



**IN THE COURT OF CRIMINAL APPEALS
OF TEXAS**

NO. PD-1043-14

JOVANY PAREDES, Appellant

v.

THE STATE OF TEXAS

**ON APPELLANT'S PETITION FOR DISCRETIONARY REVIEW
FROM THE FOURTEENTH COURT OF APPEALS
HARRIS COUNTY**

NEWELL, J., delivered the opinion of the unanimous Court.

OPINION

Does the admission of a supervising DNA analyst's opinion regarding a DNA match violate the Confrontation Clause when that opinion is based upon computer-generated data obtained through batch DNA testing? Neither this Court nor the United States Supreme Court has squarely answered this question. In this case, we hold that it does not. Consequently, we affirm the court of appeals's holding that the admission of the supervising analyst's testimony did not violate the Confrontation Clause.

Facts

Appellant, a member of the Houston-area SPPL street gang, gathered a group of gang members and entered the apartment of Rafael Sanchez Cantu and Abelardo Sanchez to attempt to steal money and drugs from the two men. In the course of the robbery, both Cantu and Sanchez were shot and killed. Appellant gave a fellow gang member, Jessica Perez, the T-shirt he had worn during the crime and asked her to wash it. She did not. Instead, she informed the police who then recovered the shirt from Perez and sent it to Identigene, a private forensic laboratory, for DNA testing. DNA testing of a bloodstain on appellant's shirt matched one of the victims.¹

At trial, the State called Robin Freeman, the forensic-laboratory director for Identigene, to testify about the DNA analyses in appellant's case. Freeman testified that DNA testing is conducted in an assembly-line batch process. A different laboratory analyst conducts each step of the DNA testing in order to generate raw DNA data. One analyst applies chemicals to the biological sample to isolate the DNA in the cells. A second analyst then determines the amount of DNA present. A third analyst copies the DNA sequence and loads the data onto the capillary electrophoresis instrument that yields a DNA graph—the raw data—that can be used to compare the produced DNA profile to other evidence. Finally, an analyst takes that graph and uses it to determine whether the DNA profile obtained from the testing matches the DNA profile of a known individual, in this case the victim.

¹Appellant did not object that the chain of custody was broken or argue that the Confrontation Clause required testimony from every person who formed a link in that chain.

Freeman testified that the batch process in this case was conducted by three different analysts and that she supervised the proceedings and conducted the final analysis—comparing the produced DNA profiles to the evidence and determining a match:

[Defense counsel:] With regard to what you're about to testify to, did you conduct these tests yourself?

[Freeman:] The testing is done in a batch process. So, we have technicians that would extract the samples and do the amplification portion of that. But I am qualified in those different areas, and I do the interpretation from the data they obtain.

[Defense counsel:] So that I'm clear, what you're saying, basically, is that what you're testifying to is what you are overseeing or, technically, supervising, but you didn't conduct the test that you're about to testify to yourself?

[Freeman:] I do the interpretation and the comparison of the D.N.A. profiles. I did not do the physical extraction process.

...

[Prosecutor:] And in this particular case, did you take their results from what they put the things through the instruments—the evidence through the instruments, applied the chemical reagents, extracted that D.N.A., that entire process; did you oversee that entire process in this case?

[Freeman:] Yes, in this case.

[Prosecutor:] And did you take their raw data and then compile it yourself and you personally do the analysis leading to your ultimate opinion?

[Freeman:] Yes, I do the comparison and interpretation.

Freeman acknowledged that she did not physically watch each of the three analysts conduct the DNA testing process, but she explained that Identigene has safety protocols to identify errors in the process. Freeman testified that if there were “a problem in the analysis,

then what happens is you get no result as opposed to a wrong analysis.” The three analysts in this case provided Freeman with the raw data she used to determine that (1) the complainant’s DNA matched the DNA found in a stain on the T-shirt, and (2) scrapings from the collar of the T-shirt contained DNA from at least three contributors, and one was the major contributor.²

The State did not introduce into evidence any documents concerning the raw data that Freeman relied upon to perform her analysis, and none of the three analysts who conducted the batch process testified at trial. However, Freeman made clear that she was not testifying about someone else’s opinions because she was responsible for compiling the data generated by the various instruments and reaching the ultimate conclusion:

[Prosecutor:] But, then, am I to understand correctly that you took the results of those instruments or the readings that you got from various equipment in the lab, you compiled it, you looked at it, you compared it, you analyzed it and interpreted it?

