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Surrogate Testimony After *Williams*: A New Answer to the Question of Who May Testify Regarding the Contents of a Laboratory Report

JENNIFER ALBERTS*

INTRODUCTION

The Sixth Amendment of the U.S. Constitution guarantees the accused the right “to be confronted with the witnesses against him.”¹ However, for the past few years, the Supreme Court has struggled to determine just how this right applies to reports produced by forensic laboratories.² On the one hand, forensic laboratories make mistakes.³ Sometimes, they even engage in fraudulent science.⁴ It seems clear that defendants should have some means of assessing the credibility of these laboratories’ reports, and the method that the Constitution prescribes is cross-examination.⁵

On the other hand, however, scientific reports are quite different from statements made by lay witnesses. There are already a number of procedures in place to ensure the reliability of scientific evidence.⁶ Is cross-examination still necessary? More importantly, a report produced by a laboratory is usually created by a number of laboratory workers.⁷ This presents a crucial question: *Which* individual must testify in order for a report to be introduced as evidence in a trial?⁸

In the Court’s most recent decision on the issue, *Williams v. Illinois*, the Court provided no clear answer to this important question.⁹ The Court held that the witness in that case could testify to a conclusion based on a report received from a different laboratory, and make some references to that report in the process, without any person from the other laboratory testifying.¹⁰ But there was no single majority rationale in the case.¹¹ Nonetheless, the plurality seemed to consider a number of factors in reaching its decision.¹²

This Note draws on some of the factors that the plurality seemed to focus on in *Williams* (although the plurality did not explicitly consider these factors as a part of any test) to propose a new answer to the question of who must testify. Specifically, this Note proposes that a witness who did not observe or participate in the testing process should nonetheless be allowed to testify regarding the contents of a

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1. U.S. CONST. amend. VI.

2. *See, e.g.*, *Williams v. Illinois*, 132 S. Ct. 2221 (2012); *Bullcoming v. New Mexico*, 131 S. Ct. 2705 (2011); *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009).

3. *See Melendez-Diaz*, 557 U.S. at 319–21.

4. *See id.* at 318–19.

5. *Id.* at 318.

6. *See Bullcoming*, 131 S. Ct. at 2726–27 (Kennedy, J., dissenting).

7. *Melendez-Diaz*, 557 U.S. at 332 (Kennedy, J., dissenting).

8. *See id.*

9. *See* 132 S. Ct. 2221 (2012) (plurality opinion).

10. *See id.* at 2227–28.

11. *See id.*

12. *See id.*

scientific report if three conditions are met: (1) the underlying analysis is shown to be reliable, (2) the report that is relied upon is sufficiently detailed, and (3) the testifying witness is an adequate substitute witness.

Part I of this Note examines how the Court has interpreted the Confrontation Clause since *Ohio v. Roberts*. It begins by reviewing how the Court has applied the clause to lay witnesses and then discusses how the Court has attempted to apply those same principles to scientific evidence, as well as the problems the Court has run into in doing so. Part II presents an overview of the problem of applying the Confrontation Clause to scientific reports. It examines reasons why scientific evidence needs to be confronted in court, reasons why it cannot be treated the same way as statements made by lay witnesses, and solutions to the problem that have already been proposed. Finally, Part III presents a novel answer to the question of who may testify to the contents of a laboratory report. Part III suggests that the three-part test mentioned above would be the best solution to this problem.

I. CONFRONTATION CLAUSE CASE LAW: FROM *ROBERTS* TO *CRAWFORD* TO *WILLIAMS*

The Sixth Amendment of the U.S. Constitution guarantees the accused the right “to be confronted with the witnesses against him.”¹³ However, there is much confusion regarding precisely who must be confronted in order for the person’s statement to be used in court. For twenty-four years, the admissibility of out-of-court testimony by witnesses against the accused was determined solely by the reliability of the testimony. The Court held in *Ohio v. Roberts* that evidence that fell within an established hearsay exception or that bore other “indicia of reliability” or “particularized guarantees of trustworthiness” was admissible without any opportunity for cross-examination by the defendant.¹⁴

The standard for the admissibility of out-of-court statements changed, however, in 2004, when the Court decided *Crawford v. Washington*.¹⁵ In that case, the Court overruled *Ohio v. Roberts* and began a new era of Confrontation Clause jurisprudence.¹⁶ Crawford was charged with the assault and attempted murder of a man, Lee, who he believed attempted to rape his wife, Sylvia.¹⁷ He claimed to have acted in self-defense.¹⁸ Crawford testified that he thought he saw Lee reaching for something before he stabbed Lee.¹⁹ His wife, on the other hand, who was also a suspect at the time,²⁰ in a somewhat ambiguous tape-recorded statement to the police,²¹ seemed to say that Lee may have reached for something *after* Crawford

13. U.S. CONST. amend. VI.

14. 448 U.S. 56, 66 (1980).

15. 541 U.S. 36, 68–69 (2004).

16. *Id.*

17. *Id.* at 38, 40.

18. *Id.* at 40.

19. *Id.* at 38–39.

20. *Id.* at 65.

21. *Id.* at 38–40.

assaulted him and that Lee had nothing in his hands after he was stabbed.²² This statement was played for the jury during trial, and Crawford was convicted.²³

The lower courts' conclusions with respect to the reliability of the tape-recorded statement varied. The trial court in *Crawford* found that the statement was reliable and admissible because the statement mostly corroborated Crawford's own statement: Sylvia had direct knowledge of what happened, Sylvia was describing recent events, and Sylvia was being questioned by a "neutral" officer.²⁴ The court of appeals reversed, finding the statement unreliable because it contradicted a previous statement, it was made in response to specific questions, and Sylvia had closed her eyes during part of the altercation.²⁵ The Washington Supreme Court reversed again, finding that the statement was reliable because it was "virtually identical" to Crawford's statement.²⁶

The United States Supreme Court reversed the Washington Supreme Court and found that admission of the tape-recorded statement violated Crawford's right to confront witnesses.²⁷ Finding that "[r]eliability is an amorphous, if not entirely subjective, concept,"²⁸ the Court held that reliability is no longer relevant to the admissibility of an out-of-court statement under the Confrontation Clause.²⁹ Instead, all testimonial statements are only admissible if the declarant testifies in court or the declarant is unavailable and the defendant had a prior opportunity to cross-examine him or her.³⁰

For five years, this standard was applied to only lay witnesses.³¹ It was developed with respect to lay witnesses in two major decisions: *Davis v. Washington*³² and *Michigan v. Bryant*.³³

In *Davis v. Washington*, the Court found that the admission of a 911 call by the victim regarding the defendant was constitutional without the victim's testimony in court.³⁴ In the call, the victim named the defendant and said that he was attacking her.³⁵ In the companion case to *Davis*, *Hammon v. Indiana*, on the other hand, the Court found that the victim's statements to the police while she was standing in a different room than the defendant, after an incident of domestic violence had occurred, were not admissible without confrontation.³⁶ The Court adopted the "primary purpose" test to resolve these cases. Under this test, statements made

22. *Id.* at 39–40.

23. *Id.* at 38.

24. *Id.* at 40.

25. *Id.* at 41.

26. *Id.*

27. *Id.* at 68–69.

28. *Id.* at 63.

29. *Id.* at 68–69.

30. *Id.* at 68.

31. *See Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 307, 310 (2009) (holding that affidavits created by forensic experts were subject to the Confrontation Clause's limitations).

32. 547 U.S. 813 (2006).

33. 131 S. Ct. 1143 (2011).

34. 547 U.S. at 817–19, 829.

35. *Id.* at 817–18.

