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## § 8:91 Public records—Forensic laboratory reports

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**§ 8:91 Public records—Forensic laboratory reports**

Prosecutors routinely prove DNA profile and match reports generated by laboratory tests, blood-alcohol test results, chemical tests of suspected drugs, and many others. These depend on controlled procedures, and usually they involve experts who testify at trial—chemists, doctors, and forensic analysts whose expertise covers a variety of subjects. These experts regularly testify to the results reached, and usually the results are also set out in written reports.

How to handle such reports in criminal cases is a matter that presents considerable challenge. The issue came to the fore in 2009 when the Court decided in *Melendez-Diaz* that drug analyses, when generated by forensic laboratories operated by the state, are “testimonial” in nature. As a constitutional matter under the Crawford doctrine, it follows that proof of this nature requires live testimony, and not just use of the reports themselves.<sup>1</sup> The same result should obtain where reports are produced by private laboratories working in conjunction with law enforcement agencies or prosecutors, as happened in the *Williams* case in 2012.<sup>2</sup> It needs also to be borne in mind that satisfying constitutional concerns does not by itself resolve hearsay issues: Lab reports, when offered to prove their conclusions, are hearsay even when the prosecutor calls technicians as witnesses.

It seems useful to start by looking at the destination to which the modern cases and (in the states) statutory developments have led. Then it is useful to look in some detail at confrontation issues that surfaced in *Melendez-Diaz* and later opinions, because these issues largely eclipse hearsay issues that arise in applying the public records exception. Finally, the discussion takes up the hearsay issues, and use of the public records exception in this setting.

Where we have gotten to: Lab reports and live testimony. Forensic laboratory reports are not freely admissible against defendants

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U.S. v. Johnson, 413 F.2d 1396, 1397–1398 (5th Cir. 1969) (agent's testimony that motor number matched number that FBI's computerized center listed as stolen was double hearsay).

Sixth Circuit: U.S. v. Davis, 568 F.2d 514, 515–516 (6th Cir. 1978) (error to admit testimony by FBI agent who ran numbers through National Crime Information Center and made a “hit” when one matched vehicle reported stolen).

**[Section 8:91]**

<sup>1</sup>Supreme Court: *Crawford v. Washington*, 541 U.S. 36 (2004) (discussed in § 8:27, supra); *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009).

<sup>2</sup>Supreme Court: See *Williams v. Illinois*, 132 S.Ct. 2221 (2012) (rejecting challenge where expert testified on basis of private lab report, but not because such the lab was private rather than state-owned).

in criminal cases in the manner of ordinary hearsay that fits conventional exceptions, such as the business records or state-of-mind exceptions. It is well understood that such reports are often decisive and critical for prosecutors, and yet fallible and subject to the separate concerns underlying the hearsay doctrine and the confrontation clause. When DNA profiling shows “match” between defendant's genetic makeup and tissue samples found on the person of the victim or at the crime scene, they are likely to be decisive. The same is true when blood-alcohol tests show the intoxication of a driver in a “drunk driving” case. Yet forensic testing is subject to significant risks of error stemming from laboratory mistakes, limitations in technology, contamination of samples, mislabeling or mixing samples up, interpretive difficulties, and (as the Court commented in *Melendez-Diaz*) incompetent or dishonest analysts.<sup>3</sup>

Still, it is essential to find a way to make use of reports of forensic test results in criminal cases. One reason is that the analyst who performs the tests is unlikely to remember in enough detail the steps taken or the result reached in any given case, so insisting on live testimonial accounts in lieu of reports would be counterproductive. Even if the analyst refreshes recollection before trial by reading the report, there are often details and complexities in the steps taken and results reached that nobody could remember, any more than one can remember all the charges on a credit card or the checks written on a bank account over a period of weeks or months. Insisting that lab test results be presented by live testimony would often result in an inferior and incomplete presentation, with more errors than one would encounter if the report itself were used.

