No. 22-899

In The Supreme Court of the United States

JASON SMITH,

Petitioner,

v.

STATE OF ARIZONA,

Respondent.

On Writ Of Certiorari To The Court Of Appeals Of The State Of Arizona, Division One

BRIEF OF AMICI CURIAE NATIONAL DISTRICT ATTORNEYS ASSOCIATION AND FORTY-ONE PROSECUTING ATTORNEY ASSOCIATIONS, COUNCILS AND GOVERNMENT ENTITIES IN SUPPORT OF RESPONDENT

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INTEREST OF AMICI CURIAE¹

The National District Attorneys Association (NDAA) is the oldest and largest association of prosecutors in the country with over 5,500 members, including state and local prosecutors' offices from both urban and rural districts, and both large and small jurisdictions. NDAA serves as a nationwide resource center for research, training, and knowledge, working to promote equitable administration of justice. NDAA routinely provides policy advice and testimony to Congress and the Executive Branch on criminal justice issues, and amicus curiae briefs to the United States Supreme Court on cases impacting prosecutors throughout the country, to maintain a high standard of professional responsibility and ethics.

Co-amici (Appendix below) are forty-one prosecuting attorney associations, councils, entities, or government entities with prosecutorial responsibilities and interests. Co-amici are dedicated to unbiased and equitable administration of justice, achieved through high standards of advocacy, ethics, and compliance with constitutional and legal mandates.

¹ Pursuant to Supreme Court Rule 37.2, amicus gave counsel of record for each party written notice of the intention of amicus NDAA to file this brief at least 10 days in advance of the filing. Under Rule 37.6, amicus states that this brief was not authored in whole or in part by counsel for any party, and no person other than amicus curiae, its members or its counsel made any monetary contribution intended to be used in the preparation or submission of this brief.

Your amici have extensive experience in prosecution of criminal cases involving forensic scientific evidence, and the issues presented in the case at bar. Your amici believe this experience, and the arguments of amici, will be helpful to this Court in its deliberations and decision in this case.

SUMMARY OF ARGUMENT

This case, arising under the Confrontation Clause of the Sixth Amendment, deals with whether and to what extent a testifying forensic scientist can rely on the work, data, and analysis produced by another scientist (the underlying analyst), reach his or her own opinion and conclusion on an ultimate matter, and testify to that in a criminal trial, without the underlying analyst having testified. Under the precedents of this Court, the standard for whether the underlying matter is such that the underlying analyst must testify is whether the matter is "formalized testimonial materials." Here, forensic scientist Longoni testified to his own conclusion that the items in question were illegal drugs. He reviewed and based his opinion on materials about the testing done by the original, underlying analyst Rast, Rast's report and laboratory notes, and Rast's conclusion, but those were not admitted in evidence. Since the materials Longoni reviewed and relied on were not formalized testimonial materials, his testimony did not violate the Confrontation Clause.

A rule that Longoni's testimony violated the Confrontation Clause would affect not only drug analysis evidence, but a number of other forensic science disciplines. This is so in part because it is common for original analysts, for a variety of reasons, to be unavailable at the time of trial. It is also common for the original analyst to arrive at his/her conclusions based on work, evidence processing, and data from other technicians or scientists. Of particular concern is DNA evidence analysis. Many large, high-volume laboratories conduct DNA analysis in a batch, assembly line process, improving efficiency, and building-in cross-review and checks. A rule in which all or many underlying analysts would be required to testify would not only burden laboratory operations and court proceedings. It would also discourage laboratories from efficient and multi-analyst interactive approaches, which are part of the nature of scientific inquiry, and help ensure better scientific outcomes overall.

A substantial number of courts and cases, having considered the issue, have concluded an analyst may testify to his or her own opinion, based on the material and data produced by others, without offending the Confrontation Clause when the underlying analyst has not testified. This body of case law extends across many jurisdictions, covers many different types of scientific evidence, and supports the conclusion the Confrontation Clause does not require something more than what scientist Longoni testified to in this case.

Finally, petitioner's implied suggestion that the large jurisdictions of New York and California have

restricted forensic science experts from giving their own opinions based on the work of others is not born out by a review of cases from those jurisdictions.

ARGUMENT

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I. Introduction

As Justice Harlan observed in *California v. Green*, 399 U.S. 149 (1970), "... the Confrontation Clause comes to us on faded parchment. History seems to give us very little insight into [its] intended scope...." 399 U.S. at 173–174 (Harlan, J., concurring.) However true that may be of evidence by "conventional witnesses" or "fact witnesses" (i.e., eyewitnesses, crime victims, other percipient witnesses, co-defendants who have made out-of-court statements), and however challenging some circumstances with those types of witnesses may be, there is at least some historical precedent for how such evidence was viewed and dealt with in the founding era, when the Confrontation Clause was adopted.

Thus, in *Crawford v. Washington*, 541 U.S. 36 (2004), dealing with an out-of-court statement by an assault (domestic violence) victim who did not testify at trial, this Court was able to examine the founders' concerns about abuses in English criminal law matters to conclude that the clause focuses on "testimony." Evidence in the nature of *ex parte* examinations, and examinations of witnesses who were unavailable without there having been a prior opportunity for cross-examination, were the type of "testimonial matter"

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covered by the Confrontation Clause. The historical abuses of concern to the founders about percipient, fact, or accusatory witnesses informed this Court as to how far the clause went, giving an adequate basis to determine how the victim's statement should be evaluated for confrontation purposes. See *Crawford*, supra, 541 U.S. at 42–56.