[Freeman:] Right.

[Prosecutor:] Right. So, the ultimate opinion is yours?

[Freeman:] Correct. It’s my opinion.

[Prosecutor:] You’re not testifying for someone else. This is what you discovered, correct?

[Freeman:] Correct.

²An analyst from a different lab testified that appellant’s DNA matched the DNA of this major contributor on the T-shirt, but appellant does not raise an issue about that testimony on appeal. It was, after all, appellant’s T-shirt.

The record is unclear about whether Freeman herself created a report based on her opinions, but even if she did, the State did not admit any such report into evidence. The State offered only Freeman's opinion testimony.

Appellant objected, arguing that he was entitled to cross-examine the people who actually conducted the testing on which the expert opinion was based. The State responded that Freeman's analysis was the relevant testimony:

What these other people did was they took the evidence and they just put it through the instruments and they applied chemical reagents for it. She's looking at all the data. She's comparing the data. So, the only steps that she didn't do is actually take the physical stuff, the evidence, and place it into the instruments and apply the chemical reagents that gave these scientific readings She's comparing them. She's analyzing them. She's doing the interpretation. The final result is what's coming before the jury.

The trial judge overruled appellant's objection, and appellant was ultimately convicted of capital murder and sentenced to life in prison without the possibility of parole.

Appeal

The Fourteenth Court of Appeals affirmed, holding, among other things, that Freeman's testimony did not violate the Confrontation Clause. Subsequently, this Court held in *Burch v. State* that the introduction of a lab report containing drug-test results violated the Confrontation Clause when the testifying witness explaining the report was merely a surrogate for the lab technician who had performed the test. 401 S.W.3d 634, 637 (Tex. Crim. App. 2013). Consequently, this Court granted appellant's petition for discretionary review, vacated the court of appeals' judgment, and remanded the case to allow the court of

appeals the opportunity to consider *Burch* and its applicability to this case. *Paredes v. State*, No. PD-1420-11, 2013 WL 4507075 (Tex. Crim. App. Aug. 21, 2013) (per curiam) (not designated for publication).

On remand, the court of appeals again affirmed, distinguishing appellant's case from both *Burch v. State*, 401 S.W.3d 634 (Tex. Crim. App. 2013) and *Bullcoming v. New Mexico*, 131 S. Ct. 2705 (2011). As we observed, the testifying lab supervisor in *Burch* had no personal knowledge of the specific tests used to determine that the seized substance was cocaine as detailed in the lab report because she did not observe or perform any analysis. 401 S.W.3d at 635. Similarly, in *Bullcoming*, the United States Supreme Court considered both a certified lab report and testimony from an analyst who had not actually participated in or observed the testing of the defendant's blood, though the analyst was familiar with a forensic lab's blood-alcohol-content testing procedures. 131 S. Ct. at 2709.

But as the court of appeals observed in this case, Freeman had personal knowledge of the tests used, and she conducted the crucial analysis by comparing the DNA profiles and determining that the complainant's DNA profile matched the DNA from the bloodstain on appellant's T-shirt. *Paredes v. State*, 439 S.W.3d 522, 526 (Tex. App.—Houston [14th Dist.] 2014). The court of appeals further distinguished appellant's case by noting that the raw DNA data was not found in a formal report and was not admitted into evidence. *Id.* at 527. Furthermore, the court of appeals held that the raw DNA data was not used as a substitute for out-of-court testimony, but rather it merely provided the basis for the opinion developed

by Freeman. *Id.* Because appellant had the opportunity to cross-examine Freeman, the person who conducted the analysis linking him to the crime, the court of appeals held that appellant's Confrontation Clause rights were satisfied. *Id.*

We granted appellant's second petition for discretionary review to determine whether the Confrontation Clause should have precluded the admission of Freeman's testimony when she relied on raw DNA data generated by non-testifying analysts to form her opinion.