There are also practical considerations. From the standpoint of prosecutors, having to call the analyst as witness can be burden-

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<sup>3</sup>See *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 319 (2009) (citing modern studies concluding that laboratory reports suffer from significant risks of error based on bias or mistakes in procedure, and commenting that “lack of proper training or deficiency in judgment may be disclosed in cross-examination” and that confrontation is designed “to weed out not only the fraudulent analyst, but the incompetent one as well”).

And see generally Imwinkelried, *The Debate in the DNA Cases Over the Foundation for the Admission of Scientific Evidence: The Importance of Human Error as a Cause of Forensic Misanalysis*, 69 *Wash. U. L.Q.* 19 (1991) (surveying studies showing significant margins of error in forensic analysis; still, most lab reports are correct and burden of showing departures from standard protocol should rest on opponent); Imwinkelried, *The Constitutionality of Introducing Evaluative Laboratory Reports Against Criminal Defendants*, 30 *Hast. L. J.* 621, 637 (1979) (studies uncover “real possibility of error” in forensic analyses by police labs).

some or impossible. Participants in the process may become unavailable, particularly if months or years have elapsed between testing and trial. Even if they are available, requiring them to testify is costly in taking them from their work as analysts. On the other hand, from the standpoint of the defense, it may be critical to have a live witness—critical because the only way to deal effectively with errors or flawed outcomes is to be able to cross-examine a witness who knows what was done and understands the technology and laboratory protocols.<sup>4</sup> Yet sometimes the opposite is true, and the analyst's testimony is not critical to the defense at all: The defense may recognize that the report got it right, and a defendant would prefer not to have a live witness presenting the results, which is often fine with prosecutors as well.

There is another practical complication, and it has absorbed the energy of many lawyers and courts in recent years: Forensic testing often involves activities by many persons, including those who gather and package and mark crime scene samples, those who check and calibrate the machinery used in the testing process, and those who actually perform the tests and sometimes check (or “certify”) the results. Here is one common question that arises: How many of these people can be said to be essential to a full and fair presentation?

Many states have adopted, as the best approach to these problems, “notice and demand” statutes. These vary widely, but essentially they require the prosecutor to give notice of intent to offer lab reports, and they allow the defendant to demand production of the relevant witnesses.<sup>5</sup> Under this approach, the defense is assured of a percipient witness who can be cross-examined, while allowing the prosecutor not to go to the trouble of calling such a witness where the defense is willing to forego such questioning. The Supreme Court has approved such statutes as

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<sup>4</sup>Second Circuit: *U.S. v. Oates*, 560 F.2d 45, 64–65, 81–82 (2d Cir. 1977) (noting questions and discrepancies in report; defense may wish to explore questions unique to case and chemist's qualifications and experience; defense might have tried to determine whether tests were properly performed, procedures and analyses are reliable, and equipment was in good working order).

<sup>5</sup>See, e.g., Colo. Rev. Stat. § 16-30309(5) (crime lab reports “shall be received in evidence,” provided that any party may request preparer to “testify in person” by giving 10 days' notice); Ohio R.C. § 2925.51 (lab reports on drugs are admissible unless defense demands testimony of analyst).

constitutional.<sup>6</sup> Some of these require defendants to advance some reason for insisting on live testimony, which may be difficult or impossible in some cases and may impose too heavy a burden to comport with due process, although the Supreme Court has yet to speak to this point.<sup>7</sup> Another common approach is the “subpoena statute,” which invites defendants to subpoena the analyst, but these statutes unfairly put on the defendant the burden of calling the witness, and potentially the risk of being left with nothing if the analyst cannot be found or brought to court, and the Court has rightly condemned this approach.<sup>8</sup> The notice-and-demand statutes inspired the 2013 amendment to Rule 803(10), which put in place a similar procedure in connection with the use of certificates to prove the absence of public entries or records.<sup>9</sup>

Constitutional Issues: *Melendez-Diaz*; *Bullcoming*; *Williams*. In three modern decisions, each by five-Justice majorities, the Supreme Court dealt with confrontation issues in the use of lab reports.

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<sup>6</sup>Supreme Court: *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 326 (2009) (notice-and-demand statutes “shift no burden,” and can properly require the matter to be raised before trial).

