392, 2397, 49 L. Ed. 2d 342 (1976) ("a conviction obtained by the knowing use of perjured testimony is fundamentally unfair and must be set aside if there is any reasonable likelihood that the false testimony could have affected the judgment of the jury."). He also argues that under California v. Green, 399 U.S. 149, 186 n.20, 90 S. Ct. 1930, 1950 n.20, 26 L. Ed. 2d 489 (1970), his due process rights under the Fifth and Fourteenth Amendments protect him from "conviction based on unreliable evidence," and that "fundamental fairness" requires that he be given a new trial. (Pet. Mem. at 162-63). Even assuming that the Brady "reasonable probability" standard

applies, the standard applied in Greineder's case by the state courts is at least as favorable to the Defendant. See Mello v. DiPaulo, 295 F.3d 137, 144-45 (1st Cir. 2002) (AEDPA applied to ineffective assistance of counsel claim decided under state standard that is at least as favorable to the defendant as the federal standard). There is no basis for the habeas court to disturb their conclusions.

In United States v. Gonzalez-Gonzalez, 258 F.3d 16 (1st Cir. 2001), the First Circuit was called upon to decide "the standard to be applied to a criminal defendant's motion for a new trial where the claim is that the prosecution knowingly used perjured testimony." Id. at 18.

The court ruled as follows:

In sum, a court's choice among the standards for analyzing new trial motions depends upon the ground for the new trial motion. First, for the non-Brady Rule 33 motion where a defendant seeks a new trial based on newly discovered evidence (other than evidence that an adverse witness testified falsely) the inquiry is whether that evidence ... in actual probability would result in acquittal if a new trial were granted. That test is also used where a new trial motion is premised upon alleged new evidence that a conviction was obtained by perjured testimony when the government's use of that testimony was unwitting. In that situation, Huddleston requires the defendant to meet the "actual probability of acquittal" standard.

The second category involves the different types of Brady violation cases where it is alleged that the government withheld exculpatory evidence. There, a defendant must show that there is a "reasonable probability" that the missing evidence would have changed the result. In contrast, the "reasonable likelihood that the false testimony could have affected the judgment of the jury" standard applies where it is alleged that the government knowingly used perjured testimony to obtain a defendant's conviction. Although the Supreme Court has not described whether there is a difference between the "reasonable likelihood" and "reasonable probability" standards, we believe they are equivalent. In the end, both standards are concerned with whether defendants received a fair trial resulting in a verdict worthy of confidence.

*Id.* at 21-22. Thus, under First Circuit law, where the government used perjured testimony unwittingly, the standard applied is less favorable to the defendant than the Brady standard — the defendant must prove there was an “actual probability” that the new evidence would have resulted in an acquittal. See also Turnage v. Fabian, 606 F.3d 933, 938 & n.6 (8th Cir. 2010) (a number of Circuits (including the First) have applied the standard requiring petitioner “to show that the jury would have probably or likely reached a different verdict had perjury not occurred” to cases involving the unwitting use of perjured testimony, while applying the “any reasonable likelihood” standard to intentional use of perjured testimony) (internal punctuation and citations omitted)).

Nevertheless, the Gonzalez-Gonzalez court also recognized that, despite Huddleston, recent Supreme Court cases had applied the “reasonable likelihood of acquittal” standard to cases “which did not involve knowing use of perjured materials[.]” *Id.* at 21, and cases cited. Greineder does not contend that he can meet the standard set forth in Huddleston that “the force of the newly discovered event (i.e., the fact and nature of the perjury) and the content of the corrected testimony are such that an acquittal probably would result upon retrial.” Huddleston, 194 F.3d at 221. Even assuming that the “reasonable likelihood” standard applies, there is no basis to disturb the state courts’ conclusions.

In the instant case the trial judge focused very much on whether Greineder “received a fair trial resulting in a verdict worthy of confidence.” He analyzed the facts presented as if the testimony had been that the footprint was that of Greineder’s toe, and not his heel. He explained why the changed testimony would not have changed the Commonwealth’s theory that the Defendant dragged his wife’s body, and that even absent the footprint there was

ample evidence to support that theory. (FSA 1309-11). The judge explained why the changed opinion “would not have been a real factor in the jury’s deliberations” in light of the substantial evidence placing the Defendant at the scene “as the bloodshed event was unfolding.” (FSA 1310). He held that he could not conclude “that eliminating both the heel print evidence and the prosecutor’s argument on that evidence would have reasonably caused the jury to doubt the theory that the defendant was present at the time the fatal blows were struck and was therefore the dragger.” (FSA 1311). He explained the reasons for his conclusion that eliminating the heel print evidence and the prosecutor’s argument on the subject “would not have been a real factor in the jury’s deliberations, given all the evidence at trial of the defendant’s complicity in his wife’s murder.” (*Id.*). Judge Chernoff concluded that there was “no substantial risk that the jury would have reached a different conclusion if it learned that F7 represents the defendant’s toe, not his heel.” (FSA 1312-13). The changed testimony did not, in the trial judge’s view, “cast real doubt on the justice of the defendant’s conviction.” (FSA 1313). Similarly, the SJC concluded in denying relief under Mass. Gen. Laws ch. 278, § 33E that there was not a substantial risk of a miscarriage of justice.

These findings more than satisfy the standard of whether there was a “reasonable probability” that new testimony would have changed the result of the trial. Similarly, the state courts’ analysis answers in the negative the question whether “the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict.” Strickler v. Greene, 527 U.S. 263, 290, 119 S. Ct. 1936, 1952, 144 L. Ed. 2d 286 (1999) (quoting Kyles v. Whitley, 514 U.S. 419, 435, 115 S. Ct. 1555, 131 L. Ed. 2d 490 (1994)). Under these circumstances, the state courts’ conclusions, which applied an appropriate

standard of review, are entitled to deference and are not contrary to or an unreasonable application of Supreme Court law. Moreover, the underlying facts are amply supported by the record.

Finally, in this court's view, Greineder has not established that the absence of the heel print testimony was reasonably likely to have resulted in a different verdict. Instead, he argues that “[t]here is little doubt that, had the Commonwealth footprint expert, Rebeiro, authored her affidavit correcting her mistaken identification of the toe print as a heel print prior to trial, and had that affidavit been inadvertently mislaid by the prosecution and not turned over to the defendant, this would have constituted a grave constitutional violation under Brady v. Maryland, 373 U.S. 83 (1963), and its progeny.” (Pet. Reply Mem. at 20). However, that is not the relevant inquiry. The question is what effect, if any, would Rebeiro testifying to the print being a toe print have had on the verdict. In his thorough and well-reasoned opinion, the trial judge answered that the testimony would not have affected the verdict. This court recommends that habeas relief on this ground be denied.

## **VIII. ADMISSION OF EVIDENCE OF EXTRAMARITAL SEXUAL ACTIVITIES**

### **A. The State Court Decisions**

Prior to trial, Greineder had moved to exclude evidence of his extramarital sexual activities. Judge Chernoff explained in his ruling on the motion for a new trial that prior to trial he had “ruled that evidence of the defendant’s use of telephone sex lines and Internet pornography was inadmissible as too remote in time and not probative of the defendant’s hostility toward his wife. However, [the] Court deemed admissible the flurry of sexual behavioral activity within the week of the murder including the tryst with an out-of-state

prostitute, Internet and/or e-mail solicitation for a sexual relationship with another or others, and phone communications with an in-state prostitute." (FSA 1253 (internal punctuation omitted)).<sup>23</sup> At trial, the Defendant put in some additional evidence of extramarital sexual activity to prove that it had been going on for some time, and in order to counter the impression that it was a recent event and therefore related to the murder. (FSA 1254). During the testimony and again during the jury charge, the court gave limiting instructions that the evidence could be considered by the jury solely on the issue of motive. (See Pet. Mem. at 171). The Defendant contends that the Commonwealth dropped its theory that the evidence was relevant to motive, but rather characterized it in the closing as "a window to the relationship that was going on between May and Dirk at that time period." (Id. at 172).<sup>24</sup>

Greineder argues that the evidence at trial "did not provide any link in a chain of evidence proving that the defendant had a motive to murder his wife. There was no evidence introduced to suggest that Ms. Greineder intended to leave Greineder, nor was there any

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<sup>23</sup> The trial judge's "Memorandum of Decision and Order on the Defendant's Motion in Limine to Exclude Prior Bad Acts Evidence" can be found beginning at FSA 666.

<sup>24</sup> In this court's view, the Commonwealth suggested in its closing that it was a motive for murder, although it is hard to predict what would motivate someone to kill and the Commonwealth did not need to prove motive. The Commonwealth reviewed some of the testimony of extramarital sexual encounters, including statements to prostitutes that he was separated from his wife or planning to divorce her. (Tr. 6/26/2001 (FSA 33) at 60-62). The Commonwealth argued that Greineder "was no longer experimenting at this point ... [h]e's crossed that line" and that "[t]here's no question this Defendant and May, as a team, loved their children very much, spent a lifetime nurturing them. But were they a team anymore? And what would have happened to that relationship with the children if they weren't? What would happen to that relationship if they were no longer a team by virtue of this Defendant's activities?" (Id. at 61). This was followed by the Commonwealth's noting that while the defense had questioned what the motive for the murder was, the Commonwealth did not need to prove motive because no one really knew what motivated someone to kill. (Id. at 61-62). The Commonwealth then went on to say "But this information is certainly a window to the relationship that was going on between May and Dirk at that period of time[.]" (Id. at 62).

evidence of hostility between the two. Hence, the sex evidence was simply not relevant and should have been excluded.” (Pet. Mem. at 177). He argues further, that even if the evidence had some relevance to motive, “any probative value was far outweighed by the resulting unfair prejudice.” (Id.). Finally he contends that the prosecutor made two statements in his closing that were not substantiated in the record and were unfairly prejudicial, although he does not explain why.<sup>25</sup> (Id. at 178). The Defendant contends that these errors resulted in a trial that violated his due process rights.

The SJC reviewed the evidence and the trial judge’s ruling, assessing it under the rules of evidence that provide that while “[e]vidence of bad acts is not admissible to prove bad character or propensity to commit the crime charged, [ ] it may be admissible, if relevant, for other purposes, including proof of motive.” Greineder I, 458 Mass. at 240, 936 N.E.2d at 397. While the SJC did not mention Greineder’s due process rights, it stressed that “the probative value of such evidence [must] outweigh[] its prejudicial value in the context of the case.” Id. at 241, 936 N.E.2d at 398, and cases cited. The SJC concluded that the probative value of the challenged testimony was “very high” and “provided a reasonable basis to infer a motive to kill, and it was connected in time and place with the facts of this case.” Id. As the SJC found:

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<sup>25</sup> Greineder objects to the statement by the prosecutor in his closing that in a conversation with a prostitute the Defendant had characterized his wife as “old and soft.” There was no objection at trial. During his testimony, the Defendant had testified “I did not say that exactly.” He testified further that “I did not say old. I do not recall saying soft” though he did recall telling the prostitute that he and his wife no longer had sex. (FSA 1255, 1290). In addition, Greineder challenges the prosecutor’s statement in his closing that he sought out a woman named Elizabeth with whom he had a long term relationship, when his trial testimony was that he had sex with a prostitute named Elizabeth several times and that he called her after that, but she did not return his calls. (FSA 1290). The trial judge concluded that these statements “had some basis in the evidence and the inferences to be drawn therefrom” and “any slight misstatement in the sex facts did not go to the heart of the case and did not create a substantial likelihood of a miscarriage of justice.” (Id.)

Here, the evidence of the defendant's extramarital sexual activity was highly relevant to a motive to kill. The defendant gave contradictory statements to Trooper Foley and Belinda Markel about recent sexual relations with the victim. During the week before the murder the defendant feverishly sought a wide range of sexual relations and activity. In addition, he was insistent with people he solicited that their relations be discreet, and that he could not host a tryst but he would arrange for hotel accommodations. The defendant was both circumspect and impulsive in his quest. In an e-mail to one couple he said he first would like to meet them to see if they were compatible, but wrote, "I will tend to be impatient if we find we are, indeed, compatible." The defendant became concerned on October 29, 1999, two days before the victim was murdered, that she had used his computer, through which he conducted his search for sexual relations. In September the defendant told a prostitute with whom he sought to revive a relationship not to telephone him because "it was not the right time," then he telephoned her the day before and the day after the murder.

This evidence supported a reasonable inference that the victim's presence had become an inconvenience to the defendant, and an obstacle to a life-style he pursued and kept secret from his entire family and the public. The jury could have inferred that when he contacted the prostitute just before and after the murder, the time had come to kill his wife. In the words he expressed to the prostitute, the time was now "right." The evidence was highly probative of a motive to kill. "Without the challenged evidence [the murder] could have appeared to the jury as an essentially inexplicable act of violence." *Commonwealth v. Mendes*, 441 Mass. 459, 464, 806 N.E.2d 393 (2004), quoting *Commonwealth v. Bradshaw*, 385 Mass. 244, 269, 431 N.E.2d 880 (1982). The judge did not abuse his discretion by admitting this evidence.

Id. at 240-41, 936 N.E.2d at 397-98. The SJC continued:

There is no merit to the defendant's claim that the prosecutor should not have argued as he did to the jury because the defendant had abandoned this evidence and theory of motive. The prosecutor's statement in closing argument that he wished he could explain how a person gets to the point in his life where he kills another was not abandonment of motive, but merely a statement of something he did not have to prove, see *Commonwealth v. Bonomi*, 335 Mass. 327, 355, 140 N.E.2d 140 (1957), and he asked the jury to return a verdict based on what he had proved. The prosecutor's reference to certain instances of the defendant's extramarital activity that were not objected to at trial and about which the defendant now complains were made with record support and were not unfair.

Id. at 241-42, 936 N.E.2d at 398.

There is no reason to disturb the state courts' conclusion that the challenged testimony was "relevant and admissible" and that it was not so unduly prejudicial as to deprive the Defendant of his due process rights.

**B. Standard of Review**

"Federal habeas relief cannot be granted merely because a state court errs in its application of state law." Sanna v. Dipaolo, 265 F.3d 1, 11 (1st Cir. 2001). Greineder argues, however, that this was not a mere evidentiary issue — the admission of this testimony violated his due process rights to a fair trial. The federal standard is "whether the introduction of this type of evidence is so extremely unfair that its admission violates 'fundamental conceptions of justice.'" Dowling v. United States, 493 U.S. 342, 352, 110 S. Ct. 668, 674, 107 L. Ed. 2d 708 (1990) (quoting United States v. Lovasco, 431 U.S. 783, 790, 97 S. Ct. 2044, 2048, 52 L. Ed. 2d 752 (1977)). As the First Circuit explained in Lyons v. Brady, 666 F.3d 51 (1st Cir. 2012):

An erroneous evidentiary ruling that results in a fundamentally unfair trial may constitute a due process violation and thus provide a basis for habeas relief. However, to give rise to habeas relief, the state court's application of state law must be so arbitrary or capricious as to constitute an independent due process violation. To be a constitutional violation, a state evidentiary error must so infuse the trial with inflammatory prejudice that it renders a fair trial impossible.

Id. at 55-56 (citations, alterations, and internal quotation marks omitted); accord Jaynes v. Mitchell, 824 F.3d 187, 195 (1st Cir. 2016). Similarly, a prosecutor's improper remarks may "so infect[] the trial with unfairness as to make the resulting conviction a denial of due process." Donnelly v. DeChristoforo, 416 U.S. 637, 643, 94 S. Ct. 1868, 1871, 40 L. Ed. 2d 431 (1974). The "standard of review for such a claim on writ of habeas corpus is the narrow one of due

process[.]” Darden v. Wainwright, 477 U.S. 168, 181, 106 S. Ct. 2464, 2471, 91 L. Ed. 2d 144 (1986) (internal citation and quotation omitted).

### C. Analysis

The state courts’ rulings that the evidence of extramarital sexual conduct was admissible was not contrary to nor an unreasonable application of Supreme Court law. In addition, the factual findings are amply supported by the record and are not unreasonable. Both the trial judge and the SJC were concerned with whether the prejudicial value of the evidence outweighed its probative value. Thus, although the courts did not address the issue as one of due process, they did evaluate whether the admission of this testimony would deprive the Defendant of a fair trial. The conclusion that the evidence was “highly probative” and was not introduced for inflammatory purposes is not contrary to nor an unreasonable application of Federal law.

As the SJC explained, and as noted above, despite the Defendant’s testimony of a loving relationship with his wife, his conduct and statements made to the prostitutes could be viewed by the jury as indicating otherwise. Moreover, in light of the evidence that his wife may recently have learned of his activities by using his computer, the jury could have inferred that Greineder’s ability to maintain both his home and extramarital affairs was threatened. His statements and the timing of his calls to a prostitute could be viewed as expressing his mindset that the time had come to eliminate his wife from his life in some fashion. The state courts’ ruling on the evidentiary issue was not arbitrary and capricious. Moreover, the record does not support the argument that the evidence was offered to inflame. Rather, it had a direct bearing on the murder. There was no due process violation and there is no basis for habeas relief.

## IX. ALLEGED JUROR EXPOSURE TO EXTRANEous EVIDENCE

### A. Procedural Background

As the trial judge explained in his ruling on the Defendant's motion for a new trial, “[n]o one would seriously question that the murderer of Mabel Greineder had donned cloth work or garden gloves with rubberized dimples, that the gloves became soaked with the victim's blood, and left 'stamp pad' dots marks on the handle of one of the murder weapons, the hammer. Two of the vehicles for tying the defendant to the murder gloves were the stamp pad red dots on the defendant's glasses and the blood streak on the sleeve of his jacket.” (FSA 1108 (foot-note omitted)). At trial, the Commonwealth's expert, Rod Englert, opined that the pattern of dots on the work gloves matched the streak on Greineder's jacket. (Pet. Mem. at 181). The Commonwealth's blood stain expert, Lieutenant Kenneth Martin, testified that he made transfer exemplars of the glove's dot pattern with a damp paper towel, white paper and fingerprint powder, as well as exemplars and transparencies from a sample glove using a thin film of fingerprint ink, and he testified to the similarity of the patterns. (Resp. Mem. at 47). Stuart James, the defense blood spatter expert, testified that he could not make a positive comparison between the dimples on the gloves and the streak on the jacket, and called such a comparison “speculation.” (Pet. Mem. at 182).

Greineder argues that his constitutional right to a fair trial was violated because the jury was exposed to extraneous material when a juror rubbed the dimpled work gloves against an unpeeled banana and the resulting impressions were the subject of discussion among some of the jurors. The issue came to the attention of the defense (and the court) post-verdict, when appellate counsel learned of a book written about the case entitled “Murder at Morses Pond.”

Greineder I, 458 Mass. at 246, 936 N.E.3d at 401. Therein, the author recounted interviewing a juror who described an experiment<sup>26</sup> by the jury using a banana that was in the jury room and the gloves admitted into evidence. Id. The interview was recorded. Id. The Defendant moved for an evidentiary hearing on the matter and moved for a new trial. Id. The trial judge held the evidentiary hearing and took testimony from the book's author, admitted the recording of the interview, and heard sworn testimony from six of the deliberating jurors. (Pet. Mem. at 183). The trial judge made detailed findings of fact and rulings of law. (FSA 1108-24).

The trial judge, citing state law cases, recognized that a “defendant has a right to be tried by a jury whose members are impartial and whose deliberations are unaffected by extraneous matters.” (FSA 1110 (citing Commonwealth v. Cuffie, 414 Mass. 632, 638 (1993))). The trial judge ruled that the use of the banana did not constitute extraneous evidence as a matter of law (FSA 1111-16), the “banana experiment would not have influenced a hypothetical average jury” (FSA 1116-18) and, as a matter of fact, the “banana experiment did not influence the actual deliberating jury.” (FSA 1118-20). Therefore, he concluded that “Greineder is not entitled to a new trial based on the jury’s alleged exposure to extraneous evidence.” (FSA 1120). The SJC “discern[ed] no abuse of discretion or other error of law in the judge’s determination that the jury experiment did not constitute extraneous matter.” Greineder I, 458 Mass. at 248, 936 N.E.2d at 402. Greineder contends that “[t]he SJC’s determination that this

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<sup>26</sup> In connection with the motion for a new trial, the Commonwealth objected to the characterization of what occurred in the jury room as being an “experiment” since the jurors themselves did not use that word. (FSA 1111 n.6). The trial judge used the word “experiment” as being synonymous with “incident.” (Id.). This court will do the same.

experiment did not expose the jury to extraneous evidence was an unreasonable application of clearly established federal law.” (Pet. Mem. at 188).

**B. Relevant Facts**

As the trial judge found, the so-called experiment took place during lunch on the fourth day of deliberations. (FSA 1108). It was a concern to the jury to “mak[e] the glove print fit the eye glasses and the jacket” and, to this end, the jury requested a millimeter ruler. (FSA 1108). The request was refused by the judge, after consultation with counsel. (*Id.*). It was the judge’s belief that the jurors “were going to compare configurations and distances between dots with the dots on the glasses and also along the smear mark on the jacket sleeve” and that the refusal to provide the ruler “was somewhat frustrating to the jury.” (*Id.*). The jurors took a vote before lunch, but no verdict was reached. The trial judge made the following factual findings:

During lunch or immediately after lunch, but before the jury resumed deliberations, some jurors were handling the evidence and were trying on the jacket and the gloves. At one point, there was an unpeeled banana on the table which was part of juror Charles Salvi’s lunch. Mr. Salvi was wearing the gloves when he picked up the banana with the intention of eating it. He then put the banana down to remove the gloves before peeling the banana. Some minutes later, when the banana was still unpeeled, it was noted that the skin of the banana showed the dot impression from the finger of the glove. It is not known to the court whether the dot pattern on the banana was then compared to the dot pattern on the eye glasses. Juror Salvi then intentionally rubbed a gloved finger, probably a thumb, along the skin of the banana over the distance of about one inch. Minutes later a smear mark appeared on the banana which was compared to the mark on the jacket. Strong similarities were noted by some of the jurors, although others made no observations. There was a verbal reaction or communication between some jurors at the time and then the break was over and the deliberations resumed. The banana was peeled and eaten by a female juror. There is not evidence that the banana experiment subsequently became the subject of discussion among the deliberating jury and this Court specifically finds that it did not. There were no further votes by the jury until the early afternoon of the fifth and final day of deliberations. As a result of that vote, the jury reported that a verdict had been reached and the verdict was taken in open

court after a few minutes. In conclusion, this Court finds that the banana incident had no impact on the resumed deliberations on day four and the deliberations on day five to verdict.

(FSA 1108-10 (footnotes omitted)). In support of his conclusion that the banana experiment was not the subject of discussion among the jurors, the trial judge cited the testimony of three jurors, including the foreman who had “zero recollection of a banana in the jury room or anything to do with a banana.” (FSA 1109 n.4).

**C. State Court Rulings**

The trial judge made extensive rulings of law. Since the SJC affirmed on the basis that his conclusion was that the banana experiment did not involve extraneous evidence, this court will limit its discussion accordingly. As detailed herein, the trial judge applied the appropriate standard of review, and there is support in federal law for his ruling. The Defendant has cited to no Supreme Court cases that require a different result. The fact that the Defendant believes that a different result should have been reached on the evidence presented is not sufficient to warrant habeas relief.

As the trial judge ruled:

A defendant has a right to be tried by a jury whose members are impartial and whose deliberations are unaffected by extraneous matters. An extraneous matter is one that involves information, knowledge, or specific facts that did not come from the evidence at trial. Litigants are entitled to a decision on the evidence at trial, governed by the rules of evidence, and while the jury may use its wisdom and experience during deliberations, it must not bring extra facts into the jury room. The investigation of facts by a juror or production of evidence by a juror not adduced by either party may form the basis for probing the impartiality of a jury verdict.

The defendant bears the initial burden of showing by a preponderance of the evidence that the jury were in fact exposed to extraneous matters. If the defendant makes such a showing, the burden shifts to the Commonwealth to

show beyond a reasonable doubt that the defendant was not prejudiced by the extraneous matter.

(FSA 1110-11 (citations omitted)).

The trial judge reviewed the case law relating to the scope of permissible juror experiments. As the judge explained, with case law support, “[e]xperimentation with a jury exhibit is generally permissible if it is within the scope of the evidence presented at trial, duplicative of tests or demonstrations performed in the courtroom, or cumulative of evidence already in the record.” (FSA 1112 (citation omitted)). “The jury may use an exhibit according to its nature to aid them in reaching a conclusion upon a controverted matter, and may carry out experiments within the lines of offered evidence. However, a jury room experiment with an exhibit produces extraneous evidence if it does not fairly fall within the scope and purview of the offered evidence but rather, invades new fields which were not the subject of evidence during trial.” (Id. (citations omitted)). The use of “an outside object not part of the trial evidence[ ] did not make the experiment an improper consideration of extrinsic evidence.” (FSA 1115).

The trial judge acknowledged Greineder’s contention “that the banana experiment exposed the jurors to information beyond that offered at trial: the fact that if rubbed on the peel of a banana, the glove would produce a bruise similar to the streak on the right sleeve of the defendant’s jacket.” (FSA 1112). He further acknowledged that “Greineder notes that a key defense strategy at trial was to emphasize to the jury the absence of overlays or other quantitative measurements demonstrating that the streak on the jacket matched the pattern on the glove. He thus argues that the use of the banana in an attempt to link the glove to the stain on the jacket constituted an invasion into a new field which was not the subject of

evidence during trial.” (FSA 1112-13). In rejecting this argument, the trial judge concluded that using the banana to see if the glove was able to make a pattern similar to the dots on the eyeglasses or the streak on the jacket was “within the lines of the evidence offered at trial, and was intended to aid the jury in reaching a conclusion upon a controverted matter: whether the streak on the defendant’s jacket was made by the dimpled glove.” (FSA 1113). As the court found, “[t]he experiment was loosely based on the testimony and arguments presented at trial and did not invade a new field of evidence.” (*Id.*). The experiment “permissibly assisted them in weighing the credibility of Englert’s opinion that there was a match and in a broad sense, recreated Martin’s transfer exemplars.” (*Id.*). The banana had no independent significance, “rather, the jury simply used the banana to assist it in scrutinizing the physical nature of a critical trial exhibit, the glove, and in evaluating the opinion of the Commonwealth’s witness that the streak on the jacket, another critical piece of evidence, was consistent with the pattern on the glove.” (FSA 1115). After analyzing all the relevant facts, and case law throughout the country, both on the state and federal level, the trial judge concluded that “the so-called ‘banana experiment’ did not constitute extraneous information which improperly affected the jury’s deliberations.” (FSA 1116).

The SJC agreed with the standard applied by Judge Chernoff, and confirmed that “[a] defendant is entitled to be tried by a jury that are impartial and whose deliberations are unaffected by extraneous matter.” Greineder I, 458 Mass. at 246, 936 N.E.2d at 401. After reviewing the facts and relevant law, the SJC held as follows:

Experimentation with an exhibit during deliberations is generally permissible if it is within the scope of the evidence presented at trial, duplicative of tests or demonstrations performed in the court room, or cumulative of evidence already in the record. See *Commonwealth v. Pixley*, 42 Mass.App.Ct. 927,

928-928, 677 N.E.2d 273 (1997), and cases cited. See also 2 McCormick, Evidence § 220, at 51 (6th ed. 2006) (critical difference is between experiments that constitute closer scrutiny of exhibit and experiments that go beyond lines of trial evidence).

The judge concluded that the experiment did not constitute extraneous matter. The judge found that the experiment was conducted to observe whether the glove was capable of making a pattern similar to the dots and swipe stain on the defendant's glasses and his jacket. He said it was "loosely based on the testimony and arguments presented at trial and did not invade a new field of evidence." The judge further found that the use of the banana, an outside object not part of the trial evidence, did not transform the experiment into extraneous matter. We agree.

The experiment was within the scope of the evidence presented at trial, and cumulative of expert testimony. It was an evaluation of the testimony of experts who opined on the consistency between the dots on the gloves and dots and swipe stains on various pieces of evidence. See *Banghart v. Origoverken, A.B.*, 49 F.3d 1302, 1306-1307 (8th Cir. 1995) (jury not exposed to extraneous evidence where they dropped toothpicks and matches not in evidence into wooden stove, a trial exhibit, in order to evaluate expert's testimony that experiments he conducted with stove showed it was defective). We discern no abuse of discretion or other error of law in the judge's determination that the jury experiment did not constitute extraneous matter. *Commonwealth v. Moore*, 408 Mass. 117, 125, 556 N.E.2d 392 (1990).

