

Confronting the Forensic Confirmation Bias

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INTRODUCTION

The Sixth Amendment Confrontation Clause provides that, “[i]n all criminal prosecutions, the accused shall enjoy the right . . . to be confronted with the witnesses against him.”¹ At the core of the Confrontation Clause is the need to ensure the accuracy and trustworthiness of witness testimony by requiring witnesses to take the stand and face cross-examination in the course of criminal trials.² The Supreme Court endorsed this policy of ensuring testimonial accuracy by expanding the conventional meaning of “witness” to encompass analysts who conduct forensic tests for criminal prosecutions.³ The consequence of this expansion was that courts generally declined to admit forensic test results as evidence when the analyst who performed the test was not available for cross-examination, an outcome reached by the Supreme Court in two landmark cas-

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1. U.S. CONST. amend. VI.
2. See, e.g., *Ohio v. Roberts*, 448 U.S. 56, 63-64 (1980) (“[T]he Clause envisions a personal examination and cross-examination of the witness, in which the accused has an opportunity, not only of testing the recollection and sifting the conscience of the witness, but of compelling him to stand face to face with the jury in order that they may look at him, and judge by his demeanor upon the stand and the manner in which he gives his testimony whether he is worthy of belief.” (quoting *Mattox v. United States*, 156 U.S. 237, 242-43 (1895)) (internal quotation marks omitted)).
3. *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 311 (2009) (stating that analysts were witnesses for Sixth Amendment Confrontation Clause purposes).

es: *Melendez-Diaz v. Massachusetts*⁴ and *Bullcoming v. New Mexico*.⁵ Only a year after *Bullcoming*, however, the Supreme Court delivered a fractured opinion in *Williams v. Illinois* that contravened the general principles of the Confrontation Clause doctrine at the time.⁶ Specifically, the Court allowed the admission of a DNA report into evidence even when only a surrogate witness was available to testify to the results of the DNA test.⁷

In *Williams*, the dissent vehemently argued that the ruling would erode criminal defendants' constitutional rights to ensure the accuracy of forensic test results.⁸ This Comment argues the counterintuitive proposition that the *Williams* decision was actually the first step towards eliminating the true threat to both the accuracy of forensic evidence and the spirit of the Confrontation Clause—an implicit bias known as the *forensic confirmation bias*. Part I introduces the concept of the forensic confirmation bias and explains why lawyers and forensic analysts will jointly perpetuate it absent an intervention. Part II rejects the Supreme Court's oversimplified cross-examination solution for ensuring testimonial accuracy and argues that the *Williams* decision may instigate structural change that creates more effective protections for defendants against inaccurate evidence. Finally, Part III explores and evaluates two ways in which the Supreme Court can effectively nest the *Williams* decision within the Confrontation Clause doctrine in order to preserve these potential protections against inaccuracy.

4. *Id.* (“Absent a showing that the analysts were unavailable to testify at trial *and* that petitioner had a prior opportunity to cross-examine them, petitioner was entitled to be confronted with the analysts at trial.” (internal quotation marks omitted)).

5. 131 S. Ct. 2705, 2713-14 (2011).

6. *See Williams v. Illinois*, 132 S. Ct. 2221, 2227-28 (2012).

7. *Id.* A surrogate witness is an individual who testifies to the results of a forensic test that he or she did not perform. *See* Nicholas Klaiber, *Confronting Reality: Surrogate Forensic Science Witnesses Under the Confrontation Clause*, 97 VA. L. REV. 199, 201 (2011). Courts generally classify these witnesses as experts and allow them to testify under Rule 703 of the Federal Rules of Evidence. *See* FED. R. EVID. 703; Julie A. Seaman, *Triangulating Testimonial Hearsay: The Constitutional Boundaries of Expert Opinion Testimony*, 96 GEO. L.J. 827, 837 (2008).

8. *See Williams*, 132 S. Ct. at 2264-65 (Kagan, J., dissenting).

I. THE FORENSIC CONFIRMATION BIAS: THE TRUE THREAT TO EVIDENTIARY ACCURACY

A. *The Science of Subtle Influencing*

Forensic evidence leads to false convictions because of “subtle influencing.”⁹ In the realm of DNA evidence, for example, “police departments deliver biological material [to crime laboratories] with cover letters . . . that inform the analysts of non-DNA evidence [suggesting a] suspect’s guilt and then ask the analyst[s] to corroborate that inculpatory evidence.”¹⁰ The result is a system in which forensic analysts do not work objectively, but implicitly align their interpretations of evidence with the preexisting theories of both prosecutors and law enforcement officials.¹¹

Through a great deal of empirical research, psychologists have been able to document this general phenomenon, which they call the *confirmation bias*.¹² For example, Bressan and Dal Martello found that participants reported higher ratings of facial similarity between *unrelated* adults and children when led to believe that the adults and children were parent and offspring.¹³ In addition, Charman, Gregory, and Carlucci found that participants reported higher similarity between a suspect and a facial composite when they were told that the particular suspect was guilty.¹⁴ Perhaps most pertinent is a study by Lange, Thomas, Dana, and Dawes, in which participants who were led to believe that a