36. *Id.* at 819–20, 834.

during a police interrogation which, examined objectively, are made for the primary purpose of assisting the police in resolving an ongoing emergency are not testimonial and, therefore, not subject to Confrontation Clause limitations.³⁷ But statements made during a police interrogation are testimonial when, examined objectively, they are made for the primary purpose of establishing or proving past events potentially relevant to a later prosecution.³⁸ Several factors that were important to the Court were whether the statements were elicited during interrogations,³⁹ whether the statements described past events or events as they were occurring,⁴⁰ and the level of formality of the statements.⁴¹

In *Michigan v. Bryant*, the Court expounded on this “primary purpose” test further.⁴² In *Bryant*, the police found the victim mortally wounded in a gas station parking lot.⁴³ The Court held that the victim’s statements to the police describing what had happened were not testimonial because they had the primary purpose of assisting the police in resolving an ongoing emergency.⁴⁴ Thus, they were not subject to Confrontation Clause limitations.⁴⁵ In so holding, the Court considered several factors: whether the threat was to the public or merely to the victim,⁴⁶ the type of weapon used,⁴⁷ the medical condition of the declarant,⁴⁸ and the formality of the interrogation.⁴⁹

Significantly, in *Bryant* the Court brought reliability back into the picture as a part of its Confrontation Clause analysis. The Court found that because there is a significantly diminished “prospect of fabrication” in situations where participants in an interrogation are focused on resolving an emergency rather than on proving facts related to past events, confrontation is unnecessary.⁵⁰ The Court compared this to the justification for the excited utterance hearsay exception.⁵¹ That is, a declarant who is in an excited state because of an event presumably cannot easily form a falsehood when describing that event.⁵² The Court found that hearsay exceptions such as this one may be relevant in determining whether a statement is testimonial.⁵³ This was significant because it was a departure from *Crawford*, where the Court found that reliability and hearsay exceptions were no longer a part of Confrontation Clause jurisprudence.⁵⁴

37. *Id.* at 822.

38. *Id.*

39. *See id.* at 826.

40. *See id.* at 827.

41. *See id.*

42. 131 S. Ct. 1143 (2011).

43. *Id.* at 1150.

44. *Id.*

45. *Id.*

46. *Id.* at 1158.

47. *Id.* at 1158–59.

48. *Id.* at 1159.

49. *Id.* at 1160.

50. *Id.* at 1157.

51. *Id.*

52. *Id.*

53. *Id.* at 1155.

54. *See Crawford v. Washington*, 541 U.S. 36, 68–69 (2004).

After *Davis*, but two years before *Bryant*, the Court first applied the Confrontation Clause to evidence provided by forensic scientists.⁵⁵ In *Melendez-Diaz v. Massachusetts*, the Court held that affidavits sworn to by forensic scientists that indicated both the weight of a white powder and that the powder was found to be cocaine were testimonial and inadmissible without the in-court testimony of the forensic scientists who performed the analysis of the substance.⁵⁶ According to the Court, affidavits such as the ones in *Melendez-Diaz* clearly fall within the category of testimonial statements that are subject to the confrontation requirement.⁵⁷ They were clearly “made under circumstances which would lead an objective witness reasonably to believe that the statement would be available for use at a later trial” because use at trial was the sole purpose of the affidavits.⁵⁸

Nonetheless, as a 5–4 decision, this was the first highly divided decision issued by the Court since the *Crawford* era began.⁵⁹ Massachusetts and the dissent made several arguments as to why the Confrontation Clause should not apply to this type of case, all of which were rejected by the majority⁶⁰: (1) the affidavits were only accusatory when taken together with other evidence;⁶¹ (2) the scientists who made the statements were not conventional witnesses because they were recording contemporaneous observations rather than recalling past events, did not actually observe the crime, and did not make their statements in response to an interrogation;⁶² (3) the statements were the result of neutral, scientific testing;⁶³ (4) the statements were similar to business records;⁶⁴ (5) the defendant could subpoena the analysts;⁶⁵ and (6) practicality demands that the analysts not be required to testify.⁶⁶ The majority found these arguments to be flawed and explained in detail how scientific evidence is not as reliable as Massachusetts suggested.⁶⁷

The dissent, in particular, stressed the practical difficulties that would result from this decision. The majority wrote that the “analyst” has to testify in court in order to admit the results of the lab analysis, but who is the “analyst”?⁶⁸ According to the dissent, a number of scientists play a role in every test for drugs, it is impractical to have them all testify, and it is impossible to determine from the

55. See *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009) (holding that affidavits created by forensic experts were subject to the Confrontation Clause’s limitations).

56. *Id.* at 307–08, 310.

57. *Id.* at 310.

58. *Id.* at 311 (quoting *Crawford*, 541 U.S. at 52).

59. *Crawford* was a 9–0 decision with Chief Justice Rehnquist and Justice O’Connor concurring only in the judgment but dissenting in the reasoning. *Crawford v. Washington*, 541 U.S. 36, 37 (2004). *Davis* was an 8–1 decision with Justice Thomas concurring in part and dissenting in part. *Davis v. Washington*, 547 U.S. 813, 815 (2006). *Melendez-Diaz* was a 5–4 decision. 557 U.S. at 306.

60. See *Melendez-Diaz*, 557 U.S. at 313–25.

61. *Id.* at 313.

62. *Id.* at 315–16.

63. *Id.* at 317.

64. *Id.* at 321.

65. *Id.* at 324.

66. *Id.* at 325.

67. *Id.* at 317–21.

68. *Id.* at 332 (Kennedy, J., dissenting).

majority opinion which one has to testify.⁶⁹ The question of who must testify remained unanswered.⁷⁰

Justice Thomas wrote a concurring opinion, stating that only formalized statements are subject to Confrontation Clause limitations.⁷¹ The affidavits in this case, however, were sufficiently formal to qualify.⁷²

After *Melendez-Diaz*, the Court addressed the issue of how the Confrontation Clause applies to forensic experts once more in *Bullcoming v. New Mexico*.⁷³ In *Bullcoming*, the Court answered the question of whether a surrogate (or substitute) expert could be used to testify to the results of another expert's analysis.⁷⁴ The State had introduced into evidence a forensic laboratory report that contained the results of a blood-alcohol analysis; however, instead of having the analyst who performed the test testify, the State called to the stand a different analyst from the laboratory who was familiar with the testing procedures but had not observed that particular test.⁷⁵ The analyst who had performed the test was not called to testify because he had been placed on unpaid leave for unknown reasons.⁷⁶

The New Mexico Supreme Court found that this substitute witness testimony was permissible because the analyst who performed the test was merely recording the results provided by a machine; the analyst who testified could testify regarding, and be cross-examined about, the operation of the machine, what the results meant, and the laboratory procedures.⁷⁷ The United States Supreme Court, however, reversed and held that this was a violation of the defendant's right to confrontation; according to the Court, the analyst who certified the report must testify.⁷⁸ A different analyst would not be able to testify, for example, that the test-performing analyst received the sample intact or that he performed the test according to protocol.⁷⁹ A different analyst also could not testify regarding the competence or honesty of the other analyst.⁸⁰

Justice Sotomayor, however, described in her concurrence four situations in which the results of a test may be able to be introduced without the testimony of the test-performing analyst: (1) when the primary purpose of the report is not to be used as evidence in a trial,⁸¹ (2) when the person who does testify regarding the results of the test is a supervisor or reviewer who had some minimal connection to the test,⁸² (3) when an uninvolved expert presents an independent opinion regarding

69. *Id.* at 332–33.

70. *See id.* at 325–28 (majority opinion).

71. *Id.* at 329 (Thomas, J., concurring).

72. *Id.* at 330.

73. 131 S. Ct. 2705 (2011).

74. *Id.* at 2710.

75. *Id.* at 2709.

76. *Id.* at 2711–12.

77. *Id.* at 2713.

78. *Id.* at 2710.

79. *Id.* at 2714.

80. *Id.* at 2715.

81. *Id.* at 2722 (Sotomayor, J., concurring).