Greineder I, 458 Mass. at 247-48, 936 N.E.2d at 402. This conclusion is not an unreasonable application of Supreme Court law.

**D. Federal Law**

Greineder does not contend that the state courts applied an inappropriate standard. Thus, it is indisputable that "the right to jury trial guarantees to the criminally accused a fair trial by a panel of impartial, 'indifferent' jurors. The failure to accord an accused a fair hearing violates even the minimal standards of due process." Turner v. Louisiana, 379 U.S. 466, 471-72, 85 S. Ct. 546, 549, 13 L. Ed. 2d 424 (1965) (internal quotation and citation omitted). The verdict "must be based upon the evidence developed at the trial." Id. at 472. "Jury exposure to facts

not admitted during trial violates the sixth amendment right to trial by jury by permitting evidence to reach the jury which has not been subjected to confrontation or cross-examination and to which counsel has not had the opportunity to object or request a curative instruction.”

Lacy v. Gardino, 791 F.2d 980, 983 (1st Cir. 1986). Nevertheless, as the case law makes clear, there is nothing wrong with the jury engaging in experiments, or reenactments, even those using outside objects, in order to better understand the evidence presented during trial. See Banghart v. Origoverken, A.B., 49 F.3d 1302, 1306-07 (8th Cir. 1995), and cases cited. Here, the trial judge and the SJC carefully reviewed the relevant cases and concluded that the banana experiment fell within the cases holding that the jury had not been subjected to extrinsic evidence. This conclusion is not an unreasonable application of Supreme Court law. Therefore, the habeas petition on this ground should be denied. See Kurina v. Thieret, 853 F.2d 1409, 1413-14 (7th Cir. 1988) (jury re-creation of evidence using a cardboard knife they had made to determine if killer was right-handed was simple experiment based solely on evidence presented and did not constitute extrinsic evidence). “There is simply no constitutional command preventing a jury from using common sense and ordinary and uninflammatory props to reenact a crime in the privacy of the jury room.” United States v. Abeyta, 27 F.3d 470, 477 (10th Cir. 1994).

## **X. JURY'S VIEW OF BACK OF JACKET**

Greineder contends that his constitutional right to a jury verdict based solely on the evidence presented in the courtroom was violated when his complete bright yellow jacket was sent as an exhibit to the jury room despite the fact that the trial judge had previously ruled that spatter marks on the back of the jacket were inadmissible because there was no expert testimony identifying the marks as blood. This issue was first presented after the SJC had affirmed Greineder's conviction. For the reasons detailed herein, this court concludes that this error does not rise to the level of a constitutional violation, and habeas relief is not appropriate.

### **A. Relevant Facts**

#### **Trial Testimony**

One of the pieces of evidence linking Greineder to his wife's murder was the blood-stained yellow nylon windbreaker jacket that he was wearing that morning. (SA 483). There were bloodstains on the front shoulders, upper sleeves and elbow, and chest area of the jacket, as well as a stain all along the left arm and cuff that ended abruptly about two inches from the end of the sleeve. (SA 484). In addition, the jacket was saturated with blood in the inner collar and upper chest areas, with smears along the arms and chest. (*Id.*). All of these stains were clearly visible, and were the subject of expert testimony. (SA 483-84). The prosecution also sought to introduce evidence about stains on the back of the jacket. Specifically, “[t]he prosecutor proffered that Ron Englert, a crime scene reconstructionist, would testify that stains on the right back quadrant of the jacket were cast-off stains, consistent with the defendant inflicting a blow on his wife with a weapon, then raising his arm above his head and stopping his arm. When the weapon stopped, small droplets of blood kept going and landed on the back of

the jacket." (SA 483). In contrast to the stains on the front of the jacket, the stains on the back were not visible to investigators until the back of the jacket was treated with amido black, a stain which is used to detect the presence of protein. (Id.). Amido black shows any contact with a protein, not necessarily blood. (SA 485). While the prosecution was prepared to offer expert testimony that the stains on the back were cast-off stains, the experts could not testify to a reasonable degree of scientific certainty that they were blood since the stains had not been tested. (SA 484, 486).

Prior to trial, defense counsel filed a motion in limine to exclude certain evidence of blood spatter interpretation. (SA 483). The court did not make a ruling at that time. (Id.). During trial, on June 5, 2001, the jacket was entered into evidence and there was testimony about the visible blood stains on the jacket. (SA 484). On June 13, 2001, the trial judge conducted a voir dire of Ron Englert, the crime scene reconstructionist, outside the presence of the jury, concerning the stains on the back of the jacket. (Id.). He later held another voir dire of State Police Officer Kenneth Martin of the Chief Medical Examiner's Officer, who was an expert in bloodstain pattern analysis, outside the presence of the jury as well. (SA 486). On the evening of June 14, 2001, the trial judge entered an order concluding that "the attention of expert witnesses may be drawn to the markings on the back of the jacket and their testimony may include the following (a) that through the use of amido black, the markings show a deposit of a liquid protein substance, (b) that blood is one of many proteins for which amido black yields a positive result, and (c) that the stains on the back of the jacket comprise a pattern consistent with the cast-off of a liquid protein substance." (SA 486-87). In his order, the trial

judge concluded that “on all of the evidence, the jury might reasonably infer that the source of the stains was blood.” (SA 486).

Several hours later, the trial judge reconsidered his decision. He concluded that while “[i]t is clear that the Commonwealth can establish through expert testimony that testing on the back of the jacket was positive for a number of stains of a protein substance and that the configuration of these stains was very consistent with the pattern made by a cast-off liquid, i.e., liquid cast off from an implement being propelled from the front to the back of the wearer of the jacket[,]” no expert could say “within a reasonable degree of scientific certainty that the protein substance on the back of the jacket was blood” since it had not been tested. (SA 487). The possibility remained, however, that the stains could be tested to determine the source of the protein. (SA 487-88). The court concluded that “[a]s it now stands, the evidence is barely relevant and its prejudicial effect would greatly outweigh its probative value. Hence, evidence of the presence of protein on the back of the jacket and its cast-off configuration will be excluded.” (SA 488).

The judge and counsel discussed various ways to exclude the back of the jacket from the view of the jury, including cutting out the back or covering it up, and/or the possibility of limiting instructions. (SA 488-89). No resolution was reached and the matter was dropped by everyone. The jacket went to the jury without any limiting instructions or restrictions on the view of the back of the jacket. (SA 489-90).

During trial, the jury heard expert testimony from Michael French, an examiner with the Keene County Sheriff’s Office in Seattle, who had treated the yellow jacket with amido black at the processing lab in Seattle and photographed the result. (SA 484-85). He testified about

amido black, "a chemical which stains proteins a dark blue or black color and is used to enhance stains for better visualization." (SA 484). He testified further that the stain appears if there is "[a]ny contact with protein[.]" (SA 485). The jury also heard expert testimony from Trooper Martin, about cast-off, and what causes it. (SA 485-86). He also testified "that the stains on the right front side and sleeves of the jacket were blood impact spatter, indicating close proximity to a bloodshed incident. Martin further testified that there were transfer stains on the right sleeve shoulder and left sleeve indicating that something bloody came in contact with those surfaces." (SA 485). Englert also testified about the basic properties of blood and bloodstain analysis. (SA 489). He "opined that small stains on the left and right sleeves of the yellow jacket were consistent with medium velocity spatter. He also identified a contact transfer stain on the sleeve, and a hair transfer stain on the left sleeve cuff. He identified reddish brown stains on the sleeves which covered an area of three by three inches and contained voids, and opined that these were consistent with a grabbing type of transfer stain. Englert testified that the stains on the jacket were consistent with touching and moving the victim's body from the back." (SA 489-90).<sup>27</sup> The defense expert was Stuart James, a forensic scientist who performs crime scene reconstruction and bloodstain pattern analysis. (SA 490). James opined that bloodstains act differently on weather resistant nylon material, and that "medium velocity impact spatter is easily confused with satellite spatter, which occurs when small droplets

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<sup>27</sup> During cross-examination of Englert, defense counsel made what appears to be the only trial reference to the back of the jacket, when he asked whether the witness had taken notes and made diagrams about the significant stains he observed on the front and the back of the jacket. (SA 501). Defendant argues that at most what happened during cross-examination was that Murphy brought out the fact that Englert did not note any bloodstains on the back of the jacket prior to amido black being used. (Pet. Mem. at 205 n.70).

rebound from an initial impact of blood on a surface and fall into each other, forming a small pool. James opined that several areas of spatter on the yellow jacket could be impact spatter or spatter from a passive source." (Id.). He also testified about amido black, that it enhanced the stains on the Defendant's jacket, and that "protein based stains other than blood will also react" to amino black. (Tr. 6/22/01 (FSA 29) at 67-69).

The case went to the jury on June 26, 2001. (SA 490). Although given an opportunity to review the exhibits that went to the jury, no counsel objected to the jacket being sent to the jury. (See SA 560 & n.9). The jury returned its verdict on June 29, 2001. (SA 490).

#### Post-Trial Events

On October 9, 2012, Thomas Farmer, a Boston Herald reporter who covered the trial on a daily basis, and retired State Trooper Martin Foley, the lead police investigator in the case, published a book entitled "A Murder in Wellesley." (SA 490). Therein, the authors purported to discuss jury deliberations in detail based on interviews with jurors. The book contained the following passage:

Poring over every inch of the bloodstained evidence, the jurors made another startling discovery on the back of the nylon windbreaker that they had heard no testimony about. Discussing what could have caused the small, circular stains highlighted by amido black, they could come to only one conclusion. It had to be blood cast from an upraised weapon. Not knowing [Defense Counsel] Marty Murphy had convinced the judge to keep the incriminating pattern out of evidence because [ADA] Grundy could not prove it was May's blood after deciding not to remove the stain and have it tested, the astute jurors had found it anyway.

(SA 490). There is apparently no indication in the book as to what role, if any, the spatter on the back of the jacket played in the jury deliberations.

Several years later, on March 18, 2014, the Defendant filed a “Motion for Post-Verdict Jury Inquiry and New Trial” “on the ground that the jury’s consideration of the cast-off stains on the back of the jacket violated his Sixth Amendment . . . right to be convicted based solely upon evidence presented in the courtroom.” (SA 491, 510). By this time, Judge Chernoff had retired and the motion was heard by Judge Brassard. Judge Brassard held that while “[t]here is considerable argument that defense counsel’s failure to further pursue alteration of the jacket or seek a limiting instruction constitutes a waiver, given that the jury would not have been exposed to the allegedly extraneous evidence had action been taken to prevent it from seeing or considering the back of the jacket[,]” he would nevertheless address the merits of the Defendant’s claim, rather than rest on waiver, due to the seriousness of the claim. (SA 492). Judge Brassard declined to conduct a post-verdict inquiry of the deliberating jurors, finding that such an inquiry was disfavored, and that while Greineder had made “a colorable showing that the jury examined the cast-off stains on the back of the jacket during their deliberations[,]” a new trial was not warranted. (SA 496). Judge Brassard issued a lengthy opinion on July 24, 2014. (SA 482-507).<sup>28</sup>

#### The State Trial Court’s Ruling

As an initial matter, Judge Brassard ruled that the jury was not exposed to evidence that was extraneous to the trial. He determined that “Judge Chernoff’s primary concern was excluding expert testimony about the stains” and since the jacket was properly admitted as a

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<sup>28</sup> The decision also can be found at [Commonwealth v. Greineder](#), No. 2000-08588, 2014 WL 3715033 (Mass. Super. July 24, 2014). For convenience, this court will cite to the copy of the decision that was included in the Supplemental Answer.

trial exhibit, there also was properly admitted testimony “about how amido black reacts with protein and how bloodstain evidence may show distinctive cast-off patterns,” and the back of the jacket was mentioned during the cross-examination of Englert, despite the ruling excluding expert testimony on the subject. (SA 501-02). As a result, Judge Brassard ruled that “Greineder has not demonstrated by a preponderance of the evidence that the jury was exposed to extraneous evidence in violation of the Sixth Amendment.” (SA 502).

Critically, Judge Brassard ruled further that even if the jury was improperly exposed to and drew inferences about the stains on the back of the jacket, no new trial was warranted because there was “no reasonable possibility of prejudice.” (Id.). The judge recognized that the burden was on the Commonwealth “to prove beyond a reasonable doubt that the defendant was not prejudiced by the extraneous facts.” (SA 502 (citing, inter alia, Lacy v. Gardino, 791 F.2d 980, 983 (1st Cir. 1986))). The standard applied was “the probable effect of the extraneous facts on a hypothetical average jury.” (SA 503, and cases cited). The court could consider the strength of the evidence against the Defendant, the length of deliberations, and “whether the extraneous matter produced such a high probability of prejudice that error must be inferred.” (Id.). The court rejected the defense’s suggestion that it apply a presumption of prejudice requiring a new trial, since the jurors did not actively gather outside information, but, at most, examined a trial exhibit that had been sent to them in the jury room for their deliberations. (SA 503-04 (court rejects argument that it “should presume prejudice and grant a new trial because the jury in this case ‘took an active role in generating new evidence against the defendant.’”)).

Judge Brassard concluded that this was “not a case where the evidence against the defendant was weak, creating a reasonable possibility that extraneous facts impacted the jury in reaching a verdict.” (SA 505). He reviewed all of the extensive evidence that supported a guilty verdict. (SA 504-05). As he held:

A review of the record as a whole leads to the conclusion that the Commonwealth has demonstrated beyond a reasonable doubt that Greineder was not prejudiced by the jury's consideration of the cast-off stains on the back of the jacket. There was compelling evidence that the defendant killed his wife, including blood spatter on his shoes, shirt, pants, and jacket that showed he was present at the bloodshed event; scratches on his neck; blood transfer stains on his jacket consistent with grabbing the victim from behind and dragging her body backward; his spotless hands, which he denied washing, despite checking the victim's carotid artery for a pulse where she had a gaping neck wound that exposed tissue, muscle, blood vessels, and vertebra; a witness's observation of the defendant hurrying to and quickly reemerging from the path leading to the storm drains where the murder weapons were found; DNA evidence on the murder weapon and murder gloves linking him to those items; the bloody pattern of smudged dots from the murder gloves on his jacket and eyeglasses; the discovery of a second pair of gloves identical to the murder gloves concealed in a dog house in his yard; his involvement in sexual infidelity which he concealed from his wife, and his contacting a prostitute on the days immediately before and immediately after the murder; and consciousness of guilt evidence including his query to police at the scene whether he was going to be arrested, his refusal to give police his eyeglasses, his expression of fear when asked to turn over his clothing, his statement to police that the victim might have his skin under her fingernails from a back rub the night before, and his statement to his sister-in-law that after having simultaneous nosebleeds, he and the victim wiped their noses on the same towel, from which his DNA might have been transferred to her gloves.

(Id.). Finally, the judge held that “considering the entire record, the cast-off stains on the back of the jacket were not of a nature which produced a high probability of prejudice” nor did their existence “undermine the defense.” (SA 506-07).

In sum, the judge concluded, “[i]n light of the compelling evidence identifying Greineder as his wife's killer, there is no reasonable possibility that the cast-off stains, even if extraneous,

wounded him so as to warrant a new trial." (SA 507). In a footnote, the judge recognized that the Defendant had also argued ineffective assistance of counsel in failing to request the removal of the back of the jacket, but did not address that issue further since it would not change the result as there was no "substantial likelihood of a miscarriage of justice." (SA 507 n.3).

**The Ruling of the Single Justice of the SJC**

Greineder filed an application for leave to appeal the denial of his motion for a new trial with a Single Justice of the SJC, pursuant to Mass. Gen. Laws ch. 278, § 33E. The application was denied on December 30, 2014. (SA 589). The Single Justice concluded that the motion for a new trial did not present either a "new" or "substantial" question which ought to be decided by the full court. (SA 590, 592). Specifically, the Single Justice concluded that the issue was not new because it existed as of the time the jacket was sent to the jury without modification, and that error could have been addressed in Greineder's direct appeal. (SA 592). The issue was not substantial in that the trial judge applied the appropriate standard of review and "the motion judge acted well within his discretion in concluding that the presence of the back panel of the jacket was extremely unlikely to tip the scales of the jury's verdict because of the amount of evidence against the defendant and the jury's thoughtful deliberation on the extensive material before it." (SA 594-95).<sup>29</sup>

Like the motion judge, the Single Justice rejected the Defendant's argument that a new trial was necessary as a matter of law on the grounds that prejudice should be presumed since the jury had actively sought out extraneous information. (SA 594, and cases cited). The Single

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<sup>29</sup> The Single Justice described, but did not specifically adopt (or reject) the motion judge's ruling that the evidence should not be considered extraneous. (See SA 593-94).

Justice ruled that where, as here, the jury considered information before it due only to an oversight by the parties and the Court, it was appropriate to determine whether the Defendant had been prejudiced by the error. (SA 594). The Court had “to determine the probable effect of the extraneous facts on a hypothetical average jury.” (Id.). The Single Justice agreed with the motion judge that “[t]he oversight of the back panel of the jacket, if not already waived and then also considered extraneous information, would have had little to no significant prejudicial effect on a hypothetical average jury.” (SA 594-95).

**B. Habeas Claims**

Defendant takes exception to the motion judge’s findings and legal rulings, and argues that the conclusion that there was no prejudice “is unreasonable.” (Pet. Mem. at 202-07). He also argues, in the alternative, that “defense counsel provided ineffective assistance in allowing the jacket to go to the jury without any objection or attempt to redact or conceal the stains on the back of the jacket.” (Id. at 207). In addition to disputing the Defendant’s arguments on the merits, the Commonwealth contends that the issue has been procedurally defaulted. For the reasons detailed herein, this court finds that there was a procedural default, but that the Defendant has asserted that there was “cause” for the default in the form of ineffective assistance of counsel. Nevertheless, this court recommends that the habeas petition be denied, as the state courts’ conclusion that there was no prejudice was not contrary to nor an unreasonable application of Supreme Court law. Nor is it based on an unreasonable determination of the facts in light of the evidence presented.

### 1. Procedural Default

“[A]s a general matter, a federal habeas court will not review a claim rejected by a state court if the decision of the state court rests on a state law ground that is independent of the federal question and adequate to support the judgement[.]” Lee v. Corsini, 777 F.3d 46, 54 (1st Cir. 2015) (internal punctuation and citation omitted). The habeas court must “look to the ‘last reasoned opinion’ of the state court to discern the grounds for its decision.” Id. (quoting Ylst v. Nunnemaker, 501 U.S. 797, 803, 111 S. Ct. 2590, 2595, 115 L. Ed. 2d 706 (1991)). The parties agree that a “Single Justice’s finding that a petitioner has not raised a ‘new-and-substantial’ question for further review constitutes a finding of procedural default under state law.” Costa v. Hall, 673 F.3d 16, 23 (1st Cir. 2012) (internal citation omitted). Specifically, a finding by a Single Justice that an issue is not “new” constitutes a procedural default, while a finding that the issue is new but not substantial does not. See id. at 23-24. In the instant case, the Single Justice clearly concluded that the issue raised regarding the back of the jacket was not new. Nevertheless, Greineder argues that this finding of fact was not supported by the record, since the issue was first made known with the publication of the book in 2014. (Pet. Reply Mem. at 23-25). This court disagrees.

As the Single Justice concluded, “[t]he act that the defendant challenges in this appeal is not the use of the jacket during deliberations, but rather its unadulterated submission to the jury after they had been instructed by the judge.” (SA 592). The fact that the jury was given the jacket without restrictions was known, or could have been known, to the Defendant at the time the jury was sent to deliberate. The “effect [of the book’s publication] was merely to draw the defendant’s attention belatedly to an issue he could have addressed earlier.” (SA 592).

This finding, which is clearly supported by the evidence, mandates the conclusion that there was a procedural default which, unless excused, precludes this habeas court from reviewing the state court decisions.<sup>30</sup>

An exception to the bar exists if “the prisoner can demonstrate cause for the default and actual prejudice as a result of the alleged violation of federal law, or demonstrate that failure to consider the claims will result in a fundamental miscarriage of justice.” Coleman v. Thompson, 501 U.S. 722, 750, 111 S. Ct. 2546, 2565, 115 L. Ed. 2d 640 (1991). Ineffective assistance of counsel may constitute “cause” for the default. Lynch v. Ficco, 438 F.3d 35, 46 (1st Cir. 2006). “A habeas petitioner complaining of ineffective assistance of counsel as a basis to show cause for procedural default must show (1) ‘that counsel’s representation fell below an objective standard of reasonableness,’ and (2) that ‘any deficiencies in counsel’s performance [were] prejudicial to the defense,’ in that ‘there is a reasonable probability that, but for counsel’s unprofessional errors, the result of the proceeding would have been different[.]’” Id. (quoting Strickland v. Washington, 466 U.S. at 688, 692, 694, 104 S. Ct. at 2064, 2067, 2068). In the instant case, Greineder argues that his counsel was ineffective for failing to make sure that the spatters on the back of the jacket did not go to the jury. Even assuming that counsel’s conduct “fell below an objective standard of reasonableness,”<sup>31</sup> Greineder must show that he

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<sup>30</sup> In light of this ruling, this court does not need to address whether the delay between the book’s publication and the filing of the motion for a new trial constituted a waiver of the challenge to the evidence submitted to the jury.

<sup>31</sup> This court recognizes that the Commonwealth argued to the Single Justice that there was no evidence of ineffective assistance of counsel since it could have been a “sound strategic reason[] for having the intact jacket go to the jury.” (SA 583). “Having succeeding in having testimony on amido black and cast-off blood spatter as to the back of the jacket excluded, trial counsel could have decided that jurors

was prejudiced thereby. Similarly, if counsel's conduct did not fall below the objective standard of reasonableness, "cause" for a new trial would be warranted only if he was able to prove a risk of a fundamental miscarriage of justice. He cannot meet either standard.<sup>32</sup>

## **2. There Is No Basis To Disturb The Conclusion Of No Prejudice**

The state courts used the "harmless error" standard applied in federal court where a jury is subjected to extraneous evidence. See Lacy, 791 F.2d at 983, and cases cited. Under federal law, "[a] jury's consideration of extrinsic information is susceptible to harmless-error analysis, and an error will be deemed harmless if 'the beneficiary of . . . [the] constitutional error [can] prove beyond a reasonable doubt that the error complained of did not contribute to the verdict obtained.'" United States v. Santana, 175 F.3d 57, 65 (1st Cir. 1999) (internal citation omitted). After reviewing all of the facts of the case, the state courts concluded that the weight of the evidence against Greineder, the fact that the evidence was not of the type that is inherently prejudicial, and the fact that the evidence did not undermine the Defendant's theory, among other things, compelled the conclusion that there was no prejudice to the Defendant. The defense has not proffered any argument to establish that this conclusion is contrary to or an unreasonable application of Supreme Court law.

The Defendant keeps repeating that the jury's view of the jacket was prejudicial, but offers no support for this conclusion other than (1) the trial judge found that it was prejudicial

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would not place much import on it. Trial counsel could have decided that cutting the jacket in the midst of trial would draw unwanted attention." (Id.).

<sup>32</sup> In light of this conclusion, this court will not address the motion judge's ruling that the jury was not subjected to extraneous evidence.

when precluding expert testimony on the spatter on the back of the jacket, and (2) the “extraneous information fit precisely into the Commonwealth’s theory of the case[.]” (See Pet. Reply Mem. at 25). However, there was evidence of blood spatter on various parts of the Defendant’s jacket. Assuming that the jury did believe that the back of the jacket contained blood spatter (and there is no evidence that the jury relied on any such conclusion), the Defendant has offered no theory as to why such a belief would be more persuasive than the testimony about the undisputed blood on the other parts of the jacket, which were the subject of extensive expert testimony. Moreover, the Defendant has not proffered any theory which would be supported by the assumption that the spatter on the back of the jacket was something other than blood. In short, the state courts’ conclusion that an assumption that the back of the jacket contained blood spatter would not have tipped the verdict in favor of guilty is more than reasonable. Similarly, any assumption that the back of the jacket contained blood spatter did nothing to undermine any defense the Defendant presented. There is no basis on habeas review to disturb the state courts’ conclusion that any error was harmless.

**XI. CONCLUSION**

For all the reasons detailed herein, this court recommends to the District Judge to whom this case is assigned that Greineder's habeas petition be DENIED.<sup>33</sup>

/s / Judith Gail Dein

Judith Gail Dein

United States Magistrate Judge

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<sup>33</sup> The parties are hereby advised that under the provisions of Fed. R. Civ. P. 72 any party who objects to these proposed findings and recommendations must file a written objection thereto with the Clerk of this Court within 14 days of the party's receipt of this Report and Recommendation. The written objections must specifically identify the portion of the proposed findings, recommendations or report to which objection is made and the basis for such objections. The parties are further advised that the United States Court of Appeals for this Circuit has repeatedly indicated that failure to comply with this Rule shall preclude further appellate review. See Keating v. Sec'y of Health & Human Servs., 848 F.2d 271, 275 (1st Cir. 1988); United States v. Valencia-Copete, 792 F.2d 4, 6 (1st Cir. 1986); Park Motor Mart, Inc. v. Ford Motor Co., 616 F.2d 603, 604-605 (1st Cir. 1980); United States v. Vega, 678 F.2d 376, 378-79 (1st Cir. 1982); Scott v. Schweiker, 702 F.2d 13, 14 (1st Cir. 1983); see also Thomas v. Arn, 474 U.S. 140, 153-54, 106 S. Ct. 466, 474, 88 L. Ed. 2d 435 (1985). Accord Phinney v. Wentworth Douglas Hosp., 199 F.3d 1, 3-4 (1st Cir. 1999); Henley Drilling Co. v. McGee, 36 F.3d 143, 150-51 (1st Cir. 1994); Santiago v. Canon U.S.A., Inc., 138 F.3d 1, 4 (1st Cir. 1998).

134 S.Ct. 166  
Supreme Court of the United States

Dirk K. GREINEDER, petitioner,  
v.  
MASSACHUSETTS.

No. 12-10743.

|  
Oct. 7, 2013.

**Opinion**

Petition for writ of certiorari to the Supreme Judicial Court of Massachusetts denied.

**All Citations**

571 U.S. 865, 134 S.Ct. 166 (Mem), 187 L.Ed.2d 114, 82 USLW 3183

**Synopsis**

Case below, [464 Mass. 580, 984 N.E.2d 804](#).

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↳ Sources of data

 KeyCite Yellow Flag - Negative Treatment  
Distinguished by [Com. v. Jones](#), Mass., September 21, 2015  
464 Mass. 580  
Supreme Judicial Court of Massachusetts,  
Norfolk.  
  
COMMONWEALTH  
v.  
Dirk K. GREINEDER.  
  
SJC-08866a.  
  
Submitted Nov. 8, 2012.  
  
Decided March 14, 2013.

Although facts and data not in evidence may form the basis of an expert witness's opinion testimony, the expert may not present on direct examination the specific information on which he or she relied, because expert testimony to the facts of the test results obtained by someone else is hearsay.

[17 Cases that cite this headnote](#)

[\[2\] Criminal Law](#)

↳ Sources of data

Even though an expert may not present on direct examination the specific information on which he or she relied in forming her expert opinion, an expert may be required to disclose the facts or data that formed the basis of the expert opinion on cross-examination; disallowing direct testimony to the hearsay basis of an expert opinion helps prevent the offering party from slipping out-of-court statements not properly in evidence in through the back door.

[25 Cases that cite this headnote](#)

[\[3\] Criminal Law](#)

↳ Sources of data

[Criminal Law](#)

↳ Out-of-court statements and hearsay in general

In Massachusetts, a distinction is drawn between an expert's opinion on the one hand and the hearsay information that formed the basis of the opinion on the other, holding the former admissible and the latter inadmissible, because the admission of expert opinion but exclusion of its hearsay basis protects a criminal defendant's constitutional right to confront witnesses. [U.S.C.A. Const.Amend. 6](#).

