

Present: Hassell, C.J., Koontz, Kinser, Lemons, and Millette,
JJ., and Russell and Lacy, S.JJ.

MIGUEL ANGEL AGUILAR

v. Record No. 082564

COMMONWEALTH OF VIRGINIA

OPINION BY

JUSTICE CYNTHIA D. KINSER

September 16, 2010

ON REMAND FROM THE SUPREME COURT OF THE UNITED STATES

In a per curiam opinion, the Supreme Court of the United States vacated this Court's judgment refusing Miguel Angel Aguilar's petition for appeal and remanded "for further consideration in light of" Melendez-Diaz v. Massachusetts, 557 U.S. ___, 129 S.Ct. 2527 (2009). Aguilar v. Virginia, 559 U.S. ___, ___, 130 S.Ct. 1282, 1283 (2010). On remand, the issue we address is whether, in view of the decision in Melendez-Diaz, the Commonwealth's failure to call as witnesses two forensic scientists who played preliminary roles in the DNA analysis at issue but did not author certificates of analysis admitted into evidence violated Aguilar's rights under the Confrontation Clause. We conclude that it did not because neither scientist bore testimony against Aguilar.

FACTS AND PROCEEDINGS

Aguilar was convicted in a bench trial in the Circuit Court of the City of Alexandria of robbery, in violation of Code § 18.2-58; use of a firearm in the commission of robbery, in violation of Code § 18.2-53.1; rape, in violation of Code

§ 18.2-61; and object sexual penetration, in violation of Code § 18.2-67.2(A)(2). The convictions arose out of felonious conduct committed against Elizabeth Arnez while she was working alone as a night teller in a bank located in the City of Alexandria. As she counted money in her cash drawer, she heard footsteps behind her and turned to see a man pointing a firearm at her. A hood covered the gunman's face except for his eyes. The gunman took money from her cash drawer and a vault and, forcing Arnez into a women's bathroom, told her to lower her pants. According to Arnez, she felt his penis enter her vagina and "he pushed three times." The gunman also penetrated her vagina with his finger.

After Arnez reported the crimes to the police, a sexual assault nurse examiner interviewed Arnez and collected evidence from her. Specifically, the nurse obtained buccal, right thigh, and vaginal swabs in addition to Arnez' underpants and pantyhose. The nurse packaged each item separately and placed them in a physical evidence recovery kit (PERK).

Aguilar was eventually arrested and indicted for the named offenses. After his arrest, buccal swabs were obtained from him pursuant to a search warrant. Those swabs, the PERK evidence collected from Arnez, and buccal swabs obtained from Aguilar's brother, Jovel Antonio Aguilar, were submitted to the

Commonwealth of Virginia Department of Forensic Science for DNA analysis.¹

Pursuant to Code § 19.2-270.5, the Commonwealth notified Aguilar prior to trial of its intent to introduce into evidence certificates of analysis containing the results of DNA analysis. Nathan Himes, a forensic scientist who qualified at trial as an expert in "DNA analysis and body fluid identification," authored those certificates and testified regarding the DNA analysis conducted on the submitted samples. According to Himes, the tested samples included a "thighs[/]external genitalia sample, a vaginal[/]cervical sample, an oral buccal mucosa sample," underpants, and pantyhose, all obtained from Arnez, and the buccal swabs taken from Aguilar and his brother.

With regard to the samples taken from Arnez, Himes stated that the initial testing, which he described as a "preliminary screening" conducted to "indicate the presence of seminal fluid," was done under his supervision by another examiner, Catherine Columbo. At that time, Columbo had recently started working as an examiner so Himes directly supervised her work. Himes "physically [saw] the tests being performed."

In her preliminary screening of the thighs/external genitalia and vaginal/cervical samples, Columbo did not find any

¹ Aguilar and his brother had been employees of a company that performed cleaning services at the bank where the incident involving Arnez occurred.

spermatozoa present. Examining the samples himself, however, Himes identified "one spermatozoa head in each of the smear and the extract from the thighs[/]external genitalia sample." He found nothing on the vaginal/cervical sample. Himes also discovered seminal fluid, but no spermatozoa, on the victim's underpants. From the seminal fluid, a "single DNA type . . . foreign to" Arnez was obtained, but it "was not suitable for comparison or drawing any conclusions."