82. *Id.*

a report that is not introduced into evidence;⁸³ and (4) when the State presents only machine-generated results, such as a printout from the machine.⁸⁴

Bullcoming was another 5–4 decision.⁸⁵ The dissent again argued that the majority provided no explanation as to why one participant in the testing process must testify and others need not and offered no guidance for determining who must testify in future cases.⁸⁶ According to the dissent, the analyst involved in the test did no more than any other participant in the testing process.⁸⁷ In addition, the dissent argued that reliable scientific evidence is not what the Confrontation Clause was designed to exclude from trial.⁸⁸ Scientific evidence, such as the report in this case, can have checks on its reliability besides cross-examination that make cross-examination less necessary: the opportunity for retesting, result-blind issuance of reports, the independence of the lab, routine procedures, and mass testing.⁸⁹ These characteristics of science, according to the dissent, are reason to treat scientific evidence differently than lay witness statements with respect to confrontation.⁹⁰

Finally, in *Williams v. Illinois*, the Court issued its most recent opinion regarding forensic experts and the Confrontation Clause.⁹¹ *Williams* was unique because the dissenting justices from *Melendez-Diaz* and *Bullcoming* finally became the plurality and, thus, limitations were placed upon those two cases.⁹²

In *Williams*, a forensic expert testified that a DNA profile created by the Cellmark lab from semen found on vaginal swabs from the victim matched a DNA profile created by the state crime lab from a sample of the defendant's blood.⁹³ The expert testified that the DNA sample that she matched had been received from the Cellmark lab, and documents were introduced that stated that vaginal swabs from the victim had been sent to and received back from the Cellmark lab.⁹⁴ No one from the Cellmark lab testified regarding the DNA sample that it produced.⁹⁵

The Court found no Confrontation Clause violation.⁹⁶ The plurality provided two alternative reasons for this conclusion. First, it found that the testimony regarding the DNA profile produced by the Cellmark lab was permissible because any reference to the profile was being offered not to prove the truth of the matter asserted, but merely to explain the basis for the expert's conclusion that she found a DNA match.⁹⁷ Second, it found that any statements made by the Cellmark lab that

83. *Id.*

84. *Id.*

85. *Id.* at 2709.

86. *Id.* at 2725 (Kennedy, J., dissenting).

87. *Id.* at 2724.

88. *Id.* at 2726.

89. *Id.* at 2727.

90. *Id.* at 2726–27.

91. 132 S. Ct. 2221 (2012).

92. *See id.* at 2227–28 (plurality opinion).

93. *Id.* at 2227.

94. *Id.*

95. *See id.*

96. *Id.* at 2228.

97. *Id.*

were introduced were not testimonial because they were not made with the “primary purpose of accusing a targeted individual of engaging in criminal conduct.”⁹⁸

Although those two rationales were the rationales that the plurality explicitly adhered to in its opinion, the plurality, like the Court in *Bryant*, also seemed to consider reliability as a part of its analysis. According to the plurality, “reliability is a salient characteristic of a statement that falls outside the reach of the Confrontation Clause.”⁹⁹ Because the police did not even have a suspect at the time that the Cellmark lab produced a DNA profile from the semen found in the victim, the plurality noted that there was no prospect of fabrication of the DNA profile.¹⁰⁰ Furthermore, without having a sample from the defendant at the lab, there was no real chance that the lab would produce a profile matching the defendant by mistake.¹⁰¹ Finally, any mistake that may have been made could likely be detected by looking at the profile itself, which the expert who testified did.¹⁰² For these reasons, these statements were not the type of statements the Confrontation Clause was designed to protect against.

Justice Breyer concurred. He suggested that reports prepared by accredited labs, or at least accredited DNA labs, should presumptively fall outside the scope of the Confrontation Clause because there are already procedures in place to promote their reliability.¹⁰³

Justice Thomas concurred only in the judgment, finding that the report in this case was not testimonial because it was informal.¹⁰⁴

After *Williams*, it remains unclear precisely how expert reports are to be handled with respect to the Confrontation Clause. The lower courts are divided,¹⁰⁵ and the Supreme Court has done nothing to provide direction. *Bryant* and *Williams* demonstrate a trend towards incorporating reliability back into the analysis.¹⁰⁶ However, the Court has not explicitly abandoned *Crawford* or declared reliability to be a part of any test.¹⁰⁷

As Justice Breyer noted, the question of which expert must testify in order to introduce any given report, when a number of experts are involved in the testing process, has yet to be answered.¹⁰⁸

98. *Id.* at 2242.

99. *Id.* at 2243 (citation omitted).

100. *Id.* at 2243–44.

101. *Id.* at 2244.

102. *Id.*

103. *Id.* at 2248–52 (Breyer, J., concurring).

104. *Id.* at 2255 (Thomas, J., concurring).

105. Different courts have taken different approaches. For example, some courts have followed Justice Thomas’s concurrence, requiring formality for a statement to be testimonial. *See, e.g., Cooper v. State*, 73 A.3d 1108, 1123 (Md. 2013). Others have followed one of the two plurality approaches. *See, e.g., Commonwealth v. Reavis*, 992 N.E.2d 304, 310–12 (Mass. 2013) (allowing an expert to testify regarding an opinion that was based on statements made by another expert who did not testify). Finally, some courts have rejected all of the *Williams* approaches. *See, e.g., United States v. James*, 712 F.3d 79, 95–96 (2d Cir. 2013).

106. *See supra* notes 50–54, 99–102 and accompanying text.

107. *See supra* notes 42–49, 97–98 and accompanying text.

108. *Williams*, 132 S. Ct. at 2246–48 (Breyer, J., concurring).

II. OVERVIEW OF THE PROBLEM OF EXPERT REPORTS AND THE CONFRONTATION CLAUSE

Before addressing the question of who must testify, raised by the dissenting justices in *Melendez-Diaz* and *Bullcoming* and by Justice Breyer in *Williams*, we must examine the arguments for and against subjecting forensic experts to the confrontation requirement. This Part first considers the primary reasons why experts must be subject to confrontation. Second, this Part examines the reasons why statements made by experts may need to be treated differently than statements made by lay witnesses with respect to the Confrontation Clause. Finally, this Part reviews the solutions to this problem that have thus far been suggested.

A. Why Experts Must Be Confronted

There are two main reasons, both discussed by the Court in *Melendez-Diaz*, why forensic expert witnesses should be subject to the confrontation requirement. The first reason is formal. Under *Crawford*, confrontation is a procedural requirement that must always be observed.¹⁰⁹ Forensic expert witnesses are not exempt from this requirement, and defendants have a right to confront those experts in court when the experts provide testimony against the defendants.¹¹⁰

The second reason is more functional. Confrontation is a mechanism designed to ensure the reliability of evidence,¹¹¹ and the Court in *Melendez-Diaz* expressed a number of concerns about the reliability of forensic evidence.¹¹² If courts were to limit the confrontation requirement with respect to forensic experts, then they would have to address these concerns in some way. The problems the Court found with the accuracy of forensic science can be roughly divided into four types of errors: (1) errors in the interpretation of results, (2) errors in the methodology, (3) mistakes made during the testing process, and (4) fraud. This Note will briefly explore each type of error.

One type of error that forensic scientists sometimes make is in interpreting the results of their analysis. This kind of error might occur in a report but often occurs during the scientist's testimony at trial.¹¹³ Professor Brandon Garrett and Innocence Project Co-Director Peter Neufeld conducted a study to examine the validity of the testimony that forensic scientists gave in court regarding the interpretation of their results in a number of cases.¹¹⁴ They found that, in 82 out of 137 cases (60%), forensic scientists had formed and testified to conclusions that were invalid based on the data they had generated through their scientific testing.¹¹⁵ That is, even if the

109. *Crawford v. Washington*, 541 U.S. 36, 61 (2004).

110. *See Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 309–11 (2009).

111. *Crawford*, 541 U.S. at 61 (“To be sure, the Clause's ultimate goal is to ensure reliability of evidence . . .”).