<sup>7</sup>New Jersey: N.J. Stat. 2C:35-19 (forensic drug reports are admissible in “unless it appears from [defendant's] notice of objection and specific grounds for that objection that the composition, quality, or quantity of the substance submitted to the laboratory for analysis will be contested at trial”).

See Imwinkelried, *The Debate in the DNA Cases Over the Foundation for the Admission of Scientific Evidence: The Importance of Human Error as a Cause of Forensic Misanalysis*, 69 Wash. U. L.Q. 19, 43 (1991) (burden to show untrustworthy test procedure should fall on opponent); Imwinkelried, *The Constitutionality of Introducing Evaluative Laboratory Reports Against Criminal Defendants*, 30 Hast. L. J. 621, 647 (1979) (court should exclude lab report offered to prove essential element in crime on showing that “more likely than not the conclusion expressed in the report is so evaluative that it could be the subject of varying expert opinion”).

*State v. Laturner*, 218 P.3d 23, 30 (Kan. 2009) (notice-and-demand statute requiring defense to object to lab certificate and to claim that the results will be contested at trial was unconstitutional; burden too heavy).

<sup>8</sup>Supreme Court: *Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 324 (2009) (confrontation clauses puts burden on prosecutor; letting defense subpoena analyst “shifts the consequences of adverse-witness no-shows” from state to defense).

Ninth Circuit: *Wigglesworth v. Oregon*, 49 F.3d 578 (9th Cir. 1995) (statute must require state to subpoena technician; letting defense do it is a Catch-22, forcing defendant to “call the criminalist” and “possibly bolster” state's case, “or forego examination” and maybe lose the chance “to expose a defect”).

Oregon: *State v. Willis*, 236 P.3d 714 (Or. 2010) (letting defense subpoena preparer of crime lab report does not satisfy confrontation concerns) (reversing).

<sup>9</sup>See the discussion of Rule 803(10) in § 8:94, *infra*.

The Melendez-Diaz case, decided in 2009, held that a forensic lab report prepared by the Massachusetts state crime laboratory was testimonial under Crawford. The report said the substance seized from defendant was cocaine, and it was offered as proof that indeed he was in possession of that substance. The majority (in an opinion by Justice Scalia, who authored Crawford) firmly rejected arguments that forensic lab reports qualify as business records that escape the “testimonial” label, and just as firmly rejected arguments that forcing prosecutors to call laboratory technicians would be too burdensome. Equally important, the majority cited modern studies concluding that laboratory reports suffer from significant risks of error based on bias or mistakes in procedure, and on lack of training or even dishonesty. And the majority rejected suggestions that scientific evidence differed from “accusatory” statements, and went out of its way to approve notice-and-demand statutes and to reject “subpoena” statutes as inadequate because they put the burden on defendants to summon lab technicians.<sup>10</sup>

The Bullcoming case came down in 2011, and it addressed the question whether testimony presenting forensic lab results, given by a colleague of the analyst who conducted the tests, could satisfy confrontation rights. There the report rested on gas chromatography, and it concluded that defendant had a blood alcohol content of .21. The analyst who did the test and prepared the report did not appear, and the prosecutor did not even claim that he was unavailable (he was on unpaid leave for an undisclosed reason). Instead, the prosecutor called another analyst from the same lab to answer questions, but he had not been involved in running defendant's test. The state argued that the report reflected machine output that could not be testimonial, but the Court rejected this argument, stressing that the report also said it was defendant's blood that was tested, that the analyst adhered to protocol, and that no circumstances affected the integrity of the sample or validity of the analysis. These representations related “to past events and human actions not revealed in raw, machine-produced data” and were “meet for cross-examination.” Producing the second analyst as a witness did not satisfy the confrontation clause. Such “surrogate testimony” could not convey what the testing analyst “knew or observed about the events” that he certified, and would not “expose any lapses or lies on the certifying analyst's part.”<sup>11</sup>

In the Williams case in 2012, the split that had been seen in

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<sup>10</sup>Supreme Court: Melendez-Diaz v. Massachusetts, 557 U.S. 305 (2009).