Following the identification of spermatozoa, Himes took the sample "forward" for analysis and "essentially split that one sample into two separate samples[:] the first sample being . . . the spermatozoa itself, and the second sample being everything else other than spermatozoa." This "nonsperm fraction," according to Himes, "potentially contain[ed] the nonsperm components of seminal fluid as well as any other body fluid such as saliva, vaginal fluid, anything else that's not a sperm cell."

Himes then placed the samples on a "robot" that was operated by Melanie Morris, a "PCR/STR technician" trained in "robotic extraction." Himes described her work as "processing . . . the samples" that he had determined were suitable for DNA analysis by "run[ning] the machines that [would] ultimately begin the DNA analysis take-out process." Morris "operate[d] the robot in order to conduct the analysis portion where the

DNA's being pulled out of [a] cell[;] the DNA's being amplified." After Morris pulled the DNA out of a cell and amplified it by making "multiple copies of just the areas of DNA [Himes] want[ed] to look at," she "placed [the samples] on a gel in order to determine how much amplified DNA there was." The gel "shows the amount of amplified product that was determined after [the] amplification process, and . . . prior to taking it forward to DNA typing." Himes then "perform[ed] the DNA typing process, where [the samples are] placed on a larger gel in order to actually determine DNA fragments."

Himes developed a DNA profile from the nonsperm fraction; there were "no amplification results" from the sperm fraction. He also developed a DNA profile from the "oral buccal mucosa" sample given by the victim. Himes concluded that a "DNA profile foreign to E. Arnez was developed from the thighs/external genitalia sample," and he stated that finding in a certificate of analysis dated January 25, 2007. The certificate bore Himes' signature and his attestation that he performed the analysis "as an employee of the Department of Forensic Science" and that the certificate was "an accurate record of the results of that analysis."

Himes also developed DNA profiles of both Aguilar and his brother from the buccal swabs obtained from each of them. He compared those profiles to the foreign DNA profile developed

from Arnez' thighs/external genitalia sample. Himes could not "eliminate [Aguilar] as a contributor to that foreign DNA profile developed from the thighs[/]external genitalia sample." He was, however, able to eliminate Aguilar's brother as a contributor of that particular profile.

In statistical terms, Himes reached these conclusions regarding the foreign DNA profile developed from Arnez' thighs/external genitalia sample:

[I]t was 1.1 quadrillion times more likely to be observed if it originated from Ms. Arnez and Mr. Miguel Aguilar than if it originated from Ms. Arnez and an unknown individual in the Caucasian population. 76 quadrillion times more likely to be observed if [it] originated from Ms. Arnez and Mr. Miguel Aguilar than if it originated from Ms. Arnez and an unknown individual in the black population. And 340 trillion times more likely to be observed if it originated from Ms. Arnez and Mr. Miguel Aguilar than if it originated from Ms. Arnez and an unknown individual in the Hispanic population.

Himes' conclusions with regard to Aguilar and his brother were set forth in two certificates of analysis, dated April 16, 2007 and December 10, 2007, respectively. Both contained Himes' signature and the same attestation as previously described.

On cross-examination, Himes conceded that, at times, several forensic scientists may work on a DNA analysis. Himes agreed that he relies on the "other team members" to do their jobs correctly, as well as their conclusions. Finally, Himes

stated he was aware, when receiving evidence in a victim PERK, that the results of a DNA analysis could be used later in litigation.

Aguilar objected to the admission of the three certificates of analysis on the ground that Columbo and Morris had worked on the project and Himes had relied on their work and conclusions in forming his own opinion. Aguilar argued that the conclusions of Columbo and Morris were testimonial and because he was unable to cross-examine either of them, admission of the certificates of analysis into evidence violated his rights under the Confrontation Clause. The circuit court overruled the objection and found Aguilar guilty on all charges.