112. *See Melendez-Diaz*, 557 U.S. at 317–21.

113. *See* Brandon L. Garrett & Peter J. Neufeld, *Invalid Forensic Science Testimony and Wrongful Convictions*, 95 VA. L. REV. 1, 9 (2009) (examining the validity of forensic science testimony).

114. *Id.* at 7–8.

115. *Id.* at 9.

data they generated were accurate, their interpretation of their own results was inaccurate. The errors that the scientists made dealt with probabilities—in all of the cases, they essentially testified that the probability that the perpetrator was the defendant, based on the results of their testing, was greater than it actually was.¹¹⁶

An example of this type of error occurred in the case of Gary Dotson, an innocent man who was convicted of rape but later exonerated based on DNA evidence.¹¹⁷ At Dotson's trial, a forensic scientist who had analyzed a sample from a vaginal swab from the victim testified that the donor of the semen in the victim had type B blood, that Dotson also had type B blood, and that only 11% of the population has type B blood.¹¹⁸ This suggested that 89% of the population could not have been the donor and that Dotson was in the 11% of the population that could have been the donor. However, in the Dotson case, the victim also had type B blood.¹¹⁹ The sample that came from her could have been type B because of her own fluids in it, rather than the semen.¹²⁰ Thus, 100% of the population could have been the donor because there was no information about the blood type of the semen donor that could be obtained from the sample.¹²¹ The scientist's testimony about the results of the testing was misleading.

A second type of error arises from the use of an invalid forensic methodology. Over time, scientists have discovered that a number of methodologies that were once considered reliable are not reliable enough.¹²² For example, during the 1970s and 1980s, scientists used the color test and the crystal test to identify drugs.¹²³ After those methods were found to be unreliable, scientists began to use thin-layer and gas-liquid chromatography for that same purpose.¹²⁴ That method, too, however, was determined to be unreliable after time.¹²⁵ In 2009, the National Academy of Sciences released a report that reviewed all of the methods commonly used in forensic science and attempted to assess their validity.¹²⁶ It found that the methods used to analyze some types of evidence, such as impression evidence (shoe tracks, tire tracks, etc.), tool marks, and firearms, have not been validated and may not be reliable.¹²⁷

Even when a method is reliable, however, there are errors that can be made during the testing process that can make the results inaccurate. Thus, the third type of error that forensic scientists make is mistakes in the testing process. An example

116. *See id.*

117. *Id.* at 4; *see also* Affidavit of Edward T. Blake, D. Crim., *People v. Dotson*, No. P.C. 4333 (July 29, 1985).

118. Garrett & Neufeld, *supra* note 113, at 4.

119. *Id.*

120. *Id.*

121. *Id.*

122. *See* Pamela R. Metzger, *Cheating the Constitution*, 59 VAND. L. REV. 475, 493–94 (2006).

123. *Id.* at 493.

124. *Id.*

125. *Id.*

126. NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES, *STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD* 127–82 (2009).

127. *Id.* at 149, 154.

of this was provided by the dissent and Justice Breyer's concurrence in *Williams*. These opinions described the *Kocak* case,¹²⁸ where an analyst testified, based on a report, that her laboratory had found DNA from the crime scene to match the defendant's DNA.¹²⁹ After reviewing the laboratory's notes, however, the analyst realized that there had been a mistake in the report.¹³⁰ The DNA from the crime scene matched the victim's DNA, not the defendant's.¹³¹ Someone who was involved in the writing of the report must have misread the label on one of the samples.¹³² That is, the laboratory made a mistake.

Even a competent scientist may make some mistakes; however, there is also the problem of analyst incompetence. Many workers at laboratories are not properly educated and trained for their particular jobs.¹³³ This presumably increases the likelihood that mistakes will occur.

Finally, there is the problem of fraud in laboratories. A recent example of this occurred at a Massachusetts laboratory and involved the laboratory analyst Annie Dookhan.¹³⁴ Dookhan admitted that, as a laboratory analyst, she often identified drugs simply by looking at them rather than by properly testing them.¹³⁵ She also sometimes turned negative samples into positive samples by adding narcotics to the samples herself.¹³⁶ Dookhan was arrested for these crimes, pled guilty, and is now serving three to five years in prison.¹³⁷ However, what happened in Massachusetts was not a single, isolated occurrence. A number of other crime lab scandals have occurred in states such as New York, Minnesota, West Virginia, and North Carolina.¹³⁸

All of these problems seem to indicate that there is good reason for scientific evidence to be subject to the requirements of the Confrontation Clause. However, there are also some distinctions between scientific evidence and lay witness statements that may require scientific evidence to be treated differently.

128. *Williams v. Illinois*, 132 S. Ct. 2221, 2264 (2012) (Kagan, J., dissenting) (citing Tr. in *State v. Kocak*, No. SCD110465 (Cal. Sup. Ct. Nov. 17, 1995), available at <http://www.scientific.org/distribution/archive/JohnIvanKocak.pdf>).

129. *Id.* at 2246 (Breyer, J., concurring).

130. *Id.*

131. *Id.*

132. *Id.*

133. Metzger, *supra* note 122, at 494.

134. *The Moment Boston State Chemist Is Arrested for Faking Criminal Drug Test Results Casting Doubt on 34,000 Convictions*, DAILY MAIL (Sept. 28, 2012, 17:03 EST), <http://www.dailymail.co.uk/news/article-2210168/Boston-state-chemist-Annie-Dookhan-arrested-fake-drug-tests-Massachusetts.html> [hereinafter *Boston State Chemist Arrested*].

135. *Id.*

136. *Id.*

137. Milton J. Valencia & John R. Ellement, *Annie Dookhan Pleads Guilty in Drug Lab Scandal*, THE BOSTON GLOBE (Nov. 22, 2013), <http://www.bostonglobe.com/metro/2013/11/22/annie-dookhan-former-state-chemist-who-mishandled-drug-evidence-agrees-plead-guilty/7UU3hfZUof4DFJGoNUfXGO/story.html>.

138. Mark Hansen, *Crime Labs Under the Microscope After a String of Shoddy, Suspect, and Fraudulent Results*, A.B.A. J. (Sept. 1, 2013, 4:20 AM CST), http://www.abajournal.com/magazine/article/crime_labs_under_the_microscope_after_a_string_of_shoddy_suspect_and_fraud/.

B. Why Experts Are Different from Lay Witnesses

There are two primary reasons why statements made or implied by experts in their reports should be treated differently than statements made by lay witnesses.

The first reason deals, again, with reliability. As the dissenters noted in *Bullcoming* and Justice Breyer noted in *Williams*, there are already a number of procedures in place that serve to promote the reliability of scientific reports.¹³⁹ Accredited DNA labs, for example, must adhere to standards with respect to the education, training, and experience required of lab workers, as well as testing procedures, equipment maintenance, audits, and many other things.¹⁴⁰

As the previous section illustrated, the availability of these procedures does not always guarantee the reliability of scientific evidence; however, under certain circumstances, science *can* be made reliable. In *Williams*, for example, the scientists who were building a DNA profile from semen found on a vaginal swab taken from the victim had no access to the DNA of any suspect.¹⁴¹ It would have been impossible for them to intentionally construct the profile in a way that would incriminate a particular suspect, and it would have been nearly impossible for them to build the defendant's exact profile by mistake.¹⁴² Although *Williams* involved DNA testing, it is possible that through the use of some type of blind procedure, this same "veil of ignorance" can be created with respect to other kinds of testing.¹⁴³

The primary purpose test, which the Court has applied since *Davis*, excludes statements made in some situations in which lay witnesses are less likely to be able to fabricate statements;¹⁴⁴ however, it does not take into account situations in which scientists are unable to fabricate evidence. This is one reason why perhaps a different test should be used with respect to scientific evidence.