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9. Edward J. Ungvarsky, *Remarks on the Use and Misuse of Forensic Science to Lead to False Convictions*, 41 NEW ENG. L. REV. 609, 617-18 (2007).
 10. *Id.* at 618.
 11. *Id.* at 619 (“Crime analysts try to make the DNA profiles fit. They do not presume innocence, they do not assume innocence.”).
 12. See, e.g., Charles G. Lord et al., *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence*, 37 J. PERSONALITY & SOC. PSYCHOL. 2098, 2098 (1979) (describing one of the earliest studies of confirmation bias in evidentiary interpretation); Raymond S. Nickerson, *Confirmation Bias: A Ubiquitous Phenomenon in Many Guises*, 2 REV. GEN. PSYCHOL. 175, 175 (1998) (reviewing evidence of the confirmation bias in a variety of contexts); see also Saul M. Kassin et al., *The Forensic Confirmation Bias: Problems, Perspectives, and Proposed Solutions*, 2 J. APPLIED RES. MEMORY & COGNITION 42, 44-48 (2013) (providing a comprehensive overview of the literature on the confirmation bias, generally, and the forensic confirmation bias, more specifically).
 13. Paola Bressan & Maria F. Dal Martello, Talis Pater, Talis Filius: *Perceived Resemblance and the Belief in Genetic Relatedness*, 13 PSYCHOL. SCI. 213, 213 (2002).
 14. Steve D. Charman et al., *Exploring the Diagnostic Utility of Facial Composites: Beliefs of Guilt Can Bias Perceived Similarity Between Composite and Suspect*, 15 J. EXPERIMENTAL PSYCHOL.: APPLIED 76, 76 (2009).

speaker was suspected of a crime perceived more incriminating statements in recordings of that speaker's speech.¹⁵

Responding to the burgeoning literature on the influence of subtle suggestion on human perception, Kassin, Dror, and Kukucka coined the specific term "forensic confirmation bias" to refer to "the class of effects through which an individual's preexisting beliefs, expectations, motives, and situational context influence the collection, perception, and interpretation of evidence during the course of a criminal case."¹⁶ This bias, they explain, results in "a rigid focus on one suspect that leads investigators to seek out and favor inculpatory evidence, while overlooking or discounting any exculpatory evidence that might exist."¹⁷ Indeed, recent studies support this specific type of confirmation bias. For example, Dror, Charlton, and Peron asked five experienced forensic experts to reassess fingerprints that they had examined years earlier and declared to be a match with a particular suspect.¹⁸ Prior to the reassessment, however, the experts were told that the fingerprints had come from a high-profile case of erroneous identification, implying that the fingerprints were not actually a match.¹⁹ Troublingly, after the subtle suggestion, only one of the experts adhered to his initial assessment and reported that the fingerprints were a match.²⁰

Even more relevant is a study by Dror and Hampikian that used a DNA sample from an actual gang rape case wherein analysts matched the sample with a suspect who had been implicated in an incriminating plea bargain.²¹ When Dror and Hampikian later provided the same DNA sample to seventeen neutral data analysts, without the biasing information in the plea bargain that linked the suspect to the DNA, only one analyst agreed with the original result while all the other analysts deemed the results to be either inconclusive or exonerative.²² What these results suggest is that the interpretation of forensic evidence—even evidence misguidedly perceived as infallible such as DNA results—is subject to implicit manipulation by psychological suggestion. Moreover, many other studies have shown that this potential for implicit manipulation is not just limited

15. Nick D. Lange et al., *Contextual Biases in the Interpretation of Auditory Evidence*, 35 *LAW & HUM. BEHAV.* 178, 178 (2011).

16. Kassin et al., *supra* note 12, at 45.

17. *Id.*

18. Itiel E. Dror et al., *Contextual Information Renders Experts Vulnerable to Making Erroneous Identifications*, 156 *FORENSIC SCI. INT'L* 74, 74 (2006).

19. *Id.*

20. *Id.* at 76.

21. Itiel E. Dror & Greg Hampikian, *Subjectivity and Bias in Forensic DNA Mixture Interpretation*, 51 *SCI. & JUST.* 204, 204-05 (2011).

22. *Id.* at 205.

to fingerprinting and DNA evidence, but is endemic in all types of forensic contexts.²³

In sum, the wealth of psychological literature suggests that “an observer’s expectations can impact visual and auditory perception,” skewing that observer’s interpretation of data.²⁴ Because forensic testing involves such visual and auditory perception in, for example, the comparison of samples found on a crime scene with samples obtained from particular individuals, the introduction of pre-identified suspects poses a real risk of perceptual contamination. Specifically, forensic analysts are more likely to interpret what could otherwise be an ambiguous piece of evidence as belonging to a pre-identified suspect when police departments provide them with the identity of the suspect, or additional evidence suggesting that suspect’s guilt, as a perceptual and interpretive anchor.²⁵ This bias is a “natural and automatic feature of human cognition that can occur in the absence of self-interest.”²⁶ As such, the forensic confirmation bias is distinct from explicit procedural errors, such as methodological flaws and data doctoring, that lawyers can realistically expose through cross-examination.

23. See, e.g., Eitan Eyal et al., *The Effects of Prior Expectations and Outcome Knowledge on Polygraph Examiners’ Decisions*, 7 J. BEHAV. DECISION MAKING 279, 279 (1994) (demonstrating the forensic confirmation bias in the context of polygraph interpretation); Larry S. Miller, *Bias Among Forensic Document Examiners: A Need for Procedural Change*, 12 J. POLICE SCI. & ADMIN. 407, 407-10 (1984) (demonstrating the forensic confirmation bias in the context of handwriting analysis).