Aguilar appealed to the Court of Appeals of Virginia, arguing, *inter alia*, that admitting the certificates of analysis without the live testimony of Columbo and Morris violated his confrontation rights. The Court of Appeals denied Aguilar's appeal, finding that pursuant to this Court's decision in Magruder v. Commonwealth, 275 Va. 283, 657 S.E.2d 113 (2008), the circuit court did not err in admitting the certificates of analysis into evidence.² Aguilar v. Commonwealth, Record No. 0686-08-4, slip op. at 4-5 (Sept. 5, 2008) (unpublished). This

² That case is also before this Court on remand from the Supreme Court of the United States and is the subject of Cypress v. Commonwealth, 280 Va. 305, 699 S.E.2d 206 (2010) (this day decided).

Court also refused Aguilar's petition for appeal. Aguilar v. Commonwealth, Record No. 082564 (July 22, 2009).

Aguilar then petitioned the Supreme Court of the United States for a writ of certiorari. Aguilar, 559 U.S. at ____, 130 S.Ct. at 1282-83. The Supreme Court granted the petition, vacated the judgment, and remanded for further consideration in light of its opinion in Melendez-Diaz. Id.

ANALYSIS

On remand from the Supreme Court, the sole issue we address is whether, in view of the decision in Melendez-Diaz, Colombo and Morris were required to testify at trial to preserve Aguilar's confrontation rights.³ Before it decided Melendez-Diaz, the Supreme Court ruled in Crawford v. Washington, 541 U.S. 36 (2004), that the Confrontation Clause applies to " 'witnesses' against the accused - in other words, those who 'bear testimony.' 'Testimony,' in turn, is typically '[a] solemn declaration or affirmation made for the purpose of establishing or proving some fact.' " Id. at 51 (citation omitted). The Supreme Court provided several examples of "testimonial statements":

³ Aguilar only assigns error to the admission of the certificates of analysis, not to Himes' testimony generally. We will thus examine under the Confrontation Clause only the admissibility of the certificates of analysis without testimony from Colombo and Morris.

[E]x 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[;] extrajudicial statements . . . contained in formalized testimonial materials, such as affidavits, depositions, prior testimony or confessions[;] statements 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 51-52 (citations and internal quotation marks omitted).

Under the Confrontation Clause, testimonial statements of a witness who did not testify at trial are inadmissible as evidence "unless [the witness] was unavailable to testify, and the defendant had had a prior opportunity for cross-examination." Id. at 54.

Following Crawford, the Supreme Court elaborated on the definition of "testimonial statements" in Davis v. Washington, 547 U.S. 813 (2006), explaining that only "testimonial statements" are the "sort [that] cause the declarant to be a 'witness' within the meaning of the Confrontation Clause." Id. at 821. In holding that a "911" call at issue was not testimonial, the Supreme Court concluded that the caller "simply was not acting as a witness; she was not testifying. What she said was not 'a weaker substitute for live testimony' at trial." Id. at 828 (quoting United States v. Inadi, 475 U.S. 387, 394 (1986)). In contrast, statements made by a victim at a crime

scene in response to police questioning were "testimonial." Id. at 829. "Such statements under official interrogation are an obvious substitute for live testimony, because they do precisely what a witness does on direct examination; they are inherently testimonial." Id. at 830.

Thus, with regard to statements made in response to police interrogation, the Supreme Court held:

Statements are nontestimonial when made in the course of police interrogation under circumstances objectively indicating that the primary purpose of the interrogation is to enable police assistance to meet an ongoing emergency. They are testimonial when the circumstances objectively indicate that there is no such ongoing emergency, and that the primary purpose of the interrogation is to establish or prove past events potentially relevant to later criminal prosecution.

Id. at 822.

In Melendez-Diaz, the question before the Supreme Court was whether affidavits reporting the results of forensic analyses, i.e., certificates of analysis, were "'testimonial,' rendering the affiants 'witnesses' subject to the defendant's right of confrontation under the Sixth Amendment." 557 U.S. at ___, 129 S.Ct. at 2530. There, the prosecution introduced three certificates of analysis establishing that substances seized by the police contained cocaine. Id. at ___, 129 S.Ct. at 2531. The certificates were admitted over the defendant's objection

and without any testimony from the forensic analysts-affiants.
Id.