The second reason why scientific evidence should be treated differently than statements made by lay witnesses is a practical reason. The dissenters in *Melendez-Diaz* and *Bullcoming*, as well as Justice Breyer in *Williams*, argued that it is impractical to apply the Confrontation Clause to expert witnesses and their reports because, often, a number of experts are involved in the production of any single report.¹⁴⁵ It would be impossible for them to all testify in every case for

139. See *Williams v. Illinois*, 132 S. Ct. 2221, 2249–50 (2012) (Breyer, J., concurring); *Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2727 (2011) (Kennedy, J., dissenting); Jennifer Mnookin & David Kaye, *Confronting Science: Expert Evidence and the Confrontation Clause*, 2012 SUP. CT. REV. 99, 148.

140. *Williams*, 132 S. Ct. at 2249–50 (Breyer, J., concurring).

141. *Id.* at 2243–44 (plurality opinion).

142. *Id.*

143. Justice Breyer discusses the idea of a "veil of ignorance" keeping scientists from knowing which defendant their work may incriminate. *Id.* at 2249 (Breyer, J., concurring). However, presumably, blind procedures may also keep scientists from having any pro-prosecution bias, if the scientists are unaware, as they were in *Williams*, which result of their testing will benefit the prosecution.

144. See *Michigan v. Bryant*, 131 S. Ct. 1143, 1157 (2011) (finding that statements made for the primary purpose of resolving an emergency need not be subject to cross-examination because the prospect of fabrication is diminished).

145. *Williams*, 132 S. Ct. at 2247 (Breyer, J., concurring) (twelve or more technicians could be involved in the production of a DNA report); *Bullcoming v. New Mexico*, 131 S.

which they help to prepare a report.¹⁴⁶ Moreover, if only one expert must testify, it is unclear who may testify to the contents of the report and who may not.¹⁴⁷

For example, during the testing process at issue in *Bullcoming*, one laboratory worker had to receive the sample that was to be tested, record its receipt, and properly store it.¹⁴⁸ Another worker had to take the sample, put it into the testing machine, and transcribe the results from a printout of the machine onto a report.¹⁴⁹ A third worker had to review the results.¹⁵⁰ There may have been others who were important to the process as well, such as the person who calibrated the machine that was used.¹⁵¹ And in other testing situations, as many as forty people are involved in the testing process.¹⁵²

The Court held in *Bullcoming* that the analyst who transcribed the results from the machine printout had to testify because implicit in the report was the analyst's certification that he had received the sample intact, ensured that the sample number was the same as the report number, and placed the sample into the machine according to protocol.¹⁵³ However, following this reasoning, it seems that it is also implicit in the report that the first worker, for example, certified that he or she received the sample intact, properly labeled it, and properly stored it in the correct location.¹⁵⁴ It is not clear why one of the workers must testify and the other one need not.¹⁵⁵

Furthermore, as scholars have pointed out, it is beneficial for laboratories to operate like this, with a number of workers being involved in each test, because such a procedure can increase accuracy.¹⁵⁶ Thus, any rule that would discourage this kind of testing process is undesirable. For example, in *Commonwealth v. Yohe*, the Pennsylvania Supreme Court had to determine whether there was a Confrontation Clause violation when a reviewer who had not participated in or observed any part of the blood-alcohol analysis of the defendant's blood testified regarding the report prepared by his lab.¹⁵⁷ The procedure employed by that particular lab, however, involved two analysts running separate analyses of the same blood sample, in order to increase accuracy, and then a reviewer putting the results of the two tests together and testifying regarding them.¹⁵⁸ If courts were to require that both analysts testify in a situation such as this one, rather than allowing

Ct. 2705, 2724 (2011) (Kennedy, J., dissenting); *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 332 (2009) (Kennedy, J., dissenting).

146. *Melendez-Diaz*, 557 U.S. at 332–33 (Kennedy, J., dissenting).

147. *Williams*, 132 S. Ct. at 2247 (Breyer, J., concurring); *Melendez-Diaz*, 557 U.S. at 332 (Kennedy, J., dissenting).

148. *Bullcoming*, 131 S. Ct. at 2724 (Kennedy, J., dissenting).

149. *Id.*

150. *Id.*

151. *See Melendez-Diaz*, 557 U.S. at 332 (Kennedy, J., dissenting).

152. *Bullcoming*, 131 S. Ct. at 2726 (Kennedy, J., dissenting).

153. *Id.* at 2714 (majority opinion).

154. *See Melendez-Diaz*, 557 U.S. at 332–34 (Kennedy, J., dissenting) (describing how each worker in a testing process is making certifications about what they did and all of those certifications contribute to the final report).

155. *See id.*

156. Mnookin & Kaye, *supra* note 139, at 154.

157. 79 A.3d 520, 524–25 (Pa. 2013).

158. *Id.* at 524.

a single reviewer of both tests to testify, this would discourage the use of the procedure, which was designed to promote accuracy.

C. Current Approaches and Previously Suggested Solutions

A number of solutions to the problem of who must testify to the contents of a scientific report have been proposed by scholars or used by courts. These approaches can be divided into roughly two categories: (1) approaches that consider the reliability of the scientific evidence and seek to exempt such reliable evidence altogether from Confrontation Clause requirements; and (2) approaches that ignore the reliability of the evidence at issue altogether and attempt to find other ways to limit who must testify alongside an expert report.

There are a few approaches that fall into the former category. The *Melendez-Diaz* dissenters, for example, argued that scientific evidence need not be subject to the requirements of the Confrontation Clause at all.¹⁵⁹ On the other hand, it has been argued that scientific evidence should not be subject to the Confrontation Clause, but that reports should be required to provide far more detailed information and should be held to the *Daubert* standard with regards to admissibility.¹⁶⁰ Finally, Justice Breyer suggested in *Williams* that reports prepared by accredited labs, or at least accredited DNA labs, should be considered presumptively exempt from the requirements of the Confrontation Clause.¹⁶¹ If, however, there is evidence that the laboratory that prepared the report is incompetent, that its accreditation is invalid, or that it had motive to falsify the evidence, then the Confrontation Clause would be applicable.¹⁶²

In the latter category, a number of approaches have been suggested. In *Bullcoming*, for example, Justice Sotomayor noted some ways in which someone other than the “analyst” (or no one at all) might be able to testify to the contents of a report.¹⁶³ For example, she suggested that a machine printout alone could be introduced into evidence without testimony or a report.¹⁶⁴ She also wrote that a supervisor with minimal involvement in the testing process may be able to testify to the contents of the report itself.¹⁶⁵ The *Williams* plurality added two additional scenarios. First, a scientist can testify to the contents of a report prepared by others if the contents of the report are not being offered to prove the truth of the matter asserted, but only to explain an independent opinion made by the testifying

159. *Melendez-Diaz*, 557 U.S. at 330–31 (Kennedy, J., dissenting).

160. Eric Nielson, Note, *The Admission of Scientific Evidence in a Post-Crawford World*, 14 MINN. J.L. SCI. & TECH. 951, 952–53, 974–76 (2013). See generally *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) (establishing the standard for admitting expert testimony in federal courts).

161. *Williams v. Illinois*, 132 S. Ct. 2221, 2251–52 (2012) (Breyer, J., concurring).

162. *Id.* at 2252.

163. *Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2722 (2011) (Sotomayor, J., concurring).