[6 Cases that cite this headnote](#)

West Headnotes (7)

[\[1\] Criminal Law](#)

[4] **Criminal Law**

↳ Sources of data

**Criminal Law**

↳ Out-of-court statements and hearsay in general

Holding of United States Supreme Court in *Williams v. Illinois*, that admission of evidence of the basis of an expert's independent opinion did not violate the confrontation clause, did not require any change to Massachusetts rule allowing expert to testify to his or her independent opinion even if based on data not in evidence, and not allowing expert witnesses to testify to the specifics of hearsay information underlying the opinion on direct examination; *Williams* did not interpret the confrontation clause to exclude an expert's independent opinion testimony, even if based on facts or data not in evidence and prepared by a nontestifying analyst, and Massachusetts rule was more protective of defendant's rights than the confrontation clause. [U.S.C.A. Const.Amend. 6.](#)

[26 Cases that cite this headnote](#)

[5] **Criminal Law**

↳ Out-of-court statements and hearsay in general

Defendant's confrontation rights were not violated at murder trial by admission of testimony of DNA expert that defendant's DNA matched the DNA found on a knife and two gloves recovered from the crime scene, despite expert's reliance on the DNA test results obtained by a nontestifying analyst to form the basis of her opinion; defendant had meaningful opportunity to cross-examine expert on reliability of data that formed her opinion. [U.S.C.A. Const.Amend. 6.](#)

[18 Cases that cite this headnote](#)

[6]

**Criminal Law**

↳ Out-of-court statements and hearsay in general

Admission of forensic expert opinion testimony, even if based on independently admissible facts or data not in evidence, does not violate a criminal defendant's confrontation rights for two principal reasons; first, an expert witness is subject to cross-examination regarding that testimony, and second, the expert witness also can be meaningfully cross-examined about the reliability of the underlying data. [U.S.C.A. Const.Amend. 6.](#)

[8 Cases that cite this headnote](#)

[7]

**Criminal Law**

↳ Reception of evidence

Defendant was not prejudiced at murder trial by erroneous admission, in violation of defendant's confrontation rights, of expert testimony of forensic laboratory director as to details of DNA test results obtained by staff member; expert's opinion testimony as to her own independent evaluation of the data was admissible, counsel prepared and pursued two effective strategies as a response to very high likelihood opinion would be admitted, and counsel benefited from staff member not testifying because counsel was able to frustrate testimony at points where witness simply had no knowledge about analytical choices made by staff member, which likely reflected negatively on witness's credibility. [U.S.C.A. Const.Amend. 6.](#)

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Present: IRELAND, C.J., SPINA, CORDY, BOTSFORD, GANTS, DUFFLY, & LENK, JJ.

## Opinion

SPINA, J.

\*581 This case is again before us after the United States Supreme Court, in *Greineder v. Massachusetts*, — U.S. —, 133 S.Ct. 55, 183 L.Ed.2d 699 (2012), vacated the judgment and remanded *Commonwealth v. Greineder*, 458 Mass. 207, 936 N.E.2d 372 (2010) (*Greineder*), to this court. The remand came with instructions to give the case further consideration in light of the recent Supreme Court decision in *Williams v. Illinois*, — U.S. —, 132 S.Ct. 2221, 183 L.Ed.2d 89 (2012) (*Williams*). Our review proceeds accordingly, and we conclude that *Williams* does not require us to change our jurisprudence.<sup>1</sup> Therefore, we affirm the defendant's conviction and the order denying his motion for a new trial.

1. *Greineder*. A recitation of the underlying facts is unnecessary as the facts have been fully set forth in our decision in *Greineder, supra*, which we incorporate by reference. We do, however, briefly recount our previous determination that the \*582 trial judge properly admitted the expert opinion of Dr. Robin Cotton, the forensic laboratory director of Cellmark Diagnostics laboratory (Cellmark), a private deoxyribonucleic acid (DNA) testing laboratory, that the defendant's DNA matched the DNA found on a knife and two gloves recovered from the crime scene, despite Cotton's reliance on the DNA test results obtained by a nontestifying analyst to form the

basis of her opinion. *Greineder, supra* at 236, 936 N.E.2d 372. We held that such expert opinion testimony did not violate the defendant's confrontation right pursuant to the Sixth Amendment to the United States Constitution<sup>2</sup> "because the expert witness [was] subject to cross-examination about her opinion, as well as 'the risk of evidence being mishandled or mislabeled, or of data being fabricated or manipulated, and as to whether the expert's opinion [was] vulnerable to these risks.' " *Id.*, quoting *Commonwealth v. Barbosa*, 457 Mass. 773, 791, 933 N.E.2d 93 (2010), cert. denied, — U.S. —, 131 S.Ct. 2441, 179 L.Ed.2d 1214 (2011) (*Barbosa*). We did, however, determine that Dr. Cotton's testimony concerning the details of the nontestifying analyst's DNA test results (illustrated by charts marked as chalks) was admitted in error. *Greineder, supra* at 237, 936 N.E.2d 372 (testimony concerning data, "while providing basis for [the] opinion, was hearsay"). Our review proceeded under the prejudicial error standard, and (for reasons we elaborate on *infra*) we determined that the defendant suffered no \*\*807 prejudice on account of the erroneous admission of the data that formed the basis of Dr. Cotton's expert opinion. *Id.* at 239, 936 N.E.2d 372. As to that issue, we accordingly declined to grant relief under G.L. c. 278, § 33E, and affirmed the defendant's conviction and the denial of his motion for a new trial. *Id.* at 255–256, 936 N.E.2d 372.

2. *Massachusetts evidentiary rule on bases of expert opinion testimony*. We begin our analysis of the continued validity of our approach to protecting the confrontation right of criminal defendants with a brief review of the Massachusetts evidentiary rule on expert opinion testimony and its permissible bases. The traditional rule was that an expert's opinion had to be based either on evidence in the record or on facts of which the expert \*583 had direct, personal knowledge. See *Barbosa, supra* at 784–785, 933 N.E.2d 93. In *Department of Youth Servs. v. A Juvenile*, 398 Mass. 516, 531, 499 N.E.2d 812 (1986), we expanded the permissible bases of expert opinion testimony to include "facts or data not in evidence if the facts or data are independently admissible and are a permissible basis for an expert to consider in formulating an opinion." Compare *Mass. G. Evid.* § 703 (2012), with *Fed.R.Evid.* 703 (expert opinion may be based on "inadmissible" facts or data). To determine "independent admissibility," courts consider whether the underlying facts or data would be admissible through an appropriate witness. See *Commonwealth v. Markgart*, 437 Mass. 331, 337–338, 771 N.E.2d 778 (2002), quoting *Department of Youth Servs. v. A Juvenile, supra*. See also *Mass. G. Evid.*, *supra* at § 703, note at 219 (DNA analyst may testify to tests personally conducted). As long as "independently admissible," expert opinion may be based

on facts or data not actually admitted in evidence.

[1] [2] Although facts and data not in evidence may form the basis of an expert witness's opinion testimony, the expert may not present on direct examination the specific information on which he or she relied, see *Commonwealth v. McNickles*, 434 Mass. 839, 857, 753 N.E.2d 131 (2001), and cases cited, because expert testimony to the "fact[s] of the test results obtained by someone else ... [is] hearsay." *Commonwealth v. Evans*, 438 Mass. 142, 152, 778 N.E.2d 885 (2002), cert. denied, 538 U.S. 966, 123 S.Ct. 1763, 155 L.Ed.2d 521 (2003). See *Commonwealth v. Cohen*, 412 Mass. 375, 393, 589 N.E.2d 289 (1992), quoting McCormick, *Evidence* § 246, at 729 (3d ed. 1984) (defining hearsay as statement, other than one made by declarant testifying at trial or hearing, offered in evidence to prove truth of matter asserted). The expert may, however, be required to disclose the facts or data that formed the basis of the expert opinion on cross-examination. See Mass. G. Evid., *supra* at § 705, at 223. Disallowing direct testimony to the hearsay basis of an expert opinion helps prevent the offering party from slipping out-of-court statements not properly in evidence in through the "back door" (citation omitted). *Department of Youth Servs. v. A Juvenile*, *supra*. Our prohibition of expert testimony concerning a nontestifying analyst's test results (even where those results formed the basis of the expert's opinion), on grounds that such basis evidence is offered for its truth and, therefore, is hearsay, differs from evidentiary rules in some other jurisdictions. Under **Rule 703 of the Federal Rules of Evidence**, for example, an **\*584** expert witness may disclose the facts or data that formed the basis of the expert opinion during direct examination for the limited, nonhearsay purpose of explaining the bases for the expert opinion. See *Williams*, *supra* at 2239–2240 & n. 10, quoting Notes of Advisory Committee on Proposed Rules **\*\*808** to Fed.R.Evid. 703, 28 U.S.C. app. 361 (2000). The same is true in some States. See *Williams*, *supra* at 2234, citing Ill. Rule Evid. 703 (State evidence rule permitted introduction of basis of expert opinion where basis evidence not offered for its truth).

[3] In Massachusetts, we draw a distinction between an expert's opinion on the one hand and the hearsay information that formed the basis of the opinion on the other, holding the former admissible and the latter inadmissible. See *Department of Youth Servs. v. A Juvenile*, *supra* at 531–532, 499 N.E.2d 812. See also *Barbosa*, *supra* at 783–784, 933 N.E.2d 93 ("Where a Commonwealth expert testifies to her own opinion, the opinion is not hearsay, because the declarant of the opinion is testifying at trial"). The admission of expert opinion but exclusion of its hearsay basis protects a

criminal defendant's Federal and State constitutional right to confront witnesses. *Id.* at 783, 933 N.E.2d 93 ("our evidentiary rules and the Sixth Amendment are in harmony"). Expert opinion testimony, even if based on facts and data not in evidence, does not violate the right of confrontation because the witness is subject to cross-examination concerning his or her expert opinion and the reliability of the underlying facts and data. *Id.* at 785–786, 933 N.E.2d 93.

3. *Nexus between rules of evidence and right of confrontation.* To illustrate "the intersection between our common-law rules of evidence concerning expert testimony and the constitutional right of confrontation," *id.* at 783, 933 N.E.2d 93, we highlight several foundational cases decided in the wake of the Supreme Court's monumental Sixth Amendment decision in *Crawford v. Washington*, 541 U.S. 36, 124 S.Ct. 1354, 158 L.Ed.2d 177 (2004) (*Crawford*),<sup>3</sup> that concern a criminal defendant's confrontation right in the context of expert opinion testimony that relies on a nontestifying analyst's forensic test results.

Several years after *Crawford*, *supra*, we considered the admissibility of expert opinion and testimony to its basis in *Commonwealth \*585 v. Nardi*, 452 Mass. 379, 387–396, 893 N.E.2d 1221 (2008) (*Nardi*). One question presented was whether an expert witness could testify to the autopsy findings of a pathologist who performed the autopsy but was unavailable to testify at trial. *Id.* at 383, 391–396, 893 N.E.2d 1221. We concluded that the expert's direct testimony about the autopsy findings of the unavailable pathologist was inadmissible for two reasons.<sup>4</sup> *Id.* at 391–396, 893 N.E.2d 1221. We concluded that the findings were inadmissible because they constituted hearsay—the witness was plainly asserting the truth of the statements in the autopsy report—and did not fall within a hearsay exception. *Id.* at 394, 893 N.E.2d 1221. We also determined that the autopsy report was testimonial; thus, admission of testimony of an expert who did not author the autopsy report regarding **\*\*809** the details of the report violated the defendant's confrontation right.<sup>5</sup> *Id.* at 392, 394. *Nardi* also presented the question whether the expert's independent opinion regarding the victim's death that was based on findings in the nontestifying pathologist's report was admissible. *Id.* at 387–391, 893 N.E.2d 1221. We concluded that the expert's independent opinion was admissible because the autopsy report provided a permissible basis for its formulation. *Id.* at 388–389, 893 N.E.2d 1221, quoting *Commonwealth v. Markvart*, 437 Mass. 331, 337, 771 N.E.2d 778 (2002). Moreover, we held that admission of the expert's opinion testimony did not run afoul of the defendant's confrontation right under either the Federal or State

Constitution because the defendant had the opportunity to question the expert on the foundation of his opinion on cross-examination. *Nardi, supra* at 390–391, 893 N.E.2d 1221, citing *Commonwealth v. Daye*, 411 Mass. 719, 743, 587 N.E.2d 194 (1992).

Two years later,<sup>6</sup> in *Barbosa, supra* at 780–793, 933 N.E.2d 93, we employed \*586 the same reasoning that we used in *Nardi* in the context of an expert witness testifying to DNA test results, as opposed to autopsy results, of a nontestifying DNA analyst. The Commonwealth conceded that the portions of the expert witness's testimony that relayed the opinion and recited the results of the nontestifying DNA analyst were inadmissible because they were hearsay.<sup>7</sup> *Id.* at 782–783, 933 N.E.2d 93. As in our decision in *Nardi*, we nonetheless concluded that the defendant's right of confrontation was not violated by admission of expert opinion based on inadmissible hearsay absent the analyst's testimony, because the defendant "had a fair opportunity to confront [the expert] as to the reasonable basis for that opinion." \*\*810 *Barbosa, supra* at 786, 933 N.E.2d 93, citing *Nardi, supra* at 390, 893 N.E.2d 1221. We went on to address the unique factual context of objective chemical analysis, like DNA testing,<sup>8</sup> as distinct from the more subjective science of autopsy reporting. *Barbosa, supra* at 787–791, 933 N.E.2d 93. We noted that, "with DNA analysis, the testing techniques are so reliable and the science so sound \*587 that fraud and errors in labeling or handling may be the *only* reasons why an opinion is flawed." *Id.* at 790, 933 N.E.2d 93, citing National Research Council, Strengthening Forensic Science in the United States: A Path Forward 130 (2009). Furthermore, we "reject[ed] the premise that, in DNA analysis, there is no meaningful distinction between the opinion and the underlying fact finding." *Barbosa, supra* at 789, 933 N.E.2d 93. To the contrary, we determined that data indicating the presence of certain alleles that match a defendant's DNA profile is quite distinct from evidence of the statistical significance of the match.<sup>9</sup> *Id.* We concluded that "[e]vidence of a [DNA] match ... is meaningless without evidence indicating the significance of the match." *Id.*, quoting *Commonwealth v. Lanigan*, 419 Mass. 15, 20, 641 N.E.2d 1342 (1994).

In 2011, the Supreme Court addressed the constitutional sufficiency of "surrogate" testimony, or testimony of a person who did not perform or observe the laboratory analysis described in a blood alcohol report the prosecution sought to admit, as a vehicle for the admission of the nontestifying analyst's findings. *Bullcoming v. New Mexico*, — U.S. —, 131 S.Ct. 2705, 2709, 2714–2717, 180 L.Ed.2d 610 (2011) (*Bullcoming*). In its five-to-four decision in *Bullcoming*,

the Court held that the nontestifying analyst's report indicating \*588 the defendant's blood alcohol concentration, offered through the laboratory supervisor, was admitted in error. *Id.* at 2710. The Court reasoned that, far from "raw, machine-produced data," forensic test results are the product of independent judgment, and, as such, "are meet for cross-examination." *Id.* at 2714. Cross-examination of a surrogate witness, even \*\*811 one with supervisory authority over the nontestifying analyst, was, according to the court, insufficient. *Id.* at 2714–2715. The surrogate in *Bullcoming* could not "expose any lapses or lies" or "reveal whether incompetence, evasiveness, or dishonesty" may account for the forensic test results. *Id.* at 2715. Therefore, the Court determined that the Sixth Amendment precludes admission of forensic test results through surrogate testimony. *Id.* at 2710, 2713. Significant for our analysis is that Justice Sotomayor wrote separately to address the limits of *Bullcoming*: "[T]his is not a case in which an expert witness was asked for his *independent opinion* about underlying testimonial reports that were not themselves admitted into evidence.... [T]he State does not assert that [the surrogate witness] offered an independent, expert opinion." (Emphasis added.) *Id.* at 2722 (Sotomayor, J., concurring in part).

Later that year, in *Commonwealth v. Munoz*, 461 Mass. 126, 131–138, 958 N.E.2d 1167 (2011), vacated and remanded, — U.S. —, 133 S.Ct. 102, 184 L.Ed.2d 4 (2012) (*Munoz*),<sup>10</sup> we considered the continued validity of *Barbosa, supra*, in light of the Supreme Court's decision in *Bullcoming, supra*. *Munoz* concerned the expert testimony of a chemist who relied on a nontestifying chemist's raw data to form an independent opinion on the weight and composition of the cocaine seized from the defendant's vehicle.<sup>11</sup> *Id.* at 130–131. We drew a \*589 distinction between the facts in *Munoz* and those in *Bullcoming*: *Munoz*, like *Barbosa*, involved an expert's "*independent opinion* about underlying testimonial reports that were not themselves admitted into evidence" (emphasis added), *Munoz, supra* at 132, 958 N.E.2d 1167, quoting *Bullcoming, supra* at 2722 (Sotomayor, J., concurring in part), whereas *Bullcoming* concerned the admission, through a surrogate witness, of underlying data itself. *Munoz, supra* at 132–133, 958 N.E.2d 1167. We then noted that the outcome of *Bullcoming*—that a surrogate witness cannot introduce a nontestifying analyst's test results on direct examination—is in accord with the Massachusetts common-law prohibition of direct testimony about the underlying information that formed the basis of an expert's opinion testimony because such information is offered for its truth and therefore is hearsay. *Id.* at 132, 958 N.E.2d 1167 ("Our cases ... distinguish[ ] between a substitute analyst's testimony as

to independent opinions based on data generated by a nontestifying analyst, and a substitute analyst's testimony as to the testing analyst's reports and conclusions"). See *Nardi, supra* at 392–393, 893 N.E.2d 1221; *Commonwealth v. McNickles*, 434 Mass. 839, 857, 753 N.E.2d 131 (2001). Because the evidence the *Bullcoming* Court determined was erroneously admitted would have been excluded in Massachusetts, <sup>\*\*812</sup> we concluded that *Bullcoming* did not undermine our bifurcated approach to safeguarding a defendant's confrontation right, in which we admit an expert's opinion testimony but exclude its hearsay basis on direct examination. *Munoz, supra* at 133, 958 N.E.2d 1167. In *Munoz*, as in *Barbosa, supra*, we again rejected the view that "there is no meaningful distinction between the [expert] opinion and the underlying fact finding." *Munoz, supra* at 136 n. 13, 958 N.E.2d 1167, quoting *Barbosa, supra* at 789, 933 N.E.2d 93. We also asserted that a surrogate expert witness can be meaningfully cross-examined on the risks of error in the underlying forensic testing on which he or she relied. *Id.* at 133–136, 958 N.E.2d 1167. For these reasons, we concluded that an expert witness could still permissibly testify to his independent opinion, even if based on a nontestifying analyst's test results, without offending a criminal defendant's confrontation right under the Sixth Amendment of the United States Constitution or art. 12 of the Massachusetts Declaration of Rights. *Id.* at 130–131 & n. 7, 958 N.E.2d 1167.

**\*590 4. Consideration in light of *Williams*.** We turn now to our central task: to determine the import of *Williams* and then apply it to the facts of the present case. *Williams* concerned the testimony of a forensics expert who did not perform and was not even affiliated with the laboratory that performed the underlying DNA testing, but who used a nontestifying analyst's DNA test results in formulating her opinion that the DNA recovered from the victim matched the defendant's DNA. *Williams, supra* at 2227, 2229. In the course of her testimony, the expert referred to underlying DNA test results not admitted in evidence, despite her lack of personal knowledge that the DNA profile created by the nontestifying analyst was based on an analysis of the correct DNA sample. *Id.* at 2230, 2236. Disclosure of such basis evidence was permitted under the relevant State rules of evidence for the limited, nonhearsay purpose of showing the basis for the expert opinion.<sup>12</sup> *Id.* at 2231–2232, 2234–2235 & n. 2. See Notes of Advisory Committee on Proposed Rules to Fed.R.Evid. 703, 28 U.S.C. app. 361 (2000).

The *Williams* Court held that the admission of statements that disclosed information about underlying DNA testing performed by a nontestifying analyst that formed the basis of the expert opinion did not violate the Sixth

Amendment. *Id.* at 2228, 2240, 2244. The five Justices that reached this conclusion, however, differed in their reasoning. The plurality (four Justices) determined that the expert's basis evidence was not offered for its truth. *Id.* at 2228, 2231–2232, 2235, 2239–2240. Therefore, the underlying facts that formed the basis of the opinion were admissible under *Crawford* because *Crawford* "does not bar the use of testimonial statements for purposes other than establishing the truth of the matter asserted." *Id.* at 2235, quoting *Crawford, supra* at 59–60 n. 9, 124 S.Ct. 1354. Justice Thomas determined that admission of the expert's testimony to the underlying basis of her expert opinion did not violate the Sixth Amendment because the <sup>\*591</sup> nontestifying analyst's report was not testimonial;<sup>13</sup> <sup>\*\*813</sup> therefore, he concurred in the judgment. *Id.* at 2255, 2259–2260 (Thomas, J., concurring in the judgment). Justice Thomas differed from the plurality in that he concluded that the expert's basis testimony was, in fact, introduced for its truth. *Id.* at 2258–2259 (Thomas, J., concurring in the judgment). This view, that "[t]here is no meaningful distinction between disclosing an out-of-court statement so that the factfinder may evaluate the expert's opinion and disclosing that statement for its truth," *id.* at 2257 (Thomas, J., concurring in the judgment), was shared by the four Justices writing in dissent. *Id.* at 2268–2269 (Kagan, J., dissenting). The four dissenters also determined that the laboratory report that included the DNA test results ostensibly offered for the limited purpose of explaining the basis of the expert opinion was testimonial and, therefore, statements that implicated it were admitted in violation of the confrontation clause. *Id.* at 2265, 2273 (Kagan, J., dissenting). Importantly, however, the dissent concluded:

"There was nothing wrong with [the expert's] testifying that two DNA profiles—the one shown in the ... report and the one derived from [the defendant's] blood—matched each other; that was a straightforward application of [the expert's] expertise. Similarly, [the expert] could have added that *if* the ... report resulted from scientifically sound testing of [a DNA sample recovered from the victim], *then* it would link [the defendant] to the assault. What [the expert] could not do was what she did: indicate that the ... report *was* produced in [a particular] way...." *Id.* at 2270 (Kagan, J., dissenting).

Thus, no member of the Supreme Court plainly concluded that the expert opinion testimony was improper. See *id.* at 2235–2236 <sup>\*592</sup> (plurality opinion), 2245–2246 (Breyer, J., concurring), 2255 (Thomas, J., concurring in the judgment), 2270 (Kagan, J., dissenting).

<sup>[4]</sup> 5. *Import of Williams.* Of great significance for our present purposes is that *Williams* focused on the

admissibility of evidence of the basis of the expert's independent opinion, and not the admissibility of the expert opinion itself. See *id.* at 2227, 2236, 2240 (plurality opinion). Five members of the Supreme Court concluded, albeit for different reasons, that such basis evidence is admissible without violating a defendant's confrontation right. See *id.* at 2244 (plurality opinion), 2245, 2248 (Breyer, J., concurring), 2255 (Thomas, J., concurring in the judgment). As we explained earlier, under Massachusetts jurisprudence, a forensic expert's opinion that relies on the data or conclusions of a nontestifying analysis is bifurcated from its basis. We allow an expert to testify to his or her independent opinion even if based on data not in evidence; we do not allow expert witnesses to testify to the specifics of hearsay information underlying the opinion on direct examination. See *Nardi, supra* at 392–393, 893 N.E.2d 1221; *Commonwealth v. McNickles*, 434 Mass. 839, 857, 753 N.E.2d 131 (2001). Thus, our rules of evidence differ from the Illinois evidentiary rule implicated in *Williams* that, like the Federal rule, allows an expert to disclose the data on which the **\*\*814** expert's opinion is based for the nonhearsay purpose of explaining its basis. *Williams, supra* at 2234–2235, 2239–2240 (discussing *Ill. R. Evid. 703* and *Fed. R. Evid. 703*). The expert witness's testimony in *Williams* that implicated the DNA test results of a nontestifying analyst "would have been ... improper under long-standing Massachusetts law." *Commonwealth v. Munoz, supra* at 133, 958 N.E.2d 1167. Moreover, five Justices concluded that an expert's disclosure of the underlying facts from an unadmitted DNA report went to its truth and not the limited purpose of explaining the basis for the expert opinion. See *Williams, supra* at 2256–2257 (Thomas, J., concurring in the judgment); *id.* at 2268 (Kagan, J., dissenting). This reasoning supports the Massachusetts rule that an expert's testimony to the fact of a nontestifying analyst's test results is hearsay. See *Nardi, supra* at 392, 893 N.E.2d 1221.

Thus, our rules of evidence and the protections they afford **\*593** are not inconsistent with *Williams*.<sup>14</sup> *Williams* does not interpret the confrontation clause to exclude an expert's independent opinion testimony, even if based on facts or data not in evidence and prepared by a nontestifying analyst. See *Williams, supra* at 2270 (Kagan, J., dissenting) ("straightforward application" of expertise does not offend confrontation clause). See also *Bullcoming, supra* at 2722 (Sotomayor, J., concurring in part) (independent expert opinion based on facts not in evidence is admissible and does not implicate confrontation clause). Moreover, where five Justices concluded that admission of underlying facts that formed the basis of an expert's opinion did not offend the confrontation clause, *Williams* allows even more than an

expert's independent opinion in evidence. See *Williams, supra* at 2244 (plurality opinion), 2245–2246 (Breyer, J., concurring), 2255 (Thomas, J., concurring in the judgment). As is clear by now, our evidentiary rules afford a defendant more protection than the Sixth Amendment. See *Nardi, supra* at 392–394, 893 N.E.2d 1221. See also *Department of Youth Servs. v. A Juvenile*, 398 Mass. 516, 531, 499 N.E.2d 812 (1986). In fashioning more protective evidentiary rules than the Supreme Court would require, we necessarily satisfy the mandates of the Sixth Amendment. We can, and often do, afford criminal defendants greater protections, both under our common-law rules of evidence and the Massachusetts Constitution. See *Smith v. Commonwealth*, 420 Mass. 291, 295, 649 N.E.2d 744 (1995), citing *Commonwealth v. Aponte*, 391 Mass. 494, 506, 462 N.E.2d 284 (1984) ("Our State **\*594** Constitution often provides **\*\*815** to criminal defendants broader protection than does the Federal Constitution under similar provisions"). Compare *Commonwealth v. Tavares*, 385 Mass. 140, 150, 152, 430 N.E.2d 1198, cert. denied, 457 U.S. 1137, 102 S.Ct. 2967, 73 L.Ed.2d 1356 (1982), and cases cited (Massachusetts law requires both judge and jury to find voluntariness of confessions and admissions beyond a reasonable doubt), with *Jackson v. Denno*, 378 U.S. 368, 378, 84 S.Ct. 1774, 12 L.Ed.2d 908 (1964) (under Federal Constitution, only judge determines whether confession or admission is voluntary), and *Lego v. Twomey*, 404 U.S. 477, 489, 92 S.Ct. 619, 30 L.Ed.2d 618 (1972) (voluntariness of admission or confession by preponderance of evidence). One vehicle for ensuring that a criminal defendant realizes the constitutional right of confrontation is our evidentiary rule that only an expert's opinion and not its testimonial hearsay basis is admissible on direct examination.<sup>15</sup> This rule strikes an appropriate "balance between the jury's need to learn the factual basis of an expert's opinion and the danger that the Commonwealth would use an expert's opinion to inform the jury of facts not in evidence.... [This approach] is consistent with the right of confrontation ... even where the expert bases his opinion on testimonial evidence that is admissible but not admitted." *Barbosa, supra* at 785, 933 N.E.2d 93.

<sup>[5]</sup> <sup>[6]</sup> 6. *Application.* Forensic expert opinion testimony, even if based on independently admissible facts or data not in evidence, does not violate a criminal defendant's confrontation rights for two principal reasons. First, an expert witness is subject to **\*595** cross-examination regarding that testimony. Second, the expert witness also can be meaningfully cross-examined about the reliability of the underlying data. We consider this two-fold reasoning in light of the facts of the present case.

First, as concerns the opportunity to cross-examine a

forensics expert about his or her opinion, the defendant argues that the expert witness here did not, in fact, offer her independent opinion, but instead merely parroted the conclusions in Cellmark's report of the DNA test results. The multiple reports submitted by Cellmark included statistical calculations on the frequency that the genetic makeup recovered from evidence collected from the crime scene appears in the population, as well as conclusions regarding whether the defendant could be excluded as a source of DNA obtained from these samples. Nonetheless, and as we determined previously, **\*\*816** the record reflects that Dr. Cotton reviewed the nontestifying analyst's work, including six prepared reports, and then conducted an independent evaluation of the data.<sup>16</sup> *Greineder, supra* at 236, 936 N.E.2d 372. She then "expressed her own opinion, and did not merely act as a conduit for the opinions of others." *Id.* Moreover, we will not exclude expert opinion just because statistics indicating the significance of the genetic information have been included in the report provided to the expert. See *Nardi, supra* at 390, 893 N.E.2d 1221. In fact, similar views on the statistical significance of allelic information extrapolated from test samples only lends credence to an expert's independent opinion.