<sup>11</sup>Supreme Court: Bullcoming v. New Mexico, 131 S.Ct. 2705 (2011).

Melendez-Diaz and Bullcoming took a different shape, and the Court approved expert testimony based on a forensic report that was not itself introduced into evidence (different from, but uncomfortably close to, the “surrogate testimony” condemned in Bullcoming). In Williams the prosecutor adduced expert testimony by a state-employed scientist that rested in part on a lab report prepared by Cellmark (a private lab), but not offering the report itself. A four-Justice plurality invoked the principle that experts can rely on inadmissible evidence, and Justice Thomas concurred in the result on a narrow ground, while actually agreeing with four dissenting Justices on the larger issue, which is whether the report itself was actually used substantively (even though not introduced). The four-Justice dissent argued that the Cellmark report had in effect been used as substantive evidence in violation of the hearsay doctrine and (in their view) in violation of the Confrontation Clause, and the fact that the witness had nothing to do with its preparation meant that the case was controlled by Bullcoming.<sup>12</sup>

In Williams, investigators had obtained a vaginal swab from a rape victim in Chicago. The Illinois State Police lab (ISP) confirmed that there was semen on the swab, which was resealed and sent to Cellmark in Maryland, which produced a DNA profile and sent back its report. An ISP analyst then conducted a computer search of the ISP database and found a match with defendant's DNA. (Williams is a “trawling” case, in which DNA is the starting point, rather than the more usual case in which other evidence leads to arrest, and DNA profiling confirms the identity of defendant as the perpetrator.) In invoking expert testimony rules, the plurality stressed that the case was tried to a judge (who could be trusted to know the difference between treating the Cellmark report as the basis of the expert's opinion and taking it as substantive evidence). The plurality also stressed, as a second theory supporting use of the Cellmark report, that the “primary purpose” of the Cellmark test “was not to accuse” the defendant or “create evidence for use at trial,” but rather “to catch a dangerous rapist who was still at large” (in post-Williams decisions, other courts sometimes refer to the “targeted accusation” factor).

Four others, including Justice Scalia (author of Crawford and Melendez-Diaz), thought the procedure in Williams did violate defense confrontation rights. The testifying analyst “affirmed, without qualification, that the Cellmark report showed a ‘male DNA profile found in semen taken from the vaginal swabs,’” and

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<sup>12</sup>Supreme Court: Williams v. Illinois, 132 S.Ct. 2221 (2012).

the decisions in *Melendez-Diaz* and *Bullcoming* mean that an expert cannot “offer[ ] the results through the testimony of another analyst.” The swing vote (Justice Thomas) agreed with the dissenters that “the validity” of the analyst’s testimony “ultimately turned on the truth of Cellmark’s statements,” hence that the report was “admitted for its truth.” The only reason Thomas aligned himself with the plurality who found no confrontation violation is that he took the view that the Cellmark report was not testimonial because it lacked “the solemnity of an affidavit or deposition,” being “neither a sworn nor a certified declaration.”

*Williams* is a messy opinion that is hard to decipher.<sup>13</sup> One might construe it to mean that expert testimony, even when it necessarily rests on a lab report that is testimonial in character, may be admitted without providing an opportunity to cross-examine those who prepared the report. In favor of this construction, one can even cite *Bullcoming*, where Justice Sotomayor was necessary to make a majority, and she wrote a separate concurring opinion stressing that the facts did not involve an expert giving “an independent opinion about underlying testimonial reports that were not themselves admitted into evidence.”