164. *Id.*

165. *Id.*; see also Nicholas Klaiber, Note, *Confronting Reality: Surrogate Forensic Science Witnesses Under the Confrontation Clause*, 97 VA. L. REV. 199, 203–04 (2011) (arguing that supervisors who were minimally connected to the testing process should be able to testify regarding the report).

scientist.¹⁶⁶ Second, anyone can introduce the contents of a report into evidence if the report was not prepared with the primary purpose of accusing a targeted individual of a crime.¹⁶⁷

Finally, scholars have come up with a number of solutions that also fall under this second category. One proposal is that the testimony of one scientist who was substantially involved in the testing process should be sufficient to introduce the entire report.¹⁶⁸ This is similar to one of Justice Sotomayor's suggestions in *Bullcoming*.¹⁶⁹ Other suggestions allow the introduction of a report through a substitute witness when the "analyst" is unavailable and certain other criteria are met.¹⁷⁰ Mnookin and Kaye, for example, propose that an expert should be allowed to testify to the contents of another expert's report when the original analyst is unavailable, retesting is impossible, and the report is sufficiently detailed to allow another expert to exercise independent judgment.¹⁷¹ Justice Breyer lists some other proposals that have been made in his concurring opinion in *Williams*; for the most part, however, they are largely similar to those already described.¹⁷²

Unfortunately, as will be explained in Part III, none of these solutions adequately addresses the problem.

III. A NEW PROPOSAL

This Note proposes a new solution, drawing largely on facts that the plurality found relevant in *Williams*. Although the two alternative approaches that the plurality explicitly adhered to in *Williams* are unworkable, the plurality noted a number of factors throughout its opinion that helped to justify its overall conclusion. First, the plurality noted that the chances of fraud or mistake during the DNA profile building process were low, given the circumstances.¹⁷³ Second, there was information provided to the testifying expert that was sufficient for an uninvolved expert to draw an independent conclusion (i.e., errors could be detected by looking at the DNA profile itself and a match could be found by comparing it with another profile).¹⁷⁴ Finally, an expert who was qualified to examine the DNA

166. *Williams*, 132 S. Ct. at 2228 (plurality opinion).

167. *Id.* at 2242–43.

168. See, e.g., Ronald J. Coleman & Paul F. Rothstein, *Grabbing the Bullcoming by the Horns: How the Supreme Court Could Have Used Bullcoming v. New Mexico to Clarify Confrontation Clause Requirements for CSI-Type Reports*, 90 NEB. L. REV. 502, 537 (2011).

169. See *supra* note 82 and accompanying text.

170. See, e.g., Mnookin & Kaye, *supra* note 139, at 156; Jesse J. Norris, *Who Can Testify About Lab Results After Melendez-Diaz and Bullcoming?: Surrogate Testimony and the Confrontation Clause*, 38 AM. J. CRIM. L. 375, 425–27 (2011) (discussing a few approaches to this problem that require unavailability of the original analyst). Norris also proposes a different approach: allowing surrogate testimony only when the report is non-testimonial. Norris, *supra*, at 376. However, since non-testimonial evidence is not subject to the Confrontation Clause currently, this Note will not address that approach.

171. Mnookin & Kaye, *supra* note 139, at 156.

172. *Williams*, 132 S. Ct. at 2247 (Breyer, J., concurring).

173. *Id.* at 2243–44 (plurality opinion).

174. See *id.* at 2229–31, 2244.

profiles, explain the DNA profiling methodology, and make the DNA match did testify regarding the match.¹⁷⁵

This Note proposes that these factors can be used to formulate a new test. That is, an expert who was not involved in the actual testing process should be able to testify regarding a report if (1) there is evidence that suggests that the underlying analysis was sufficiently reliable; (2) the report is sufficiently detailed; and (3) the testifying expert has knowledge sufficient to make him or her an adequate substitute witness. This Note will explain and justify each of these requirements in turn.

A. Reliability of the Underlying Analysis

The Supreme Court has stated that ensuring the reliability of evidence is the purpose of the Confrontation Clause,¹⁷⁶ and despite the overturning of *Ohio v. Roberts*, the Court has also stated that when evidence is exempt from the requirements of the Confrontation Clause, that exemption is justified by the relative reliability of the evidence.¹⁷⁷ Thus, if some kind of exception is to be made for scientific evidence, the reliability of the evidence should be a consideration.

Yet, a number of the solutions to the problem of experts and confrontation that the Court and scholars have offered do not take reliability into account at all, and some of them even decrease reliability. For example, the plurality's proposed alteration of the primary purpose test in *Williams* focuses on whether there is a suspect under investigation and whether the scientists who prepare a report are aware of that suspect.¹⁷⁸ This makes some sense in the context of that case, since it is difficult to fabricate DNA evidence without a suspect's DNA.¹⁷⁹ However, in other circumstances, whether or not there is a suspect has little to do with the prospect of fabrication or the risk of a mistake.¹⁸⁰ For example, in a drug case like *Melendez-Diaz*, if the police had found the drugs in a car and had them tested before connecting the car with a suspect, the scientists doing the testing would have no less reason to fabricate evidence than they would if the suspect was known. Their motive to fabricate comes from their knowledge that the police believe what they are testing to be drugs and their desire to assist the police by making such a finding.¹⁸¹

The other *Williams* solution, allowing experts to testify to the results of another expert's analysis if not offering those results for the truth of the matter asserted, is

175. *See id.* at 2229–30. The plurality did not explicitly focus on the qualifications of the testifying witness; however, it stressed that the testifying witness was testifying to an independent opinion. *See id.* at 2233. Implicit in that is that the testifying witness was sufficiently qualified to be able to render such an opinion.

176. *Crawford v. Washington*, 541 U.S. 36, 61 (2004).

177. *See Michigan v. Bryant*, 131 S. Ct. 1143, 1157 (2011) (finding that statements made for the primary purpose of resolving an emergency need not be subject to cross-examination because the prospect of fabrication is diminished).

178. *See Williams*, 132 S. Ct. at 2243–44 (plurality opinion).

179. *See id.*

180. *See* Richard D. Friedman, *Confrontation and Forensic Laboratory Reports, Round Four*, 45 TEX. TECH L. REV. 51, 59 (2012) (criticizing the “targeted individual” test).

181. *See Metzger, supra* note 122, at 496–98 (describing the problem of pro-prosecution bias in crime labs).

no better at ensuring the reliability of the evidence presented. As scholars have noted, there is really no reason for the evidence to be offered at all if not for its truth.¹⁸² And when following this approach to determine whether evidence is admissible, the less the witness who is testifying says about the reliability of the evidence, the more likely the evidence is to be admissible.¹⁸³ Calling a witness who may be able to testify somewhat about the accuracy of the underlying analysis is discouraged; it is better to ignore the accuracy of the underlying analysis completely, if one wants to admit the evidence, because attempting to prove that the underlying analysis is accurate demonstrates that the evidence is being offered to prove the truth of the matter asserted.¹⁸⁴

Proposed solutions allowing for the introduction of a report through a surrogate witness when the original analyst is unavailable also do nothing to ensure the reliability of the report.¹⁸⁵ And allowing a single lab worker who was significantly involved in part of the testing process to testify does nothing to ensure the reliability of the parts of the testing that were conducted by other workers without that worker present. None of these solutions, thus, adequately takes reliability into account when it exempts a number of workers who contributed to a report from testifying.

Reliability should be a factor that is explicitly considered by courts when determining whether to admit a laboratory's report. However, only a particular kind of reliability should be considered. This Note previously discussed four types of error that occur in the production of laboratory reports.¹⁸⁶ Two of these types of error, errors related to the interpretation of results and errors related to the methodology employed, are not relevant here. Any qualified expert in a particular field should be able to testify as to how the results of the testing should be interpreted and whether the methodology employed is a valid methodology. The problematic types of error are the two types of error that might be made by any of the number of workers involved in the testing process and that might be known only by the person who committed the error: mistakes and fraudulent activity.

Courts should, therefore, look for evidence that the risks of mistakes in the testing process and of fraudulent reporting of results are low before deciding to admit a report through an uninvolved witness. The prosecution should be required to offer

182. Mnookin & Kaye, *supra* note 139, at 101 (“On the particular facts of *Williams*, we maintain that notwithstanding several Justices’ argument to the contrary, there were no plausible grounds for deeming the evidence introduced for a purpose other than its truth.”).

183. See *Williams*, 132 S. Ct. at 2235 (plurality opinion) (noting that the testifying expert “did not vouch for the quality of Cellmark’s work”).