Second, the Massachusetts Association of Criminal Defense Lawyers (association), as amicus curiae, contends that an expert **\*596** witness cannot adequately testify to the reliability of the underlying forensic data that formed the basis of the expert's independent opinion. The association highlights the fallibility of DNA analysis, including its vulnerability to mishandling, manipulation, fabrication, and bias. But see National Research Council, Strengthening Forensic Science in the United States: A Path Forward, 7 (2009) ("With the exception of nuclear DNA analysis, ... no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source" [emphasis supplied]). The association also asserts that an expert cannot be cross-examined effectively on the subjective decisions a forensic analyst makes in developing a DNA profile.<sup>17</sup> Although we acknowledge that forensic test results as well as expert opinion testimony (like all testimony) may be imperfect, we nonetheless maintain, consistent with our jurisprudence, that forensics experts can be meaningfully cross-examined about the underlying data and the procedures and processes that led to its production. See *Barbosa, supra* at 791, 933 N.E.2d 93. See also *Munoz, supra* at 134, 958 N.E.2d 1167 ("Reasonable reliance ... implies that the expert will have ascertained that the data on which he or she **\*\*817** relies are adequate and appropriate to the task and were prepared in conformity

with accepted professional—here scientific—practices and procedures"). In fact, the expert witness in this case may be in the best position to speak to the testing processes at Cellmark and the resultant DNA profiles generated. Dr. Cotton was an expert in biology and DNA, and she was also the forensic laboratory director of Cellmark at the time of the trial. As such, she was in a unique position to speak to the DNA testing process employed by Cellmark, including the chain **\*597** of custody and evidence-handling protocols,<sup>18</sup> and other standardized procedures of Cellmark analysts. For example, and as we addressed in *Greineder, supra* at 238, 936 N.E.2d 372, Cellmark was "using a standard minimum interpretation threshold setting on its computer software" to analyze whether someone was included as a possible source of DNA found on evidence recovered from a crime scene. Midway through the testing of items in this case, Cellmark raised this minimum interpretation threshold. *Id.* Only a senior person within Cellmark could testify to the reasoning behind raising the standard interpretive threshold; the individual analyst who conducted the DNA testing would not have been similarly able. Not only was Dr. Cotton in a better position than an individual analyst to testify to the reliability and accuracy of Cellmark's testing procedures, she was also in a better position to testify meaningfully than the expert witness in *Williams*, whose testimony, which implicated the underlying forensic report, satisfied the mandates of the Sixth Amendment. *Williams, supra* at 2228, 2240, 2244. The forensics expert in *Williams* did not even work for Cellmark (which, as in this case, was the independent laboratory that produced a DNA profile from a sample collected from the victim), but instead worked for a laboratory run by the Illinois State Police. *Id.* at 2229. Although the expert in *Williams* could testify to the process of DNA analysis generally, she was not in as strong a position to testify to the details of Cellmark's DNA testing procedures as was Dr. Cotton.<sup>19</sup> Because there was a greater opportunity for **\*598** meaningful cross-examination of the expert witness in the present case as compared to the expert in *Williams*, we conclude that her opinion **\*\*818** testimony did not violate the defendant's confrontation right.<sup>20</sup>

Here, not only did the defendant have a meaningful opportunity to cross-examine Dr. Cotton on the reliability of the data that formed the basis of her expert opinion, his experienced trial counsel used the opportunity effectively. Trial counsel reviewed Cellmark's DNA testing process with Dr. Cotton on cross-examination, and had her acknowledge aspects of the process not governed by standard protocols. He challenged Dr. Cotton on Cellmark's minimum interpretation thresholds that, although they were raised mid-analysis, were still below

testing thresholds used elsewhere. *Greineder, supra* at 238, 936 N.E.2d 372. Trial counsel also elicited information from Dr. Cotton concerning how data filtering may affect DNA test results. A significant portion of trial counsel's cross-examination of Dr. Cotton was devoted to attacking the reliability of Cellmark's reported test results. *Id.* at 239, 936 N.E.2d 372. Thus, to the extent that DNA test results, with their "strong scientific underpinning," see *Barbosa, supra* at 788 n. 13, 933 N.E.2d 93, quoting National Research Council, *Strengthening Forensic Science* \*599 in the United States: A Path Forward 134 (2009), are vulnerable to error, the defendant did not want for opportunity to test the reliability of data underlying Dr. Cotton's expert opinion. *Greineder, supra* at 238–239, 936 N.E.2d 372. See *Williams, supra* at 2239 ("match also provided strong circumstantial evidence regarding the reliability of Cellmark's work"). Therefore, the confrontation clause's purpose—to ensure fair criminal trials based on reliable evidence—was served. See *Bullcoming, supra* at 2725 (Kennedy, J., dissenting); *Commonwealth v. Amirault*, 424 Mass. 618, 631, 677 N.E.2d 652 (1997), quoting *Maryland v. Craig*, 497 U.S. 836, 846, 110 S.Ct. 3157, 111 L.Ed.2d 666 (1990). That an expert may give an opinion but may not describe its hearsay basis on direct examination is "as sensible an approach to balancing the competing concerns as any." *Commonwealth v. Avila*, 454 Mass. 744, 762 n. 18, 912 N.E.2d 1014 (2009), quoting D.H. Kaye, D.E. Bernstein, & J.L. Mnookin, *The New Wigmore: A Treatise on Evidence—Expert Evidence* § 3.10.8, at 64 (Supp. 2009).

7. *A bifurcated approach: admitting opinion, but excluding its hearsay basis on direct examination.* The defendant challenges our bifurcation of admissible expert opinion from its inadmissible, hearsay basis. He argues that the two elements—the underlying facts that form the basis of an expert opinion and the expert opinion \*\*819 itself—are inextricably linked, at least in the context of DNA analysis. We disagree. There is a clear distinction between the allelic information that establishes genetic makeup and the statistical significance of the data that establishes how frequently a genetic combination appears in the population at large. See *Commonwealth v. Vao Sok*, 425 Mass. 787, 789, 790–791, 683 N.E.2d 671 (1997) (discussing alleles), 791 (statistical analysis). As we said in *Barbosa, supra* at 789, 933 N.E.2d 93, it is the statistical significance of a DNA match that is of greatest use to a jury; information about the prevalence of a particular gene combination gives meaning to the underlying fact of allelic presence. See *Commonwealth v. McCowen*, 458 Mass. 461, 484, 939 N.E.2d 735 (2010), citing *Barbosa, supra* ("the admission of the raw DNA testing results alone, even where the allele numbers

match, is meaningless to a jury"). Admittedly, Justice Kagan, dissenting in *Williams*, approached the relationship between underlying facts and the resultant opinion in the DNA context from a different end. \*600 She emphasized the importance of the underlying DNA test results to aid the jury in evaluating the credibility of the expert witness and the validity of his or her opinion. *Williams, supra* at 2268–2269 (Kagan, J., dissenting) ("If the [underlying out-of-court statement] is true, then the conclusion based on it is probably true; if not, not. So to determine the validity of the witness's conclusion, the factfinder must assess the truth of the out-of-court statement on which it relies"). Hearsay data underlying an expert's opinion testimony are admissible if elicited by the defendant on cross-examination (who, in the act of cross-examination waives his confrontation right, see *Barbosa, supra* at 785–786, 933 N.E.2d 93). See *Mass. G. Evid.* § 705 (2012). Therefore, basis evidence that is hearsay may become available to the jury to evaluate a witness's credibility. If a defendant does not open the door on cross-examination to the hearsay basis of an expert's opinion, then the jury may properly accord less weight to the expert's opinion. *Williams, supra* at 2239–2240. Should the prosecution wish to offer weightier testimony, then it should call either the author-analyst (assuming that person is qualified to testify to the statistical significance of the underlying data), or both the author-analyst and an expert, the former to testify to the underlying factual findings and the latter to interpret them.<sup>21</sup>

In support of its view that our evidentiary bifurcation of admissible expert opinion from its inadmissible hearsay basis on direct examination is not sufficiently protective of defendants' confrontation right,<sup>22</sup> \*\*820 the Committee for Public Counsel Services (CPCS), as amicus curiae, provides examples of cases where \*601 the prosecution has improperly elicited basis evidence that is hearsay from forensic experts on direct examination. Such cases, according to CPCS, demonstrate that an expert is unable to give a bare opinion without disclosure on direct examination of the nontestifying analyst's underlying test results or conclusions. We disagree. Indeed, despite our repeated insistence that such basis evidence is inadmissible, prosecutors do elicit basis evidence from forensic expert witnesses on direct examination. See, e.g., *Greineder, supra* at 236–237, 936 N.E.2d 372. We then have had to evaluate the effect of the erroneous admission given the applicable standard of review.<sup>23</sup> See, e.g., *id.* at 239, 936 N.E.2d 372. However, this does not indicate a flawed system. It merely reveals either a lack of emphasis on the prohibition of expert basis evidence on direct examination, or the scarcity of practical skills training to aid prosecutors in eliciting only opinion and not its

hearsay basis from expert witnesses.<sup>24</sup> Thus, we use the present opportunity to emphasize to judges that the hearsay bases of expert opinion testimony are inadmissible on direct examination. As concerns eliciting only the expert's opinion, the prosecutor, as a general matter, may first ask the expert for an opinion, given the expert's background and training and after review of the \*602 underlying data, whether the defendant, given his or her DNA profile authenticated by chain of custody evidence as having originated from the defendant, could be excluded as a possible source of DNA recovered from the crime scene, similarly authenticated by chain of custody evidence. See *id.* at 238, 936 N.E.2d 372. If the expert opines that the defendant could not be excluded as a possible contributor, a prosecutor may then elicit an expert's opinion on the significance of the DNA evidence. R.C. Michaelis, R.G. Flanders, Jr., & P.H. Wulff, *A Litigator's Guide to DNA: From the Laboratory to the Courtroom* 297–298 (2008). The prosecutor may ask the expert for his or her opinion on the statistical likelihood that the DNA profile found on the relevant exhibit would be found in an individual randomly selected from the population. See note 9, *supra*. See also *Williams, supra* at 2270 n. 2 (Kagan, J., dissenting) (assumptions, \*\*821 framed in hypothetical question “if X is true, then Y follows,” pass constitutional muster). See generally P.M. Lauriat & J.F. McHugh, *Massachusetts Expert Witnesses* § 6.1.2 (Mass. Cont. Legal Educ. 2d ed. 2010). Greater detail regarding specific allelic presence at various loci is unnecessary and, under our evidentiary rules, prohibited on direct examination of a forensics expert who did not conduct the underlying DNA testing.

[7] Granted, in this case, Dr. Cotton did testify to the details and results of the nontestifying analyst's DNA test results. *Greineder, supra* at 236–237, 936 N.E.2d 372. We held then and repeat now that this evidence elicited on direct examination was admitted in error. *Id.* at 237, 936 N.E.2d 372. We maintain, however, that the defendant was not prejudiced by the erroneous admission. As we determined in *Greineder, supra* at 239, 936 N.E.2d 372:

“Defense counsel made extensive use of the data prepared by [the nontestifying analyst] in his cross-examination of Dr. Cotton. This cross-examination buttressed

#### Footnotes

<sup>1</sup> We acknowledge the amicus briefs submitted by the Committee for Public Counsel Services; the Massachusetts Association of Criminal Defense Lawyers; and the Attorney General and the district attorneys for the Berkshire, Bristol, Cape and the Islands, Essex, Hampden, Middlesex, Northwestern, Suffolk, and Worcester districts.

two pillars of the defense, namely, the unreliability of Cellmark's testing procedures, which necessarily affected the credibility of Dr. Cotton's opinion as to the high probability of the defendant's being a contributor to the DNA on the knife and brown gloves, and the defense theory that a third party committed the murder.... Both strategies depended entirely on the use of [the nontestifying analyst's] data in \*603 cross-examination of Dr. Cotton.... The data were an integral part of the defense, and it was going to be the subject of inquiry by the defense whether [the nontestifying analyst] testified or not.”

8. *Conclusion.* For the reasons discussed above, Dr. Cotton's expert opinion that the defendant's DNA matched the DNA on items recovered from the crime scene was properly admitted. Expert opinion testimony, even that which relies for its basis on the DNA test results of a nontestifying analyst not admitted in evidence, does not violate a criminal defendant's right to confront witnesses against him under either the Sixth Amendment or art. 12 of the Massachusetts Declaration of Rights. Nothing in the Supreme Court's decision in *Williams v. Illinois*, — U.S. —, 132 S.Ct. 2221, 183 L.Ed.2d 89 (2012), is to the contrary. Dr. Cotton's direct testimony to the details of the DNA test results of a nontestifying analyst, however, was improperly admitted. Because the defendant was not prejudiced by the erroneous admission, we affirm his conviction and the denial of his motion for a new trial.

*So ordered.*

#### All Citations

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2 The defendant did not argue that art. 12 of the Massachusetts Declaration of Rights provides greater protection than the Sixth Amendment to the United States Constitution, and we did not address that issue. *Commonwealth v. Greineder*, 458 Mass. 207, 237 n. 9, 936 N.E.2d 372 (2010) (*Greineder*).

3 The Supreme Court, in *Crawford v. Washington*, 541 U.S. 36, 59, 124 S.Ct. 1354, 158 L.Ed.2d 177 (2004) (*Crawford*), held that “[t]estimonial statements of witnesses absent from trial [can be] admitted only where the declarant is unavailable, and only where the defendant has had a prior opportunity to cross-examine.”

4 There is an important distinction between satisfying the mandates of common-law evidentiary rules and satisfying the mandates of the confrontation clauses of the Federal and State Constitutions. In criminal cases, out-of-court statements are only admissible if they satisfy both; failure to satisfy either the applicable rules of evidence or the Federal and State Constitutions will result in the exclusion of evidence. See generally Mass. G. Evid., Introductory Note to art. VIII (2012), and cases cited.

5 Although we concluded that the expert’s testimony to the findings in the autopsy report on direct examination was admitted in error, we nonetheless determined that, in the circumstances of the particular case, its admission did not create a substantial likelihood of a miscarriage of justice and, therefore, a new trial was unwarranted. See *Commonwealth v. Nardi*, 452 Mass. 379, 395–396, 893 N.E.2d 1221 (2008) (*Nardi*).

6 In the interim, in *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 308–309, 311, 129 S.Ct. 2527, 174 L.Ed.2d 314 (2009) (*Melendez-Diaz*), the Supreme Court applied *Crawford*, *supra*, to forensic evidence and held that the admission of a chemical drug test report without the testimony of the analyst who performed the test violated the defendant’s Sixth Amendment confrontation right. One question *Melendez-Diaz* left unanswered was whether “admission into evidence of affidavits containing testimonial hearsay, would necessarily require the government to call [an analyst] to testify [where] her report [is] not admitted into evidence,” but is instead relied on as the basis for the independent opinion of a second analyst.” *Commonwealth v. Munoz*, 461 Mass. 126, 131, 958 N.E.2d 1167 (2011), vacated and remanded, — U.S. —, 133 S.Ct. 102, 184 L.Ed.2d 4 (2012) (*Munoz*), quoting *United States v. Pablo*, 625 F.3d 1285, 1295 (10th Cir. 2010), cert. granted and vacated, — U.S. —, 133 S.Ct. 56, 183 L.Ed.2d 699 (2012). We determined that “*Melendez-Diaz* did not purport to alter the evidentiary rules governing expert testimony.” *Commonwealth v. Barbosa*, 457 Mass. 773, 787, 933 N.E.2d 93 (2010), cert. denied, — U.S. —, 131 S.Ct. 2441, 179 L.Ed.2d 1214 (2011) (*Barbosa*), citing *Commonwealth v. Avila*, 454 Mass. 744, 762–763, 912 N.E.2d 1014 (2009). *Melendez-Diaz*, we concluded, “stands simply for the proposition that, under the Sixth Amendment right of confrontation, the Commonwealth may not offer an expert opinion in evidence unless the defendant has an opportunity to cross-examine *the expert*” (emphasis added). *Barbosa*, *supra*, citing *Melendez-Diaz*, *supra* at 311, 129 S.Ct. 2527.

7 However, as in *Nardi*, *supra*, the erroneous admission of testimony to the hearsay basis underlying the expert opinion did not create a substantial likelihood of a miscarriage of justice and, thus, did not warrant retrial. See *Barbosa*, *supra* at 792–793, 933 N.E.2d 93 (same).

8 For descriptions of deoxyribonucleic acid (DNA) testing, see *Commonwealth v. Vao Sok*, 425 Mass. 787, 789–792, 683 N.E.2d 671 (1997), and *Commonwealth v. Curnin*, 409 Mass. 218, 227–231, 565 N.E.2d 440 (1991) (Appendix).

9 Here, Dr. Cotton presented her opinion on the statistical likelihood that the DNA recovered from the crime scene that matched the defendant’s DNA profile would match an unrelated person in the general population. *Greineder*, *supra* at 217–218, 936 N.E.2d 372. See *Commonwealth v. Vao Sok*, *supra* at 791, 683 N.E.2d 671 (statistical significance of DNA analysis). She testified, for example, that a statistical analysis based on the match at four loci of the defendant’s DNA to DNA recovered from the knife found at the crime scene “indicated that one in 1,400 unrelated African–Americans and one in 2,200 unrelated Caucasians would be included with the defendant as possible secondary” sources of the DNA. *Greineder*, *supra* at 217, 936 N.E.2d 372. She further testified that “statistical analysis indicated one in fifteen million unrelated African–Americans, and one in 680,000 unrelated Caucasians could be included with the defendant as possible contributors” to DNA recovered from a left hand glove; and that “one in 680 million unrelated African–Americans and one in 170 million unrelated Caucasians would be included with the defendant as possible secondary contributors” to DNA recovered from a right hand glove similarly recovered from the crime scene. *Id.* at 217–218, 936 N.E.2d 372. Such statistical information is necessary because approximately “99.9% of DNA is identical between any two individuals”; only the remaining .1% of DNA is particular to a given individual. Federal Judicial Center, Reference Manual on Scientific Evidence 491 (2d ed. 2000). See *Commonwealth v. Vao Sok*, *supra* at 789, 683 N.E.2d 671, quoting *Commonwealth v. Curnin*, 409 Mass. 218, 228, 565 N.E.2d 440 (1991).

10 As in *Greineder*, the Supreme Court vacated the judgment in *Munoz*, *supra*, and remanded it for further consideration in light of *Williams v. Illinois*, — U.S. —, 132 S.Ct. 2221, 183 L.Ed.2d 89 (2012) (*Williams*). *Munoz* v.

*Massachusetts*, — U.S. —, 133 S.Ct. 102, 184 L.Ed.2d 4 (2012). The defendant in *Munoz* decided not to pursue the appeal before this court.

11 In *Munoz*, the Commonwealth conceded that the expert's testimony on direct examination that implicated a nontestifying analyst's data and conclusions violated the defendant's confrontation rights and was admitted in error. *Munoz*, *supra* at 130, 958 N.E.2d 1167, citing *Barbosa*, *supra* at 786, 933 N.E.2d 93. Thus, the issue in *Munoz*, *supra* at 131–133, 958 N.E.2d 1167, was only whether *Bullcoming v. New Mexico*, — U.S. —, 131 S.Ct. 2705, 2710, 180 L.Ed.2d 610 (2011) (*Bullcoming*), mandated a change in the Massachusetts evidentiary rules that permit expert *opinion* testimony even if based on testimonial hearsay. We concluded that it did not. *Munoz*, *supra* at 133, 958 N.E.2d 1167.

12 The *Williams* plurality distinguished *Williams* from *Bullcoming* on the ground that, in *Williams*, the expert's reference to the underlying forensic report, which was not introduced in evidence, was (at least, ostensibly) not offered to prove the truth of the matter asserted in the report. *Williams*, *supra* at 2240. In contrast, according to the *Williams* plurality, the forensic report admitted in evidence through the testimony of a "surrogate" witness in *Bullcoming*, *supra*, was unquestionably offered for its truth. *Id.*

13 The plurality, in an alternative conclusion, also determined that the expert's basis testimony was admissible because the report that included the underlying DNA test results was not testimonial. *Williams*, *supra* at 2242–2244. However, the test the plurality employed in determining that the nontestifying analyst's DNA test results were not "testimonial" differed from the test Justice Thomas employed to reach the same conclusion. Compare *id.* at 2242–2243 (primary purpose), with *id.* at 2255, 2259–2264 (Thomas, J., concurring in the judgment) (formality and solemnity). We address the issue whether the DNA test results in this case qualified as "testimonial." See note 15, *infra*.

14 In determining that *Williams*, *supra*, does not undermine our jurisprudence, we mirror our approach in *Munoz*, *supra* at 131–136, 958 N.E.2d 1167, in which we evaluated the continued validity of our bifurcation of expert opinion from its hearsay basis in light of the Supreme Court's decision in *Bullcoming*, *supra*. There we noted that *Bullcoming* concerned the admission of evidence (a forensic report prepared by a nontestifying analyst via a surrogate witness) that would not have been admissible under Massachusetts law. *Munoz*, *supra* at 132–133, 958 N.E.2d 1167. Our prohibition of an expert's direct testimony about the underlying facts that formed the basis of the opinion "essentially, [is] a different way of stating the central holding of *Bullcoming*: that a substitute analyst cannot testify to, or otherwise introduce, the original analyst's reports and conclusions on direct examination." *Id.* at 133, 958 N.E.2d 1167. Similarly, *Williams* concerns the constitutionality of the admission of expert basis evidence that would not have been admissible in Massachusetts because it is hearsay. See *Williams*, *supra* at 2256–2257 (Thomas, J., concurring in the judgment); *id.* at 2268 (Kagan, J., dissenting). Therefore, *Williams* does not undercut our evidentiary rule that sufficiently safeguards defendants' confrontation right.

15 That our rules of evidence preclude an expert from testifying on direct examination to the hearsay information that formed the basis of his or her opinion is reason enough for its exclusion. Nevertheless, we also conclude that Dr. Cotton's testimony regarding the DNA analyst's test results was admitted in error for the additional reason that the nontestifying analyst's report was testimonial. See *Commonwealth v. McCowen*, 458 Mass. 461, 483, 939 N.E.2d 735 (2010). Although the precise contours of the "primary purpose" test are arguably in flux following *Williams*, the report in the present case is distinguishable from the report in *Williams* because Cellmark Diagnostics laboratory (Cellmark) had the defendant's DNA sample. See, e.g., *Williams*, *supra* at 2243. This indicates that the defendant was targeted as a suspect at the time Cellmark conducted DNA testing, and demonstrates that the DNA testing was conducted for the purpose of obtaining evidence for later use at trial. Thus, as we determined previously, "a reasonable person in [the nontestifying analyst's] position would anticipate her findings and conclusions being used against the accused in investigating and prosecuting a crime." *Greineder*, *supra* at 237, 936 N.E.2d 372, quoting *Nardi*, *supra* at 394, 893 N.E.2d 1221. See *Commonwealth v. Avila*, 454 Mass. 744, 763 n. 20, 912 N.E.2d 1014 (2009), quoting *Nardi*, *supra* (same as to autopsies).

16 As it was in the present case, unfiltered or raw data, in addition to filtered data, should be made available to DNA expert witnesses, as well as to defense counsel during discovery. Unfiltered or raw data shows all peaks detected by the machine, whereas an analyst may limit the DNA peaks that a computer detects. Providing an expert with unfiltered data puts the expert in the best position to formulate an independent opinion and to respond to questions concerning the risk that evidence was fabricated or manipulated. See *Barbosa*, *supra* at 791, 933 N.E.2d 93. Beyond ensuring that data are made available to the expert witness, we decline to delve more deeply into an expert witness's trial preparation process. We leave that to the "crucible of cross-examination." *Crawford*, *supra* at 61, 124 S.Ct. 1354. Where the expert has not reviewed the raw data, defense counsel may use this to gain an advantage. Such was the circumstance of the present case: the expert had only reviewed the filtered, printed data (as opposed to the raw, electronic data), which defense counsel then used to impeach the expert's testimony.

17 DNA test results may, for example, contain “artifacts,” or false indications of allelic presence. See *Commonwealth v. Bly*, 448 Mass. 473, 481, 862 N.E.2d 341 (2007). See also *Commonwealth v. Buckman*, 461 Mass. 24, 35–36, 957 N.E.2d 1089 (2011), cert. denied, — U.S. —, 132 S.Ct. 2781, 183 L.Ed.2d 646 (2012). Dr. Cotton testified that it is common for the computer to label a peak as an allele and the analyst to override that call. However, the fact that a nontestifying analyst may use his or her independent judgment in generating a DNA profile does not indicate that the resulting data are inherently unreliable or that an expert cannot be meaningfully cross-examined about the process of DNA analysis.

18 “Alleged defects in the chain of custody usually go to the weight of the evidence and not its admissibility.” *Commonwealth v. Viriyahiranpaiboon*, 412 Mass. 224, 230, 588 N.E.2d 643 (1992), citing *Commonwealth v. White*, 353 Mass. 409, 419–420, 232 N.E.2d 335 (1967), cert. denied, 391 U.S. 968, 88 S.Ct. 2039, 20 L.Ed.2d 881 (1968). Of course, the prosecution is strongly encouraged to offer conventional chain of custody evidence to establish the source of the sample tested, such as the testimony of the person who recovered the DNA sample, the testimony of the person who had custody of the sample before it was sent to the laboratory, and shipping manifests to show the sample was sent to and returned from the laboratory. See *Williams*, *supra* at 2239. Although an expert witness may not be competent to testify to the chain of custody of the particular DNA sample, a DNA match is “itself striking confirmation” that the laboratory tested the correct sample. *Id.* at 2238 (“there is simply no plausible explanation for how [the laboratory] could have produced a DNA profile that matched [the defendant] if [the laboratory] had tested any sample other than the one [recovered from the crime scene]”).

19 In the context of DNA forensics, we strongly encourage the Commonwealth, as it did in this case, to call a qualified representative of the laboratory that conducted the underlying DNA analysis as its expert witness so as to afford the defendant greater opportunity to cross-examine the expert on the specific laboratory procedures leading to the production of the underlying data.

20 Although it is clear from the record that Cellmark had a known sample of the defendant’s DNA, it is not clear whether the nontestifying analyst who authored the DNA test reports accessed known samples of the defendant’s DNA while simultaneously interpreting the unknown samples. However, in response to the defendant’s memorandum in support of his motion for a new trial and a supplemental affidavit of Dr. Arthur Eisenberg, a former chairman of the United States DNA advisory board to the Federal Bureau of Investigations whom the defense retained to analyze Cellmark’s work in the present case, Dr. Cotton submitted an affidavit in which she stated that it was “decidedly contrary” to Cellmark’s practice and to accepted scientific practices to access known samples while interpreting unknown samples. Dr. Cotton also stated that, although the risk of “unconscious bias” exists, Cellmark’s protocols are designed to address that possibility, and “it would have been foolish to compromise our integrity by biasing our analysis toward a particular result.” Moreover, the fact that there was also evidence of a stranger’s DNA on a glove recovered from the crime scene, *Greineder*, *supra* at 238–239, 936 N.E.2d 372, demonstrates that DNA testing was not geared toward matching the defendant’s DNA profile.

21 “Only an expert can testify to the likelihood that more than one person possesses a particular DNA profile, based on her knowledge of the alleles selected for the DNA profile and the mathematical probabilities that more than one person may possess the same characteristics of those alleles.” *Barbosa*, *supra* at 789, 933 N.E.2d 93. See *Williams*, *supra* at 2252 & Appendix at 2253–2255 (Breyer, J., concurring) (distinguishing technician’s production of electropherogram indicating allelic presence at given loci from analyst’s conclusion about significance of DNA test results).

22 The Committee for Public Counsel Services, as amicus curiae, urges us to abandon our reliance on our evidentiary rule barring inquiry on direct examination about the testimonial hearsay basis of an expert opinion as a means of protecting criminal defendants’ confrontation right. It points us to language in Justice Thomas’s concurrence and the dissent in *Williams* to the effect that State evidentiary rules should not define constitutional requirements. See *Williams*, *supra* at 2256 (Thomas, J., concurring in the judgment); *id.* at 2272 (Kagan, J., dissenting). We decline to change our rule. Certainly, common-law rules of evidence are no substitute for a constitutionally protected right. However, where, as here, a State evidentiary rule provides even greater protection than is required under the Federal Constitution, by definition, it provides sufficient safeguard of a defendant’s constitutional right.