It is not so for forensic scientific evidence. Unlike evidence from ordinary, percipient or fact witnesses, forensic science as we deal with it today was not a part of criminal investigations and proceedings in the founding era; it left no trail in the judicial records. In the late 18th century, those proposing the Confrontation Clause had no conception of how laboratory and physical forensic science would develop, how it would be presented in court, and the importance it would have in the criminal justice system. One will search in vain for sources revealing how such evidence was handled by courts in the founding era, but it will not be found. It is just as well. We should not expect to find hidden gems about scientific evidence from a time when one of the principal treatments for illness was bleeding the patient.

That being said, this Court is now faced with how the Confrontation Clause should apply to forensic science evidence, based on previous precedents, current confrontation analysis, and the practicalities of applying these in a manner that satisfies the historic and core concerns of confrontation in the context of modern scientific practices and evidence.

II. Under the Precedents of This Court There Was No Confrontation Clause Violation

At the outset, it is important to recognize the "primary purpose" test for measuring statements under the Confrontation Clause as applied to the work of underlying analysts is not the holding of the Court in Bullcoming v. New Mexico, 564 U.S. 647 (2011), and does not constitute the standard this Court has adopted for underlying analyst material in forensic science cases. Justice Ginsberg's Bullcoming opinion, which is in part the opinion of the Court and in part a plurality opinion, sets out the primary purpose test in footnote 6, where she states one must look to whether the evidence statement or report had as a "primary purpose" the "establish[ing] or prov[ing] [of] past events potentially relevant to later criminal prosecution." 564 U.S. at 659, fn. 6. Justice Thomas, the fifth vote for most of Justice Ginsberg's opinion, did not join footnote 6. See 564 U.S. at 651, opening line and dagger footnote. Thereby, Justice Thomas affected the rationale holding of the majority.

Without five votes for the "primary purpose" rationale, one must look to the lowest common denominator of the rationale accepted by the majority, which requires focus on whether the evidence at issue amounts to "formalized testimonial materials." See *Marks v. United States*, 430 U.S. 188, 193 (1977). Justice Thomas made clear in his concurring opinion in *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009), that in his view, for evidence to be covered by the Confrontation Clause, it must be "formalized testimonial materials." See 557 U.S. at 329–330 (Thomas, J., concurring). He reiterated that position in *Williams v*. Illinois, 567 U.S. 50 (2012), in his concurring opinion. See 567 U.S. at 103, 110–118 (Thomas, J., concurring). Justice Thomas had previously dissented from the use of the "primary purpose" test for confrontation analysis in Davis v. Washington, 547 U.S. 813 (2006), proposing instead a rule based on whether the evidence was "formalized testimonial material." See concurring and dissenting opinion of Justice Thomas, 547 U.S. at 834-842. "Formalized testimonial material" as Justice Thomas describes it is a subset of "primary purpose" material. The "primary purpose" view does not represent the opinion of the Court in *Bullcoming*, because it did not command five votes. Since Justice Thomas agreed with most of Justice Ginsberg's opinion and her disposition, but not the "primary purpose" portion, clearly only the "formalized testimonial materials" subset had the agreement of a majority of the Court. Justice Thomas's view is thus the lowest common denominator and establishes the high-water mark for the reach of the Confrontation Clause in forensic lab evidence cases. See Marks v. United States, supra, 430 U.S. at 193.

Williams v. Illinois, supra, confirms this analysis. Counting votes in that case, Justice Kagan's dissenting opinion reaffirms her support for the primary purpose test, but only commanded four votes. 567 U.S. at 118– 141 (Kagan, J., dissenting). Justice Thomas in his concurring opinion rejects that test, again adhering to "formalized testimonial materials." See 567 U.S. at 103, 110–118 (Thomas, J., concurring).

Thus, through three decisions (*Melendez-Diaz*, *Bullcoming*, and *Williams*), the lowest common denominator, which constitutes the high-water mark for the reach of the Confrontation Clause when considering underlying analyst material in forensic laboratory evidence situations, is "formalized testimonial materials."

The meaning of "formalized testimonial materials" as Justice Thomas has used that term can be found in his concurring and dissenting opinion in *Davis*. Justice Thomas explained that the framers intended the Confrontation Clause to prevent the practice employed under the Marian statutes in 16th century England, when witnesses were examined outside the presence of the court, the examinations were transcribed, and the transcripts were then commonly submitted later to the court as part of the trial, without the witnesses testifying. 547 U.S. at 835–836. Based on this historical analysis of the Confrontation Clause, Justice Thomas concluded that the clause was directed only at "formalized testimonial materials, such as affidavits, depositions, prior testimony, or confessions." Id., at 836.

Davis involved two joined cases. In one, a police officer responding to a domestic violence call questioned a woman. The questioning was in the nature of a conversation, not a formalized dialogue, the woman was not Mirandized, she was not in custody, and there was no other indication of solemnity or formality in the taking of her statement. Justice Thomas concluded this statement did not have the solemnized or formalized character of an affidavit, deposition, prior testimony, or confession, and thus was not covered by the Confrontation Clause. 547 U.S. at 835–842. Justice Thomas explained:

Affidavits, depositions, and prior testimony are, by their very nature, taken through a formalized process. Likewise, confessions, when extracted by police in a formal manner, carry sufficient indicia of solemnity to constitute formalized statements and, accordingly, bear a "striking resemblance," . . . to the examinations of the accused and accusers under the Marian statutes.