Forensic Testing and the Confrontation Clause

The Confrontation Clause of the Sixth Amendment guarantees the accused the right to confront the witnesses against him. *Pointer v. Texas*, 380 U.S. 400, 403 (1965). The United States Supreme Court has applied this rule to "testimonial" statements and held that such statements are inadmissible at trial unless the witness who made them either takes the stand to be cross-examined or is unavailable and the defendant had a prior opportunity to cross-examine the witness. *Crawford v. Washington*, 541 U.S. 36, 54 (2004). In *Crawford*, the Supreme Court included in the class of testimonial statements those "that were made under circumstances which would lead an objective witness reasonably to believe that the statement would be available for use at a later trial." *Id.* at 52; *see also Burch*, 401 S.W.3d at 636 ("While the exact contours of what is testimonial continue to be defined by the courts, such statements are formal and similar to trial testimony.").

Melendez-Diaz v. Massachusetts and Bullcoming v. New Mexico

Since *Crawford*, the Supreme Court has considered the Confrontation Clause in three

cases involving forensic reports. First, in *Melendez-Diaz v. Massachusetts*, the Court held that the admission into evidence of notarized “certificates of analysis” prepared by a state laboratory and listing the composition, quality, and weight of the narcotics at issue violated the Confrontation Clause. 557 U.S. 305, 309-11 (2009). The testing analysts did not testify at trial, and the defendant was not given any opportunity to cross-examine them. *Id.* The Supreme Court held that the certificates of analysis were testimonial because they were “functionally identical to live, in-court testimony, doing precisely what a witness does on direct examination.” *Id.* at 310-11 (internal quotation marks omitted). Therefore, the reports were inadmissible without the testimony of the analysts who performed the testing and prepared the reports. *Id.* at 311. Notably, however, the Court explicitly refused to hold in *Melendez-Diaz* that “anyone whose testimony may be relevant in establishing the chain of custody, authenticity of the sample, or accuracy of the testing device, must appear in person as part of the prosecution's case.” *Id.* at 311 n.1.

The Supreme Court next addressed the applicability of the Confrontation Clause to the admission of forensic lab reports in *Bullcoming v. New Mexico*, 131 S. Ct. 2705 (2011). In *Bullcoming*, the defendant was charged with driving while intoxicated, and the prosecutor introduced a lab report certifying that the defendant’s blood-alcohol content was above the limit for the New Mexico offense of aggravated DWI. *Id.* at 2709. The analyst who had tested the defendant’s blood and signed the report did not testify because he was on unpaid leave from the laboratory. *Id.* at 2711-712. Rather than call the analyst who had performed

the testing, the prosecution called a different analyst, one who was familiar with general BAC testing procedures conducted at the lab, but who did not review the prior analyst's work or sign the forensic report. *Id.* at 2712. The Supreme Court held that the lab report was testimonial and that the "surrogate testimony" given by the non-testing analyst explaining the report did not satisfy the defendant's Confrontation Clause rights. *Id.* at 2715. The Court rejected the argument that the testing analyst was a "mere scrivener" who transcribed the results calculated by a machine because the testing analyst's role involved checking for human error, not just reading machine-generated raw data. *Id.* at 2714.

Williams v. Illinois

The Supreme Court's most recent attempt to come to terms with the application of the Confrontation Clause to forensic-opinion testimony resulted in an irreconcilably divided opinion. In *Williams v. Illinois*, the Illinois State Police lab sent vaginal swabs to Cellmark, a private lab, and Cellmark developed a DNA profile from the semen contained in those swabs. 132 S. Ct. 2221, 2229 (2012). The prosecution did not call any of the analysts from Cellmark. *Id.* at 2229. Instead, a forensic specialist testified that she compared the Cellmark-created DNA profile from the vaginal swabs to the defendant's DNA profile in the state DNA database and determined that they were a match. *Id.* at 2229-230. The forensic specialist also noted that Cellmark's DNA profile would "exhibit certain telltale signs if it had been deduced from a degraded sample," but she didn't see any evidence of that. *Id.* at 2231. The Cellmark report itself, however, was not admitted into evidence. *Id.* at 2230.