24. Kassir et al., *supra* note 12, at 45.

25. In other words, “forensic analysts who possess an a priori belief in a suspect’s guilt are vulnerable to forensic confirmation biases that render them more likely to see evidence as incriminating—even when it is not.” Jeff Kukucka, *Forensic Confirmation Bias: When Evidence Doesn’t Speak for Itself*, HUFFINGTON POST: HUFF POST SCI. (Apr. 29, 2013, 12:26 PM), http://www.huffingtonpost.com/jeff-kukucka/forensic-evidence_b_3178848.html. Furthermore,

[a] growing body of real-world cases and research studies demonstrate this point. For example, following the 2004 Madrid train bombings, three FBI fingerprint experts confidently concluded that a latent print taken from a bag containing detonating devices belonged to Brandon Mayfield, an American Muslim attorney in Oregon. Mayfield spent 17 days in FBI custody before Spanish authorities identified the true perpetrator. At that point, the DOJ’s Office of the Inspector General ordered a full review of the case and ultimately implicated “confirmation bias” as contributing to Mayfield’s misidentification, adding that a “loss of objectivity” led examiners to see “similarities . . . that were not in fact present.”

Id.

26. Kassir et al., *supra* note 12, at 44.

B. *The Gaps Between Lawyers and Forensic Analysts*

Unfortunately, the destructive pattern of catering to the forensic confirmation bias persists because of a stark disconnect between the scientific and legal communities. For three reasons, neither field is likely to address the forensic confirmation bias without substantial incentives for *structural* change.

First, lawyers²⁷ and forensic analysts have inherently conflicting goals. While analysts seek to describe their results objectively, lawyers have an obligation to zealously advocate for their clients.²⁸ As such, it is unlikely that lawyers will take steps to mitigate the very bias that bolsters their chances at obtaining evidence that will support their case. Furthermore, in the criminal justice system, the interests of prosecutors tend to prevail because law enforcement officials, who subscribe to similar prosecutorial goals, tend to have significant control over affiliated crime laboratories.²⁹

Second, lawyers lack fundamental knowledge of the operations and intrinsic limitations of forensic testing.³⁰ As such, they are often unable, without the proper education, to appreciate the effects of the forensic confirmation bias on the interpretation of data and test results.³¹ Conversely, forensic analysts have not made sufficient efforts to alert lawyers to the intricacies of statistical and scientific data. For example, drug reports conventionally include only a single sentence indicating the likely composition of an unknown substance, with no mention of possible implicit sources of error.³² Moreover, forensic laboratories

27. I use the more general term “lawyers” instead of “prosecutors” simply because the forensic confirmation bias may work for defense attorneys as well. For example, a defense attorney could submit a piece of DNA evidence to a forensic analyst with suggestions of a particular suspect’s innocence. This subtle suggestion would make it more likely that the analyst would interpret the sample to confirm the defense attorney’s theory of innocence. For an example of a psychological study demonstrating this possibility, see Dror et al., *supra* note 18, at 74.

28. See CONNIE FLETCHER, EVERY CONTACT LEAVES A TRACE 337-38 (2006) (highlighting several forensic experts’ frustration with the ideological differences between analysts and lawyers).

29. See COMM. ON IDENTIFYING THE NEEDS OF THE FORENSIC SCI. CMTY., STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD 187 (2009) (“[F]orensic practitioners who work in public crime laboratories often are seen as part of the prosecution team, not as part of the scientific enterprise.”) [hereinafter STRENGTHENING FORENSIC SCIENCE].

30. See *id.* at 234-36.

31. See *id.* at 238-39; FLETCHER, *supra* note 28, at 337 (“[Lawyers] really need to spend time . . . learning and asking [an] expert . . . what [a] test is capable of doing and what it [cannot] do.”).

32. See STRENGTHENING FORENSIC SCIENCE, *supra* note 29, at 135 (providing an example of a typical drug report for a marijuana case).

use inconsistent and confusing terminology to describe the association between particular suspects and corresponding biological evidence.³³

Finally, the steadily increasing burden on crime laboratories in recent years has left forensic analysts with neither the incentive nor the capacity to correct the forensic confirmation bias. In 2009, for example, public crime laboratories had a total backlog of over one million requests for forensic services, most of which involved forensic biology.³⁴ In addition, the Supreme Court's rulings in *Melendez-Diaz* and *Bullcoming* taxed the time and resources of analysts even further by essentially requiring them to travel to courthouses for cross-examination every single time a criminal defendant sought to challenge forensic test results.³⁵

It is clear that there are numerous obstacles to solving the pervasive problems of evidentiary inaccuracy caused by the forensic confirmation bias. Furthermore, ad hoc measures such as cross-examination within the course of a trial are insufficient solutions. Instead, both lawyers and forensic analysts must be incentivized, on a structural level, to bridge their fundamental philosophical, knowledge, and capacity gaps. Because the roles of lawyers and analysts converge so intimately within the criminal justice system, the courts are in a prime position to instigate such a change. Indeed, the *Williams* decision may have been the Supreme Court's first step in this direction.