547 U.S. at 837.

He went on to observe that although many interactions between witnesses and law enforcement officials could have adverse legal consequences for the speaker who is dishonest, that "... does not, however, render those statements solemnized or formal in the ordinary meaning of those terms." 547 U.S. at 838, fn. 3.

When faced with the "certificates of analysis" admitted without any live witness testimony in *Melendez-Diaz*, Justice Thomas concluded they were "quite plainly affidavits," and thus "formalized testimonial materials." (Thomas, J., concurring, 557 U.S. at 329– 330). While a live laboratory witness testified in *Bullcoming*, not only had he not performed the analysis, but he did not testify to his own opinion. Instead, he simply testified to the lab report prepared by the original analyst, making the evidence comparable to the *Melendez-Diaz* certificates.

The same analysis and conclusion cannot be applied to the laboratory opinion evidence of forensic scientist Longoni in the case at bar. Unlike in Melendez-*Diaz* and *Bullcoming*, Longoni reviewed the records of the chain of custody for the items tested, and the notes of the testing conducted by the original analyst Rast. As both the testimony of Longoni and the lab documents included in the record show, these notes reflect the specific observations made and tests performed by Rast, including observations of the material, notation of the amount/weight, notation of the appearance of the material (including observations made under a microscope for the vegetable material), the administration of various reagent and dye tests, which gave visual displays of particular colors when certain chemicals were applied; the procedures used in testing the materials in an automated gas chromatograph - mass spectrometer (GC-MS); and the charts the GC-MS produced in each instance. Appendix to Petition for Certiorari (hereafter Pet. App.), Appendices G, H and I, pp. 27a-126a. The GC-MS charts reflected the "chemical signature" of the particular controlled substances (marijuana and methamphetamine). The GC-MS charts cover 18 pages in the lab file, with a total of 35 GC-MS charts. Pet. App. pp. 108a-126a. Longoni then evaluated all these elements together, and reached, based on his training and experience, his own

expert opinion as to what the substances were, and that they were in a usable quantity.

The raw data and test indicators in the lab file would be meaningless to a non-expert. For instance, the fact that the application of a Marquis reagent produced an orange-brown reaction, and the application of sodium nitroprusside produced a blue reaction, would mean nothing to a lay person. See Pet. App. p. 97a. Likewise, to a lay observer, the GC-MS charts with certain peaks would mean nothing. But a trained, experienced forensic scientist, like Longoni, can take those pieces of information, combine them, and reach his own opinion as to the chemical nature of the substance. As to the identity of the items examined being the same items the police seized, and thus relevant to the case being tried, both Rast and Longoni had in the case file the same chain of custody information, and thus could reach the same conclusion on that point. Pet. App. pp. 100a–105a; 127a.

From this review of Longoni's testimony, and the laboratory records on which he based his opinions, the following points can be had. First, the individual items of information reflected in lab notes and GC-MS printouts do not amount to "formalized testimonial materials," the standard from the opinions in *Melendez-Diaz, Bullcoming* and *Williams*, as discussed above. Thus, no Confrontation Clause violation occurred. Also, unlike in *Melendez-Diaz* and *Bullcoming*, the conclusion report of the original analyst Rast (i.e., that the materials were marijuana and methamphetamine) was not put into evidence in the case at bar. What was put into evidence, by way of live witness testimony subject to cross-examination, was the independent opinion of Longoni. This was not done in *Melendez-Diaz* (where no live witness testified) nor in *Bullcoming* (where the live witness who testified did not arrive at and testify to his own opinion). Thus, neither *Melendez-Diaz* nor *Bullcoming* dictate reversal in this case.

- III. A Rule Affecting When a Testifying Drug Analyst May Rely on Work by Others Will Affect Many Forensic Science Disciplines
 - A. Drug Analysis, Toxicology Analysis (Including Blood Alcohol), Autopsies, and Forensic Sexual Assault Exams May All Be Affected by Rules Affecting Reliance on Work by Other Analysts

What Longoni did in the instant case – review data and information produced by another, and reach his own conclusion based on that data – happens across a variety of forensic science disciplines in the ordinary processing of evidence. This is not surprising. It is how science works. Commonly, scientific knowledge comes not from an individual or solo enterprise, but rather a collective one, where scientists and experts rely on and build from facts, data, opinions and test results of others. Mnookin, Jennifer and Kaye, David (2013) "Confronting Science: Expert Evidence and the Confrontation Clause," *The Supreme Court Review*, University of Chicago Press, Vol. 2012, Article 4 (Lexis cite 2013 S.Ct.Rev. 99, at 102–103, 149, 151). For this reason, a ruling from this case will not just affect a single, garden variety drug analysis matter. It will reverberate across many forensic science disciplines.

Aside from cases involving drug analysis, other forensic science evidence may be affected by the same impediment to using the original analyst that arose in the case at bar. The original analyst may no longer be employed by the original crime laboratory, having moved to a different job, perhaps to a different state, perhaps hundreds or even thousands of miles away. This can affect the availability of analysts not just in drug analysis cases, but also in blood alcohol or other toxicological matters, as well as autopsies. See e.g., *State v. Gonzales*, 274 P.3d 151 (N.M. Ct. App. 2012), where the original autopsy pathologist was no longer employed by the medical examiner's office in New Mexico, and had moved to Washington state.