This construction of *Williams*, however, does not stand up under scrutiny, because five Justices agreed that the expert who testified was making hearsay use of the underlying report—rejecting the view that the report was just used to explain the basis of her testimony, and necessarily the use of hearsay implicates confrontation concerns. In short, five Justices thought the Cellmark report was used substantively (only four thought otherwise), and five thought it made no difference that the case was tried to a judge, and five thought it made no difference that the report was not accusatory (because nobody had been arrested), and only one Justice thought it was crucial that the report was not sworn. In short, it seems that five Justices in *Williams* thought that what happened there triggered the right established in *Bullcoming* to cross-examine the preparer, or at least someone involved in the testing. Tellingly, Justice Sotomayor is one of the five in *Williams* who dissented, which suggests at the very least that her comment in *Bullcoming* cannot be read to mean that experts may testify on the basis of testimonial hearsay that is critical to their conclusion. In short, *Williams* is better understood as a decision of limited impact that does not excuse production of the preparer of such a report, that does not

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<sup>13</sup>California: See *People v. Barba*, 155 Cal. Rptr. 3d 707, 740 (Cal. App. 2013) (making sense of *Williams* and related cases is “to some extent an exercise in *tesseomancy*” [fortunetelling]).



exempt judge-tried cases from confrontation rights set out in *Melendez-Diaz* and *Bullcoming*, and that does not exempt nonaccusatory statements from those confrontation rights either.<sup>14</sup>

Constitutional Standard: How broadly does it apply? *Melendez-Diaz* settled the proposition that many forensic lab reports, prepared with a view to their use by the prosecutor in criminal trials, are testimonial statements. The decision expressly recognizes that many such tests involve methods that require the exercise of human judgment and bring risks of error. Hence such lab reports are inadmissible under the Confrontation Clause unless the defense has an adequate opportunity to cross-examine at some point—at trial or before. What is not entirely clear is how broadly this principle is to be applied. There is no room to doubt that the principle applies to drug tests (*Melendez-Diaz*), blood alcohol tests (*Bullcoming*), and DNA tests.

It seems that the *Melendez-Diaz* principle should reach reports of all forensic tests, where they depend on modern science and technology to develop conclusions in a setting in which it is expected that they will be used in investigating or prosecuting crime. Thus understood, the principle applies not only to the three mentioned above, but also to ballistics tests, fingerprint analysis, toolmark analysis, blood spatter analysis, and many others.<sup>15</sup>

We should note that the plurality in *Williams* sought to narrow

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<sup>14</sup>Second Circuit: *U.S. v. James*, 712 F.3d 79, 95 (2d Cir. 2013) (when no one rationale commands five Justices, holding is position taken by those who concurred on narrowest ground; it is not “the plurality’s narrowed definition of testimonial,” and nor the view that lab reports are not testimonial because not formal; *Williams* has no “single” holding useful here) (“routine autopsy report” was not testimonial).

Wisconsin: *State v. Deadwiller*, 2013 WL 3612812 (Wis. 2013) (when “no single rationale” explains result and commands five Justices, holding is position of those who concurred in judgment on narrowest ground, but rule applies only when two rationales for the majority “fit or nest into each other like Russian dolls,” and a “fractured opinion mandates a specific result” if parties are in substantial identical positions) (approving conviction on basis of testimony by state lab technician that DNA profiles generated by Cellmark matched DNA in state database).

<sup>15</sup>District of Columbia: *Gardner v. U.S.*, 999 A.2d 55, 59 (D.C. 2010) (DNA and serology reports); *Duvall v. U.S.*, 975 A.2d 839 (D.C. 2009) (drug lab report).

Massachusetts: *Com. v. Hernandez*, 929 N.E.2d 992, 996 (Mass. App. 2010) (drug certificate).

Mississippi: *Burdette v. State*, 110 So.3d 296, 304 (Miss. 2013) (ballistics report) (admitting was harmless error).

New York: See *People v. Rawlins*, 884 N.E.2d 1019 (2008), cert. denied, 129 S.Ct. 2856 (2008) (fingerprint comparison report) (pre-*Melendez-Diaz*).