II. THE *WILLIAMS* SOLUTION: ABOLISHING STRUCTURAL STASIS

A. *The Shift to Williams and the Insufficiency of Cross-Examination*

In light of the forensic confirmation bias, one could argue that the attorney for a criminal defendant should have the opportunity to cross-examine the analysts who actually performed particular forensic tests.³⁶ Indeed, it would seem

33. *See id.* at 185 (“Such terms include but are not limited to ‘match,’ ‘consistent with,’ ‘identical,’ ‘similar in all respects tested,’ and ‘cannot be excluded as the source of.’ The use of such terms can have a profound effect on how the trier of fact . . . perceives and evaluates evidence.”).

34. MATTHEW R. DUROSE ET AL., BUREAU OF JUSTICE STATISTICS, CENSUS OF PUBLICLY FUNDED FORENSIC CRIME LABORATORIES, 2009, at 3-4 (2012).

35. *See Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2728 (2011) (Kennedy, J., dissenting) (explaining the “chaotic” impact of *Melendez-Diaz* on forensic analysts in the states of California and New Mexico); *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 342 (2009) (Kennedy, J., dissenting) (describing the impact of the *Melendez-Diaz* rule on the already limited number of drug analysts in Philadelphia and Cleveland); *see also* Klaiber, *supra* note 7, at 213.

36. *See, e.g., Marshall v. People*, 309 P.3d 943, 952 (Colo. 2013) (Bender, J., concurring in part and dissenting in part) (“Given the increasing use of testimonial forensic evidence—and the possibility that such evidence could be analyzed incorrectly—it is important that courts maintain the historical right of an accused to cross-

that such a safeguard would aid in the detection and prevention of the negative effects of the bias. This was the general sentiment of the Supreme Court's decisions in *Melendez-Diaz* and *Bullcoming*, where surrogate witnesses were simply not permitted to testify to the results of forensic tests that they did not conduct themselves.³⁷ The problem with that argument, however, is that biased testing occurs "unconsciously and unintentionally."³⁸ In other words, analysts are generally unaware of the influence that psychological suggestion has on their professional judgment.³⁹ This lack of awareness eludes even the most extensive cross-examinations because the questions in such proceedings pertain to whether the forensic analysts *knowingly* committed particular errors or deviated from standard procedures.⁴⁰ As such, the Supreme Court's simplistic cross-examination solution is an ineffective method for protecting the core purpose underlying the Confrontation Clause—the accuracy and reliability of evidence. The better approach would be to initiate structural change in the way that lawyers and analysts carry out their jobs by systematically eliminating potential sources of psychological suggestion. The *Williams* decision may have been the first step towards instigating just this type of approach.

In *Williams*, the Supreme Court shocked the nation when it affirmed a decision by the Illinois Supreme Court to permit an expert witness to testify to the results of a DNA test that she did not actually conduct.⁴¹ In the plurality opinion, Justice Alito jumped numerous hurdles set up by *Melendez-Diaz* and *Bullcoming* in order to advance two rationales for the *Williams* ruling. His first rationale was that the expert witness was not introducing the test results "for the truth of the matter asserted," and was merely assuming the truth of the test results in the course of giving her expert opinion.⁴² This appeared to be an arbi-

examine witnesses who present testimonial evidence"); Jennifer Mnookin & David Kaye, *Confronting Science: Expert Evidence and the Confrontation Clause*, 2012 SUP. CT. REV. 99, 110 (2012) ("[A] surrogate cannot provide the defendant with the same opportunity to probe the actual analyst's competence, veracity, and work habits.").

37. See *Bullcoming*, 131 S. Ct. at 2715-16; *Melendez-Diaz*, 557 U.S. at 319.

38. Ungvarsky, *supra* note 9, at 618.

39. See STRENGTHENING FORENSIC SCIENCE, *supra* note 29, at 184-85.

40. See, e.g., *State v. Brewington*, 743 S.E.2d 626, 627 (N.C. 2013) (illustrating the types of questions that may arise in the cross-examination context).

41. *Williams v. Illinois*, 132 S. Ct. 2221, 2227-28 (2012).

42. *Id.* at 2228 ("Out-of-court statements that are related by the expert solely for the purpose of explaining the assumptions on which that opinion rests are not offered for their truth and thus fall outside the scope of the Confrontation Clause."). It is important to note that a Confrontation Clause analysis is two-tiered and considers both statutory and constitutional principles. DEBORAH JONES MERRITT & RIC SIMMONS, *LEARNING EVIDENCE: FROM THE FEDERAL RULES TO THE COURTROOM* 701-02 (3d ed. 2014). The first step is to look to the Federal Rules of Evidence and

trary rationale that sowed confusion among lower courts as to the permissibility of surrogate testimony.⁴³