184. Justice Kagan criticizes this aspect of the opinion in her dissent. *Id.* at 2268 (Kagan, J., dissenting). She notes that the defense attorney had even less opportunity to cross-examine a witness regarding the underlying analysis than in *Bullcoming* because the testifying witness in *Williams* knew even less about that underlying testing than the testifying witness in *Bullcoming* did. *Id.*

185. At least one scholar has suggested that a report be allowed to be introduced when the analyst is unavailable and the evidence is trustworthy. Norris, *supra* note 170, at 427 (reviewing several proposed solutions). Although this does seem to take reliability into account, it does not completely address the problem of experts and confrontation since the problem exists even when the analysts who performed the testing are technically available.

186. See *supra* Part II.A.

evidence that the workers involved were competent (for example, their qualifications and the results of some kind of proficiency testing) and that there were procedures in place to protect against the prospect of fraud and regularly sloppy work.

In *Williams*, it was the lack of a suspect that ensured that the risks of fraud and mistake were low.¹⁸⁷ If scientists do not know what a defendant's DNA profile looks like, it is nearly impossible to intentionally or accidentally create a profile that matches that profile.¹⁸⁸ However, this risk reduction should be able to be replicated in other types of testing through the use of laboratory procedures. For example, in a drug lab like the one in *Melendez-Diaz*, the laboratory could use negative control samples—that is, samples that are not actually drugs—to make those performing the tests on the drugs unaware what the result of the tests is expected to be (rather than simply assuming that the result should be that the substance tested positive for some kind of controlled substance¹⁸⁹). If some of the samples that must be tested are negative, the test performers do not know which ones those are, and the laboratory checks to ensure that the test performers correctly identified those samples as negative, that should serve to both prevent fraud and detect an excessive amount of mistakes.

This type of procedure would likely have prevented the fraudulent activity that occurred in Massachusetts involving Annie Dookhan. Dookhan had been identifying substances as drugs without testing them and sometimes adding drugs into negative samples to make them positive samples.¹⁹⁰ If the procedure described above had been employed, however, the laboratory would have quickly discovered her. Other procedures, such as random retesting of samples and audits of laboratory workers' work, may also be sufficient to prevent this kind of fraud from occurring.¹⁹¹

An objection to this reliability requirement is that it would be in contradiction of *Crawford*. In *Crawford*, the Court held that reliability was no longer a consideration in determining whether a statement is subject to the Confrontation Clause's requirements.¹⁹² However, as previously explained, there are two good reasons for treating forensic laboratory reports differently than statements made by lay witnesses. First, the Court in *Crawford* found that “[r]eliability is an amorphous, if not entirely subjective, concept[.]”¹⁹³ but that is only the case when attempting to determine the reliability of a statement made by a lay witness. As one writer pointed out, with respect to science, “reliability is a measurable quantity.”¹⁹⁴ Thus, one of the reasons that made the holding in *Crawford* necessary with respect to lay witnesses is inapplicable to scientific reports. Second, statements made by

187. *Williams*, 132 S. Ct. at 2243–44 (plurality opinion).

188. *Id.*

189. See Metzger, *supra* note 122, at 496–98 (explaining that analysts sometimes assume that the police and prosecution desire a particular test outcome and operate with a bias based on that assumption).

190. *Boston State Chemist Arrested*, *supra* note 134.

191. In the Dookhan case, audits revealed that Dookhan tested around five times as many samples as any other lab worker, which caused coworkers to express concern about her work. *Id.* In addition, a chemist who retested Dookhan's samples found seven instances in which she incorrectly identified a substance. *Id.*

192. *Crawford v. Washington*, 541 U.S. 36, 68 (2004).

193. *Id.* at 63.

194. Nielson, *supra* note 160, at 969.

lay witnesses are easily attributable to one person. Because forensic laboratory reports are often produced by many lab workers, it is impractical to apply *Crawford* to these reports in the same way as it is applied to statements made by lay witnesses.¹⁹⁵ If some of the workers must not be required to testify, then it makes sense to bring reliability back into the picture as a justification for that.

B. A Detailed Report

In addition to the reliability requirement, in order for a substitute expert to testify to the contents of a forensic science report, the report should have to be sufficiently detailed. Some other scholars have included the requirement of a more detailed report in their own proposed solutions. For example, Mnookin and Kaye suggested that when the original analyst is unavailable, retesting is impossible, and the report is “sufficiently detailed to permit the surrogate to exercise independent judgment,” surrogate testimony should be allowed.¹⁹⁶ Another writer argued that reports should have to include information on a number of things: sample identifiers, documentation of the chain of custody of the sample, the analysts’ names and credentials, evidence of the analysts’ qualifications to perform the test, the laboratory’s certification, the testing method used, evidence of the reliability of the method used, the results of the testing, the calibration log for any machine used, a statement of any relevant observations made, a statement that everything in the report is true, and evidence of a second-party review.¹⁹⁷ To meet this Note’s proposed requirement, a report should, at the very least, describe the methodology used and include all of the results of the testing, including any raw data that was produced by the testing. However, the more that is included in the report about the process, the better.

A detailed report is crucial for a few reasons. First, it allows a substitute witness to know the methodology that was followed so that the substitute witness can thus testify as to his or her own opinion on that methodology’s validity.

Second, it allows a substitute witness to draw his or her own conclusions with respect to interpretation of the data, rather than simply reading a conclusion that was arrived at by others. This is what Mnookin and Kaye were concerned with when they suggested that a report be detailed enough for another expert to draw an independent conclusion from reading the report.¹⁹⁸

Lastly, in some situations, a detailed report may allow an expert reading the report to detect errors that were made during the testing process. This is what happened in the *Kocak* case that was described by the concurrence and dissent in *Williams*. In that case, the witness testified that the laboratory had found a match between the crime scene DNA and the defendant’s DNA.¹⁹⁹ However, she later realized that the sample numbers had been switched at some point on the report; the match was between the victim’s DNA and the crime scene DNA, not the

195. Mnookin & Kaye, *supra* note 139, at 149, 152.

196. *Id.* at 156.

197. Nielson, *supra* note 160, at 975–76.

198. See Mnookin & Kaye, *supra* note 139, at 156.

199. *Williams v. Illinois*, 132 S. Ct. 2221, 2246 (2012) (Breyer, J., concurring) (citing Tr. in *State v. Kocak*, No. SCD110465 (Cal. Sup. Ct. Nov. 17, 1995), available at <http://www.scientific.org/distribution/archive/JohnIvanKocak.pdf>).

defendant's DNA.²⁰⁰ This mistake was detected not by speaking with those involved in the testing process, but by reviewing the report.²⁰¹ Presumably, errors like this are more likely to be caught the more detailed the report is.

Errors like this are also probably more likely to be caught through the review of a detailed report than through the cross-examination of an involved analyst. Analysts, after all, perform a large number of tests every year and are unlikely to remember any particular test and whether they may have made any mistakes during it at the time of a trial.²⁰² Thus, even if the analyst testifies, he or she will likely base his or her testimony solely on the report.²⁰³

C. An Adequate Substitute Witness

The last requirement that should have to be met in order for a substitute witness to testify regarding a forensic laboratory report is the requirement of an adequate substitute witness. In order to be an adequate substitute, a witness should be familiar with the methodology that was employed and able to testify regarding its validity and should also be sufficiently qualified to be able to independently interpret the results of the testing.²⁰⁴ In a case like *Williams*, where particular laboratory procedures are not necessary to ensure the accuracy of the underlying analysis (because intentionally or mistakenly creating the defendant's DNA profile is nearly impossible²⁰⁵), the substitute need not be from the laboratory that produced the report.²⁰⁶ In situations in which the previously mentioned procedures are necessary, however, the substitute witness should be a supervisor, director, or person of a similar position from the laboratory that produced the report.²⁰⁷

Some have argued that no witness should be required to testify in order to introduce a laboratory report if the report is sufficiently reliable²⁰⁸ or sufficiently detailed.²⁰⁹ However, considering that departure from *Crawford* is justified with

200. *Id.*

201. *Id.*

202. *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 339 (2009) (Kennedy, J., dissenting); Nielson, *supra* note 160, at 968–69.