The Supreme Court concluded that although labeled "certificates" under Massachusetts law, the documents were "quite plainly affidavits" and were "incontrovertibly a 'solemn declaration or affirmation made for the purpose of establishing or proving some fact.'" Id. at ____, 129 S.Ct. at 2532 (quoting Crawford, 541 U.S. at 51) (internal quotation marks omitted). The certificates, the Supreme Court said, were "functionally identical to live, in-court testimony, doing 'precisely what a witness does on direct examination.'" Id. (quoting Davis, 547 U.S. at 830).

[N]ot only were the affidavits "made under circumstances which would lead an objective witness reasonably to believe that the statement would be available for use at a later trial," but under Massachusetts law the sole purpose of the affidavits was to provide prima facie evidence of the composition, quality, and the net weight of the analyzed substance.

Id. (quoting Crawford, 541 U.S. at 52) (citation and internal quotation marks omitted). Thus, the Supreme Court held that the "analysts' affidavits were testimonial statements, and the analysts were 'witnesses' for purposes of the Sixth Amendment." Id. In the absence of a showing that the analysts were unavailable to testify at trial and that the defendant had had a prior opportunity to cross-examine them, the defendant was

entitled to " 'be confronted with' the analysts at trial." Id. (quoting Crawford, 541 U.S. at 54) (internal quotation marks omitted).

After the decision in Melendez-Diaz, there is no question that the certificates of analysis admitted as evidence in the case now before us fell within the "core class of testimonial statements" described in Crawford and Davis. See Cypress v. Commonwealth, 280 Va. 305, 314-15, 699 S.E.2d 206, 312 (2010) (this day decided). That conclusion, however, does not resolve the question on remand. Because no one testified with regard to the certificates of analysis at issue in Melendez-Diaz, the Supreme Court did not decide whether anyone other than the forensic analysts who signed the certificates needed to testify. The Court merely stated that "[t]he certificates were sworn to before a notary public by analysts at [a state laboratory]" and those "analysts were 'witnesses' for purposes of the Sixth Amendment." 557 U.S. at ___, 129 S.Ct. at 2531-32. Responding to an argument from the dissent, however, the Supreme Court stated:

Contrary to the dissent's suggestion, we do not hold, and it is not the case, 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. While the dissent is correct that [i]t is the obligation of the prosecution to establish the chain of custody, this does not mean that

everyone who laid hands on the evidence must be called. . . . [G]aps in the chain [of custody] normally go to the weight of the evidence rather than its admissibility. It is up to the prosecution to decide what steps in the chain of custody are so crucial as to require evidence; but what testimony is introduced must (if the defendant objects) be introduced live. Additionally, documents prepared in the regular course of equipment maintenance may well qualify as nontestimonial records.

Id. at ___ n.1, 129 S.Ct. at 2532 n.1 (citations and internal quotation marks omitted).

To decide whether admission of the certificates of analysis without the testimony of Columbo and Morris violated Aguilar's confrontation rights, we need only to review why a certificate of analysis is testimonial. In Melendez-Diaz, the Supreme Court held that the certificates of analysis there were testimonial because they contained "'solemn declaration[s] or affirmation[s] made for the purpose of establishing or proving some fact.' [They were] functionally identical to live, in-court testimony." Id. at ___, 129 S.Ct. at 2532 (quoting Crawford, 541 U.S. at 51) (citation and internal quotation marks omitted). Here, the only "declaration[s]" or "affirmation[s]" contained in the admitted certificates of analysis were Himes'. Unlike his in-court testimony that discussed the work of Columbo and Morris, the certificates of analysis did not contain information describing the steps involved in conducting a DNA analysis, such as the preliminary screening and the amplification process, nor did

they reference the findings of any person other than Himes. Instead, the certificates primarily contained Himes' conclusions about the DNA profiles that were developed from the various samples.

With respect to Columbo in particular, Himes' testimony established that her preliminary screening ultimately had no role in the DNA analysis. She apparently only worked on the samples taken from Arnez and did not find any spermatozoa present on either the thighs/external genitalia sample or the vaginal/cervical sample. Rather, Himes, examining the samples himself, identified the spermatozoa on the thighs/external genitalia sample and the seminal fluid on the underpants. Those were the only samples from which DNA profiles were ultimately developed. Thus, contrary to Aguilar's contention, the certificates of analysis did not contain the results of Columbo's work product in any form, much less her "declaration[s]" or "affirmation[s]." In other words, she did not "bear testimony" against Aguilar under the Confrontation Clause. Crawford, 541 U.S. at 51 (internal quotation marks omitted).