Justice Alito's second rationale did not receive as much attention from commentators and lower courts. It was arguably this rationale, however, that had unrecognized potential to address the negative effects of the forensic confirmation bias. In deciding that the report in *Williams* did not fall within the scope of the Confrontation Clause, Justice Alito reasoned that the analyst had produced the incriminating report "before any suspect was identified."⁴⁴ Indeed, the petitioner was not even under suspicion at the time of testing and there was "no incentive to produce anything other than a scientifically sound and reliable profile."⁴⁵ This situation distinguished *Williams* from both *Melendez-Diaz* and *Bullcoming*, where the forensic tests directly inculpated a particular defendant⁴⁶ and were presumably subject to the perils of psychological suggestion.⁴⁷

determine whether an out-of-court statement falls within a hearsay exception. *Id.* If so, the second step would involve determining whether the statement in question is testimonial in nature. *Id.*; see also Marc D. Ginsberg, *The Confrontation Clause and Forensic Autopsy Reports — A "Testimonial,"* 74 LA. L. REV. 117 (2013). Justice Alito sidestepped this complex analysis by instead declaring that the testimony of the surrogate witness was not hearsay at all since it was not offered for the truth of the matter asserted. *Williams*, 132 S. Ct. at 2228. As with most tests of this sort, it is unclear why the Justices decided to complicate the doctrine by varying the constitutional requirements rather than simply adhering to the requirements of the Federal Rules of Evidence. It could potentially be because the Court simply interpreted the constitutional language to offer stronger protections than the Rules afforded. Indeed, Justice Thomas argued, in *Williams*, that "the rules of evidence should [not] so easily trump a defendant's confrontation rights" because "concepts central to the application of the Confrontation Clause are ultimately matters of federal constitutional law that are not dictated by state or federal evidentiary rules." *Id.* at 2256 (Thomas, J., concurring).

43. Compare *State v. Ortiz-Zape*, 743 S.E.2d 156, 164 (N.C. 2013) (allowing the admission of a crime laboratory analyst's expert opinion on the results of a drug test that she did not perform), with *Martin v. State*, 60 A.3d 1100, 1109 (Del. 2013) (holding that a laboratory manager's certification was insufficient to deprive the defendant of his right to confront the analyst who tested the defendant's blood sample).
44. *Williams*, 132 S. Ct. at 2228.
45. *Id.* at 2224.
46. See *Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2709 (2011); *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 308 (2009).
47. See Ungvarsky, *supra* note 9, at 618.

B. *A Policy Perspective: Incentivizing the Avoidance of the Forensic Confirmation Bias*

Justice Alito sought to abandon the burdensome and formalistic interpretations of the Confrontation Clause in favor of an approach that provided lawyers and analysts with greater flexibility.⁴⁸ To take advantage of the flexibility, however, lawyers and analysts would have to take affirmative steps towards addressing the forensic confirmation bias in their respective professions. Requiring such participation from lawyers and analysts could produce a structural solution to unreliable evidence that would be longer lasting and more effective than an ad hoc cross-examination solution.

Forensic analysts needed a way to cope with the immense burdens placed upon crime laboratories by *Melendez-Diaz* and *Bullcoming*. In the month after *Melendez-Diaz*, for example, analysts responded to over 900 subpoenas by spending 369 hours traveling to or testifying in courthouses across the state.⁴⁹ Furthermore, *Melendez-Diaz* and *Bullcoming* created line-drawing problems because anywhere from six to twelve analysts could be involved with the procedures of a single forensic test.⁵⁰ Thus, a strict interpretation of the Confrontation Clause would require redundant cross-examinations of multiple analysts—an outcome that would be economically burdensome for both the crime laboratories and the analysts involved in trials. The *Williams* decision promises to relieve analysts of such a burden in instances where they conduct independent forensic tests without prior knowledge of a particular suspect.⁵¹ As such, analysts can reap the benefits of a reduced workload *only if* they contribute to eliminating the effects of the forensic confirmation bias by ensuring that their testing procedures are free from psychological suggestion.⁵²

48. See, e.g., *Bullcoming*, 131 S. Ct. at 2726-28 (Kennedy, J., dissenting) (underscoring the “disruptive, long-term structural consequences of decisions like [*Bullcoming*].”)

49. See Tom Jackman, *Virginia Lawmakers to Address High Court Ruling on Forensic Analysts*, WASH. POST, Aug. 18, 2009, <http://washingtonpost.com/wp-dyn/content/article/2009/08/17/AR2009081702302.html>.

50. *Williams v. Illinois*, 132 S. Ct. 2221, 2247 (2012) (Breyer, J. concurring).

51. See *id.* at 2228.

52. Edward Ungvarsky of the Public Defender Service for the District of Columbia argues:

Before ever looking at the suspect’s DNA profile, the analyst should establish an independent, objective profile of the evidence sample. The analyst should develop the crime-scene profile first, cabining herself off from the possibility that her interpretation of evidence is influenced by her knowledge of the suspect’s profile. Then, and only then, should the analyst look to the suspect’s profile to see if it fits the already-reached conclusion as to what the crime-scene evidence profile is.

Lawyers also needed a way to cope with the harsh effects of *Melendez-Diaz* and *Bullcoming*. These decisions allowed courts to exclude entire forensic reports, no matter how crucial to the case, if the analyst who conducted the test is unavailable for *whatever reason*.⁵³ Furthermore, this broad exclusionary principle would govern even when such out-of-court evidence fell within an established hearsay exception.⁵⁴ The *Williams* decision promises lawyers a reprieve from this sweeping rule, but *only if* they are careful enough not to impose their accusatory theories on analysts. Indeed, *Williams* requires that there be “no incentive to produce anything other than a scientifically sound and reliable profile,” thereby discouraging lawyers from using even the subtlest methods of manipulation.⁵⁵

Indeed, the incentives provided by the *Williams* decision have great potential to encourage both the legal and scientific communities to bridge the gaps discussed in Part I.B that would otherwise persist if cross-examination remains the only solution to protecting Confrontation Clause rights. Specifically, lawyers would have a reason to attenuate their adversarial philosophies in exchange for potentially more lenient evidentiary exclusion rules. Similarly, analysts would have a reason to reject forensic samples that are coupled with suggestive affidavits in exchange for more manageable demands on their and their crime laboratories’ time and resources.