Oregon: *State v. Willis*, 236 P.3d 714 (Or. 2010) (drug analysis report).

the coverage of the constitutional principle in the setting of forensic lab reports. In *Bullcoming*, the same four Justices dissented and tried to shorten the reach of *Crawford*: They doubted that “routine” reports raise constitutional issues, and in *Williams* they pointed out that the lab report with the DNA profile was not a “targeted accusation.” There is a kernel of truth in the proposition that a “routine” report does not raise confrontation concerns as acutely and that “targeted accusations” suggest a mindset that raises especially serious confrontation concerns. Decisions in other courts stress similar points, approving use of reports in part because of their routine nature<sup>16</sup> or explaining that a report could not be viewed as “pointing the finger” at anyone (or as an “accusation” of someone, usually under suspicion for other reasons).<sup>17</sup> These points, however, hearken back to the *Roberts* approach to confrontation issues, which stressed trustworthiness, while the *Crawford* approach rests more on procedural or adversarial considerations. It may be understandable from a human perspective why such points are made, but *Crawford*'s basic insight is that analyzing trustworthiness is not the mandate of the confrontation clause, and in that sense these points should not count. In *Williams*, four Justices would limit confrontation concerns in this way, while five reject this argument.<sup>18</sup>

In large measure because of these uncertainties, courts disagree on the question whether autopsy reports are testimonial, with some decisions concluding that they are,<sup>19</sup> but some concluding otherwise on the basis that such reports have broader uses than investigating or prosecuting crime.<sup>20</sup>

Constitutional Standard: Who Must Testify? *Melendez-Diaz* did

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<sup>16</sup>Second Circuit: *U.S. v. James*, 712 F.3d 79, 99 (2d Cir. 2013) (“routine autopsy report” prepared by Office of Chief Medical Examiner before any criminal investigation began was not testimonial).

<sup>17</sup>California: *People v. Barba*, 155 Cal. Rptr. 707, 742 (Cal. App. 2013) (Cellmark DNA profile was nontestimonial; primary purpose was not “to accuse a targeted individual,” even though defendant had been arrested).

<sup>18</sup>Supreme Court: *Williams v. Illinois*, 132 S.Ct. 2221, 2262 (2012) (decrying “reformulated version” of “primary purpose” test endorsed by plurality; declarant can become a “witness” before identity of accused is known; there is no textual justification for limiting confrontation concerns to “inherently inculpatory” statements) (dissenting opinion by Justice Kagan representing the views of four Justices; Justice Thomas concurs on this point).

<sup>19</sup>North Carolina: *State v. Locklear*, 681 S.E.2d 293, 304–305 (N.C. 2009) (autopsy report was testimonial).

Oklahoma: *Cuesta-Rodriguez v. State*, 241 P.3d 214, 228 n8 (Okla. App. 2010) (autopsy report was testimonial).

<sup>20</sup>Second Circuit: *U.S. v. James*, 712 F.3d 79, 99 (2d Cir. 2013) (“routine autopsy report” was not testimonial).

not describe or identify the witnesses that prosecutors are expected to call in order to provide defendants, if they demand a live witness, an adequate opportunity for cross-examination.

Clearly the technician who conducted the test is the best witness—or all technicians involved in conducting the test, and some cases point toward this ideal as the actual requirement of constitutional doctrine.<sup>21</sup> At the opposite end of the spectrum, we can be sure on the basis of Bullcoming that merely being a colleague working in the same lab with the analyst who conducted the tests is not good enough to qualify the person to testify to the substance of the report.<sup>22</sup>

In between these extremes is a range of possibilities. There are good reasons to allow the presentation of a lab report by a technician or analyst who supervised the work of the person who ran the actual tests, including those with overall supervisory authority over the activities of the lab. Such a witness should suffice if she knows and can explain the testing process, has enough knowledge and training to understand the dangers and limits of the test and the underlying machinery, and can read the notes and

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Illinois: *People v. Leach*, 980 N.E.2d 570, 590 (Ill. 2012) (autopsy report was nontestimonial; not prepared for “primary purpose of accusing a targeted individual” or for “primary purpose of providing evidence in a criminal case”).

<sup>21</sup>District of Columbia: *Gardner v. U.S.*, 999 A.2d 55, 61–62 (D.C. 2010) (error to let doctor C in Maryland lab testify on basis of DNA tests in Texas; C’s only involvement was “technical review” of file and report that was mailed to her; error to let doctor Z testify on serology testing as “technical reviewer”) (reversing).