In addition, in some laboratory situations, the same samples may undergo testing by multiple analysts in different steps, in the testing for different substances. See e.g., *State v. Watson*, 185 A.3d 845 (N.H. 2018), a toxicology case, where multiple analysts were involved in the testing of samples from the body of a deceased. Similarly, *State v. Mattox*, 890 N.W.2d 256 (Wisc. 2017), cert. denied, 583 U.S. 932 (2017), involved a situation where the autopsy pathologist relied on a toxicology analysis that he received, but had not personally performed. These scenarios are analogous to the multiple analyst situation with DNA discussed in

detail below, although with a lesser degree of complications than found in that area.

And it may not simply be a matter of the original expert having moved to a different job or location. In recent years, law enforcement agencies have committed significant resources, often with great success, to investigating and solving old, "cold" murder cases. But if the case arose years, perhaps decades ago, the pathologist who conducted the original autopsy may no longer be living. Ackerman v. State, 51 N.E.3d 171 (Ind. 2016), involved the death of a 21-month-old child. When the death originally occurred, there was no prosecution, but over three decades later, after further investigation, a suspect was charged. By then, the original pathologist had died. A rule that another qualified expert could not examine the original autopsy notes, diagrams, and photos, reach his or her own opinion, and testify to that opinion, would impose a functional statute of limitations on murder, a crime for which there is no statute of limitations. See discussion by Breyer, J., concurring in *Williams v. Illinois*, supra, 567 U.S. at 97–98.

Further, if the original analyst cannot be made available, re-testing the sample is not always an option. In many situations (some DNA cases, some drug cases, some sexual assault forensic examinations) the original sample may have been so small that it was entirely consumed in the original testing. In a forensic sexual assault examination, injuries may be healed. In autopsy cases, the body may no longer be available, and if it can be made available by exhumation (not always a possibility), it will certainly not be in the same condition.

B. The Field of DNA Evidence Presents Special Complications with Respect to Multiple Analysts being Relied on for the Final Conclusion

One discipline that would be significantly impacted by a broad ruling in the instant case is DNA. DNA analysis as currently performed involves several steps: (1) Examination, to determine if biological material (which would include cells with DNA) is present; (2) Extraction, where chemical reagents are applied to break open the cells and their nuclei, to release the DNA; (3) Quantification, which is measuring the amount of DNA to ensure there is a sufficient amount for further testing; (4) Amplification, which involves the use of polymerase chain reaction (PCR) in a machine using an automated thermal cycling process to create additional "copies" of particular loci (genes), producing an enhanced quantity, as well as "tagging" the specific genes in question (attaching a molecule that can be visually detected in the next step); (5) Electrophoresis, whereby the material is passed through a gel medium subject to an electrical field, causing it to migrate through the gel, but at varying speeds, depending on the size of the individual molecule, since different alleles (forms of the gene) are of different sizes, and therefore migrate through the gel at different speeds, then being read by a sensor which detects the tags, the machine producing a line graph visual

depiction of the genetic material (electropherogram), with peaks showing the presence and length of various DNA strands at different loci; and (6) Report that identifies the various alleles (genes) present, compares those to the known frequency of the alleles in the population, then computes the overall probability or likelihood of an individual having this particular combination of genes. See generally, *Williams v. Illinois*, 567 U.S. 50 (2012), concurring opinion of Breyer, J., Appendix, 567 U.S. at 99–102, with sources compiled and cited there; U.S. Department of Justice, Office of the Inspector General, "The FBI DNA Laboratory: A review of Protocol and Practice Vulnerabilities," May 2004, p. 29; *People v. John*, 52 N.E.3d 1114 (N.Y. 2016) at 1117–1118.

While in some crime labs with DNA sections, all the steps for a particular sample, or in a particular case, are done by a single analyst, that is not true in all laboratories. Many large labs, for purposes of capacity and efficiency, employ a case processing structure where each of the steps is performed by a different analyst, in what may be described as an assembly line. In some laboratories, even sub-parts within the basic delineated steps may be further divided up, with more than one analyst or technician performing individual sub-parts of the procedure. See e.g., "The FBI DNA Laboratory. . . ." supra, at pp. 25, 29; People v. John, supra, 52 N.E.3d at 1118, regarding the New York City, Office of the Chief Medical Examiner system. High volume private laboratories providing forensic DNA analysis on contract, such as Bode Forensics, use such a system.

The purpose of such batch processing, assembly line procedures is to achieve high throughput without sacrificing quality. Samples, et al., "The Rotating Analyst – The NYC OCME Casework System," *Progress in Forensic Genetics 8, Proceedings of the 18th International ISFH Congress*, Sensabaugh, et al., editors, Elsevier (2000), at p. 620. As recently as May 2022, the National Institute of Justice released a report on best practices for DNA laboratory efficiency, recommending adoption of a team approach to casework where possible, the use of batching and automated processes, and the batch review of data. National Institute of Justice, *National Best Practices for Improving DNA Laboratory Process Efficiency*, United States Department of Justice (2022), at pp. 14–15, 21–24, 54.