We therefore hold that the admission of the certificates of analysis without Columbo's testimony did not violate Aguilar's confrontation rights. Columbo's failure to find any spermatozoa on the samples taken from Arnez might affect the weight afforded

Himes' testimony by the fact-finder. See Hetmeyer v. Commonwealth, 19 Va. App. 103, 108-09, 448 S.E.2d 894, 898 (1994) (holding that a challenge to an expert's opinion based on the methods used goes to the weight of the evidence). It does not, however, have any bearing on whether Aguilar had the right to confront her as a witness against him.

As to Morris, Himes described her role as a "PCR/STR technician" who operated the robot to extract DNA from the samples. Morris amplified the samples by pulling DNA out of the cell and making multiple copies of the areas of DNA Himes wished to examine. Morris then placed the samples on a gel to determine the amount of amplified DNA.⁴ But, the certificates of analysis did not explain Morris' work as the "PCR/STR technician"; they did not contain any notes or reports she might have generated during the course of her work; and they did not report any factual findings by Morris about the DNA analysis.

Moreover, Morris did not perform the DNA typing process or reach any conclusions regarding the DNA profiles. The various results set forth in the certificates of analysis, primarily that DNA profiles were developed and that Aguilar could not be eliminated as a contributor of the DNA profile foreign to Arnez, were not "declaration[s]" or "affirmation[s]" of Morris, either

⁴ It is not clear from Himes' testimony whether Morris worked on just the samples obtained from Arnez or also worked on the samples taken from Aguilar and his brother.

expressly or impliedly; they were Himes' testimonial statements. Simply put, nothing from Morris was presented to the fact-finder in a form "functionally identical to live, in-court testimony, doing 'precisely what a witness does on direct examination.'" Melendez-Diaz, 557 U.S. at ____, 129 S.Ct. at 2532 (quoting Davis, 547 U.S. at 830); see United States v. Turner, 591 F.3d 928, 934 (7th Cir. 2010) (noting that a forensic chemist's report "was not admitted into evidence, let alone presented to the jury in the form of a sworn affidavit," and thus was not functionally equivalent to a witness' live testimony); Bradberry v. State, 678 S.E.2d 131, 134 (Ga. Ct. App. 2009) (holding that the defendant's confrontation rights were not violated when two lab technicians who were involved in forensic analyses did not testify).

Furthermore, Himes supervised both Columbo's and Morris' work and was directly involved in the entire DNA analysis at issue. Cf. Turner, 591 F.3d at 933 (finding testimony did not violate confrontation rights because witness had supervised another analyst's work, reviewed the same materials, and drew the same conclusions). Thus, Himes was the only person who could testify about the accuracy of the DNA analysis, the standard operating procedures of the forensic laboratory, as well as any deviations from or systemic problems in those procedures. Unlike Melendez-Diaz, who had no chance to confront

any witness regarding the certificates of analysis admitted as evidence in his trial, Aguilar had the opportunity to confront Himes, the forensic scientist who concluded that Aguilar could not be eliminated as a contributor to the DNA profile foreign to Arnez. Thus, we also conclude that the admission of the certificates of analysis without Morris' testimony did not violate Aguilar's confrontation rights.

Nevertheless, Aguilar contends that, because Himes relied on Columbo's and Morris' work, he was denied the right to confront all the forensic scientists who played a role in the DNA analysis. While Himes did not in fact rely on Columbo's work, evidenced by the fact that he repeated the initial screening and was the one who identified the presence of spermatozoa, the extent to which Himes relied on Morris' DNA extraction is not dispositive of Aguilar's Confrontation Clause challenge. "[T]he Sixth Amendment does not demand that a chemist or other testifying expert have done the lab work himself." Turner, 591 F.3d at 933 (quoting United States v. Moon, 512 F.3d 359, 362 (7th Cir. 2008)). Likewise, the Sixth Amendment does not require that every person who had some role in performing a forensic analysis, or whose work upon which the ultimate conclusions depend, testify at trial. See Melendez-Diaz, 557 U.S. at ___ n.1, 129 S.Ct. at 2532 n.1. The

Confrontation Clause requires only that "what testimony is introduced must (if the defendant objects) be introduced live." Id.