23 In many of the cases we have decided since *Crawford*, *supra*, that implicated a defendant’s confrontation right in the context of expert opinion testimony, we upheld the defendant’s conviction. See, e.g., *Greineder*, *supra* at 239, 256, 936 N.E.2d 372. In *Commonwealth v. Durand*, 457 Mass. 574, 581, 931 N.E.2d 950 (2010), however, we held that the direct testimony of two doctors to autopsy report findings of a nontestifying examiner was admitted in error, and that the error was not harmless beyond a reasonable doubt. Thus, we reversed the conviction and remanded the case for a new trial. *Commonwealth v. Durand*, *supra* at 575, 601, 931 N.E.2d 950.

24 A *Daubert-Lanigan* hearing also protects a defendant from the risk of inaccurate forensics. *Barbosa, supra* at 790-791, 933 N.E.2d 93. At a *Daubert-Lanigan* hearing, a defendant may challenge the admissibility of an expert opinion that is based on evidence that the defendant expects was somehow tainted or not subject to the expert's thorough review on ground that an expert must have a "permissible basis" to support his or her opinion. *Id.*, quoting *Department of Youth Servs. v. A Juvenile*, 398 Mass. 516, 531, 499 N.E.2d 812 (1986). See *Williams, supra* at 2241 (noting additional safeguards preventing admission or improper use of expert basis evidence); *id.* at 2249 (Breyer, J., concurring) (professional guidelines ensure reliability of forensic test results).

133 S.Ct. 55  
Supreme Court of the United States

Dirk K. GREINEDER, petitioner,  
v.  
MASSACHUSETTS.

No. 10-8835.  
|  
June 29, 2012.

### Opinion

On petition for writ of certiorari to the Supreme Judicial Court of Massachusetts. \*56 Motion of petitioner for leave to proceed *in forma pauperis* and petition for writ of certiorari granted. Judgment vacated, and case remanded to the Supreme Judicial Court of Massachusetts for further consideration in light of *Williams v. Illinois*, 567 U.S. —, 132 S.Ct. 2221, 183 L.Ed.2d 89 (2012).

### All Citations

567 U.S. 948, 133 S.Ct. 55 (Mem), 183 L.Ed.2d 699, 80 USLW 3715

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Certiorari Granted, Judgment Vacated by [Greineder v. Massachusetts](#),  
U.S. Mass., June 29, 2012

458 Mass. 207  
Supreme Judicial Court of Massachusetts,  
Norfolk.

COMMONWEALTH  
v.  
Dirk K. GREINEDER.

SJC-08866.

Argued Oct. 9, 2009.

Decided Nov. 4, 2010.

### Synopsis

**Background:** Defendant was convicted in a jury trial in the Superior Court Department, Norfolk County, Paul A. Chernoff, J., of murder and his motion for new trial was denied, [2007 WL 7008820](#). Defendant appealed.

**Holdings:** The Supreme Judicial Court, [Spina](#), J., held that:

[1] individual voir dire was not closed to the public in violation of defendant's right to a public trial;

[2] right to confrontation was not violated with regards to opinion testimony of forensic laboratory director based on lab work of another employee;

[3] erroneous admission of expert testimony of director as to details of DNA test results obtained by staff member did not constitute prejudicial error;

[4] probative value of evidence of defendant's extramarital sexual activity outweighed any possible undue prejudice;

[5] newly discovered evidence did not create substantial likelihood of different result;

[6] jury experiment did not constitute exposure to extraneous matter;

[7] counsel's failure to move to exclude DNA results was not deficient performance; and

[8] counsel's failure to move to suppress fruits of vehicle search was reasonable trial strategy.

Affirmed.

West Headnotes (34)

[1] [Criminal Law](#)  
 [Jury selection](#)

Individual voir dire was not closed to the public in violation of defendant's right to a public trial in murder prosecution; judge's reference to individual voir dire as "non-public" was not intended to mean the public was excluded and was only intended to encourage jurors to be candid, trial judge recalled members of the public being present in courtroom during individual voir dire, no sign had been placed outside the courtroom indicating it was closed to the public, no court officer was turning away members of the public, no one had been asked to leave the courtroom, members of the media attended other portions of voir dire, and judge asserted that he did not order the courtroom closed. [U.S.C.A. Const.Amend. 6](#).

[3 Cases that cite this headnote](#)

[2] [Criminal Law](#)  
 [Motion for new trial](#)

When reviewing the grant or denial of a motion for a new trial, the Supreme Judicial Court extends special deference to the action of a motion judge who also was the trial judge.

[4 Cases that cite this headnote](#)

[3] [Criminal Law](#)  
 [New Trial](#)

**Criminal Law**

🔑 Motion for new trial

A judge's subsidiary findings of fact made when considering a motion for a new trial will not be disturbed on appeal unless they are shown to be the result of a clear abuse of discretion or were clearly erroneous.

1 Cases that cite this headnote

[4]

**Criminal Law**

🔑 Motion for new trial

Where a claim for a new trial is constitutionally based, the Supreme Judicial Court exercises its own judgment on the ultimate factual and legal conclusions.

[5]

**Criminal Law**

🔑 Requisites of public trial; definitions

The right to a public trial does not require members of the public to attend the trial; it prohibits their exclusion by the State, except in limited circumstances. [U.S.C.A. Const.Amend. 6.](#)

1 Cases that cite this headnote

[6]

**Judges**

🔑 Determination of objections

Judge, who was also trial judge, acted within his discretion in denying motion to recuse himself from deciding defendant's motion for a new trial following murder conviction on basis that courtroom was closed to violation of right to a public trial; defendant offered no evidence to show that the judge was not fair and impartial, and there was no evidence of bias or prejudice from an extrajudicial source. [U.S.C.A.](#)

[Const.Amend. 6.](#)

6 Cases that cite this headnote

[7]

**Judges**

🔑 Determination of objections

When deciding a question of recusal, a judge must first consult his or her own emotions and conscience; if the judge passes the internal test of freedom from disabling prejudice, the judge must then attempt an objective appraisal of whether the proceeding is one in which the judge's impartiality might reasonably be questioned.

1 Cases that cite this headnote

[8]

**Judges**

🔑 Determination of objections

Recusal is a matter that rests in the first instance in the discretion of the judge.

1 Cases that cite this headnote

[9]

**Judges**

🔑 Bias and Prejudice

To show that a judge abused his discretion in refusing to recuse himself, a defendant ordinarily must show that the judge demonstrated a bias or prejudice arising from an extrajudicial source, and not from something learned from participation in the case.

1 Cases that cite this headnote

[10]

**Criminal Law**

🔑 Use of documentary evidence

Defendant's right to confrontation was not violated with regards to opinion testimony of forensic laboratory director based on lab work of another employee for purposes of murder prosecution, where defendant had adequate opportunity to cross-exam witness, and witness testified that she reviewed other employee's work and conducted her own independent evaluation of the data that was produced during testing. [U.S.C.A. Const.Amend. 6](#).

[1 Cases that cite this headnote](#)

[\[11\] Criminal Law](#)

 [Out-of-court statements and hearsay in general](#)

Opinion testimony may be based on hearsay and not offend the right to confrontation. [U.S.C.A. Const.Amend. 6](#).

[1 Cases that cite this headnote](#)

[\[12\] Criminal Law](#)

 [Sources of data](#)

[Criminal Law](#)

 [Out-of-court statements and hearsay in general](#)

If hearsay evidence that opinion testimony is based on is independently admissible and if it is the kind of evidence on which experts customarily rely as a basis for opinion testimony then an expert may give opinion testimony based on such material; such testimony does not violate the right to confrontation because the expert witness is subject to cross-examination about her opinion, as well as the risk of evidence being mishandled or mislabeled, or of data being fabricated or manipulated, and as to whether the expert's opinion is vulnerable to these risks. [U.S.C.A. Const.Amend. 6](#).

[3 Cases that cite this headnote](#)

[\[13\]](#)

[Criminal Law](#)

 [Reception of evidence](#)

Trial court's erroneous admission in violation of defendant's right to confrontation and cross-examination of expert testimony of forensic laboratory director as to details of DNA test results obtained by staff member did not constitute prejudicial error in murder prosecution; expert's opinion testimony as to her own independent evaluation of the data was admissible, counsel prepared and pursued two effective strategies as a response to very high likelihood opinion would be admitted, and counsel benefited from staff member not testifying because counsel was able to frustrate testimony at points where witness simply had no knowledge about analytical choices made by staff member, which likely reflected negatively on witness's credibility. [U.S.C.A. Const.Amend. 6](#).

[4 Cases that cite this headnote](#)

[\[14\]](#)

[Criminal Law](#)

 [Cross-examination and redirect examination](#)

Inquiry into the hearsay basis for expert opinion is the decision of the cross-examiner.

[1 Cases that cite this headnote](#)

[\[15\]](#)

[Criminal Law](#)

 [Homicide, mayhem, and assault with intent to kill](#)

Probative value of evidence of defendant's extramarital sexual activity outweighed any possible undue prejudice that may have flowed from it in prosecution for the murder of his wife; evidence of extramarital sexual activity was highly relevant to motive to kill, as evidence that defendant feverishly sought a wide range of sexual relations and activity and that he attempted to keep it a secret supported a

reasonable inference that the victim's presence had become an inconvenience to the defendant, and an obstacle to a lifestyle he pursued and kept secret from his entire family and the public.

[\[16\]](#) **Criminal Law**

↳ Showing bad character or criminal propensity in general

**Criminal Law**

↳ Other Misconduct Showing Motive

Evidence of bad acts is not admissible to prove bad character or propensity to commit the crime charged, but it may be admissible, if relevant, for other purposes, including proof of motive. [Mass.G.Evid. § 404\(b\)](#).

[\[17\]](#) **Criminal Law**

↳ Prejudicial effect and probative value

Where the relevance of prior bad acts evidence is not substantial but borderline, the evidence must be excluded unless its probative value on the issue in contention outweighs the undue prejudice that may flow from it. [Mass.G.Evid. § 404\(b\)](#).

[\[18\]](#) **Criminal Law**

↳ Discretion of court in general

The decision to admit or reject evidence of prior bad acts rests in the sound discretion of the trial judge. [Mass.G.Evid. § 404\(b\)](#).

[\[19\]](#) **Criminal Law**

↳ Cross-examination

Prosecutor did not improperly cross-examine defendant as to his prearrest and postarrest silence in violation of defendant's right to silence in murder prosecution, where defendant had not exercised his right to silence and the prosecutor did not comment directly or indirectly on an exercise of the right to remain silent. [U.S.C.A. Const.Amend. 5](#).

1 Cases that cite this headnote

[\[20\]](#)

**Criminal Law**

↳ Particular evidence or cases

Newly discovered evidence that impression at crime scene was made by defendant's right toe rather than his left heel as was asserted at trial did not create a substantial likelihood of the jury reaching a different result, and therefore trial court acted within its discretion in denying motion for new trial following murder prosecution; judge relied on his knowledge of the trial, he applied the correct standard, and he considered the newly discovered evidence in light of specific strengths of the Commonwealth's case, concluding that it did not cast real doubt on the justice of the defendant's conviction.

[\[21\]](#)

**Criminal Law**

↳ Discretion of court as to new trial

**Criminal Law**

↳ New Trial

A motion for a new trial is addressed to the sound discretion of the judge, and the judge's disposition will not be reversed unless it is manifestly unjust.

3 Cases that cite this headnote

[\[22\]](#)

**Criminal Law**

↳ Considering Matters Not in Evidence

Jury's experiment using a banana and gloves admitted into evidence did not constitute exposure to extraneous matter that warranted a new trial for defendant in murder prosecution, where the experiment was within the scope of the evidence presented at trial, and cumulative of expert testimony, as it was an evaluation of the testimony of experts who opined on the consistency between the dots on the gloves and dots and swipe stains on various pieces of evidence.

1 Cases that cite this headnote

[23] **Criminal Law**

↳ Deliberations in General

A defendant is entitled to be tried by a jury that are impartial and whose deliberations are unaffected by extraneous matter; "extraneous matter" is information, knowledge, or specific facts about one of the parties or the matter in litigation that did not come from the evidence at trial.

3 Cases that cite this headnote

[24] **Criminal Law**

↳ Objections and disposition thereof

A judge may conduct an evidentiary hearing and inquire of jurors about their exposure to extraneous facts, provided the inquiry is limited to the nature and extent of the jurors' exposure to "extraneous matter," and not the actual effect of the matter on any juror's decision; the defendant bears the burden at such a hearing of showing that the jury were in fact exposed to extraneous matter.

[25] **Criminal Law**

↳ Presumptions and burden of proof as to misconduct of or affecting jurors

If the judge finds that "extraneous matter" was introduced to the jury, the burden then shifts from the defendant to the Commonwealth to show beyond a reasonable doubt that the defendant was not prejudiced thereby.

[26]

**Criminal Law**

↳ Objections and disposition thereof

In determining the question of prejudice of jury's exposure to "extraneous matter," the judge must focus on the probable effect of the extraneous matter on a hypothetical average jury, and not the actual thought process of any deliberating juror.

[27]

**Criminal Law**

↳ Experiments by jurors

Experimentation with an exhibit during deliberations is generally permissible if it is within the scope of the evidence presented at trial, duplicative of tests or demonstrations performed in the court room, or cumulative of evidence already in the record.

1 Cases that cite this headnote

[28]

**Criminal Law**

↳ Identification

Counsel's failure to move to exclude or to challenge pretrial DNA result as scientifically unreliable was not deficient performance, and therefore did not constitute ineffective assistance of counsel in murder prosecution; counsel's decision not to pursue a pretrial motion was made in consultation with his team of experts,

counsel took into consideration the risk that a hearing would have served to educate the prosecution about weaknesses in the evidence, and judge, on motion for new trial, determined that he likely would have rejected such a challenge to the evidence. [U.S.C.A. Const.Amend. 6.](#)

[\[29\]](#) **Criminal Law**

 [Deficient representation and prejudice in general](#)

The Supreme Judicial Court reviews counsel's performance to determine if there was an error, and whether it created a substantial likelihood of a miscarriage of justice. [U.S.C.A. Const.Amend. 6.](#)

[3 Cases that cite this headnote](#)

[\[30\]](#) **Criminal Law**

 [Strategy and tactics in general](#)

Error attributable to an attorney's tactical decision will be deemed ineffective assistance of counsel only if it was manifestly unreasonable when made. [U.S.C.A. Const.Amend. 6.](#)

[\[31\]](#) **Criminal Law**

 [Preparation for trial](#)

Defense counsel has a duty to conduct an independent investigation of the forensic, medical, or scientific evidence on which the Commonwealth intends to rely to prove its case. [U.S.C.A. Const.Amend. 6.](#)

[\[32\]](#)

**Criminal Law**

 [Identification](#)

Counsel's failure to challenge DNA evidence as scientifically unreliable during trial was not deficient performance, and therefore did not constitute ineffective assistance of counsel in murder prosecution; counsel challenged test results in cross-examination over a period of nearly two days and had an expert sitting next to him at counsel table during DNA testimony, counsel was able to extract testimony that there was DNA from more than two people on the victim's glove, and counsel was able to accomplish what he need within the testimony of expert defendant contended should have testified. [U.S.C.A. Const.Amend. 6.](#)

[1 Cases that cite this headnote](#)

[\[33\]](#)

**Criminal Law**

 [Documentary evidence](#)

Counsel's failure to file motion to suppress receipt for purchase of nails did not prejudice defendant, and therefore did not constitute ineffective assistance of counsel in murder prosecution, where, although the nails receipt created a strong inference that the defendant purchased a hammer, which later was found in a storm drain with blood on it, minutes after the nails purchase, the defendant's son testified that he had purchased the nails. [U.S.C.A. Const.Amend. 6.](#)

[1 Cases that cite this headnote](#)

[\[34\]](#)

**Criminal Law**

 [Suppression of evidence](#)

Counsel's failure to move to suppress the fruits of search of the defendant's vehicle was reasonable trial strategy, and therefore did not constitute ineffective assistance of counsel in murder prosecution; although counsel recognized that the fruits of the search of the vehicle could have been suppressed, he

deliberately chose not to move to exclude police officer's testimony for tactical reasons as counsel highlighted inconsistencies and argued that point forcefully in closing. [U.S.C.A. Const. Amend. 6.](#)

### Attorneys and Law Firms

[\\*\\*376 James L. Sultan](#), Boston, for the defendant.

[Varsha Kukafka](#), Assistant District Attorney, for the Commonwealth.

Present: MARSHALL, C.J., SPINA, COWIN, BOTSFORD, & [GANTS](#), JJ.

### Opinion

[SPINA](#), J.

**\*208** The defendant was convicted of the deliberately premeditated murder of his wife. He filed a motion for a new trial. After an evidentiary hearing, the motion was denied, as was an amended motion for a new trial. The defendant appeals from his conviction and from the denial of his amended motion for a new trial. The appeals have been consolidated in this court.

The defendant argues that (1) he was denied a public trial because a portion of his jury selection proceeding was closed to **\*209** the public; (2) his State and Federal constitutional rights to confront and cross-examine witnesses were violated by the admission of deoxyribonucleic acid (DNA) evidence that constituted hearsay; (3) the judge erred by admitting as prior bad acts evidence of the defendant's extramarital sexual activity; (4) the prosecutor cross-examined the defendant in a manner that improperly elicited evidence of prearrest and postarrest silence, and then exploited the matter in his closing argument; (5) the defendant should have been granted a new trial based on recantation by a Commonwealth witness; (6) the defendant should have been granted a new trial based on the jury's exposure to extraneous information during deliberations; (7) counsel was ineffective for failing to challenge unreliable DNA evidence; (8) counsel was ineffective for failing to file a meritorious motion to suppress a receipt for a purchase of nails seized pursuant to a general warrant for a search of

the defendant's home; and (9) counsel was ineffective for failing to file a meritorious motion to suppress evidence of details of a towel observed by police during a search of the defendant's car, where police had a warrant to search the defendant's residence but not the car, and the car was not within the curtilage of the residence. The defendant also contends that the cumulative effect of the alleged errors justify the reversal of the conviction. We affirm the convictions and the denial of his amended motion for a new trial, and we decline to **\*\*377** exercise our powers under [G.L. c. 278, § 33E](#).

1. *Background.* We recite facts the jury could have found, and reserve further details for discussion of particular issues.

On the morning of October 31, 1999, the defendant and his wife of thirty-one years parked their van at the entrance to the access road to Morses Pond (pond) in Wellesley, just outside the gate that blocks vehicular access, and walked their German shepherd dog around the park at the pond. William Kear was walking his small dog that morning on the pond access road, a two-lane paved road leading to a parking lot and a beach at the pond, when the defendant crossed in front of him from right to left (east to west). This occurred when Kear was at the first (south) entrance to the parking lot off the pond access road. The defendant was just beyond the second (north) entrance to the parking lot, where the lanes separate to form a circle. The defendant had emerged from the woods on a dirt path, crossed the **\*210** pond access road just beyond the circle, then continued westerly down an unnamed road and out of sight. The defendant had a backpack, and he was walking rapidly with a dog on a leash. He made no noise.

About forty-five to ninety seconds later Kear entered the circle and the defendant reemerged from the road where Kear had last seen him. The defendant approached Kear and asked if he had a cellular telephone. Kear did not have one. The defendant asked Kear to go and make a telephone call for him. Kear declined, then asked the defendant what happened. He said his wife had been attacked, and pointed up the path beginning where Kear first saw him. The defendant said he had a cellular telephone in his van and he would make the call. On the way to his van the defendant passed Rick Magnan. He yelled to Magnan and asked if he had a cellular telephone. Magnan said he did not. The defendant walked to the start of the access road and telephoned Wellesley police from his van. In the meantime, Kear had walked up the path in the direction the defendant said his wife had been attacked to see if he could be of help.

Officer Paul Fitzpatrick was the first Wellesley police officer to arrive. He opened the gate to the access road and proceeded driving when the defendant, who was walking back toward his wife, yelled to him and said his wife had been attacked. The defendant entered Fitzpatrick's cruiser and directed him to the circle in the road. Fitzpatrick parked his cruiser, then followed the defendant up the dirt path to the area where his wife lay. Paramedics were right behind them. There was a significant area of bloodstain on the path, with a drag mark through the bloodstain. The drag mark led to the victim's body. The victim later was pronounced dead at the scene.

The cause of death was a horizontal stab **wound** into the left side of the neck. The **wound** was large, five and one-half inches long and two and one-half inches wide, caused either by two thrusts with a knife, or movement by the victim during a single thrust. Every muscle on the left side of her neck was damaged, as were the jugular veins, causing rapid **exsanguination**. A second and potentially fatal stab **wound** was inflicted horizontally into the left side of her chest, penetrating the pulmonary artery and left lung. However, so little blood was found in the left chest **\*211** cavity that the **wound** must have been inflicted either after death or around the time the victim's body had ceased to function. Other stab **wounds**, all nonfatal, included one to the victim's lower left chest, two to the back of her head, and three to her forehead.

**\*\*378** The victim sustained two other nonfatal **wounds**. One was a **laceration on the back** of her head that tore the skin and pushed it, consistent with an impact by a metal object with heft, such as a hammer. The other was a contusion on the left side of her face aligned with a fracture at the base of the skull, consistent with an impact by a padded, blunt object, such as a hand, knee, or foot. Neither of these **wounds** would have rendered her unconscious.

The victim had an abrasion on her lower back, at the base of the spine. The skin in that area displayed a piling up, as if the victim had been dragged by her shoulders. Her shirt had been pulled up and her pants opened, and blood spatter appeared on her abdomen and lower chest.<sup>1</sup> She also had blood spatter on her hands, but she had no defensive **wounds**. Seminal fluid was not detected on any swabs prepared at the autopsy.

(a) *The defendant's statements.* The defendant made several statements on October 31, 1999, the details of which were not consistent. He told a paramedic at the scene that his wife twisted her back throwing a ball to their dog. She stopped walking and the defendant went

ahead to retrieve the dog. After putting the dog in the van he returned and found his wife lying in the path.

Officer Fitzpatrick escorted the defendant away from the scene to the circle in the road while police processed the crime scene. The defendant told Fitzpatrick that he and his wife went for a walk and she tripped on something, injuring her back. She told him to go on without him and she would meet him at the entrance to the parking area. When he and the dog reached the gate to the beach, the dog started "acting funny" and it turned back. The defendant followed, and discovered his wife lying in the path. He checked her and found a weak carotid pulse, so he ran to the van to telephone police. About twenty minutes after talking to Fitzpatrick the defendant asked if his wife was dead. Fitzpatrick said she was. Five minutes later the defendant asked **\*212** whether Fitzpatrick was going to arrest him. Fitzpatrick said it was not his decision to make.

Sergeant Peter Nahass of the Wellesley police department went to the circle where the defendant and Officer Fitzpatrick were waiting. He observed a reddish stain on the sleeve of the defendant's windbreaker jacket (jacket), all the way down to the wrist, and also on his running shoes. The defendant's hands were clean. He had two scratches on his neck. Nahass asked him what happened. The defendant said he and his wife were walking their dog when she hurt her back throwing a ball to the dog. He told her to wait there while he went ahead with the dog. He turned back at the gate to the pond, which was locked, and the dog ran ahead. When he caught up to the dog, it was licking his wife's face. She was lying in the path. The defendant, who is a doctor, said he tried to take his wife's pulse at the carotid artery. The dog's leash was secured around his wife's waist. He removed the leash, attached it to the dog, then returned to their van and telephoned police. He gave a similar account to Detective Jill McDermott of the Wellesley police, but added that as he first approached his wife lying in the path he realized something was wrong because her pants were open and she had blood on her neck. She had no pulse; but she was warm, so he tried to rouse her.

**\*\*379** At the Wellesley police station the defendant told Detective McDermott he had told her everything and was not hiding anything. He then stated, "You asked me for my clothing, and it suddenly scares me." Ten minutes later the defendant said his wife had given him a back rub the night before and would have his skin under her fingernails.

Trooper Martin Foley of the State police noticed at the scene that the defendant's jacket had reddish-brown stains

on the chest area, both upper arms and elbows, and that there was a large stain on the left cuff that ended abruptly about two and one-half inches from the end of the sleeve. He also observed a reddish-brown stain on the defendant's sneakers, and a reddish-brown "swipe" on the left lens of his glasses. He observed that the victim's pants were open at the waist and her shirt was pulled up. Detective McDermott had told him of her conversation with the defendant. Foley asked the defendant what he had done the night before. The defendant said he helped his wife \*213 with a slide presentation she was working on for a course she was taking to become a nurse practitioner. The defendant said his wife went to bed around 11 P.M., and he retired at 12:30 A.M. Foley asked if they slept in the same bedroom. The defendant said they did. Because of the possibility this might be a sexual assault, Foley asked the defendant if he and his wife had intercourse that morning, the night before, or during the previous week, in the event police found semen. The defendant said he did not, and offered that they had not been sexually active for a few years because his wife had neck problems.

The defendant described for Foley the course of his walk that morning with his wife, which was similar to the description he gave Officer Fitzpatrick and Detective McDermott. However, the only *wound* he mentioned seeing was a *wound* on her forehead, and he made no mention of her neck *wound*. The defendant said he checked the carotid artery on the right side of her neck. He also said he tried to move her, but he was unable to do so. He said she weighed 120 pounds, and at one time he could lift more than twice that, but she was like dead weight. He then tried to find a jogger with a cellular telephone. He said he thought he saw one, and pointed toward the road that William Kear saw him walk down after crossing the pond's access road at the circle. The defendant said he ran as fast as he could, to the point he felt he would vomit. He then met Kear and asked if he had a cellular telephone. He told Foley that he checked the carotid artery on the left side of his wife's neck when he returned after he telephoned police from their van. He said that was the first time he noticed the *wound* in her neck. Foley asked the defendant if he had washed his hands, which were clean, and the defendant replied he had not. Foley asked him why he had no blood on his hands, and the defendant was unable to give an explanation.

The defendant told Ilse Stark, his wife's sister, that he and his wife had simultaneous nosebleeds as they were getting ready to go to the pond. He removed a towel from his car, which was in the driveway, and they both used it to stop their nose bleeds. He explained that it was possible that his DNA could have been transferred from the towel to

her gloves. He told Stark that his wife twisted her back while they were walking in the park, and she did not want to continue. She insisted that he go ahead \*214 without her and exercise the dog. About ten minutes later he returned and discovered his wife lying in the path; he saw a lot of blood. He said he took her pulse and saw that someone had "slit" her neck. He jumped up, saw a jogger, and gave chase. While \*215 chasing the jogger he saw a man with a small dog (Kear). He went back and asked the man if he had a cellular telephone.

On November 1, 1999, the defendant told Belinda Markel, Stark's daughter, that he and his wife had intercourse the morning she died. He gave a similar description of events that he had given to Stark. He told her he was concerned that police had searched his house for a glove and took his pants, and they might have fibers from gloves he had once worn. He also told her he was concerned that police photographed him and he had red marks on his neck from shaving. He said his wife's throat had been cut, and she had been hit in the head multiple times.

(b) *Extramarital sexual activity.* Police executed search warrants at the defendant's home on November 1 and November 12, 1999. During the latter search they seized several computers credit card statements; a box from the garage that contained a bottle of *Viagra* tablets (a prescription medicine that promotes sexual activity) that the defendant, a physician, had prescribed for himself on June 2; and a twelve-pack of condoms. Some *Viagra* pills and one condom were missing from their containers. The computer hard drives and the credit card statements contained, and led to, information about the defendant's extramarital sexual activity, which the Commonwealth offered as evidence of motive to kill.

Approximately one week before the murder the defendant had a date with a prostitute in New Jersey. He paid for the hotel room with a corporate credit card account he opened on July 12, 1998, in the name of a college classmate he had not seen in nearly thirty years.