In criminal investigations, at some point at least two samples will have been processed - the questioned or unknown evidence sample recovered from the crime scene or the victim, and the known or suspect sample, taken from the suspect – so the number of persons performing all the steps for a given case must be doubled (except that, depending on the circumstance, the analyst performing the final step of identifying the alleles and their frequencies, and computing the match likelihood, may be the same person). Thus, in the end, it will be common for ten technicians or analysts, and quite possibly more, to be involved in the lab work that arrives at conclusions regarding the comparison of forensic crime profiles to known profiles, including whether a particular person is included or excluded as a potential DNA donor to a forensic sample in a particular

case. In private communication, the Westchester N.Y. Forensic Lab reports that commonly eight criminalists will work on a case, plus additional numbers for supervisors and technical review. The New York City Office of the Chief Medical Examiner (a larger laboratory) reports that 14 to 30 criminalists may work on a case, depending on the nature of the case.

Turning to the Confrontation Clause, the implications of a strict, "all analysts must testify" approach to DNA evidence is obvious. Writing in concurrence in *Williams v. Illinois*, supra, Justice Breyer pointed out that "... there would seem often to be no logical stopping place between requiring the prosecution to call as a witness one of the laboratory experts who worked on the matter and requiring the prosecution to call *all* of the laboratory experts who did so." 567 U.S. at 89 (Breyer, J., concurring).

Justice Kagan, in her dissenting opinion in *Williams*, acknowledged the issue, without giving an indication as to how it might be resolved, writing: "In the event that some future case presents the multiple-technician issue, the Court can focus on "the broader 'limits' question" [of how many analysts must be called] that troubles Justice Breyer." 567 U.S. at 134, fn. 4.

With *Crawford* expressly declining to give a comprehensive definition of what is "testimonial" for Confrontation Clause purposes (541 U.S. at 68), and this Court not having settled on a definition of that term for forensic science evidence, it is not at all clear what principled distinction may be made in the forensic science realm to distinguish the work of one scientist as being testimonial (and thus subject to the Confrontation Clause), and the work of underlying scientists, whose observations, tests, and results are essential to the conclusion of the final analyst. It is not satisfactory to simply say, "All analysts will not have to testify," without a principled legal reason explaining why that is so, and how the distinction is to be made between those who must testify and those who need not. See Mnookin and Kaye, "Confronting Science: Expert Evidence and the Confrontation Clause," supra, Lexis cite 2013 S.Ct.Rev. at 152–153.

The relevance of this issue to the case at bar is that what Longoni did in this case (review the materials, notes, testing and data done by another analyst, then rely on them to reach his own opinion) does not seem different from what the final analyst will have done in a DNA case, reviewing and relying on the work, notes, and testing done before by analysts who conducted one of the preceding steps in the DNA analysis. Any ruling here must take into account the reverberations it will have across the criminal justice system.

If in fact all ten or more analysts involved in a particular DNA case analysis must testify, then disruption of both laboratory processes and court proceedings will result. On the other hand, if such a rule forces laboratories to abandon the efficiencies of the team assembly line process, then laboratory production and throughput of cases will be negatively affected. Such a consequence will have severe negative consequences. As DNA has become an increasingly powerful investigative tool, the demand for DNA testing has risen. The 2022 NIJ Best Practices report stated:

It may not be surprising, then, that the demand for DNA forensic testing has outstripped the capacity of many laboratories. According to a U.S. Department of Justice report, the number of forensic biology casework requests received by publicly funded crime laboratories rose 28% from 2009 to 2014. Data from NIJ show that state and local government laboratories participating in the agency's DNA Capacity Enhancement and Backlog Reduction program have experienced a similar trend: From 2011 to 2017, the number of DNA submissions that were not processed within 30 days rose by 85% – even as the laboratories consistently processed more requests over time.

National Best Practices for Improving DNA Laboratory Process Efficiency, supra, at p. 9.

Such backlogs and delays have an impact in the real world of cases. At one point, in Texas the Harris County Institute of Forensic Services suspended the analysis of DNA in certain types of cases due to burgeoning demand pitted against the capacity of the laboratory. Hassan, Anita, "Harris County suspends testing of 'touch DNA' evidence in property crimes," *Houston Chronicle*, 7/4/2015, online at: https://www. houstonchronicle.com/news/houston-texas/houston/ article/Harris-County-suspends-testing-of-touch-DNA-6366709.php. More recently (September 2023) a state law in the same jurisdiction mandating priority for murder cases in trial court assignments was declared to have no practical meaning due to the backlog for laboratory services. The backlog specifically for DNA analysis stood at over 1,000 cases. Taylor, Michelle "DA Says City Can't Prioritize Murder Cases Because of Crime Lab Backlog," Forensic, 9/1/2023, online at: https://www.forensicmag.com/602529-DA-Says-City-Can-t-Prioritize-Murder-Cases-Because-of-Crime-Lab-Backlog/. In February 2023, the backlog for DNA case analysis in Minnesota crime labs stood at 3,800 cases. Jackson, Kyeland, "Citing backlog of 3,800 DNA cases, law enforcement officials push for legislative support," Star Tribune, 2/28/23, online at: https://www.startribune. com/citing-backlog-of-3800-dna-cases-law-enforcementofficials-push-for-legislative-support/600255138/. The Kansas Bureau of Investigation has dealt with DNA backlogs for over two decades, with the statewide backlog at times exceeding 31,000 cases. Davids, Sharice, "Davids Announces Federal Grant to Help Eliminate Kansas' DNA Backlog," Office of U.S. Rep. Sharice Davids, 9/15/2023, online at: https://davids.house.gov/ media/press-releases/davids-announces-federal-granthelp-eliminate-kansas-dna-backlog.