Massachusetts: *Com. v. Banville*, 931 N.E.2d 457, 466 n3 (Mass. 2010) (in murder trial, DNA testimony by state police chemist B that profiles she developed were a “match” of those developed by another nontestifying chemist “constitutes testimonial hearsay” as to the latter) (issue not preserved; error harmless).

Nevada: *Vega v. State*, 236 P.3d 632, 636–637 (Nev. 2010) (in child sexual abuse trial, error to let doctor testify to “observations, findings, and statements” in sexual abuse examination report prepared by another doctor) (harmless).

<sup>22</sup>D.C. Circuit: *U.S. v. Moore*, 651 F.3d 30, 70–73 (D.C. Cir. 2011) (disapproving use of DEA drug analyses and autopsy report; testifying witness on DNA report was forensic chemist who did not author or review report; testifying witness on autopsy was chief medical examiner with limited connection to it).

North Carolina: *State v. Craven*, 696 S.E.2d 750, 752–753 (N.C. App. 2010) (in drug trial, error to present result of state crime report by technician who played no part in testing) (reversing).

New Hampshire: *State v. Connor*, 937 A.2d 928 (N.H. 2007) (state crime laboratory uses verification approach to fingerprint analysis, where second technician independently analyzes, compares and evaluates data, and then first technician generates report and issues opinion; letting first technician testify to the work of second violated confrontation rights and hearsay doctrine) (reversing).

follow the steps described in the report and offer an informed opinion that the test was (or was not) properly run and that the results are (or are not) trustworthy. To be sure, such a witness may not be in a position to know whether the samples were handled or labeled right, whether the machinery used in the test malfunctioned or operated properly, or whether the machinery was properly calibrated or adjusted, but such a witness can shed considerable and important light on the matter at hand. Most courts approve testimony by such a witness,<sup>23</sup> although some do not.<sup>24</sup>

Also sufficient is a technician who performed critical parts of

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<sup>23</sup>Colorado: *Marshall v. People*, 2013 WL 3335095 (Colo. 2013) (in trial for driving under influence of drugs, approving lab report on testimony by toxicology lab supervisor who supervised test and certified report) (dissent cites this Treatise, arguing that technician who ran test is the only percipient witness).

Indiana: *Pendergrass v. State*, 913 N.E.2d 703, 708 (Ind. 2009), cert. denied, 130 S.Ct. 3409 (as proof that defendant was father of victim's aborted fetus, admitting DNA analysis on testimony by B as lab supervisor; B testified about procedures, including receiving, storing, and testing, and reviewed table and checked work of analyst P, who performed tests, sometimes relying on P's notes).

Massachusetts: *Com. v. Barbosa*, 933 N.E.2d 93, 106–111 (Mass. 2010), cert. denied, 2011 WL 1832850 (2011) (admitting testimony describing DNA test results by senior criminalist in DNA unit of police department, who did not perform tests but “supervised and trained the analyst” who did; Melendez-Diaz “did not purport to alter the evidentiary rules governing expert testimony,” and defendant had adequate opportunity to cross-examine on risks; she did “full technical review”).

Mississippi: *Galloway v. State*, 2013 WL 2436653 (Miss. 2013) (admitting DNA test results through testimony by analyst who was “technical reviewer” in case, “familiar with each step,” and “personally analyzed” data and signed report).

Virginia: *Aguilar v. Com.*, 699 S.E.2d 215, 221–223 (2010), cert. denied, 131 S.Ct. 3089 (2011) (admitting DNA reports on testimony by person who supervised work of technicians and was “directly involved in the entire DNA analysis,” who 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”).

Washington: *State v. Manion*, 295 P.3d 270, 277 (Wash. App. 2013) (admitting testimony reflecting DNA test on firearm; witness conducted “independent review” and was “significantly involved” in testing).

<sup>24</sup>District of Columbia: *Young v. U.S.*, 63 A.3d 1033 (D.C. 2013) (in trial for kidnapping and rape, error to admit DNA match testimony based on report by member of witness's staff) (reversing).