On October 10, 1999, the defendant opened an Internet account under the user name "pussyryder@yahoo.com." During the week before the murder the defendant opened an Internet account under the user name "casualguy2000." He then opened an account with an online dating service under that user name. On October 25, 1999, he sent messages to two users, seeking "a discreet relationship," and "mutual petting and more," \*215 respectively. He described himself as age forty-nine in one message, and age fifty-nine in another. He was fifty-nine at the time. On October 25 and 26, 1999, the defendant exchanged

graphic electronic mail messages (e-mails) with two couples (and nude photographs with one couple), negotiating for “discreet” sexual relations as a threesome. He said he could not host, but would be willing to cover hotel accommodations. He described himself as age forty-nine. Around this time, the defendant’s wife’s computer “crashed.” As a result, she used his computer to prepare papers for courses she was taking. The defendant tried to fix her computer on October 29, and a workman who was renovating a bathroom in their home heard the defendant ask his wife if she had been using his computer.

The defendant arranged to meet a local prostitute at a hotel in Dedham in the spring of 1999. He telephoned her in September and expressed a desire to see her again, but he seemed confused so she suggested he not see her until he first found some peace. They spoke again, but he told her not to contact him because it was not “the right time.” He telephoned her escort service on October 30 and November 1 (the days immediately before and after his wife’s murder), but she did not speak to him.

(c) *Physical evidence.* On October 31, 1999, the defendant voluntarily surrendered his clothing to police. He also consented to searches of his house and van, and to scrapings from under his fingernails. **\*\*381** His backpack was taken from inside the van.

Three plastic bags (two inside the third) were found at the scene of the crime on October 31. Three boxes of plastic bags were seized during the execution of a search warrant at the defendant’s home on November 12.<sup>2</sup>

At approximately 1 P.M. on October 31, police found a brown right-hand glove, a two-pound Estwing drilling hammer, and a folding knife in a storm drain in the road where William Kear saw the defendant walk down and back. These items had reddish-brown stains and tested positive for the presence of blood. On November 1, police found a matching brown left-hand glove in the storm drain outside the gate to the entrance of the pond’s access road, near the place the defendant had parked his van on **\*216** October 31. It, too, tested positive for the presence of blood. The gloves are brown, made of cotton, and have a raised-dot plastic grip texture on the palm, thumb, and fingers. F. Diehl & Son, a hardware store in Wellesley, is the only store in Massachusetts east of Springfield that sells these gloves. It sold forty pairs between January 1, 1999, and October 31, 1999. Police seized (pursuant to a warrant) an identical pair of gloves on November 12, from a dog house behind the defendant’s Wellesley home.

The hardware store also sells Estwing two-pound drilling hammers, which is not a popular model. While executing

the search warrant at the defendant’s home on November 12, police seized a Diehl’s sales receipt for nails purchased at 8:55 A.M. on September 3, 1999. Diehl’s records indicated that an Estwing two-pound drilling hammer was purchased three minutes later at the same cash register. At the time, such hammers were displayed behind the cash registers.

(d) *Facts based on expert testimony.* Fibers from the glove found in the storm drain near the defendant’s van, from the gloves in the dog house at the defendant’s home, and from scrapings of the defendant’s fingernails were consistent.

Bloody patterns on the knife, the hammer, and a plastic bag containing two other bags found at the scene were consistent with the raised-dot pattern on the gloves. A unique “swipe stain” transfer pattern, consistent with the raised-dot pattern on the palm side of the gloves, was detected on the hammer, the outer plastic bag, the defendant’s jacket, and the defendant’s glasses.

Two of the three plastic bags found at the scene and the bags in one box of plastic bags seized from the defendant’s home were manufactured from the same sheet of plastic.

Blood spatter on the victim’s abdomen and left leg indicate she was struck after her pants had been opened and while she was in a horizontal position. Blood spatter on the sleeves of the defendant’s jacket, jeans, shirt, and sneakers indicate he was in close proximity to a bloodshed incident. Blood transfer stains on the left sleeve and right shoulder areas of the defendant’s jacket were consistent with placement of his arms under the victim, with his palms upward, and moving the victim’s body **\*217** by pulling it backward. A bloodstain on the defendant’s jacket was consistent with the raised-dot pattern on the gloves.

Marks on the ground at the crime scene and the skin piling at the base of the victim’s back indicate that she had been **\*\*382** dragged by her shoulders. A heel mark from the defendant’s left sneaker could have made an impression at the beginning of the drag mark in the path that led to the victim’s final resting place.

Samples containing a single source of DNA on the defendant’s shirt and the plastic bag (containing the two other plastic bags) found at the scene of the crime, respectively, were from the victim. The victim’s DNA profile matched at nine loci the profile of the primary contributor of a mixture of DNA in a sample taken from the defendant’s backpack. Samples on the defendant’s

jacket and sneakers were consistent with the victim's DNA.

The only conclusion that could be drawn from DNA tests on swabbings from the hammer was that the victim could not be excluded as the source.

DNA tests on swabbings from the knife indicated a mixture with a primary female source and a secondary male source. The test results were consistent with the DNA profiles of both the victim (whose DNA profile matched the knife sample at eight loci) and the defendant, a Caucasian (whose DNA profile matched the knife sample at four loci). A statistical analysis based on the match at four loci indicated that one in 1,400 unrelated African-Americans and one in 2,200 unrelated Caucasians would be included with the defendant as possible secondary contributors.

The right-hand glove found with the hammer and knife also contained a mixture of DNA, with a female as the primary source and a male as the secondary source. The victim's DNA profile matched the glove sample at thirteen loci, and the defendant's profile matched at eight loci. A statistical analysis of the match between the victim's profile and the glove sample indicated that only "one in 2.4 times to the eighteenth" power (2.4 quintillion) unrelated African-Americans, and only "one in one times ten to the eighteenth" power (one quintillion) unrelated Caucasians would duplicate this match. The victim was Caucasian. A statistical analysis indicated that one in 680 million unrelated African-Americans, and one in 170 million Caucasians would be included with the defendant as possible secondary contributors.

**\*218** The left-hand glove found in the storm drain near where the defendant parked his van contained a DNA mixture, but it could not be determined if one contributor was a female. The defendant's DNA profile matched the glove sample at seven loci. A statistical analysis indicated one in fifteen million unrelated African-Americans, and one in 680,000 Caucasians would be included with the defendant as possible contributors.

*2. The defense.* The defense presented ten witnesses over six days. The defendant testified and denied killing his wife. He said he was happily married and his family was the center of his life. His extramarital activity was not a motive to kill, but was his response to his wife's inability to continue with normal sexual relations due to severe back and neck problems.

The defense presented expert testimony challenging the testing procedures of Cellmark Diagnostics laboratory

(Cellmark) as unreliable. This also was developed in cross-examination of Dr. Robin Cotton, Cellmark's forensic laboratory director, who acknowledged that Cellmark's threshold of forty relative fluorescent units (RFUs)<sup>3</sup> was lower than that recommended by manufacturers of equipment **\*\*383** used by Cellmark, as well as the threshold set by the Federal Bureau of Investigation (FBI) for its DNA laboratory.

The defense developed from cross-examination of Dr. Cotton and through his own experts that Cellmark's test results indicate the presence of DNA from a "stranger." He also elicited evidence of two recent unsolved murders at recreational areas in Norfolk County.

The defense explained the presence of the defendant's DNA on various items through the phenomenon of transfer of DNA. Transfer may occur when people casually exchange an item, and the DNA of one may pass to the other in the exchange. The defendant produced expert testimony from two witnesses who explained that the defendant's alleles could have been transferred first to the victim from the bloody towel they shared to suppress their nose bleeds, and then from the victim to the gloves and other items held by the stranger who killed the victim.

**\*219** The defense called an expert who testified that the type of blood spatter caused by a medium velocity impact is easily confused with satellite spatter. He opined that the spatter on the defendant's sneakers and other items of clothing was satellite spatter resulting when the defendant tried to lift the victim.

The defense suggested that the police investigation was shoddy in many respects, including the failure to test the defendant's hands for nonvisible blood, failure to identify all the people who were at the pond that morning, including the owner of the car parked next to the defendant's van, the unreliability of Cellmark's test procedures, police confusion about a towel inside the defendant's automobile, and other aspects of the investigation.

*3. Jury selection.* The defendant argues that the individual voir dire portion of the jury selection proceeding at his trial was closed to the public, in violation of his right to a public trial under the First and Sixth Amendments to the United States Constitution. See *Commonwealth v. Cohen (No. 1)*, 456 Mass. 94, 106, 921 N.E.2d 906 (2010). He initially based his claim only on a statement made by the judge on May 21, 2001, at the beginning of the individual voir dire, to the effect that the proceedings had been moved from the main court room to "Room 8 for the purposes of conducting a *non-public* individual voir dire

of the jurors" (room 8), and a statement the judge made on May 18, 2001, while attending to pretrial matters, to the effect he had met with members of the media "who have an interest in being present during the *public part* of this case" (emphases added).

After oral argument, by order dated October 23, 2009, we remanded the case to the trial judge for specific findings because "the trial record does not otherwise present a sufficient factual record for meaningful consideration of the defendant's claim." We requested the judge to address nine questions or topics in his findings, as well as any others he deemed relevant. We specifically did not require an evidentiary hearing, but did not foreclose one from taking place. We retained jurisdiction of the case and requested the judge to file his findings within sixty days.

The judge prepared a response to the order of remand within five days, indicating that he felt he should "respond without delay ... without the necessity of an evidentiary hearing." It \*220 was filed with this court on October 28, 2009. Shortly thereafter, the judge received a letter by facsimile transmission from Tom Farmer, a former reporter with the Boston Herald newspaper who covered the trial. The letter contained a description of events that differed from the judge's recollection. \*\*384 The judge telephoned the clerk of this court and stated that he had received a letter from Farmer, that he intended to hold a conference in open court with the parties, and he requested that we take no action on his response at that time. The judge prepared a written memorandum of his conversation with the clerk and sent copies to both counsel by facsimile and surface mail. A conference took place on November 23, 2009, at which time the judge considered two motions filed by defense counsel: a motion that the judge recuse himself, and a motion for an evidentiary hearing. The motion to recuse was denied, and the motion for an evidentiary hearing was allowed. The judge informed counsel that he would request an extension of the sixty-day period within which he was to have filed his findings. Neither counsel objected. We allowed the judge's request. An evidentiary hearing was held on three days between January 14, 2010, and February 1, 2010, at which twenty-one witnesses testified and an affidavit of an unavailable defense witness was accepted in lieu of testimony.

The judge prepared a second response to our questions, dated February 16, 2010. He prefaced that response with a statement that the evidentiary hearing served to refresh his memory since his first response. He prepared findings in two parts: first, findings based on the evidence at the three-day hearing (which he states "deviate from [his] *present* memory on only a few points" [emphasis added]

); and second, his "current refreshed memory of past events."

We begin with a summary of the judge's findings and recollections, indicating areas of appreciable difference. At the end of the court day on May 17, 2001, during which he held hearings on some remaining pretrial motions, the judge announced that he would be meeting with members of the media the following morning, and he invited counsel to attend. The meeting with members of the media occurred at 8:45 A.M. on Friday, May 18, 2001. At that meeting the judge reviewed existing rules proscribing videotaping or photographing jurors or prospective jurors, or identifying them by name. He also reviewed the proscription \*221 against audio recording or taking close-up photographs of conferences between the defendant and counsel.<sup>4</sup> Court staff were introduced to the members of the press, and there was a discussion about how the press and the court could be of mutual assistance. The meeting was not on the record.<sup>5</sup> It took place *before* any decision had been made as to the location of the individual voir dire. The decision was made some time after court adjourned on Friday, May 18, 2001, and before court reconvened on May 21. The judge previously had allowed counsel's request for an individual voir dire of jurors and the use of a comprehensive questionnaire to be distributed to each juror for use at the individual voir dire. The record indicates that the last matter of business on May 18 was a discussion of the form of the questions for the questionnaire.

Although some members of the press believed they could not attend the voir dire hearing, it was not because of anything the judge said, or anything a court officer or court employee said or did. The sole exception was Farmer, whose letter to the judge indicated that he remembered the judge telling the media that the court room would be closed to them and that they could appeal to a single justice. This did not comport with the judge's memory. Those members of the media who did not \*\*385 attend the meeting and who believed they could not attend the voir dire received information on the matter from an unknown source, probably Farmer.

The judge's current recollection was refreshed by the evidence. At the meeting on May 18, 2001, the judge reviewed Superior Court protocol and **S.J.C. Rule 1:19(b) & (c)**, 428 Mass. 1301 (1998), with members of the press. As a practical matter, this meant that cameras could not be used in a court room full of jurors, or in another court room that might be used for an individual voir dire. The judge stated: "One should have taken away from my meeting with the media that the video and photo media people were not going to be able to work in the courtroom

during the individual voir dire. That was the standard protocol \*222 and did not require a further order from me. I cannot remember ever advising non-attorneys of the availability of appellate review through a single justice. If I did so here, it would have been in reference to the existing court protocol." The judge stated that had there been an order excluding anyone from the court room it would have been discussed first with his law clerk and then announced on the record or reduced to writing and filed.

In his second response to our questions, the judge explained that his reference on May 18, 2001, to the "public part of the proceedings" occurred before any decision was made about the location of the individual voir dire; and that his reference on Monday, May 21, the first day of the voir dire, to a "nonpublic voir dire" was a "refer[ence] to the fact that the many video and still photo media people, who were visible inside and outside of the court house and intended to video the trial for national consumption, were not going to be working either in a courtroom filled with jurors or in one hosting only an individual voir dire." In his first response he explained that it was not his intention to close the court room to the public or the press. Rather, he meant to encourage candid answers from prospective jurors and he retained the right to limit attendance if he saw that the presence of the public had a chilling effect on a prospective juror's ability to answer sensitive questions fully and honestly. He indicated that, as it turned out, he had no occasion so to limit access.

On Monday, May 21, 2001, prospective jurors assembled in the main court room on the second floor. The criminal case being tried in that court room was in recess that day, allowing the main court room to be used for this case. The judge explained the process they would follow for empanelment. In order to avoid the physical strain on himself, the lawyers, and the defendant at having to stand at sidebar for an individual voir dire in the main court room, and to avoid the mental fatigue on the 150 or so prospective jurors quietly waiting their turn in that court room, the judge announced that panels of prospective jurors would be moved from the main court room to benches in a corridor behind the court room, then called individually into room 8, one at a time, for an individual voir dire.<sup>6</sup> He also announced \*223 that each juror would be given a questionnaire to complete. The main court room was open to the public and the media at that time. Members of the media were present. The judge stated in his first response to our questions that members of the defendant's family were present. He stated in his second response that he could not find \*\*386 whether Britt Cavalletto (Britt), the defendant's younger daughter, was

present; but he found that his other two children were not present. There were no signs on the door to the main court room prohibiting entry. No one was denied access to the main court room by the judge, a court officer, or other person. A portion of the court room had been reserved for the public. The court officers helped seat people. The proceedings in the main court room were brief, and lasted no more than one hour. The proceedings were then moved to room 8, also on the second floor, for the individual voir dire.

Room 8 is a relatively small court room, approximately twenty-four feet by twenty-five feet. It has three doors: one opens into a corridor behind the main court room; a second opens onto a marble staircase to a public corridor that leads to the office of the clerk for civil business; a third door opens into the judge's lobby. As a practical matter, no member of the public could have entered room 8 from the corridor where jurors were waiting because the path through the court room from that entrance had been narrowed by the placement of the movable witness stand adjacent to, and to the left of, the judge's bench. The glass front door to room 8 was accessible to the public. A painted sign on the wall near the foot of a marble staircase directs the public to room 8, and includes a sketch of a hand pointing up the staircase. There was never more than one prospective juror in room 8 at any time. Each prospective juror sat in the witness stand to the left of the judge; the court reporter sat directly in front of the witness stand; the prosecutors, counsel, and the defendant sat in front of the judge at one table; four benches behind the counsel table could accommodate about twenty people, and ten additional chairs could fit in the court room.

No member of the media was ever present during the individual \*224 voir dire. Two members of the press were seated outside the glass door to the court room, and they believed they had been excluded. They were able to observe the proceedings inside room 8 through the glass door. They never requested entry. A few unidentified persons were present for at least some of the voir dire proceedings. Two of the defendant's children never were present during the voir dire because someone not affiliated with the court told them over the weekend they could not or should not attend. Based on all of the hearing evidence, the judge found "it is probable that [Britt, the defendant's youngest child,] spent some time in Room 8 during the individual voir dire." The judge initially recalled seeing a few spectators in the court room during portions of the voir dire, including a daughter of the defendant. The judge's current memory is that one or two males were present who he did not recognize as affiliated with the parties, the court, or the media. He also currently remembers that a young woman with light hair was seated

in the first row during much of the voir dire, but he hesitates to say he recalls that she was one of the defendant's daughters.

There was no sign on the door to room 8 prohibiting entry, and the door was not locked. No sign or barrier prohibiting entry to room 8 had been authorized. The judge specifically noted that "there was no evidence of any writing indicating that entry was not permitted" in room 8. No court officer or court employee affirmatively denied any person entry to observe the voir dire proceedings. The defendant's three children felt they could not or should not attend the voir dire, and at least one of them was so told by someone, probably defense counsel. The judge concluded that the evidence did not support a finding that on Tuesday, May 22, 2001, an unidentified \*\*387 male court officer told Britt to sit in a chair on the first floor and remain there until the court room was open, as she had testified.

At the conclusion of the individual voir dire, which lasted about one and one-half days, the defendant's case was moved to a larger room, court room 10 (room 10) on the first floor, for the exercise of peremptory challenges. The proceedings in room 10 were open to the public. Family members or friends of the defendant, members of the media, and members of the public were among those in attendance. There was no sign on the door to room 10 prohibiting entry. The court officers permitted people \*225 to enter, and no one was denied entry by the judge, a court officer, or other person. Empanelment was concluded in room 10 after about one hour, and trial was adjourned at 5:15 P.M.

Trial counsel's strategy originally was to obtain a change of venue, but his request was denied. He thereafter requested the individual voir dire and the use of questionnaires. The defendant himself neither expressly agreed nor assented to the process, but at no time did he indicate any dissatisfaction by body language or otherwise, and both he and his attorney sat within ten feet of the judge in room 8. The judge perceived nothing from counsel that indicated he felt any aspect of the individual voir dire worked to the disadvantage of the defendant. Counsel never specifically stated, by way of assent or request, that the individual voir dire procedure used in room 8 was a matter of trial strategy. The judge received no indication that the defendant had any strategy as to the individual voir dire. The judge asserts that defense counsel's ethics are beyond reproach, and he does not believe counsel failed to make a record of his client's assent to the process in order to create an appellate issue.

[1] [2] [3] [4] (a) *Presence of the public.* The defendant

contends that the testimony was conflicting and the judge's findings are equivocal,<sup>7</sup> and therefore we should conclude, based on the record as a whole, that no member of the public was present during the voir dire. The posture of the issue before us is similar to the review of a decision on a motion for a new trial. When reviewing the grant or denial of a motion for a new trial, we extend special deference to the action of a motion judge who also was the trial judge, as here. *Commonwealth v. Grace*, 397 Mass. 303, 307, 491 N.E.2d 246 (1986). A judge's subsidiary findings of fact will not be disturbed on appeal unless they are shown to be the result of a "clear abuse of discretion or ... were clearly erroneous." *Commonwealth v. Torres*, 437 Mass. 460, 469, 772 N.E.2d 1046 (2002), quoting *Commonwealth v. Amirault*, 399 Mass. 617, 626, 506 N.E.2d 129 (1987). Where, as in this case, the new trial claim is constitutionally based, we exercise our own judgment on the ultimate factual and legal \*226 conclusions. *Commonwealth v. Tucceri*, 412 Mass. 401, 409, 589 N.E.2d 1216 (1992).

[5] Whether the public was present is a subsidiary question of fact. Neither the presence nor the absence of members of the public during jury voir dire is determinative of the question before us. The Sixth Amendment does not require members of the public to attend the trial. It prohibits their exclusion by the State, except in limited circumstances. See *Commonwealth v. Cohen (No. 1)*, 456 Mass. 94, 108, 109–110, 921 N.E.2d 906 (2010). The ultimate question of fact before us is whether there was a court order or other official action that excluded the public (or the media) from room 8. *Id.* at 107, 111, 921 N.E.2d 906. We review the judge's findings that members of the public and Britt were present under the "clear abuse of discretion" and "clearly erroneous" standards.

The defendant begins with the judge's comments about the "public part of this case" and the "non-public individual voir dire of the [prospective] jurors." He urges us to give presumptive meaning to the judge's use of the word "non-public" and conclude that the voir dire proceedings were closed to the public. The defendant also cites evidence adduced at the hearing on remand that he claims should compel us to conclude that the voir dire was closed to the public, as follows. (1) Defense counsel and his legal assistant testified unequivocally that no member of the public was there; (2) Tom Farmer, the newspaper reporter, was "camped" outside room 8 throughout the individual voir dire and did not recall any member of the public entering the court room at any time during those two days; (3) the Commonwealth witnesses who testified that members of the public were present were unable to name a single person other than Britt (who testified she was not present); (4) an article published on

May 22, 2001, stated that the jury selection process “has been closed to the public”; (5) the implausibility that in a case that attracted such massive public interest, only a handful of people would have attended if the court room actually were open to the public; (6) there was a long-standing practice of the Norfolk County Superior Court to exclude the public from jury selection proceedings; (7) the defense lawyer who was trying the case in the main court room at the time of empanelment in the defendant’s case filed an affidavit stating that the three-day <sup>\*\*227</sup> empanelment in the case he was defending was closed to the public by virtue of a sign placed on the door stating that the court room was closed; (8) the acting chief court officer reaffirmed the accuracy of testimony she had given in the *Cohen* case, *supra*, about the Norfolk County Superior Court practice of closing court rooms during empanelment; (9) an assistant clerk testified that “usually the court officers would ask people to step outside for empanelment”; and (10) Britt, defense counsel, and his legal assistant all testified that Britt was not present during the voir dire, contrary to the evidence of others and contrary to the judge’s findings—and the defendant contends “it is incumbent upon this Court to decide the matter” based on who would be the person most likely to remember accurately. We address each point.

We decline to adopt the defendant’s view of the judge’s use of the word “non-public” to mean that the public had been excluded from the voir dire. See *Commonwealth v. Cohen (No. 1)*, *supra* at 108, 921 N.E.2d 906 (some official action excluding public from voir dire is required for Sixth Amendment violation). Our order of remand specifically stated that the record was not sufficient to allow meaningful consideration of the defendant’s claim. The judge has now explained his use of the word “non-public,” stating he never intended to exclude the public and he did not order room 8 closed. He used the word “non-public” to describe the measures taken to ensure that jurors would be encouraged to give candid answers to questions on voir dire without fear of criticism, ridicule, or reprisal, and to describe his exclusion of cameras from the court room during individual voir dire of prospective jurors.

<sup>\*\*389</sup> We note that the use of the written questionnaire, which contained thirty questions designed to identify jurors who could not be fair and impartial, was itself a “non-public” measure, as the judge used that term. That is, jurors’ written answers on the questionnaires were seen only by the parties and the judge, and the judge announced to prospective jurors as the questionnaires were being handed out for the voir dire that their answers would not be accessible to the general public. Extremely

little about their written answers was publicly discussed while they were in room 8. Only clarification of certain questions was sought, as needed. The entire voir dire process consumed over 500 pages <sup>\*228</sup> of trial transcript over one and one-half days, averaging approximately five pages for each of the more than one hundred prospective jurors interviewed. Cf. *Commonwealth v. Cohen (No. 1)*, *supra* at 117, 921 N.E.2d 906 (individual juror voir dire conducted out of hearing of public permissible if conducted in open court where public may observe process). In these circumstances, the judge’s choice of the word “non-public” may have been unfortunate, but we will not presume that he meant the voir dire proceeding itself was closed to the public.

The defendant correctly states that defense counsel testified that no member of the public was present during voir dire,<sup>8</sup> and Farmer testified he did not recall seeing a member of the public enter room 8 during voir dire. However, the three prosecutors and the judge’s law clerk testified that members of the public did attend. Although they were unable to name any such people if asked, they had no duty to ascertain the names of such people, and their lack of such knowledge went to the weight of their testimony. The judge, who was facing the spectator section of room 8 for the entire proceeding, recalled seeing spectators he did not recognize as associated with the parties, the court, or the media, and he concluded they were members of the public. Significantly, there were two bench conferences during the voir dire when no prospective juror was present. The only reason to have a bench conference in the absence of a prospective juror would be to discuss a sensitive matter outside the hearing of the public so that it would not later be repeated publicly and possibly compromise the impartiality of the jury. This was a matter of credibility for the judge, and there has been no showing that his rejection of the recollection of counsel and Farmer was an abuse of discretion or clearly erroneous.

The media article referring to the first day of “jury selection” as “closed to the public” was not an exhibit at the hearing, but was attached to the defendant’s motion for an evidentiary hearing on remand. It was written by a Metrowest Daily News staff writer and published on the “townonline” Web site on May 22, 2001. The article constitutes hearsay, there is no <sup>\*229</sup> indication that the reporter was at the court house to observe any closure, and the reporter did not testify at the hearing. Moreover, there is no dispute that the initial portion of “jury selection” in the main court room was open to the public, as was the last portion in room 10. The judge properly could have disregarded this article without explanation. See *Commonwealth v. De Christoforo*, 360 Mass. 531,

543, 277 N.E.2d 100 (1971).

There is no merit to the argument that it is implausible that only a handful of people would have attended voir dire in a \*\*390 case that attracted national attention, and that the only plausible explanation is that the court room was closed to the public. Tom Farmer testified that reporters “traditionally did not cover jury selection.” Where the vast majority of the prospective jurors’ responses were written and not available to the public, just as if the voir dire had been conducted in view of the public but out of the hearing of the public, the proceeding was far from being keenly interesting to an onlooker. There is nothing implausible about a general lack of interest in this portion of the trial.

The evidence of a long-standing practice at the Norfolk County Superior Court of excluding the public from jury selection, see *Commonwealth v. Cohen* (No. 1), *supra* at 109, 921 N.E.2d 906, was used here solely to impeach the acting chief court officer, and not for substantive purposes. Even if it had been used substantively, the evidence, consisting of her prior recorded testimony in the *Cohen* case, was significantly undermined by evidence that the policy was not followed in this case. Here, in contrast to the *Cohen* case, there was no testimony that a sign had been placed outside room 8 declaring it closed to the public, and there was no evidence that a court officer was stationed outside room 8 turning away members of the public. See *id.* There was no evidence that anyone had been asked to leave room 8 or had been removed. Farmer testified, without contradiction, that members of the media had in fact attended the initial and concluding portions of jury selection in the main court room and in room 10, respectively. Britt testified that she attended the final phase of jury selection in room 10. Both the acting chief court officer and the assistant clerk testified without contradiction that the “policy” of exclusion varied from judge to judge. There was no evidence that this judge had followed such a policy either in this case or in any case. The judge stated that he did not \*230 authorize any exclusionary sign or barrier; that he used both doors to room 8 each day and saw no sign or barrier; and if he had seen anything barring entry to the court room he would have had it removed. We conclude that the judge would have acted well within his discretion to give no credence to the evidence of such a policy if it had been admitted for substantive purposes.

We decline the defendant’s invitation to resolve the conflict in testimony as to the presence of Britt in room 8 during the jury voir dire. That is the function of the trial judge, not a reviewing court. The judge heard, and observed the demeanor of, the witnesses. As such, he was

in a superior position to assess their credibility than an appellate court, which is constrained by a printed record. See *Commonwealth v. Novo*, 442 Mass. 262, 266, 812 N.E.2d 1169 (2004). The judge resolved the question, without equivocation. He concluded that, based on all the hearing evidence, “it is probable that she spent some time in Room 8 during the individual voir dire.” This was a matter for the judge to determine, and the defendant has not shown that the judge clearly abused his discretion in making the finding, or that the finding is clearly erroneous.

For the foregoing reasons, we conclude that the judge’s findings that members of the public and Britt attended portions of the individual voir dire in room 8 were neither the result of a clear abuse of discretion nor clearly erroneous.

(b) *Exclusion of the public.* The defendant contends that, although there was no written order excluding the public from room 8, the absence of the public is attributable to the court. His focus is on the judge’s finding that Kirsten Greineder Engel (Kirsten) and Colin Greineder (Colin) \*\*391 were told by an unknown, noncourt person over the weekend of May 19 to 20, 2001, that they “could not or should not attend the individual voir dire” (emphasis added). The defendant argues that this person must have been counsel because the judge recalled that he probably made the decision to use room 8 for the voir dire on Friday, May 18, after court hours, and he probably made his decision known to both counsel on that same day to give attorneys reasonable notice of his decision. He further argues that the judge must have told counsel the voir dire would be closed to the public because that is what the Greineder children understood, \*231 and it was directly contrary to counsel’s instruction that they attend the entire trial.