A rule that forces crime laboratories to restructure, abandoning efficient lab practices, will only compound these problems. It is also not in the best interest of the public or an effective criminal justice system for another reason. The adoption of lab procedures which diminish, rather than enhance, the teamwork and mutual interaction of analysts will diminish the very things which are not only an inherent part of science, but also help ensure the accuracy and reliability of the process. Fostering systems where individual forensic scientists operate in silos, rather than interacting together, will certainly increase the chances for negligence or even misconduct to go undetected. It is the interaction and review by others which assures quality control in the first instance, and brings negligence or misconduct to light. A rule which pushes laboratories away from an interactive, multi-analyst team approach will move in the opposite direction from practices that ensure better quality and reliability.

As this Court has recognized, DNA testing has an unparalleled ability to both identify the guilty and exonerate the innocent. District Attorney's Office v. Osborne, 557 U.S. 52, at 55 (2009). Imposing processes that make DNA analysis less efficient will naturally affect both sides of that public interest – the interest of crime victims or their survivors in seeing that the guilty are identified and brought to justice, and the interest of the innocent who are suspected or accused in being exonerated. Public agencies involved in the criminal justice system have an interest in seeing that their efforts are directed against the correct perpetrators. Prosecutors and the general public have an interest in seeing that justice is done. A rule which impedes, rather than encourages, prompt and efficient case processing will not serve any of these interests.

IV. Case Law Supports the Rule That a Testifying Expert May Rely on the Work of Analysts Who Have Not Testified

Substantial, well-reasoned case law supports the conclusion that an expert other than the original analyst, or a final analyst in cases where a multi-step process involved multiple analysts, may, having reviewed and relied on the work of others, reach his or her own opinion, and testify to that opinion, without offending the Confrontation Clause.

United States v. Turner, 709 F.3d 1187 (7th Cir. 2013), cert. denied, 572 U.S. 1134 (2014), pet. rhg. denied, 573 U.S. 980 (2104) is such a case. The defendant on multiple occasions sold crack cocaine to an undercover officer. At the time of trial on federal drug charges, the original analyst Hanson was on maternity leave. Robert Block, a supervisor at the crime lab who had peer reviewed her work, then reviewed Hanson's lab notes and data, reaching his own opinion that the material was cocaine. After conviction at trial, Turner's loss on appeal in the 7th Circuit was pending his petition for certiorari in the U.S. Supreme Court while Williams v. Illinois was being heard, and was then remanded to the Circuit Court for reconsideration in light of Wil*liams* once that case was decided. On remand, the Circuit Court concluded that Block's testimony about his own opinion and conclusions, reached based on his review of Hanson's notes and data, did not violate the Confrontation Clause, noting that this amounted to the bulk of Block's testimony. The Court observed that, unlike in *Bullcoming*, Hanson's notes, report and test results were not entered into evidence, either as marked exhibits, or as part of the testimony of Block. The court did state that two of Block's statements in his testimony (that Hanson used proper procedures and that his own conclusion was the same as hers) appeared to be improper but concluded that if those statements did violate the Confrontation Clause, in the circumstances of the case it was harmless.

State v. Ortiz-Zape, 743 S.E.2d 156 (N.C. 2013), cert. denied, 572 U.S. 1134 (2014), was a prosecution for possession of cocaine. The seized drugs were tested at the crime lab by analyst Mills. At trial, Mills did not testify, chemist Ray did. Ray relied on the lab notes and records, and the machine printouts from the GC-MS, and testified to her opinion. The report of Mills was not admitted in evidence. After conviction, on appeal to the North Carolina Supreme Court, that court reviewed Melendez-Diaz, Bullcoming, and Williams. It concluded that the defendant's Confrontation Clause rights had not been violated, stating: "[Ray's] expert opinion, from Ray's own analysis of the data, constituted the substantive evidence being presented against defendant.... Therefore, the testifying expert was the witness whom defendant had the right to confront." 743 S.E.2d at 164

State v. Maxwell, 9 N.E.3d 930, 949 (Ohio 2014), cert. denied, 574 U.S. 1160 (2015) was a murder case. The murder took place in Cleveland, Ohio, and the autopsy was conducted there by Dr. Dolinak. By the time of trial, Dr. Dolinak had moved to become the medical examiner for Austin, Texas. The prosecution called at trial Dr. Felo, who reviewed the autopsy report, photos, x-rays, and tissue slides. He reached his own independent judgment as to the manner and cause of death, which he testified to at trial. The defendant was convicted. On appeal to the Ohio Supreme Court, he raised the Confrontation Clause. After reviewing *Melendez-Diaz*, *Bullcoming*, and *Williams*, the court concluded the admission of Dr. Felo's opinion did not violate the defendant's Confrontation Clause rights.

State v. Watson, 185 A.3d 845 (N.H. 2018) was a toxicology case where the defendant was charged with furnishing illegal drugs that caused death. Under a state contract, the toxicology analysis of the specimens from the decedent's body was done by a private company, NMS. Multiple technicians and analysts did the actual laboratory work, with their work, the actual instrument data, and chain-of-custody records being submitted to Isenschmid, who prepared the final NMS report, and testified at trial. On appeal, after reviewing *Melendez-Diaz*, *Bullcoming*, and *Williams*, the New Hampshire Supreme Court concluded that the admission of Isenschmid's own opinions which he arrived at on reviewing all the material submitted to him did not violate the defendant's Confrontation Clause rights.