While a majority of the Supreme Court held that the evidence did not violate the Confrontation Clause, a majority of the Court could not agree on a rationale to support this holding. A plurality opinion authored by Justice Alito held that there was no Confrontation Clause violation because the testifying expert's implicit, in-court adoption of an underlying report was not offered to prove the truth of the matter asserted (that the DNA profile came from semen found in the victim). Alternatively, the plurality held that the reference to the underlying report was not testimonial because the report was generated before there was a suspect in the case. *Id.* at 2228. Justice Thomas concurred that the admission of the evidence did not violate the Confrontation Clause, but he, along with the four dissenting Justices, rejected the rationales offered in Justice Alito's plurality opinion. Justice Thomas agreed that the report was offered for the truth of the matter asserted, but he believed the admission did not violate the Confrontation Clause because the testimony's implicit reference to an un-introduced report was not formal enough to be considered testimonial. *Id.* at 2255-256 (Thomas, J., concurring).

While *Williams* dealt with the same type of testing at issue in this case, unique characteristics of the opinion limit its value as precedent. The general rule for interpreting opinions in which no single rationale is adopted by a majority of the Court is "the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds." *Marks v. United States*, 430 U.S. 188, 193 (1977) (internal quotation marks omitted). But because each of the *Williams* opinions applies a

different rationale to determining whether the use of forensic evidence violates the Confrontation Clause, and because five members of the Supreme Court disagreed with the plurality's rationale, there is no narrow rule that this Court can apply from *Williams*. See *Young v. United States*, 63 A.3d 1033, 1043 (D.C. 2013) (noting that the narrow-grounds approach “works only when the narrowest opinion actually does represent a common denominator. If one opinion does not fit entirely within a broader circle drawn by the others, the *Marks* approach . . . would turn a single opinion to which eight of nine justices do not subscribe into law.”) (internal quotation marks omitted). Ultimately, Justice Breyer's concurring opinion may have summarized the problem with *Williams* most succinctly: “This case raises a question that I believe neither the plurality nor the dissent answers adequately: How does the Confrontation Clause apply to the panoply of crime laboratory reports and underlying technical statements written by (or otherwise made by) laboratory technicians?” 132 S. Ct. at 2244 (Breyer, J., concurring). A majority of the Justices of the United States Supreme Court agree that the implicit admission of underlying technical statements in *Williams* did not violate the Confrontation Clause; they just can't settle on why.³

³Other courts have likewise found *Williams* unhelpful when deciding Confrontation Clause issues. See, e.g., *State v. Michaels*, 95 A.3d 648, 666 (N.J. 2014) (“We find *Williams*'s force, as precedent, at best unclear.”); *Jenkins v. United States*, 75 A.3d. 174, 176 (D.C. 2013) (“We now hold that the splintered decision in *Williams*, which failed to produce a common view shared by at least five Justices, creates no new rule of law that we can apply in this case.”); *People v. Merritt*, ___ P.3d. ___, 2014 WL 4748090 (Colo. Ct. App. 2014) (“Given the absence of majority support for any of the reasoning behind the outcome of *Williams*, it provides no clear guidance as to the current state of the law regarding the testimony of experts whose opinions are based on forensic reports which they themselves did not prepare. . . . Thus, the holding in

However, some consistency with *Bullcoming* may be teased out when considering a portion of the testimony at issue in *Williams*. The Court divided over an answer to a hypothetical question that included certain, critical facts:

[Q:] Was there a computer match generated of the male DNA profile *found in semen from the vaginal swabs of [L.J.]* to a male DNA profile that had been identified as having originated from Sandy Williams?

[A:] Yes, there was.