Communication of the decision to use room 8 does not necessarily mean the judge told counsel room 8 would be closed. Defense counsel had no recollection of the judge’s saying the voir dire would be closed, and he had no recollection of telling any of the defendant’s children that they could not attend the voir dire or that it would be closed. He said he thought their presence throughout the trial would be an important signal to the jury that they were supportive of their father, who was charged with the murder of their mother. The judge was not required to accept counsel’s testimony that his strategy was to have all the defendant’s children in the court room at all times. While it may have been his strategy to have the *jury* see them at all times, the *jury* were not selected until late on May 22, 2001. Individual voir dire averaged slightly over four minutes per prospective juror, and where no more

than one prospective juror was in room 8 at a time, collectively they would have had no idea how long the defendant's children would have been in room 8. The judge had instructed the prospective jurors they could not discuss the case among themselves. Where attendance for two of the defendant's children, who were living out of State, was a professional hardship, the judge reasonably could have concluded that counsel, or even the defendant, believed the impact of their attendance at the voir dire would have been de minimis and some accommodation for their hardship was appropriate. Alternatively, the judge could have believed that counsel told the defendant or Britt that the voir dire would be conducted primarily by questionnaire and cameras would not be allowed, and that this message was miscommunicated to the Greineder children by someone other than counsel, namely, by the defendant or, as Colin had testified, by Britt.

The defendant testified that he had no specific recollection of counsel telling him that the voir dire would be closed. He said no family member complained about being unable to attend the voir dire, and although he felt lonely and isolated he did not ask counsel why his children could not attend.

Colin and Kirsten testified that they lived out of State and that attendance at trial was a hardship to them professionally, but they would have attended the voir dire if counsel requested. \*232 Colin testified that he could not remember if he was told he could not attend the voir dire or if he did not have to attend until the jury were selected, and he could not remember who told him, but he remembered it was either his sister Britt or the defendant. The judge appears to have credited this testimony.

Kirsten testified that counsel told her she could not attend the voir dire, and consequently she did not come to Massachusetts until May 23, 2001. The judge appears to have credited her testimony that she was told she could not attend the voir dire, but he rejected her testimony that it was counsel who told her.

\*\*392 Britt testified that counsel had told her it was important for her and her siblings to attend the entire trial. She further testified that she sat on a bench between the lockup and the main court room the entire day on May 21. She did not enter the main court room because the door was barricaded and a sign saying "no entry" was affixed to a post outside the main court room. She testified on direct examination by appellate counsel that at the end of the first day she had a conversation with defense counsel. When asked about the substance of that conversation she said counsel told her the voir dire would continue the next day and he needed her there, "[p]resent in the court room

with my father, supporting my father," "as soon as I possibly could" be there. She testified that the next day an unnamed male court officer told her to stay on the first floor of the court house and talk to no one because the people around her were potential jurors in her father's case. He said he would let her know when she could enter the court room. On cross-examination Britt testified that at the end of the first day counsel and her father walked past her and counsel told her she could not attend the voir dire because it was closed. She did not mention this during direct examination. She had not asked counsel earlier that day why she could not attend. The judge did not credit her testimony. Farmer testified that he attended the initial jury selection proceeding in the main court room and he recalled seeing no sign barring entry. The three court officers assigned to the voir dire testified they never told anyone that attendance was prohibited. One of the two male court officers sat behind the defendant at all times in the court room; the other was escorting prospective jurors from the benches behind room 8 into and from the court room. Neither was physically in a position \*233 to have done or said what Britt described in her testimony. The judge credited these portions of the testimony of these witnesses.

The judge found, based on the hearing evidence, that there was no oral or written order barring the media or any other segment of the public from the individual voir dire. He also found that, based on all the evidence, Britt and members of the public attended portions of the voir dire; that no one was prevented from entering room 8, and no one was asked to leave room 8. There was no evidence that anyone had stayed outside room 8 during the voir dire because of knowledge of a court house policy that excluded spectators from jury selection proceedings. Spectators who did attend were noticed and they were not asked to leave, which, in the circumstances of this case, strongly suggests that there was no closure of the court room in the constitutional sense. Compare and contrast *Commonwealth v. Cohen (No. 1)*, 456 Mass. 94, 109, 921 N.E.2d 906 (2010) (existence of spectators bold enough to gain admission does not convert officially closed court room into open one). We have exercised our own independent judgment, and we are satisfied that the defendant has failed to show that the public, including Britt, was excluded from the voir dire in the constitutional sense.

(c) *Exclusion of the media.* The defendant argues that the media had been excluded from the voir dire, and although there was no written order to that effect, the exclusion was attributable to the court. Unlike the issue involving the public and members of the defendant's family, the judge found no member of the media attended any portion

of the voir dire.

The only evidence of media exclusion is the testimony of Farmer, who said the judge told the media on the morning of May 18, 2001, that the hearing would be closed. Neither of the other two members **\*\*393** of the media who testified, or the member whose affidavit was accepted in lieu of testimony, claimed that the judge or a court officer or other court personnel prohibited the media from attending the voir dire. The judge said he did not tell the members of the media that the court room would be closed, and that Farmer was mistaken. He found, with record support, that Farmer likely conveyed his understanding to the members of the media who had waited outside room 8 with him during voir dire or who had spoken to him on May 21.

**\*234** The lead prosecutor testified that the subject of closure of the court room for voir dire was not discussed at the meeting on the morning of May 18, 2001. He recalled that the judge stated that no photographs of prospective jurors would be allowed, and that no identifying information could be released to the public. The judge's law clerk testified that the judge's practice was to put all important rulings in writing or on the record, and closure of a court room would have been such a ruling and treated accordingly.

The judge credited the testimony of these witnesses; he found that he could not have told the members of the media on the morning of Friday, May 18, 2001, that the voir dire would be closed because the trial record shows that no decision had even been made as of the end of that day whether there would be a "traditional individual voir dire at side bar" in the main court room, or whether it would be moved to a different court room. The media were present in the main court room on Monday, May 21, for the initial phase of jury selection, and there was no mention of closure of room 8 when the judge announced that the voir dire would take place there. The judge told prospective jurors in the main court room that there was considerable media interest in the case, but they would not appear on television, be photographed, or be videotaped. He also told them that their answers on the individual questionnaires being distributed for the voir dire would not be accessible by the general public. He said nothing about the absence of the media from any portion of the trial.

The judge rejected Farmer's testimony as to closure and concluded that the defendant failed to show that the media were excluded from the voir dire in the constitutional sense. Although no member of the media attended the voir dire, he found it was not because of any official

action, but most likely because of misinformation received from Farmer. These findings were not clearly erroneous or an abuse of discretion. We have exercised our independent judgment as to this issue, and we are satisfied that room 8 was not closed to the media, in the constitutional sense, during the individual voir dire of prospective jurors.

**[6] (d) Motion to recuse.** The defendant argues that the judge should have recused himself because he made findings in his first response to our questions before considering any evidence **\*235** other than his own memory. The defendant contends he was thereby prejudiced because the judge prejudged the facts.

**[7] [8] [9]** When deciding a question of recusal, a judge must first consult his or her own emotions and conscience. If the judge passes "the internal test of freedom from disabling prejudice," the judge must then attempt an "objective appraisal" of whether the proceeding is one in which the judge's impartiality might reasonably be questioned. *Lena v. Commonwealth*, 369 Mass. 571, 575, 340 N.E.2d 884 (1976). See Code of Judicial Conduct, S.J.C. Rule 3:09, Canon 3(E)(1), as appearing in 440 Mass. 1319 (2003) ("A judge shall disqualify himself or herself in a proceeding in **\*\*394** which the judge's impartiality might reasonably be questioned ..."). Recusal is a matter that rests in the first instance in the discretion of the judge. *Commonwealth v. Coyne*, 372 Mass. 599, 602, 363 N.E.2d 256 (1977). To show that the judge abused his discretion a defendant ordinarily must show that "the judge demonstrated a bias or prejudice arising from an extrajudicial source, and not from something learned from participation in the case." *Commonwealth v. Adkinson*, 442 Mass. 410, 415, 813 N.E.2d 506 (2004), citing *Liteky v. United States*, 510 U.S. 540, 551, 114 S.Ct. 1147, 127 L.Ed.2d 474 (1994).

The judge applied this test. He first examined his own conscience (with penetrating self-awareness) and concluded that he could be fair and impartial. He then applied the second prong of the test, stating what is objectively obvious in the circumstances: judges are often called on to review, reexamine, or reconsider findings and rulings, and often modify or even completely revise prior determinations, and thus the issuance of his first response did not disqualify him from further consideration of the matter. The defendant has offered no evidence to show that the judge was not fair and impartial, or that his impartiality in further considering the matter might reasonably be questioned based on the fact he issued his first response. There was no evidence of bias or prejudice from an extrajudicial source. We are satisfied that the judge did not abuse his discretion in denying the motion

to recuse himself.

[10] 4. *Right to confront witnesses.* The defendant argues that his right to confront witnesses pursuant to the Sixth Amendment to the United States Constitution was violated when Dr. Cotton, the forensic laboratory director of Cellmark, \*236 was allowed to testify as to details of DNA test results obtained by staff analyst Wendy Magee and reviewed by Dr. Jennifer Reynolds or Dr. Lewis Maddox, none of whom testified at trial, and express a statistical opinion based on those test results. We first address the question of Dr. Cotton's opinion.

[11] [12] The defendant did not object to Dr. Cotton's opinion testimony, so we review the matter under the standard of a substantial likelihood of a miscarriage of justice. *Commonwealth v. Wright*, 411 Mass. 678, 681, 584 N.E.2d 621 (1992). Opinion testimony may, as here, be based on hearsay and not offend the Sixth Amendment. If the particular hearsay is independently admissible (the defendant does not argue that Magee could not have testified as to details contained in her reports and on which Dr. Cotton relied) and if it is the kind of evidence on which experts customarily rely as a basis for opinion testimony (which it is, see *Commonwealth v. Banville*, 457 Mass. 530, 541, 931 N.E.2d 457 [2010] ), then an expert may give opinion testimony based on such material. See *Department of Youth Servs. v. A Juvenile*, 398 Mass. 516, 531–532, 499 N.E.2d 812 (1986); Mass. G. Evid. § 703(c) (2010). Such testimony does not violate the Sixth Amendment because the expert witness is subject to cross-examination about her opinion, as well as “the risk of evidence being mishandled or mislabeled, or of data being fabricated or manipulated, and as to whether the expert's opinion is vulnerable to these risks.” *Commonwealth v. Barbosa*, 457 Mass. 773, 791, 933 N.E.2d 93 (2010). See *Commonwealth v. Banville*, *supra*. The defendant had an adequate opportunity to conduct such cross-examination, and he availed himself of that opportunity, with vigor, for the better part of two days.

We add that the record reflects that Dr. Cotton testified that she reviewed Magee's \*\*395 work, including six reports prepared by Magee, and reviewed by Reynolds or Maddox. She conducted her own independent evaluation of the data that were produced during testing. She expressed her own opinion, and did not merely act as a conduit for the opinions of others. See *Commonwealth v. Avila*, 454 Mass. 744, 762, 912 N.E.2d 1014 (2009); *Commonwealth v. Nardi*, 452 Mass. 379, 387–391, 893 N.E.2d 1221 (2008). There was no error in the admission of Dr. Cotton's opinion testimony.

[13] [14] The defendant next challenges Dr. Cotton's

testimony as to the details and results of DNA tests conducted by Magee. His \*237 objection at trial to such testimony was precise: “I would like to register my objection to Doctor Cotton's testifying about the data in this case given the fact that she hasn't done any of the work on it.” This evidence, while providing basis for Dr. Cotton's opinion, was hearsay. As such, it was error to permit her to testify on direct examination to the details of the test results obtained by Magee. See *Commonwealth v. McNickles*, 434 Mass. 839, 857, 753 N.E.2d 131 (2001); *Department of Youth Servs. v. A Juvenile*, *supra*. Inquiry into the hearsay basis for expert opinion is the decision of the cross-examiner. *Id.* at 532, 499 N.E.2d 812, quoting Advisory Committee Note on Proposed Mass. R. Evid. 705. The issue is preserved, so we review under the prejudicial error standard.

The defendant asks us to review under the harmless beyond a reasonable doubt standard because the error is of constitutional magnitude. Relying on *Crawford v. Washington*, 541 U.S. 36, 124 S.Ct. 1354, 158 L.Ed.2d 177 (2004), the defendant argues that the admission of the details of Magee's test results through Dr. Cotton violates his right of confrontation and cross-examination under the Sixth Amendment.<sup>9</sup> See *Commonwealth v. Nardi*, *supra* at 392–393, 893 N.E.2d 1221. We agree with the defendant that the nature of the hearsay was testimonial in the Sixth Amendment sense because “a reasonable person in [Magee's] position would anticipate [her findings and conclusions] being used against the accused in investigating and prosecuting a crime.” *Commonwealth v. Nardi*, *supra* at 394, 893 N.E.2d 1221, quoting *Commonwealth v. Gonsalves*, 445 Mass. 1, 3, 833 N.E.2d 549 (2005), cert. denied, 548 U.S. 926, 126 S.Ct. 2982, 165 L.Ed.2d 989 (2006). Although *Crawford v. Washington*, *supra*, was decided nearly three years after the defendant's trial, he is entitled to the new rule announced in that case because his direct appeal was pending at that time. See *Griffith v. Kentucky*, 479 U.S. 314, 320–328, 107 S.Ct. 708, 93 L.Ed.2d 649 (1987); *Commonwealth v. Bray*, 407 Mass. 296, 299, 553 N.E.2d 538 (1990). However, where the defendant's objection to the testimony did not precisely raise the constitutional question, “[t]he adequacy of the objection has to be assessed in the context of the trial as a whole.” *Commonwealth v. Koney*, 421 Mass. 295, 299, 657 N.E.2d 210 (1995). See *Commonwealth v. Nardi*, *supra* at 394–395, 893 N.E.2d 1221; *Commonwealth v. Galicia*, 447 Mass. 737, 746, 857 N.E.2d 463 (2006).

\*238 Defense counsel gave his opening statement immediately after the prosecutor's opening. In his opening counsel stated that Cellmark found an unknown human's DNA on the victim's blue left-hand glove. He

quoted from a Cellmark report, and let the jury know that a significant \*\*396 part of the defense would be the failure of the “police and the prosecutors” to “conduct a fair and objective search for the truth. They never sought out other suspects.” He also promised the jury they were “going to hear a lot about DNA testing in the course of this case.”

Cellmark had been using a standard minimum interpretation threshold setting on its computer software of forty RFUs for “inclusion” of someone as a possible DNA source. Cellmark raised its threshold to sixty RFUs during testing of items in this case. Counsel challenged the reliability of Cellmark’s test results by attacking its decision to use the forty RFU and the sixty RFU thresholds, and he highlighted the interpretive difficulties when using low RFU thresholds. On cross-examination, defense counsel elicited from Dr. Cotton that the FBI used a threshold of 200 RFUs, and the manufacturers of the equipment Cellmark used had recommended a setting of 150 RFUs. Counsel elicited testimony from Dr. Cotton that if Cellmark used a setting of sixty RFUs instead of forty RFUs for tests done on the brown left-hand glove found in the storm drain near the defendant’s parked van, five of the ten “peaks” representing alleles on the electropherograms, or computer printouts of DNA test results, would have been eliminated, and her statistical calculation would change, inferentially in favor of the defendant. Similarly, using the equipment manufacturer’s recommended setting of 150 RFUs, Cellmark would have obtained only two detectable alleles; and at the FBI’s setting of 200 RFUs, there would have been no detectable results.

Counsel elicited from Dr. Cotton that Cellmark had concluded that the defendant was “excluded” as a contributor of the DNA on one sample taken from the hammer. She further admitted that if Cellmark’s tests on the knife had been at the FBI’s threshold of 200 RFUs, the only alleles detected would have been those of the victim.

As trial counsel predicted in his opening statement, there was evidence of a stranger’s DNA on the victim’s left-hand glove. \*239 Dr. Cotton testified to a total of five alleles on that glove indicating possible DNA from more than two people. In addition, an allele inconsistent with the DNA profiles of both the defendant and the victim was found in a sample taken from the right-hand glove found with the hammer and the knife.

Defense counsel made extensive use of the data prepared by Magee in his cross-examination of Dr. Cotton. This cross-examination buttressed two pillars of the defense,

namely, the unreliability of Cellmark’s testing procedures, which necessarily affected the credibility of Dr. Cotton’s opinion as to the high probability of the defendant’s being a contributor to the DNA on the knife and brown gloves, and the defense theory that a third party committed the murder.

As discussed above, Dr. Cotton’s opinion was admissible, and experienced defense counsel prepared and pursued two effective strategies as a response to the very high likelihood her opinion would be admitted. One strategy was to reduce some of the sting of Dr. Cotton’s opinion; the other was to elicit support for his third-party culprit defense. Both strategies depended entirely on the use of Magee’s data in cross-examination of Dr. Cotton. Moreover, counsel benefited from not having Magee testify because it enabled him to frustrate Dr. Cotton’s testimony at points where she simply had no knowledge about analytical choices that Magee made in producing the electropherograms, which probably reflected negatively on Dr. Cotton’s credibility. The data were an integral \*\*397 part of the defense, and it was going to be the subject of inquiry by the defense whether Magee testified or not.

We conclude that, in the context of this case, there was no prejudice in the admission of Magee’s DNA test results. Cf. *Commonwealth v. Nardi*, 452 Mass. 379, 395–396, 893 N.E.2d 1221 (2008) (admission of nontestifying medical examiner’s findings during opinion testimony of pathologist was unpreserved error, but evidence was “equally, if not more, important to the defense,” and thereby deemed not to create substantial likelihood of miscarriage of justice).

[15] 5. *Prior bad acts*. The defendant asserts error in the admission of evidence of his extramarital sexual activity, where there was no evidence of prior overt hostility toward the victim. He \*240 asks us to adopt the view expressed in *Casterline v. State*, 736 S.W.2d 207, 211–212 (Tex.Ct.App.1987), where the court held that it would be highly speculative to infer that marital infidelity, standing alone, created a homicidal motive, particularly where spouses in a troubled marriage may be neither jealous nor emotional, but even if they were, that does not necessarily create a homicidal motive.

[16] [17] [18] Evidence of bad acts is not admissible to prove bad character or propensity to commit the crime charged, but it may be admissible, if relevant, for other purposes, including proof of motive. *Commonwealth v. Barrett*, 418 Mass. 788, 793–794, 641 N.E.2d 1302 (1994). “[W]here the relevance is not substantial but borderline, the evidence must be excluded unless its probative value on

the issue in contention outweighs the undue prejudice that may flow from it.” *Commonwealth v. Helfant*, 398 Mass. 214, 225, 496 N.E.2d 433 (1986). See Mass. G. Evid. § 404(b) (2010). The decision to admit or reject such evidence rests in the sound discretion of the trial judge. *Commonwealth v. Butler*, 445 Mass. 568, 574–575, 839 N.E.2d 307 (2005).

Here, the evidence of the defendant’s extramarital sexual activity was highly relevant to a motive to kill. The defendant gave contradictory statements to Trooper Foley and Belinda Markel about recent sexual relations with the victim. During the week before the murder the defendant feverishly sought a wide range of sexual relations and activity. In addition, he was insistent with people he solicited that their relations be discreet, and that he could not host a tryst but he would arrange for hotel accommodations. The defendant was both circumspect and impulsive in his quest. In an e-mail to one couple he said he first would like to meet them to see if they were compatible, but wrote, “I will tend to be impatient if we find we are, indeed, compatible.” The defendant became concerned on October 29, 1999, two days before the victim was murdered, that she had used his computer, through which he conducted his search for sexual relations. In September the defendant told a prostitute with whom he sought to revive a relationship not to telephone him because “it was not the right time,” then he telephoned her the day before and the day after the murder.

This evidence supported a reasonable inference that the victim’s presence had become an inconvenience to the defendant, \*241 and an obstacle to a lifestyle he pursued and kept secret from his entire family and the public. The jury could have inferred that when he contacted the prostitute just before and after the murder, the time had come to kill his wife. In the words he expressed to the prostitute, the time was now “right.” The evidence was highly probative of a motive to kill. “Without the challenged evidence [the murder] could have appeared to the jury as an essentially inexplicable act of violence.”

\*\*398 *Commonwealth v. Mendes*, 441 Mass. 459, 464, 806 N.E.2d 393 (2004), quoting *Commonwealth v. Bradshaw*, 385 Mass. 244, 269, 431 N.E.2d 880 (1982). The judge did not abuse his discretion by admitting this evidence.

We decline the defendant’s request that we adopt the rule of *Casterline v. State*, *supra* at 212, where the court said “that jealousy or emotion need not necessarily create a homicidal motive,” and that “[i]t would be highly speculative to infer that marital infidelity, *standing alone*, created a homicidal motive” (emphasis added). Our rule is

somewhat different.

Our test for admissibility is more nuanced than that in the *Casterline* case. In our jurisprudence, inferences, such as motive, need not be “inescapable or necessary”; they need only be “reasonable and possible.” *Commonwealth v. Angelo Todesca Corp.*, 446 Mass. 128, 132–133, 842 N.E.2d 930 (2006). We recognize that evidence of an existing sexual relationship between a defendant and a third person is relevant on the issue of the defendant’s motive to kill his or her spouse. See *Commonwealth v. Raposa*, 440 Mass. 684, 691, 801 N.E.2d 789 (2004). Of course, a judge must consider whether the probative value of such evidence outweighs its prejudicial value in the context of the case. *Commonwealth v. Helfant*, *supra*. The context of the instant case did not leave the evidence of extramarital conduct “standing alone.” Here, as previously discussed, the probative value of the evidence was very high. It provided a reasonable basis to infer a motive to kill, and it was connected in time and place with the facts of this case. See *Commonwealth v. Barrett*, 418 Mass. 788, 794, 641 N.E.2d 1302 (1994). It tended to establish that the defendant intended to kill his wife, an element of the crime, and there was no reason to exclude it. The evidence was both relevant and admissible. See Mass. G. Evid., *supra* at §§ 401, 402.

There is no merit to the defendant’s claim that the prosecutor \*242 should not have argued as he did to the jury because the defendant had abandoned this evidence and theory of motive. The prosecutor’s statement in closing argument that he wished he could explain how a person gets to the point in his life where he kills another was not abandonment of motive, but merely a statement of something he did not have to prove, see *Commonwealth v. Bonomi*, 335 Mass. 327, 355, 140 N.E.2d 140 (1957), and he asked the jury to return a verdict based on what he had proved. The prosecutor’s reference to certain instances of the defendant’s extramarital activity that were not objected to at trial and about which the defendant now complains were made with record support and were not unfair.

[19] 6. *Cross-examination of the defendant*. The defendant asserts that the prosecutor improperly cross-examined him about his prearrest and postarrest silence, and improperly exploited this evidence in his closing argument.

The defendant testified that he tried to lift his wife three times, describing his various efforts. On cross-examination the prosecutor asked if he recalled telling Trooper Foley that he had not washed his hands, which were clean. The defendant said he believed so. The prosecutor then asked if he told police, prior to his

testimony, that he tried three times to move his wife. The defendant said they did not ask. The prosecutor then asked if the first time he ever mentioned trying to lift his wife three times to anyone in law enforcement was during his testimony. The judge sustained defense counsel's objection. When the prosecutor rephrased the question, the judge again sustained counsel's objection.

\*\*399 The next day the prosecutor pursued the difference between what the defendant told police and his testimony about attempting to lift his wife three times. He also showed the defendant photographs of his hands (clean) taken on October 31, 1999, at the Wellesley police station. The prosecutor asked the defendant if hearing expert testimony about the blood on his jacket prompted his recollection that he tried three times to lift her. The defendant said it did not.

The prosecutor challenged the defendant's testimony about one particular attempt to pick up his wife, in which he said he was on his knees and backed up on his knees into a pool of \*243 blood. The prosecutor asked if he ever mentioned that to Trooper Foley. The defendant said he could not recall saying that to Foley. The prosecutor asked the defendant whether hearing the testimony of Sergeant Rebeiro of the State police concerning the detection of his heel mark in a bloodstain near the victim's body prompted his testimony about kneeling in a pool of blood. The defendant said it did not. The prosecutor also asked the defendant if speaking to Stuart James, a defense expert on crime scene reconstruction and bloodstain pattern analysis who had not yet testified, helped him to recollect trying to lift his wife three times. The defendant said he had never had a conversation with James.

Other than the two objections referred to, there was no objection to the other questions. There was no request for a curative instruction.

In his closing argument, the prosecutor argued that the defendant's testimony about trying three times to lift the victim essentially was concocted to support Stuart James's blood spatter testimony. The prosecutor also argued that the defendant had had one and one-half years to think about this, and the first mention of it did not emerge until Stuart James told him that a type of blood spatter known as satellite spatter would occur on his pants and sneakers if he lifted up the victim and blood droplets fell off her, rebound, and then fall into each other, forming small pools on his pants and sneakers. There was no objection to the prosecutor's closing argument.

All assertions of error or prosecutorial misconduct are

unpreserved, so we review to determine if there was error or misconduct, and if so, whether it created a substantial likelihood of a miscarriage of justice. *Commonwealth v. Wright*, 411 Mass. 678, 681–682, 584 N.E.2d 621 (1992).

The defendant was not in custody and had not been advised of the Miranda warnings at the time he made any of the pretrial statements in question. Consequently, the rule of *Doyle v. Ohio*, 426 U.S. 610, 617–618, 96 S.Ct. 2240, 49 L.Ed.2d 91 (1976), prohibiting comment on a defendant's post-Miranda silence, does not apply. See *Fletcher v. Weir*, 455 U.S. 603, 102 S.Ct. 1309, 71 L.Ed.2d 490 (1982). Moreover, the defendant did not remain silent, but made several statements, including the one in question to Trooper Foley. He then testified in a different fashion. \*244 “The [prosecutor's] questions were not designed to draw meaning from silence, but to elicit an explanation for a prior inconsistent statement.” *Anderson v. Charles*, 447 U.S. 404, 409, 100 S.Ct. 2180, 65 L.Ed.2d 222 (1980). As such, they were not improper. *Id.* See *Commonwealth v. Sherick*, 401 Mass. 302, 516 N.E.2d 157 (1987); *Commonwealth v. Donovan*, 58 Mass.App.Ct. 631, 636–637, 792 N.E.2d 657 (2003).

The prosecutor's questions and argument concerning the length of time the defendant had to think about the case, hearing the testimony of Sergeant Rebeiro, and talking to Stuart James, were all \*\*400 fair and grounded in the record.<sup>10</sup> See, e.g., *Anderson v. Charles*, *supra* at 405–406, 100 S.Ct. 2180.

This case is distinguishable from *Commonwealth v. Beauchamp*, 424 Mass. 682, 690, 677 N.E.2d 1135 (1997); *Commonwealth v. Person*, 400 Mass. 136, 142, 508 N.E.2d 88 (1987); and *Commonwealth v. Ewing*, 67 Mass.App.Ct. 531, 542, 854 N.E.2d 993 (2006), S.C., 449 Mass. 1035, 873 N.E.2d 1150 (2007). Those cases all involved defendants who made no pretrial statement, and prosecutors who commented that the defendants tailored their testimony to the Commonwealth's case, and by implication, used their pretrial silence to unfair advantage. Here, the defendant did not exercise his right to silence and the prosecutor did not comment directly or indirectly on an exercise of the right to remain silent. There was nothing improper in the prosecutor's questions or argument. See *Commonwealth v. Moore*, 408 Mass. 117, 129–132, 556 N.E.2d 392 (1990).

7. *Amended motion for a new trial.* The defendant raises five issues in his appeal from the denial of his amended motion for a new trial.

[20] (a) *Recantation.* At trial, State police Sergeant Rebeiro testified that the defendant's left heel could have made

some of the impressions in an overlapping print in a drag mark through a bloodstain on the path where the victim was found. Rebeiro further testified that “the heel would be towards the back of the victim as she was in her final resting position.” This, as well as \*245 other expert evidence, enabled the prosecutor to state in his opening and argue in his closing that the defendant dragged the victim by walking backward and pulling on the upper portion of her body.