State v. Mercier, 87 A.3d 700 (Me. 2014), cert. denied, 574 U.S. 840 (2014), involved the prosecution of a 1980 murder. The case had become "cold," but nearly 30 years after the crime, DNA analysis of sperm cells found in samples from the female victim's body produced a DNA profile that, through investigation, was found to match the defendant. At trial, the medical examiner who had performed the 1980 autopsy did not testify. Another medical examiner, Dr. Greenwald, reviewed the original autopsy report and reached her own opinion as to the injuries and cause of death. Dr. Greenwald testified at trial about her opinions and conclusions, but was not permitted to testify to any details of factual findings in the original autopsy report, and that report was not entered into evidence. After conviction, the Supreme Judicial Court of Maine considered the defendant's Confrontation Clause claim, and reviewed *Melendez-Diaz*, *Bullcoming*, and *Williams*. The court concluded the evidence was properly admitted, and affirmed.

State v. Roach, 95 A.3d 683 (N.J. 2014), cert. denied, 575 U.S. 1028 (2014) was a DNA evidence rape case. Analyst Schiffner had analyzed swabs taken from the victim's inner thigh area, and buccal (cheek) swabs taken from the victim and a suspect E.A. She found sperm cells with DNA in the inner thigh swabs and concluded that the perpetrator's genetic profile did not match either the victim or E.A. At some later point, Schiffner relocated from New Jersey to Wisconsin. After the defendant was identified as a suspect, police obtained a buccal swab from him, which was analyzed by Analyst Banaag. Banaag also analyzed all of the notes, records and machine outputs from the work done by Schiffner. Banaag concluded Roach was the source of the sperm cells from the thigh swabs, computed a frequency figure in the quintillions, and testified at trial. Schiffner did not testify. After conviction

and on appeal, the New Jersey Supreme Court reviewed *Melendez-Diaz*, *Bullcoming*, and *Williams*. The court concluded the evidence was proper, and affirmed the conviction.

State v. Griep, 863 N.W.2d 567 (Wisc. 2015), cert. denied, 577 U.S. 1061 (2016), involved blood alcohol analysis in a DUI case. The defendant's blood sample was first analyzed at the Wisconsin State Laboratory by analyst Kalscheur. At trial, she was unavailable, so the prosecution called Harding, the chief of the laboratory toxicology section. Harding reviewed the records of Kalscheur's testing, including the chromatographs produced by the analysis machine. He reached his own opinion as to the blood alcohol, to which he testified at trial. Kalscheur's report and opinion were not entered into evidence. After conviction on appeal, the Wisconsin Supreme Court conducted an extensive review of Wisconsin case law, and *Melendez-Diaz*, *Bullcoming*, and Williams, and ruled that Griep's Confrontation Clause rights had not been violated.

Since *Melendez-Diaz*, *Bullcoming*, and *Williams*, many additional cases, in a variety of jurisdictions, have likewise held that when an expert reviews materials produced by another, including testing notes, observation notes, and tests produced by automated machines, and then reaches his/her own opinion and conclusions, and the underlying analyst has not testified, that second expert may still testify to his/her own conclusions, without violating the Confrontation Clause. Included among cases so holding are: *United States v. Katso*, 74 M.J. 273, at 282–284 (C.A.A.F. 2015), cert. denied, 136 S. Ct. 1512 (2016) (DNA expert); Commonwealth v. Greineder, 984 N.E.2d 804 (Mass. 2013), cert. denied, 571 U.S. 865 (2013) (DNA expert); State v. Sauerbry, 447 S.W.3d 780 (Mo. 2014) (autopsy expert); State v. McLeod, 66 A.3d 1221 (N.H. 2013) (arson experts); State v. Michaels, 95 A.3d 648 (N.J. 2014), cert. denied, 574 U.S. 1051 (2014) (blood toxicology for drugs expert); Commonwealth v. Yohe, 79 A.3d 520 (Pa. 2013), cert. denied, 572 U.S. 1135 (2014) (blood alcohol expert); Commonwealth v. Brown, 185 A.3d 316 (Pa. 2018) (autopsy expert); State v. Manion, 295 P.3d 270 (Wash. App. 2013) (DNA expert). Cases from New York and California discussed below also support this position.

While these cases involve a variety of factual and forensic science settings, they have in common the key confrontation scenario presented in the case at bar – forensic testing done by an analyst who then does not testify at trial; the notes, records, recorded observations, and if applicable machine analysis records and printouts of the original analyst reviewed by a second analyst; the second analyst reaching his or her own opinion; and the second analyst testifying to that opinion at trial, fully open to cross-examination by the defendant. The analyses and holdings of these cases provide strong support for the conclusion that in this case Smith was not denied his rights under the Confrontation Clause.

V. The New York and California Cases Cited by Petitioner Do Not Indicate an Analyst Cannot Rely on Material from a Non-Testifying Analyst

In arguing against a "not for the truth of the matter" standard for dealing with the issue of information from underlying analysts, petitioner seems to imply that the rules judicially adopted in New York and California have somehow limited the ability of an analyst to testify based on the work and data produced by another. See Petitioner's Brief on the Merits, pp. 43–44. This is part of petitioner's larger argument that putting more strict confrontation requirements on the prosecution will not lead to an undue burden on the state in proving its case. Id., at pp. 42–44; see also brief of Amicus Curiae the Alameda County Public Defender et al., at pp. 4–16. If that is petitioner's position, it overstates the rules in those jurisdictions, and their impact on the admissibility of the opinion testimony of a forensic science expert.