C. Responding to Policy-Based Counterarguments

Critics may argue that allowing lawyers to introduce forensic test results in the absence of the analyst who performed the test makes it more difficult to catch instances of outright, explicit error.⁵⁶ While this concern is legitimate, it is likely exaggerated. First, the most common forensic tests are extremely reliable,

Ungvarsky, *supra* note 9, at 618.

53. *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 340-41 (2009) (Kennedy, J., dissenting) (“For the sake of . . . negligible benefits, the Court threatens to disrupt forensic investigations across the country and to put prosecutions nationwide at risk of dismissal based on erratic, all-too-frequent instances when a particular laboratory technician . . . simply does not or cannot appear.”); *see also* Ben Conery, *Court’s Aid to Defendants Snarls Crime Lab*, WASH. TIMES, Aug. 31, 2009, <http://www.washingtontimes.com/news/2009/aug31/states-vie-for-lab-techs-in-court> (“A defendant forcing the prosecution to call a lab technician to testify is part of a defense strategy akin to a motorist appealing a speeding ticket and hoping it will be dismissed because the officer who issued it won’t be able to appear in court . . .”).
54. *See supra* note 42.
55. *See Williams*, 132 S. Ct. at 2244.
56. *See, e.g., Bullcoming v. New Mexico*, 131 S. Ct. 2705, 2715 (2011).

with negligible false positive rates.⁵⁷ Second, many laboratories are accredited and have multiple safeguards against incompetence and fraud.⁵⁸ Finally, relaxing the burden on forensic laboratories will allow analysts to divert their time and resources towards conducting empirical studies of reliability, reducing error rates, and perfecting uniform testing procedures.⁵⁹ Indeed, the problem, as it stands, is not with the elusiveness of explicit errors, but with the robustness of implicit errors—an issue that goes widely unaddressed.

This is not to say that instances of outright error never occur and that cross-examination is effectively useless in determining the accuracy of forensic test results. It is only to say that, in determining good law and policy, there must be a balancing of potential costs and benefits. Contemporary research indicates that forensic laboratories have put in place multiple safeguards against *explicit* errors⁶⁰ but close to none against *implicit* errors.⁶¹ If we are concerned with reducing the dangers of inaccurate forensic evidence, it seems more helpful to target implicit errors and allow existing safeguards to take care of explicit errors. Moreover, the costs of targeting only explicit errors by sticking to a formulaic cross-examination of each analyst that worked on a specific forensic test may backfire. Justice Alito argues, for example, that “[i]f DNA profiles could not be introduced without calling the technicians who participated in the preparation of the profile, economic pressures would encourage prosecutors to forgo DNA testing and rely instead on older forms of evidence, such as eyewitness identification, that are less reliable.”⁶²

Furthermore, an emphasis on implicit errors rather than explicit errors does not necessarily require that courts leave oversight of explicit errors purely to forensic laboratories. For example, Justice Breyer suggested that there could just be a *presumption* of admissibility for honest and reliable evidence, such as that at issue in *Williams*.⁶³ Indeed, if the defendant could show a “good reason to doubt the laboratory’s competence or the validity of its accreditation” or “the existence of a motive to falsify,” then the defendant could rebut such a presumption and receive Confrontation Clause protections.⁶⁴ This possibility illustrates that there are ancillary procedural solutions and safeguards that can

57. See STRENGTHENING FORENSIC SCIENCE, *supra* note 29, at 133 (presenting five reasons why DNA analysis is scientifically sound).

58. See *id.* at 131-32.

59. See Klaiber, *supra* note 7, at 212 (explaining that requiring analysts to appear in thousands of cases diverts their valuable time away from actually conducting studies that could improve their internal procedures).

60. See *supra* notes 57-58 and accompanying text.

61. See discussion *supra* Part I.A-B.

62. *Williams v. Illinois*, 132 S. Ct. 2221, 2228 (2012) (opinion of Alito, J.).

63. *Id.* at 2251-52 (Breyer, J., concurring).

64. *Id.* at 2252.

guard against explicit errors even without a strict, inflexible interpretation of the Confrontation Clause that would indiscriminately require cross-examination of every analyst who performed a given forensic test.