The defendant filed an affidavit of a forensic expert, William J. Bodziak, with his motion for a new trial. Bodziak had averred that the footprint was that of the toe of the defendant’s right sneaker, not his left heel. Rebeiro subsequently filed her own affidavit, admitting error and agreeing with Bodziak.

The judge concluded that the newly discovered evidence, if admitted at trial, would not have been a real factor in the jury’s deliberations, and that there is not a substantial likelihood the jury would have reached a different result if exposed to the evidence. He reasoned that although this footprint testimony was very important to the Commonwealth’s theory that the defendant held the victim from behind and dragged her from the path to a wooded area, other expert evidence supported the theory. Most foot traffic left no identifiable prints, so the absence of the heel print would not rule out the possibility that the defendant dragged the victim in the manner argued by the prosecutor. Bloodstains on the defendant’s clothes supported the inference that the defendant dragged the victim.

<sup>[21]</sup> A motion for a new trial is addressed to the sound discretion of the judge, and the judge’s disposition will not be reversed unless it is manifestly unjust. *Commonwealth v. Moore, supra* at 125, 556 N.E.2d 392. We accord special deference \*\*401 to the action of a judge on a motion for a new trial where that judge also was the trial judge, as here. *Commonwealth v. Grace, 397 Mass. 303, 307, 491 N.E.2d 246 (1986)*. Contrary to the defendant’s contention, the judge applied the correct standard. See *Commonwealth v. Weichell, 446 Mass. 785, 798, 847 N.E.2d 1080 (2006)*, quoting *Commonwealth v. Grace, supra* at 305–306, 491 N.E.2d 246 (“A defendant seeking a new trial on the ground of newly discovered evidence must establish both that the evidence is newly discovered and that it casts real doubt on the justice of the conviction.... [T]he judge must find there is a substantial [likelihood (where motion is heard before direct appeal from conviction of murder in the first degree is decided) ] that the jury would have reached a different conclusion had the evidence been admitted at trial [and] whether the new evidence would \*246 probably have been a real

factor in the jury’s deliberations.... This process of judicial analysis requires a thorough knowledge of the trial proceedings ... and can, of course, be decided by a trial judge’s observation of events at trial ...”). The judge relied on his knowledge of the trial, he applied the correct standard, and he considered this newly discovered evidence in light of specific strengths of the Commonwealth’s case, concluding that it “does not cast real doubt on the justice of the defendant’s conviction.” There was no abuse of discretion or other error of law.

<sup>[22]</sup> <sup>[23]</sup> (b) *Jury’s exposure to extraneous information*. The defendant argues that he is entitled to a new trial because the jury were exposed to extraneous material. A defendant is entitled to be tried by a jury that are impartial and whose deliberations are unaffected by extraneous matter. *Commonwealth v. Cuffie, 414 Mass. 632, 638, 609 N.E.2d 437 (1993)*. Extraneous matter is information, knowledge, or specific facts about one of the parties or the matter in litigation that did not come from the evidence at trial. See *Commonwealth v. Fidler, 377 Mass. 192, 200, 385 N.E.2d 513 (1979)*.

In March, 2005, appellate counsel learned of a book written about this case entitled “Murder at Morses Pond.” A portion of the book involves an interview of a juror by the author, describing an experiment by the jury using a banana and the gloves admitted in evidence. Counsel spoke with the author and confirmed the fact of the interview. He learned that the interview was tape recorded and still existed. Counsel included this information in an affidavit, which provided the basis (undisputed) for a postverdict evidentiary hearing and the taking of testimony from jurors. See *Commonwealth v. Fidler, supra* at 201, 385 N.E.2d 513.

The judge found the following facts. During their deliberations the jury requested a ruler with millimeter gradations. After consulting with counsel, who assumed that the jury were interested in measuring spaces between the dots on the gloves, and dots or streaks on certain items of evidence, the judge denied the request. At some point, believed to be during or shortly after lunch, one juror picked up a banana provided with lunch with the intention of eating it. He was wearing the brown gloves with raised dots on the fingers and palms. After he put down the banana and removed the gloves, he discovered dot impressions from the \*247 gloves on the banana peel. The juror then rubbed a gloved finger across the banana peel, which produced a streak on the peel. He and some other jurors then compared the dots and streaks on the peel to those on the defendant’s jacket. The jury returned their verdict the next day.

[24] [25] [26] A judge may conduct an evidentiary hearing and inquire of jurors **\*\*402** about their exposure to extraneous facts, provided the inquiry is limited to the nature and extent of the jurors' exposure to extraneous matter, and not "the actual effect of the matter on [any] juror's decision." *Id.* The defendant bears the burden at such a hearing of showing that the jury were in fact exposed to extraneous matter. If the judge finds that extraneous matter was introduced, the burden then shifts to the Commonwealth to show beyond a reasonable doubt that the defendant was not prejudiced thereby. In determining the question of prejudice, the judge must focus on the probable effect of the extraneous matter on a hypothetical average jury, and not the actual thought process of any deliberating juror. *Id.*

[27] Experimentation with an exhibit during deliberations is generally permissible if it is within the scope of the evidence presented at trial, duplicative of tests or demonstrations performed in the court room, or cumulative of evidence already in the record. See *Commonwealth v. Pixley*, 42 Mass.App.Ct. 927, 928–928, 677 N.E.2d 273 (1997), and cases cited. See also 2 McCormick, Evidence § 220, at 51 (6th ed.2006) (critical difference is between experiments that constitute closer scrutiny of exhibit and experiments that go beyond lines of trial evidence).

The judge concluded that the experiment did not constitute extraneous matter. The judge found that the experiment was conducted to observe whether the glove was capable of making a pattern similar to the dots and swipe stain on the defendant's glasses and his jacket. He said it was "loosely based on the testimony and arguments presented at trial and did not invade a new field of evidence." The judge further found that the use of the banana, an outside object not part of the trial evidence, did not transform the experiment into extraneous matter. We agree.

The experiment was within the scope of the evidence presented at trial, and cumulative of expert testimony. It was an evaluation of the testimony of experts who opined on the consistency **\*248** between the dots on the gloves and dots and swipe stains on various pieces of evidence. See *Banghart v. Origoverken, A.B.*, 49 F.3d 1302, 1306–1307 (8th Cir.1995) (jury not exposed to extraneous evidence where they dropped toothpicks and matches not in evidence into wooden stove, a trial exhibit, in order to evaluate expert's testimony that experiments he conducted with stove showed it was defective). We discern no abuse of discretion or other error of law in the judge's determination that the jury experiment did not constitute extraneous matter. *Commonwealth v. Moore*,

408 Mass. 117, 125, 556 N.E.2d 392 (1990).

[28] (c) *Trial counsel's failure to move to exclude or to challenge scientifically unreliable DNA results.* The defendant argues that his trial counsel was constitutionally ineffective in failing to file a pretrial motion to exclude Cellmark's DNA evidence as scientifically unreliable. *Commonwealth v. Lanigan*, 419 Mass. 15, 25–26, 641 N.E.2d 1342 (1994). He also faults counsel for failing to employ an expert to challenge Cellmark's DNA evidence at trial as being scientifically unreliable.

[29] [30] The statutory standard under G.L. c. 278, § 33E, is more favorable to a defendant than the constitutional standard for determining the ineffectiveness of counsel. That is, we review counsel's performance to determine if there was an error, and whether it created a substantial likelihood of a miscarriage of justice. *Commonwealth v. Wright*, 411 Mass. 678, 682, 584 N.E.2d 621 (1992). Here, the defendant must show that a *Lanigan* motion would have been successful. *Commonwealth v. Beliard*, 443 Mass. 79, 90–91, 819 N.E.2d 556 (2004). In addition, error attributable to an attorney's tactical decision will be deemed ineffective assistance of counsel only if it was manifestly unreasonable when made. *Commonwealth v. Coonan*, 428 Mass. 823, 827, 705 N.E.2d 599 (1999).

[31] Defense counsel has a duty to conduct an independent investigation of the forensic, medical, or scientific evidence on which the Commonwealth intends to rely to prove its case. *Commonwealth v. Baker*, 440 Mass. 519, 529, 800 N.E.2d 267 (2003), and cases cited. The judge found that counsel knew that Cellmark was the only laboratory using a threshold as low as forty RFUs, and that there are interpretive challenges, including allelic dropout and stutter problems, when analyzing DNA mixtures, particularly those involving low copy number (LCN) DNA. He also found **\*249** that counsel was aware that his expert, Dr. Christie T. Davis, criticized Cellmark's work as unscientific and unreliable for reasons including its failure adequately to validate its forty RFU threshold. The judge further found that counsel recognized that courts in Massachusetts and elsewhere had found issues of RFU, sample size, mixtures, and stutter to bear on the weight of DNA test results rather than their admissibility. Counsel was aware of the Superior Court judge's ruling in *Commonwealth v. Gaynor*, 443 Mass. 245, 820 N.E.2d 233 (2005), which predated the trial in this case,<sup>11</sup> and addressed issues nearly identical to those presented here. The judge in that case had concluded that the questions presented went to the weight of the evidence, not its admissibility, and we

agreed. *Id.* at 266–267, 820 N.E.2d 233.

Counsel’s decision not to pursue a pretrial *Lanigan* motion was made in consultation with his team of experts, including Professor William Thompson, who the judge found was “one of the country’s most knowledgeable attorneys on DNA issues.” Counsel’s decision took into consideration factors other than those just discussed, including the risk that a *Lanigan* hearing would serve to educate the prosecution about weaknesses in the DNA evidence. See *Commonwealth v. Bol Choeurn*, 446 Mass. 510, 520–521, 845 N.E.2d 310 (2006). In addition, the presence of a stranger’s alleles on the knife and brown work gloves, which would not have been detectable at one hundred RFUs but were detectable at forty RFUs, could reasonably be considered to have greater impact on the jury than those found on the victim’s glove, which were detectable above one hundred RFUs. Consequently, counsel weighed this factor against seeking a *Lanigan* hearing in order to have the benefit of the stranger alleles detectable at forty RFUs. The judge concluded that counsel’s decision to forgo a *Lanigan* motion was not manifestly unreasonable. The judge’s conclusion was supported by the record and was not an abuse of discretion.

The judge also determined that, acting within his discretion, he most likely would have rejected a *Lanigan* challenge to the reliability of Cellmark’s test results in this case. See *Canavan’s Case*, 432 Mass. 304, 313, 733 N.E.2d 1042 (2000). The affidavit of the defendant’s \*250 expert filed with the amended motion for a new trial opined that there is no scientific justification for a laboratory arbitrarily to lower its RFU threshold from one hundred, which was based on internal validation studies, to forty, which was not. The judge rejected this opinion. He noted that the defendant’s \*\*404 expert based his opinion in part on his informal survey of nine laboratories that were unwilling to perform LCN (i.e., low copy number, or small amount) mixture analysis at low RFUs, but he noted that this survey did not establish that such analysis is scientifically unreliable, and the defendant presented nothing in the scientific literature supporting the notion that the use of a threshold below one hundred RFUs is categorically invalid. In addition, the judge credited evidence that Cellmark scientists conducted validation studies in which they observed that good data were obtained at a threshold of forty RFUs, and that Cellmark validated stutter values for each individual locus. The judge further noted that, since the trial of this case, we have upheld trial court findings that Cellmark has conducted validation studies indicating that analysts could reliably interpret test results, at least with respect to single sources of DNA and mixtures yielding strong

evidence of a primary contributor, based on readings as low as forty RFUs. See, e.g., *Commonwealth v. Gaynor*, *supra* at 265, 267, 820 N.E.2d 233.

The defendant’s expert stresses the difficulty of interpreting LCN mixtures, compared to single source samples of DNA, and contends that Cellmark’s guidelines and standard operating procedures are inadequate in guiding analysts in this task. The judge found that Cellmark analysts are capable of considering and accounting for issues of stutter and dropout based on their experience and expertise.

The judge found that any question as to possible analyst bias, like the other issues raised by the defendant’s expert, went to the weight of Cellmark’s test results, not their admissibility. See *Commonwealth v. Gaynor*, *supra* at 263–267, 820 N.E.2d 233; *Commonwealth v. Vao Sok*, 425 Mass. 787, 806 n. 27, 683 N.E.2d 671 (1997). We conclude that the judge did not abuse his discretion or commit other error of law in concluding that the defendant probably would not have prevailed on a pretrial *Lanigan* motion.

[32] The defendant next argues that counsel was ineffective in \*251 failing to challenge the DNA evidence at trial. He first argues that counsel should have retained a forensic scientist to replace Dr. Davis, a molecular biologist retained by counsel and who was prepared to testify that Cellmark’s testing was scientifically unreliable. Defense counsel learned less than two months before trial that testimony of Dr. Davis in a recent case in Australia was “strongly criticized” by the Australian judge. Counsel also learned that the criticism of Dr. Davis in the Australian case had a negative impact on her credibility in a case in California. He began to reconsider calling Dr. Davis as the key defense expert because he believed she was vulnerable to impeachment based on the Australian case. He also was concerned about doubts she had after hearing Dr. Cotton’s testimony that the “stranger” DNA at one particular allele might in fact be an artifact.

Counsel previously had retained Dr. Dan E. Krane, associate professor of biological sciences at Wright State University, who also runs a DNA research laboratory there, to duplicate the testimony of Dr. Davis, but from an academic perspective. Counsel arranged to have Dr. Krane spend approximately twenty-four hours over two days with Dr. Davis regarding her analysis of the DNA testing done by Cellmark. Dr. Krane then offered testimony about shortcomings in Cellmark’s DNA test procedures. He testified as to other matters, including the “stranger” DNA and DNA transfer issues. Dr. Davis never testified, and was released as a witness by counsel

on June 21, after Dr. Krane testified.

\*\*405 Counsel also challenged Cellmark's test results in his cross-examination of Dr. Cotton over a period of nearly two days with a thorough command of the facts, the science, and Cellmark's electronic data. Dr. Davis sat next to him at counsel table during the entire testimony of Dr. Cotton.

The defendant contends that the electropherograms prepared by Dr. Davis to illustrate the "stranger allele defense" were excluded, and as a result the third party culprit component of the defense "fell flat." Although the electropherograms were not admitted as exhibits, counsel was able to extract from Dr. Cotton that there was DNA from more than two people on the victim's left-hand glove and the right-hand glove found with the hammer and knife. Dr. Krane also testified that he detected \*252 DNA inconsistent with both the victim and the defendant on the victim's left-hand glove and the right-hand glove found with the hammer and knife. He further testified that he detected an allele inconsistent with both the victim and the defendant, not previously reported, in the spatter on the victim's abdomen, on the hammer (inconsistent only with the defendant), the knife, the plastic bag, and the left-hand glove found in the storm drain near the place where the defendant parked his van.

Defense counsel was able to accomplish what he needed without the testimony of Dr. Davis, whose credibility was problematic. The electropherograms were merely cumulative of more compelling evidence. Indeed, any value in the electropherograms would have depended entirely on the cross-examination of Dr. Cotton and the testimony of Dr. Krane. Without their testimony, a jury would not know what to make of such exhibits, which were subject to interpretation. The third-party culprit defense did anything but "fall flat," and the decision to proceed only with Dr. Krane was not manifestly unreasonable.

Counsel's failure to request a continuance in the trial to secure a replacement for Dr. Davis was determined by the judge to have been a decision that was not manifestly unreasonable. The judge found that a continuance would have taken the trial date beyond Kirsten's early August wedding date, and counsel did not want to lose her support at trial for the defendant, a delicate matter in view of her future husband's lack of support for the defendant. Before making this decision counsel consulted the defendant and family members of the defendant.

The defendant faults counsel for failing to retain a statistics expert to challenge Cellmark's calculations. The

judge found that before deciding not to hire such an expert defense counsel consulted his team of experts, including Thompson, and he made a reasoned decision that testimony from such an expert would not significantly reduce the probability that the defendant was a source of DNA on various exhibits, and where there was other strong evidence of guilt. More significantly, it would distract the jury from the defendant's DNA transfer theory, which would render any statistical calculation irrelevant. The judge concluded that counsel's decision was not manifestly unreasonable, and we agree.

\*253 We have considered all aspects of the defendant's argument on this issue and conclude that the judge's findings and conclusions about counsel's strategic decisions are grounded in the record, and his conclusions that counsel's decisions were not manifestly unreasonable are not an abuse of his discretion.

[33] (d) *Counsel's failure to file a motion to suppress the receipt for purchase of nails.* The defendant claims that counsel was ineffective for failing to file a motion \*\*406 to suppress the receipt for the purchase of nails seized during execution of the search warrant that issued on November 12, 1999. He alleges that neither the warrant nor the affidavit in support of the application for the warrant described the receipt with sufficient particularity. See *Commonwealth v. Rutkowski*, 406 Mass. 673, 550 N.E.2d 362 (1990). In order to prevail on his claim, the defendant must establish that the motion to suppress would have been successful, *Commonwealth v. Comita*, 441 Mass. 86, 91, 803 N.E.2d 700 (2004), and that the failure to file the motion created a substantial likelihood of a miscarriage of justice, that is, that the receipt "was likely to have influenced the jury's conclusion." *Commonwealth v. Wright*, 411 Mass. 678, 682, 584 N.E.2d 621 (1992).

The judge did not decide whether he would have allowed such a motion, but concluded that even if the defendant would have prevailed in suppressing the receipt, his failure to file the motion would not have created a substantial likelihood of a miscarriage of justice. The judge found that, although the nails receipt created a strong inference that the defendant purchased the Estwing hammer minutes after the nails purchase, the defendant's son testified that he had purchased the nails. More important, the judge found that the receipt was not a key piece of evidence. There was evidence that the defendant previously had purchased items at the hardware store, which sells the type of gloves involved here as well as Estwing hammers, and the judge noted the strength of the Commonwealth's case, including "the DNA evidence linking him to the knife and [the brown gloves], the blood

spatter and transfer evidence and absence of blood on the defendant's hands and the cuffs of his jacket, the blood pattern on his glasses, the fiber evidence, the consciousness of guilt evidence [the defendant's statements], and the myriad other pieces of circumstantial evidence in the case."

**\*254** We need not decide the question of the motion to suppress because we agree that regardless of its resolution, there was no substantial likelihood of a miscarriage of justice.

<sup>[34]</sup> (e) *Counsel's failure to move to suppress the fruits of a search of the defendant's automobile.* We summarize the judge's findings. On November 1, 1999, police obtained their first search warrant for the defendant's home. The defendant's Toyota Avalon automobile was parked in the driveway, which runs from the street to the defendant's garage. The driveway is visible, in its entirety, from the street. There were no trees, fences, gates, or "no trespassing" signs between the street and the driveway. During the search of the home, police seized the keys to the Toyota. The defendant believed police had searched the Toyota but neglected to seize the towel he had told police he and his wife applied to the bloody nose each had had before going to Morses Pond on October 31. He gave the towel, which had a "Ritz-Carlton logo," to counsel on November 5. The towel was important to the defense because it corroborated statements he had made, and it supported the defense's DNA transfer theory. On April 10, 2000, in accordance with a court order, counsel turned over the towel to the Commonwealth.

Neither the return on the search warrant nor any police report indicated that police actually had entered the Toyota. At a pretrial hearing on a motion to suppress Trooper Foley testified that police had observed a bloodstained towel in the Toyota, but it was not seized. Counsel felt this testimony helpful because it corroborated the defendant's statement about the bloody towel, and it supported the defense argument that police conducted a sloppy **\*\*407** investigation. There was no evidence at the suppression hearing as to the identity of the officers who saw the towel in the car.

At trial, Detective McDermott testified that she *searched* the defendant's Toyota on November 1, 1999, and observed a white towel inside. However, she described the towel as brown and dirty, not bloodstained, and it did not have a Ritz-Carlton logo. Although surprised by Detective McDermott's testimony, counsel did not move to strike it as the fruit of an unlawful search. Instead, counsel believed this testimony could be exploited by eliciting further testimony that McDermott failed to seize

or **\*255** photograph the towel, and by highlighting the inconsistencies given by Detective McDermott and Trooper Foley.

The defendant argues that counsel should have moved to suppress the fruits of the Toyota search, and to strike Detective McDermott's testimony because the Toyota was not within the curtilage of the house. The judge concluded that Detective McDermott's search of the Toyota was unlawful, and the Commonwealth does not dispute this conclusion. He reasoned that the car was in a place that was open to public view and no measures had been taken to define the area as part of the curtilage. See *Commonwealth v. McCarthy*, 428 Mass. 871, 873, 705 N.E.2d 1110 (1999); *Commonwealth v. Simmons*, 392 Mass. 45, 48–49, 466 N.E.2d 85, cert. denied, 469 U.S. 861, 105 S.Ct. 196, 83 L.Ed.2d 128 (1984). Accordingly, because the Toyota was outside the curtilage, the search warrant that issued on November 1, 1999, did not extend to the Toyota, and the Commonwealth could offer no valid reason for conducting a warrantless search of the Toyota.

The judge concluded, however, that although counsel recognized that the fruits of the search of the Toyota could be suppressed, he deliberately chose not to move to exclude Detective McDermott's testimony for tactical reasons. He further concluded that counsel's decision was not manifestly unreasonable. See *Commonwealth v. Cuts*, 444 Mass. 821, 831, 831 N.E.2d 1279 (2005) (counsel had strategic reasons for not challenging admissibility of statements).

Counsel in fact highlighted the inconsistencies just described in his cross-examination of Detective McDermott and Trooper Foley, and he argued the point forcefully in closing. In his closing, the prosecutor did not focus on the towel, and instead disputed the defense theory of simultaneous nosebleeds and the defense theory of DNA transfer.

We conclude, as did the judge, that counsel's decision to forgo any challenge to the fruits of the search of the Toyota was a reasonable tactical decision and was not manifestly unreasonable.

8. *G.L. c. 278, § 33E.* We have reviewed the briefs and the entire record, including the transcripts and the 475 trial exhibits and scores of items marked for identification, and it is our **\*256** considered judgment that there is no reason to grant relief under *G.L. c. 278, § 33E*.

*Judgment affirmed.*

*Order denying amended motion for a new trial affirmed.*

458 Mass. 207, 936 N.E.2d 372

## All Citations

### Footnotes

- 1 The defendant pulled the victim's shirt down and closed her pants in the presence of Officer Fitzpatrick after leading him to her body.
- 2 Police executed two search warrants at the defendant's home, the first on November 1, 1999, and the second on November 12.
- 3 A relative fluorescent unit (RFU) is a measure of the amount of amplified deoxyribonucleic acid (DNA) present in a test sample.
- 4 See [S.J.C. Rule 1:19\(b\) & \(c\)](#), 428 Mass. 1301 (1998); [G.L. c. 234A, §§ 22, 23](#).
- 5 This case underscores, once again, the importance of a record of all events during trial.
- 6 The trial transcript indicates the judge told jurors that while they were waiting for their panels to be called they were to wait in the main court room but would be free to move about and socialize with one another. They were told they could not discuss the case.
- 7 The judge noted that "memories of long ago events" were difficult, if not impossible, to reconcile. He found that none of the witnesses had been asked to remember the question of closure of room 8 until approximately eight and one-half years after the voir dire, and none had notes that record or refresh recollection.
- 8 Contrary to the defendant's assertion, the legal assistant to defense counsel did not testify unequivocally that no member of the public was present. That question was not put to him.
- 9 The defendant makes no argument that art. 12 of the Massachusetts Declaration of Rights provides greater protection than the Sixth Amendment to the United States Constitution, so we do not address the question.
- 10 The defendant contends that the prosecutor had no good faith basis to believe the defendant had spoken to Stuart James over the weekend prior to his testimony. While the prosecutor's use of the verb "spoken," and his time reference to the previous weekend may have been imprecise, the record indicates that James had no information about the defendant trying three times to lift his wife until the week before his testimony. We are satisfied that the prosecutor had a good faith basis to inquire about and argue the point.
- 11 The trial in [Commonwealth v. Gaynor](#), 443 Mass. 245, 820 N.E.2d 233 (2005), took place in May, 2000. The trial in this case took place in May and June, 2001.

 KeyCite Yellow Flag - Negative Treatment  
Proposed Legislation

**United States Code Annotated**

**Title 28. Judiciary and Judicial Procedure (Refs & Annos)**

**Part VI. Particular Proceedings**

**Chapter 153. Habeas Corpus (Refs & Annos)**

**28 U.S.C.A. § 2254**

**§ 2254. State custody; remedies in Federal courts**

**Effective: April 24, 1996**

**Currentness**

<Notes of Decisions for [28 USCA § 2254](#) are displayed in two separate documents.>

**(a)** The Supreme Court, a Justice thereof, a circuit judge, or a district court shall entertain an application for a writ of habeas corpus in behalf of a person in custody pursuant to the judgment of a State court only on the ground that he is in custody in violation of the Constitution or laws or treaties of the United States.

**(b)(1)** An application for a writ of habeas corpus on behalf of a person in custody pursuant to the judgment of a State court shall not be granted unless it appears that--

**(A)** the applicant has exhausted the remedies available in the courts of the State; or

**(B)(i)** there is an absence of available State corrective process; or

**(ii)** circumstances exist that render such process ineffective to protect the rights of the applicant.

**(2)** An application for a writ of habeas corpus may be denied on the merits, notwithstanding the failure of the applicant to exhaust the remedies available in the courts of the State.

**(3)** A State shall not be deemed to have waived the exhaustion requirement or be estopped from reliance upon the

requirement unless the State, through counsel, expressly waives the requirement.

(c) An applicant shall not be deemed to have exhausted the remedies available in the courts of the State, within the meaning of this section, if he has the right under the law of the State to raise, by any available procedure, the question presented.

(d) An application for a writ of habeas corpus on behalf of a person in custody pursuant to the judgment of a State court shall not be granted with respect to any claim that was adjudicated on the merits in State court proceedings unless the adjudication of the claim--

(1) resulted in a decision that was contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of the United States; or

(2) resulted in a decision that was based on an unreasonable determination of the facts in light of the evidence presented in the State court proceeding.

(e)(1) In a proceeding instituted by an application for a writ of habeas corpus by a person in custody pursuant to the judgment of a State court, a determination of a factual issue made by a State court shall be presumed to be correct. The applicant shall have the burden of rebutting the presumption of correctness by clear and convincing evidence.

(2) If the applicant has failed to develop the factual basis of a claim in State court proceedings, the court shall not hold an evidentiary hearing on the claim unless the applicant shows that--

(A) the claim relies on--

(i) a new rule of constitutional law, made retroactive to cases on collateral review by the Supreme Court, that was previously unavailable; or

(ii) a factual predicate that could not have been previously discovered through the exercise of due diligence; and

(B) the facts underlying the claim would be sufficient to establish by clear and convincing evidence that but for constitutional error, no reasonable factfinder would have found the applicant guilty of the underlying offense.

(f) If the applicant challenges the sufficiency of the evidence adduced in such State court proceeding to support the State

court's determination of a factual issue made therein, the applicant, if able, shall produce that part of the record pertinent to a determination of the sufficiency of the evidence to support such determination. If the applicant, because of indigency or other reason is unable to produce such part of the record, then the State shall produce such part of the record and the Federal court shall direct the State to do so by order directed to an appropriate State official. If the State cannot provide such pertinent part of the record, then the court shall determine under the existing facts and circumstances what weight shall be given to the State court's factual determination.

(g) A copy of the official records of the State court, duly certified by the clerk of such court to be a true and correct copy of a finding, judicial opinion, or other reliable written indicia showing such a factual determination by the State court shall be admissible in the Federal court proceeding.

(h) Except as provided in section 408 of the Controlled Substances Act, in all proceedings brought under this section, and any subsequent proceedings on review, the court may appoint counsel for an applicant who is or becomes financially unable to afford counsel, except as provided by a rule promulgated by the Supreme Court pursuant to statutory authority. Appointment of counsel under this section shall be governed by [section 3006A of title 18](#).

(i) The ineffectiveness or incompetence of counsel during Federal or State collateral post-conviction proceedings shall not be a ground for relief in a proceeding arising under [section 2254](#).

#### CREDIT(S)

(June 25, 1948, c. 646, 62 Stat. 967; [Pub.L. 89-711](#), § 2, Nov. 2, 1966, 80 Stat. 1105; [Pub.L. 104-132, Title I, § 104](#), Apr. 24, 1996, 110 Stat. 1218.)

#### [Notes of Decisions \(8119\)](#)

28 U.S.C.A. § 2254, 28 USCA § 2254

Current through P.L. 116-91. Some statute sections may be more current, see credits for details.

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