203. Nielson, *supra* note 160, at 968–69.

204. This bears some similarity to the requirement included in some tests proposed by scholars that the substitute witness be able to offer an independent opinion. *See, e.g.*, Mnookin & Kaye, *supra* note 139, at 156.

205. *Williams*, 132 S. Ct. at 2243–44 (plurality opinion).

206. In *Williams*, the witness who testified about the DNA match based on the DNA profile produced by Cellmark was not from Cellmark, and no witness from Cellmark testified. *See id.* at 2229–30.

207. Unlike in other proposed solutions, however, the substitute witness does not have to have had any connection to the particular test at issue. *Cf.* Klaiber, *supra* note 165, at 203–04 (arguing that supervisors who were minimally connected to the testing process should be able to testify regarding the report).

208. *See Williams*, 132 S. Ct. at 2251–52 (Breyer, J., concurring) (arguing that reports from accredited labs should be presumptively exempt from the requirements of the Confrontation Clause).

209. *See* Nielson, *supra* note 160, at 952–53, 974–76 (arguing that reports should be required to meet *Daubert* and be sufficiently detailed, but should not be subject to

respect to scientific reports largely because of the impracticality of having everyone who contributed to a report testify,²¹⁰ there is little justification for requiring no one at all to testify. Requiring one scientist to testify strikes the appropriate balance between practicality and the confrontation requirement of *Crawford*.

In addition, there are two major benefits to requiring one adequate substitute witness to testify. First, the substitute witness can testify generally regarding the methodology employed and can testify as to his or her own interpretation of the results of the testing.²¹¹ Thus, the witness can be cross-examined on the validity of the methodology and on the validity of the witness's interpretation of the results.

Second, if the witness is a supervisor or director from the laboratory that produced the report, the witness can testify about the laboratory's policies and procedures generally, the competence of the workers who produced the report, the results of any proficiency testing they underwent, and the results of their testing of the negative control samples previously described²¹² or of the retesting of their samples.²¹³ Laboratory personnel should generally have some idea of whether their lab follows procedures or whether it does not. They also have some knowledge of the reputations of other lab workers. In the case of Annie Dookhan, for example, co-workers of Dookhan had been suspicious of her work.²¹⁴ They noticed that she was more productive than everyone else, that she never used a microscope, and that she weighed samples without doing a balance check on the scale.²¹⁵ All of this knowledge is information that could be delved into during cross-examination.

Some might object to the allowance of such a substitute witness's testimony on the grounds that it is in contradiction of *Bullcoming*.²¹⁶ In *Bullcoming*, the Court found that such surrogate witness testimony is a violation of the Confrontation Clause.²¹⁷ However, *Bullcoming* should be reconsidered because in the context of forensic expert testimony, surrogate witness testimony is inevitable. For example,

Confrontation Clause requirements).

210. See Mnookin & Kaye, *supra* note 139, at 149, 152 (discussing the problem of scientific reports being created by a number of people).

211. See, e.g., *Williams*, 132 S. Ct. at 2229–30 (plurality opinion) (testifying witness explained DNA profiling methodology and explained her own conclusion regarding the DNA match).

212. See *supra* Part III.A.

213. Cf. *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 334 (2009) (Kennedy, J., dissenting) (“The director is arguably the most effective person to confront for revealing any ambiguity in findings, variations in procedures, or problems in the office, as he or she is most familiar with the standard procedures, the office’s variations, and problems in prior cases or with particular analysts.”). This is more than the testifying analyst could testify to in *Bullcoming*, since, although he knew the laboratory’s policies and procedures, he was not a supervisor or director and knew nothing of the testing analyst’s competence or other related things. See *Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2715 (2011) (describing how the New Mexico Supreme Court found the testifying analyst’s testimony to be sufficient because the testifying analyst knew the testing method and the laboratory’s procedures, but then finding that testimony insufficient because the testifying analyst did not know, for example, whether the testing analyst was placed on leave due to incompetence).

214. *Boston State Chemist Arrested*, *supra* note 134.

215. *Id.*

216. See *Bullcoming*, 131 S. Ct. at 2710 (holding that the testimony of a scientist who did not perform or observe the test was not sufficient to introduce the report).

217. *Id.*

even if an analyst who participated in the testing process testifies, that analyst is arguably serving as a surrogate for all of the other laboratory workers who were involved in the testing process but who are not testifying. Because it is impractical to have all of the workers testify,²¹⁸ some kind surrogate testimony is necessary.

The Court seems to have recognized this to some extent. In *Bullcoming*, Justice Sotomayor acknowledged that there should be circumstances in which something similar to surrogate testimony is permitted.²¹⁹ Moreover, in *Williams*, the plurality arguably allowed surrogate testimony, in contradiction of *Bullcoming*.²²⁰

This Note suggests that surrogate testimony should be permitted, but only in circumstances in which it is reliable. *Bullcoming* was problematic because in that case there were questions regarding the test-performing analyst's competence.²²¹ Those questions would not exist, however, if the prosecution had been required to prove the analyst's competence before admission of testimony regarding the report. Furthermore, in *Bullcoming*, the testifying analyst could not testify regarding the test-performing analyst's competence at all.²²² If an adequate substitute witness who could testify regarding such matters had testified, the defendant would have had more of an opportunity to expose potential problems via cross-examination.

For these reasons, to the extent that the requirements of *Bullcoming* contradict this Note's proposal, they should be overruled. As noted, however, *Williams* has arguably already taken a step in that direction.²²³

CONCLUSION

Although the Court was right in *Williams* to place limitations on a defendant's right to confront forensic experts, it failed to provide a clear standard for courts to follow in the future. The Court seemed to consider a number of factors (although it did not do so explicitly) in that case, and those factors may provide guidance as to what kinds of factors should be considered as part of a future test. Sooner or later, however, the Court will have to directly answer the crucial question: who must testify in order for a laboratory report to be introduced into evidence against the accused?

This Note has proposed an answer to that question: a substitute witness who was not directly involved in the testing should be able to testify to the contents of a laboratory report if (1) the underlying analysis is reliable; (2) the report is sufficiently detailed; and (3) the testifying witness is an adequate substitute. This solution attempts to address the reliability concerns associated with forensic evidence while also taking into account the practical limitations of laboratories and

218. Mnookin & Kaye, *supra* note 139, at 149, 152.

219. *See supra* notes 81–84 and accompanying text.

220. *Williams v. Illinois*, 132 S. Ct. 2221, 2267–68 (2012) (Kagan, J., dissenting).

221. *See Bullcoming*, 131 S. Ct. at 2715–16 (noting that there was no evidence that the test-performing analyst had not been placed on unpaid leave due to his incompetence).

222. *See id.* at 2715.

223. *See Williams*, 132 S. Ct. at 2267–68 (Kagan, J., dissenting) (arguing that *Williams* contradicts *Bullcoming*); Hon. G. Ross Anderson Jr., *Returning to Confrontation Clause Sanity: The Supreme Court (Finally) Retreats from Melendez-Diaz and Bullcoming*, FED. LAW., Mar. 2013, at 67, 68 (arguing that *Williams* was a retreat from *Bullcoming* and a step in the right direction).

their staff. Following the standard would ensure that defendants can contest the reliability of the evidence offered against them as much as possible, that other safeguards will also help to promote the reliability of that evidence, and that laboratories are not unduly burdened by a requirement that every lab worker must testify in every case in which they play any role. Perhaps most importantly, this solution would provide a clear standard that would reduce the confusion that is currently present in the lower courts and promote consistency throughout our justice system.