Critics may also argue that relaxing the standards in *Melendez-Diaz* and *Bullcoming* gives lower courts free reign to simply reduce, in practice, the constitutional protections afforded by the Confrontation Clause.⁶⁵ Recent state court decisions seem to demonstrate, however, that lower courts are respectful of the standards set in *Williams*. In cases where the probability of psychological suggestion is high, state courts have been more reluctant to admit forensic test results without the accompanying testimony of the analyst.⁶⁶ In cases where more procedural safeguards are in place, however, states have used the *Williams* ruling to promote flexibility and efficiency in the workings of crime laboratories by permitting surrogate witness testimony.⁶⁷

Indeed, Justice Breyer claims that “[l]ower courts . . . have recognized the [potential] problem. And they have come up with a variety of solutions.”⁶⁸ For instance, courts have allowed a surrogate witness to testify only when accompanied by safeguards such as thorough documentation of the forensic test’s procedures or the oversight of the surrogate witness during critical stages of the testing process.⁶⁹ Justice Breyer argued that “all [the potential solutions] assume some kind of [constitutional] boundary—some kind of limitation upon the scope of its application—though they reflect different views as to just how and when that might be done.”⁷⁰

This is not to argue, of course, that consistency is unimportant in the interpretation of constitutional standards. Instead, this line of argument demonstrates how the *Williams* ruling did not actually fling courts into the rights-violating chaos postulated by many judges and commentators. Furthermore, consistency is something the Supreme Court can achieve in future cases by

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65. *See id.* at 2277 (Kagan, J., dissenting) (claiming that the *Williams* ruling will introduce confusion into Confrontation Clause jurisprudence, leaving lower courts without necessary guidance).
66. *See, e.g.,* *Burch v. State*, 401 S.W.3d 634 (Tex. Crim. App. 2013) (determining that surrogate testimony was inappropriate in a situation that looked very much like *Bullcoming*).
67. *See, e.g.,* *Marshall v. People*, 309 P.3d 943, 945 (Colo. 2013) (allowing the admission of expert testimony concerning the results of a urine test conducted by a different analyst when the expert witness carefully and independently verified the procedures, test results, and potential sources of error).
68. *Williams*, 132 S. Ct. at 2247 (Breyer, J., concurring).
69. *Id.* (outlining six potential solutions to the line-drawing problems of deciding how strictly to enforce cross-examination of the specific analyst who performed the forensic test in question).
70. *Id.* at 2248.

building upon and specifying the standards set forth in *Williams*, a possibility explored in Part III.B.

III. FINDING A HOME FOR *WILLIAMS* IN THE CONFRONTATION CLAUSE DOCTRINE

Justice Alito's primary rationale for admitting the DNA report in *Williams* was that the evidence in question was introduced in the course of expert testimony, not for the truth of the matter asserted, and thus did not constitute hearsay.⁷¹ As even Justice Thomas points out in his concurrence, however, "[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."⁷² As such, this rationale seems too theoretically and practically flimsy to persist.

For that reason, much will rest on Justice Alito's second rationale, which would permit surrogate testimony about forensic test results only when the relevant forensic test is free from psychological suggestion.⁷³ Unfortunately, Justice Alito was far from clear about where in the Confrontation Clause doctrine he intended to nest this rationale. Indeed, this crucial issue will likely decide whether *Williams* survives or simply loses its impact over time. There are currently two viable options.

A. *Forensic Evidence as Nontestimonial Evidence*

One alternative would be to characterize test results like those in *Williams* as nontestimonial. In *Crawford v. Washington*, the Supreme Court held that only evidence that is "testimonial" falls under the scope of the Confrontation Clause.⁷⁴ Fortunately, the Court never fully explained what constituted testimonial evidence, leaving the term very much open to a multitude of interpretations.⁷⁵ The Supreme Court could settle the ambiguity by proclaiming that the text of the Confrontation Clause clearly refers only to "witnesses against" the

71. *Id.* at 2228 (opinion of Alito, J.).

72. *Id.* at 2257 (Thomas, J., concurring).

73. *Id.* at 2228 (opinion of Alito, J.).

74. *Crawford v. Washington*, 541 U.S. 36, 51-52 (2004).

75. Brooke Edenfield, *Who Ya Gonna Call?: Confusion Reigns After the Supreme Court's Failure to Define Testimonial and Analyst in Melendez-Diaz v. Massachusetts*, 59 U. KAN. L. REV. 137, 148-49 (explaining the many ways in which different courts have interpreted the term "testimonial" in light of the Supreme Court's lack of clarity in *Melendez-Diaz*). *But see* Dylan O. Keenan, *Confronting Crawford v. Washington in the Lower Courts*, 122 YALE L.J. 782, 832 (2012) (arguing that state courts have been generally aligned in their definitions of testimonial evidence and their rulings on Confrontation Clause issues).

accused.⁷⁶ Indeed, it is a stretch to label a forensic analyst as a witness against a suspect when the analyst had no knowledge of the suspect's identity or potential guilt at the time of testing.⁷⁷

Justice Breyer argued for such a position in his *Williams* concurrence. Specifically, he sought to place the DNA report at issue in *Williams* outside the "outer limits" of Confrontation Clause protections by proclaiming it nontestimonial in nature.⁷⁸ He proceeded to explain that "the DNA report sought, not to accuse petitioner, but instead to generate objectively a profile of a . . . suspect's DNA."⁷⁹ Unfortunately, his explanation went no further in grappling with the earlier precedent that defined and delineated testimonial evidence. Indeed, the biggest obstacle to Justice Breyer's interpretation is the prevailing view that testimonial evidence involves an "anticipation that [the evidence will] be presented at trial."⁸⁰ It is difficult to argue that forensic analysts do not foresee that their test results will make it to trial especially when conviction is often one of the primary purposes for seeking forensic evidence at all.⁸¹

B. Exemptions for Evidence with "Indicia of Reliability"

The better, more transparent, and less complicated approach is to recognize an exception to the Confrontation Clause doctrine when a forensic test is clearly free of psychological suggestion. Various commentators have endorsed exception approaches for their potential to provide a workable middle ground between formalistic interpretations of the Confrontation Clause and the practical

76. U.S. CONST. amend. VI.

77. See *Williams*, 132 S. Ct. at 2277 (Kagan, J., dissenting) (explaining that the analyst in *Williams* had no way of knowing whether the report would incriminate or exonerate anyone, thus making it inappropriate to label the analyst as a witness against a suspect who had been unknown at the time).