With respect to New York, petitioner ignores the fact that the New York Court of Appeals has specifically approved the testimony of a single analyst who did not personally conduct, supervise, or observe all the underlying procedures in a DNA analysis case. In *People v. John*, 52 N.E.3d 1114 (N.Y. 2016), analyzing its own precedents as well as cases from this Court, the Court of Appeals expressly stated that "... an 'all analysts' rule is not consistent with the decisional law." 52 N.E.3d at 1126. As to what would be necessary, the court went on to state:

We conclude that an analyst who witnessed, performed *or supervised* the generation of defendant's DNA profile, *or who used his or her independent analysis on the raw data*, as opposed to a testifying analyst functioning as a conduit for the conclusions of others, must be available to testify.

52 N.E.3d at 1128 (emphasis added).

Thus, the New York court expressly stated that the testimony of a single witness, who either supervised the generation of a DNA profile, *or* who used independent analysis on the raw data, would satisfy the Confrontation Clause. In two very recent cases, the New York Court of Appeals confirmed its adherence to the *John* standard. *People v. Ortega*, 2023 NY Slip Op 05956, 2023 N.Y. Lexis 1902, 2023 WL 8007098 (11/20/23) (autopsy case); *People v. Jordan*, 2023 NY Slip Op 05957, 2023 N.Y. Lexis 1897, 2023 WL 800 (11/20/23) (DNA case).²

Petitioner's argument with respect to the law in California stems from the California Supreme Court decision in *People v. Sanchez*, 374 P.3d 320 (Cal. 2016). That case did not involve forensic science testimony at all, but rather the testimony of a police officer who was a gang expert. In testifying as to the defendant's alleged status as a gang member, the officer related four times

 $^{^2}$ In each case the court found deficiencies in the prosecution showing under the *John* standard for those particular cases, but in each the court made it clear that a single witness who was not the original analyst, but who used his or her own independent review and analysis of primary data and made his or her own independent conclusions, could with the proper showing testify without violating the Confrontation Clause.

when the defendant had been given "STEP" notices by police that he was associating with gang members, and that if he was convicted of a crime, his gang involvement could lead to enhanced penalties. The officer also testified to the facts from several incidents when the defendant had previously been involved with or in the proximity of gang behavior. The police reports and the STEP notices themselves were not admitted into evidence, but the testifying officer related the facts from these in his testimony, even though he had not been a percipient witness to any of them, nor had he been involved in giving defendant the STEP notices. The California Supreme Court held that the admission of these pure hearsay "case-specific" facts was improper.

Pertinent to the issue in this case, the California Supreme Court in Sanchez did not indicate the rule it enunciated had any application to forensic science evidence, or the use a testifying forensic science expert may permissibly make of observations and analysis made by a scientist or technician who did not testify. The court observed that it had previously decided two Confrontation Clause cases dealing with forensic science evidence in which it had considered and applied Williams v. Illinois: People v. Lopez, 286 P.3d 469 (Cal. 2012), a blood alcohol analysis case; and *People v*. Dungo, 286 P.3d 442 (Cal. 2012), an autopsy case. People v. Sanchez, supra, 374 P.3d at 338. In each of those cases, the testifying analyst had relied on materials, observations, and testing data produced by another expert, who did not testify. In each case, the California court concluded that the Confrontation Clause had not been violated. When it decided *Sanchez* four years

later, the court noted its decisions and analysis in *Lopez* and *Dungo*. In deciding that the case-specific gang contact information admitted against Sanchez was improper, the California court specifically disapproved six of its prior decisions relating to expert opinion basis evidence. 374 P.3d at 334, fn. 13. None of the disapproved cases involved crime lab evidence analysis, and the list of disapproved cases did not include *Lopez* or *Dungo*. Accordingly, the practices considered and approved in *Lopez* and *Dungo* regarding the admission of testimony by a scientific analyst who relied on materials, observations and data from a nontestifying analyst remain approved in California.

Thus, it is not surprising, as the Solicitor General observed in her amicus brief filed in this case, that notwithstanding petitioner's assertions, courts in New York and California still allow analysts to testify about conclusions derived from materials and data produced by underlying analysts. See Amicus Brief of Solicitor General, p. 30. Neither the rules in New York nor the rules in California stand for the proposition that an analyst may not rely on work by other, non-testifying analysts, reach his or her own opinion, and testify to that opinion without violating the Confrontation Clause. Nor does petitioner's reference to the procedures in these states support the position that overly strict requirements for the testimony of underlying experts will have little or no impact on the ability of the prosecution to prove its case, both in individual situations, and in the larger scheme of the criminal justice system as a whole.

CONCLUSION

When a forensic scientist receives and reviews work materials, data and analysis produced by another scientist, then reviews and analyzes that material, using his or her own judgment, and reaching his or her own opinion, that scientist is conducting inquiry, analysis and conclusions in the way that science works. When that scientist then testifies to his or her own conclusion, and is available for cross-examination, the historical and core concerns of the Confrontation Clause have been satisfied. That is what happened in this case. A result which extends the requirement for the testimony of underlying scientists not only reaches beyond anything the founders conceived for the Confrontation Clause. It also imposes impracticalities and impediments to the practice of forensic science in both laboratories and the courts. For these reasons, your amici respectfully urge this Court to affirm.

Respectfully submitted,

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