Williams, 132 S. Ct. at 2236. According to Justice Kagan’s dissent, this testimony was the equivalent of “surrogate” expert testimony because the testifying expert could not convey what the testing analyst knew or observed about the testing or the testing process. *Williams*, 132 S. Ct. at 2267 (Kagan, J., dissenting). Neither could the testifying expert expose any lapses or possible protocol errors, not only because she was not there to observe the testing, but also because the testifying expert had no knowledge of Cellmark’s operations. *Id.* Thus, four Justices found the expert’s opinion testimony to be surrogate testimony similar to the formal lab report introduced in *Bullcoming* because the expert’s answer to the hypothetical question necessarily included an opinion that the DNA testing at issue had been done properly and that the material tested was the same material that had been collected from the victim. *Id.*

Burch v. State

With this legal backdrop in mind, this Court examined how the Confrontation Clause

Williams is not entirely helpful.”).

applies to forensic testing in *Burch v. State*, 401 S.W.3d 634 (Tex. Crim. App. 2013). In *Burch*, the State offered into evidence a lab report certifying that the substance tested was cocaine. *Id.* at 635. Both the testing analyst and the reviewing analyst signed the lab report, but the State called only the reviewer at trial. She testified that she “basically double-checked everything” that the testing analyst did, but there was no indication that she had personally conducted any tests or observed any tests being performed. *Id.* at 635-36. We held that this violated the Confrontation Clause because the reviewer had no personal knowledge that the tests were done correctly. *Id.* at 637-38. (“Without having the testimony of the analyst who actually performed the tests, or at least one who observed their execution, the defendant has no way to explore the types of corruption and missteps the Confrontation Clause was designed to protect against.”).

Analysis

From these cases, several general principles are clear, assuming a defendant was afforded no prior opportunity to cross-examine. The admission of a lab report created solely by a non-testifying analyst, without calling that analyst to sponsor it, violates the Confrontation Clause. Doing so deprives a defendant of his opportunity to cross-examine the non-testifying expert about the conclusions contained in the report and how the non-testifying expert arrived at those conclusions. Additionally, testimony from an expert explaining that non-testifying analyst’s report does not provide an adequate substitute for cross-examination even if the testifying expert is generally familiar with how the relevant

analysis is customarily performed. When the testifying expert has no personal knowledge of how the testing was conducted, a defendant still cannot adequately challenge through cross-examination the conclusion of that non-testifying analyst offered in that non-testifying analyst's report. For an expert's testimony based upon forensic analysis performed solely by a non-testifying analyst to be admissible, the testifying expert must testify about his or her own opinions and conclusions. While the testifying expert can rely upon information from a non-testifying analyst, the testifying expert cannot act as a surrogate to introduce that information.

Turning to the facts of this case, we agree with the court of appeals that this case is distinguishable from *Bullcoming* and *Burch* because here the testifying expert was more than a surrogate for a non-testifying analyst's report. In *Bullcoming*, the testifying analyst merely knew about the laboratory's procedures but did not participate in testing the defendant's blood. 131 S. Ct. at 2709. Likewise, in *Burch*, the State called the testing analyst's supervisor who signed the lab report but had not performed or observed any testing. 401 S.W.3d at 634-35. In both cases, the prosecution offered a lab report containing testimonial statements through the expert testimony of a person who did not make those statements and could not verify the authenticity of those statements.

Yet in this case, as the court of appeals noted, Freeman performed the crucial analysis determining the DNA match and testified to her own conclusions. *See Paredes*, 439 S.W.3d at 526. She was not merely a supervisor who "checked the boxes" on the lab report.

Furthermore, the lab reports Freeman relied on to come to these conclusions were not offered into evidence. *Cf. Bullcoming*, 131 S. Ct. at 2722 (“[T]his is not a case in which an expert witness was asked for his independent opinion about underlying testimonial reports that were not themselves admitted into evidence.”) (Sotomayor, J., concurring); *Burch*, 401 S.W.3d at 639 (“[M]ore in line with *Bullcoming*, the report at issue here was offered and admitted into evidence. Consequently, it was not merely mentioned as an underlying basis of the expert’s opinion: the report itself was primary evidence.”). This is not a case in which the State attempted to bring in a testimonial lab report through a surrogate.