Furthermore, this case is not one involving so-called "surrogate forensic testimony," when a witness testifies about the factual findings and opinion of another forensic analyst. See Commonwealth v. Avila, 912 N.E.2d 1014, 1027-28 (Mass. 2009) (witness testified about factual findings contained in an autopsy report authored by the medical examiner who performed the autopsy); State v. Locklear, 681 S.E.2d 293, 304-05 (N.C. 2009) (same). Himes did not merely "parrot 'out-of-court testimonial statements . . . in the guise of expert opinion,'" but rather testified as "a true expert" regarding his opinion as reflected in the certificates of analysis. United States v. Johnson, 587 F.3d 625, 635 (4th Cir. 2009) (quoting United States v. Lombardo, 491 F.3d 61, 72 (2d Cir. 2007)).

Aguilar, however, relies on Roberts v. United States, 916 A.2d 922 (D.C. App. 2007), a pre-Melendez-Diaz decision that dealt with a similar DNA analysis and Confrontation Clause challenge. There, a serologist determined if materials submitted for examination contained biological fluids suitable for DNA analysis, and a "PCR/STR technician" prepared the samples for "DNA-typing and operate[d] the instrument that

actually determine[d] the DNA types found in the samples." Id. at 937. An "examiner" then "interpret[ed] the data produced by the DNA-typing instrument, and memorialize[d] those conclusions in a formal report." Id. Unlike this case, however, the testifying witness was not the original examiner but instead reviewed the original examiner's report and all the information, reaching his own conclusions. Id. at 937-38. The testifying examiner then stated at trial that the opinion he offered was his own. Id. The court held that "the conclusions" of the serologist, the PCR/STR technician, and the original examiner were all testimonial under Crawford. Id. at 938. "To the extent that their conclusions were used as substantive evidence against [the defendant] at trial," the court stated, the defendant was entitled to be confronted with those witnesses. Id.

Despite Aguilar's argument to the contrary, Roberts is factually distinct from the case before us. The testifying examiner there had not performed the original DNA analysis; whereas here, Himes was the only person who developed the DNA profiles and performed the comparisons. In addition, the defendant in Roberts did not challenge the admissibility of a certificate of analysis, but instead objected to the admission "of out-of-court statements of . . . forensic scientists"

offered through the testimony of the testifying examiner.⁵ Id. at 926. Here, Aguilar only contests the admissibility of the certificates of analysis. As we have already explained, the certificates did not contain testimonial statements of either Columbo or Morris. Furthermore, the court's holding in Roberts was based, in part, on the testifying examiner's reference to the conclusions of the original examiner. Id. at 938.

In summary, we conclude that the admission of the certificates of analysis without testimony from either Columbo or Morris did not violate Aguilar's rights under the Confrontation Clause. Our holding is consistent with that of other jurisdictions that have addressed the admissibility of certificates of analysis after Melendez-Diaz. See Turner, 591 F.3d at 931-32 (defendant's confrontation rights were not violated when testifying witness supervised analyst's work, reviewed the materials, and drew the same conclusions, and no statements of original analyst were introduced); Bradberry, 678 S.E.2d at 134 (defendant's confrontation rights were not violated when both a lab technician who microscopically viewed a sample taken from the victim and informed the expert that sperm were present, and a second technician who placed some blood taken from the defendant onto a "blood-stain card," did not

⁵ The written report of the DNA analysis was not introduced into evidence at trial. Roberts, 916 A.2d at 938.

testify); Pendergrass v. State, 913 N.E.2d 703, 704-05 (Ind. 2009) (no confrontation violation when DNA expert who performed paternity analysis testified at trial and a supervisor testified regarding the process of DNA test sampling, although two documents that contained information other than the test results were admitted without testimony from the analysts who compiled the information and prepared the documents), cert. denied, 560 U.S. ___, 130 S.Ct. 3409 (2010).

CONCLUSION

For these reasons, we will affirm the judgment of the Court of Appeals.

Affirmed.