78. *Id.* at 2248 (Breyer, J., concurring).

79. *Id.*

80. See *Davis v. Washington*, 547 U.S. 813, 822 (2006) (explaining that evidence is testimonial when its primary purpose is to establish or prove past events potentially relevant to later criminal prosecution); Richard D. Friedman, *Confrontation: The Search for Basic Principles*, 86 GEO. L.J. 1011, 1040 (1998) ("First, assume hypothetically that the statement could be admitted at trial even absent an opportunity for confrontation. Then, ask whether in those circumstances a person in the declarant's position should be deemed to have made the statement with the anticipation that it would be presented at trial. If the answer is in the affirmative, then the declarant should be deemed to be a witness for Confrontation Clause purposes . . .").

81. See *Williams*, 132 S. Ct. at 2273 (Kagan, J., dissenting).

realities of forensic testing.⁸² Specifically, Justice Alito could herald a return to the earlier interpretations of the Confrontation Clause, which allowed courts to admit certain evidence, despite the lack of an opportunity to cross-examine the original source, if the evidence had “indicia of reliability.”⁸³ This approach initially failed to maintain prominence because of the broad discretion it gave to judges,⁸⁴ but the Supreme Court more recently acknowledged the existence of numerous potential safeguards that make a such an approach much more workable today.⁸⁵ *Williams* could potentially resurrect the reliability approach by laying down specific standards for reliability grounded in scientific and procedural integrity.

If the Court were to return to this approach, it would need to be clear about what constitute indicia of reliability. To determine this the Court can look to the analysis and discussion in *Williams*. Indeed, getting to the actual purpose of the Confrontation Clause—the accuracy and reliability of evidence—was the main impetus behind both Justice Alito and Justice Breyer’s reasoning in *Williams*. Justice Alito argued that “the report was produced before any suspect was identified.”⁸⁶ Justice Breyer further elaborated:

Cellmark’s DNA report embodies technical or professional data, observations, and judgments; the employees who contributed to the report’s findings were professional analysts working on technical matters at a certified laboratory; and the employees operated behind a veil of igno-

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82. See, e.g., Mnookin & Kaye, *supra* note 36, at 155–59 (2012) (proposing a potential framework for scientific exceptionalism in the realm of forensic evidence); 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, 430–31 (2011) (emphasizing the importance of the reliability of the testing process and the nature of the surrogate’s analysis in determining the admissibility of forensic test results).
83. See *Ohio v. Roberts*, 448 U.S. 56, 65 (1980) (“Reflecting its underlying purpose to augment accuracy in the factfinding process by ensuring the defendant an effective means to test adverse evidence, the [Confrontation] Clause countenances only [evidence] marked with such trustworthiness that there is no material departure from the general rule.” (internal quotation marks omitted)).
84. *Crawford v. Washington*, 541 U.S. 36, 62 (2004) (“The *Roberts* test allows a jury to hear evidence, untested by the adversary process, based on a mere judicial determination of reliability.”).
85. See, e.g., *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 338 (2009) (Kennedy, J., dissenting) (explaining that petitioners may mount a defense against the analysts’ results, challenge the test’s reliability by seeking discovery, or conduct a completely independent test); *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590–97 (1993) (explaining the additional safeguards available to courts in handling surrogate testimony from expert witnesses).
86. *Williams*, 132 S. Ct. at 2228 (opinion of Alito, J.).

rance that likely prevented them from knowing the identity of the defendant in this case.⁸⁷

Consistent with the reasoning of both Justice Alito and Justice Breyer, the dispositive factor should be whether the forensic analyst in question was aware of a pre-identified suspect before conducting the forensic test. This situation presents the clearest danger of forensic confirmation bias. Additional factors that are not necessarily dispositive but could certainly raise a presumption of reliability would include policies in criminal laboratories of rejecting psychologically suggestive affidavits from law enforcement officials, internal procedural rules aimed at avoiding the pitfalls of the forensic confirmation bias, or intensive supervision of analysts by a superior trained in the detection and avoidance of psychological suggestion. The common thread tying these indicia of reliability together would be their potential to stifle the effects of the forensic confirmation bias, which threatens the accuracy and reliability of forensic evidence.

CONCLUSION

Williams gives lawyers and forensic analysts sufficient incentives to address the negative effects of the forensic confirmation bias. The resulting structural changes that *Williams* could instigate would create much stronger safeguards against inaccurate and unreliable evidence than the wooden cross-examination approach endorsed by past Supreme Court cases. Moving forward, the Supreme Court should ground *Williams* squarely within the Confrontation Clause doctrine in order to solidify its continuing impact. Indeed, *Williams* promises to be a powerful precedent that reconciles legal and scientific interests in a manner that promotes flexibility but also preserves fairness in the criminal justice system.

87. *Id.* at 2248-49 (Breyer, J., concurring).