Additionally, this case does not present the human-error problem this Court observed in *Burch*. In *Burch*, the defendant had no opportunity to challenge the opinion of the testifying reviewer because that witness “could not verify that the results were properly generated.” *Burch*, 401 S.W.3d at 637. Appellant contends that the analysts could misreport information or mishandle the samples, but the Supreme Court has held that the Confrontation Clause does not mandate “that anyone whose testimony may be relevant in establishing the chain of custody, authenticity of the sample, or accuracy of the testing device” must testify. *Melendez-Diaz*, 557 U.S. at 311 n.1. More importantly, Freeman testified about the safety measures in place at Identigene to detect such errors and stated that, if part of the analysis were done improperly, the laboratory procedure would not generate an incorrect DNA profile. The testing would yield no result at all rather than an improper result.

Indeed, this case is distinguishable from prior cases because the testifying expert in

this case relied upon raw, computer-generated data in reaching her conclusion rather than another laboratory analyst's report. As the United States Supreme Court has observed, testimonial statements include:

ex parte in-court testimony or its functional equivalent—that is, material such as affidavits, custodial examinations, prior testimony that the defendant was unable to cross-examine, or similar pretrial statements that declarants would reasonably expect to be used prosecutorially. . . .

Crawford v. Washington, 541 U.S. 36, 51-52 (2004). The Supreme Court has held that forensic documents were testimonial in two instances: (1) when three “certificates of analysis” stated that the tested substance was cocaine and reported the weight, and (2) when a report certified that the defendant’s blood-alcohol content was above the legal limit. *Melendez-Diaz*, 557 U.S. at 309-11; *Bullcoming*, 131 S. Ct. at 2715. In both of those cases, the forensic reports alone were surrogates for in-court testimony. The certificates in *Melendez-Diaz* showed that the substance in question was an illegal drug. No further analysis was required to render a testimonial statement. Similarly, in *Bullcoming*, the report on its own certified that the defendant’s blood was above the legal limit. *See Bullcoming*, 131 S. Ct. at 2722. That is not so with the raw data produced by the Identigene analysts in this case. Without Freeman’s independent analysis, the DNA profiles—the raw, computer-generated data—that the capillary electrophoresis instrument produced stand for nothing on their own. *See Burch*, 401 S.W.3d at 641-42 (Hervey, J., concurring) (“If the State can produce ‘another’ [analyst] who may have developed his or her own separate conclusion based on data supplied through testing (i.e., particular ‘testing’ is really performed through machinery

and analysts develop opinions from that data), I see no reason why that witness should be denied the opportunity to testify.”). They are not the functional equivalent of live, in-court testimony because they did not come from a witness capable of being cross-examined. They came from a computer.⁴

Conclusion

The lower court was correct that the evidence in this case did not violate the Confrontation Clause. Freeman did not introduce or testify regarding a formal report or assertion from a non-testifying analyst. Instead, she used non-testimonial information—computer-generated DNA data—to form an independent, testimonial opinion and appellant was given the opportunity to cross-examine her about her analysis. We affirm the decision of the court of appeals.

Delivered: June 3, 2015

Publish

⁴While the Fourteenth Court of Appeals has been the leading proponent of this position among Texas courts of appeals, her sister courts have also upheld the admissibility of expert testimony based upon computer-generated data. *See, e.g., Hamilton v. State*, 300 S.W.3d 14, 21-22 (Tex. App.—San Antonio 2009, pet. ref’d.) (holding that testifying expert’s recitation of non-testifying DNA analyst’s opinions violated the Confrontation Clause, but the testifying expert’s independent opinion based upon computer-generated data did not); *Blaylock v. State*, 259 S.W.3d 202, 207 (Tex. App.—Texarkana 2008, pet. ref’d.) (upholding the admission of expert witness’s independent opinion based, in part, upon “printed results from instruments”). Likewise, other states have followed this approach with regard to forensic analysts who use raw data generated by others to form an independent opinion. *See, e.g., State v. Roach*, 95 A.3d 683, 695 (N.J. 2014) (holding similar testimony admissible if “provided by a truly independent and qualified reviewer of the underlying data and report, and the witness may not merely parrot the findings of another”); *State v. Medicine Eagle*, 835 N.W.2d 886, 895 (S.D. 2013) (permitting DNA expert who did not conduct every step of the analysis to testify because “she independently reviewed, analyzed, and compared the data . . . [and] came to her own independent conclusions . . . [and] only testified about her own conclusions”).