Nevada: *Davidson v. State*, 2013 WL 1458654 (Nev. 2013) (error to let witness testify to DNA match on basis of certified report; witness did not actually develop DNA profile) (reversing).

Texas: *Burch v. State*, 401 S.W.3d 634 (Tex. App. 2013) (error to introduce drug analysis through testimony by analyst's supervisor) (reversing).

the analysis, even if such a technician did not participate in every step of the laboratory process. Again the important point is to call a witness with enough knowledge and training to understand the dangers and limits of the test and the underlying machinery, and who can understand and explain how the test was performed and whether it was properly performed.<sup>25</sup>

Perhaps understandably the availability of witnesses sometimes carries some weight in deciding who must be called, but it seems that this factor cannot excuse the obligation to call a knowledgeable witness connected with the test at hand who can answer critical questions about the process and the test itself.<sup>26</sup>

Constitutional Standard: Exceptions and Limitations. Justice Sotomayor's concurrence in *Bullcoming* limits the impact of the majority opinion in two ways not yet considered. First, she stressed that there was no purpose for the blood alcohol report other than law enforcement, suggesting that reports prepared for "an alternate primary purpose," such as treating a medical condition, would be a different matter. Second, she stressed that the facts in *Bullcoming* did not involve "only machine-generated results, such as a printout from a gas chromatograph."

These qualifications on *Bullcoming* have taken on a life of their own. Taking up the suggestion that laboratory reports are nontestimonial when they serve an "alternate primary purpose," some decisions find even that DNA reports generated after the defendant has been arrested are nontestimonial,<sup>27</sup> and post-Williams authority approves the use of medical reports on crime

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<sup>25</sup>South Dakota: *State v. Eagle*, 2013 WL 4027130 (S.D. 2013) (approving testimony by forensic DNA analyst on results of earlier tests performed in 2008, and also tests that analyst herself ran in 2011 using a different method, where witness had "participated in various steps of both the 2008 and the 2011 testing" and had "independently reviewed, analyzed, and compared the data" obtained in the earlier test, and testified to "her own conclusions and statistical calculations" and did not introduce the test reports through her testimony).

<sup>26</sup>Maine: See *State v. Mitchell*, 4 A.3d 478, 489–490 (Me. 2010), cert. denied, 133 S.Ct. 55 (2012) (allowing chief medical examiner to testify on basis of autopsy report by examiner who had left the country permanently).

Massachusetts: See *Com. v. Avila*, 912 N.E.2d 1014, 1028–1029 (Mass. 2009) (in murder trial, medical examiner could testify on basis of autopsy report by a person no longer in state employ at time of trial).

<sup>27</sup>California: *People v. Barba*, 155 Cal. Rptr. 707, 742 (Cal. App. 2013) (Cellmark DNA profile was nontestimonial, either because it lacked testimonial formalities or because "their primary purpose is not to accuse a targeted individual," even though defendant had been arrested when report was sought).

victims as nontestimonial where they appear to serve a medical rather than prosecutorial purpose.<sup>28</sup>

Exempting from confrontation concerns machine-generated output reflecting computerized testing processes can be understood as resting on the proposition that machine output is not hearsay, which makes good sense in the case of simple machines like clocks, and perhaps even in the case of elaborate computer programs that are parts of almost everyone's life.<sup>29</sup>

Yet this view of machine-generated output does not take into account some important points. First, the validity of the result always turns on human actors, who must label and track samples so the final output reflects what it purports to reflect (authentication issues). Second, often the validity of the result turns on proper preparation and preservation of samples, and factors like heat or even the simple passage of time can affect outcome. Third, the output of most machines is so much “Greek” to most laymen, and proper understanding and appraisal of the meaning of the machine output almost always turns on understanding the nature and limits (and pitfalls) of the process. Fourth, even machine output does not always yield an answer, and instead produces data that must be interpreted by humans on the basis of criteria that are not hard-edged, foolproof, or even universally accepted. Even if such material is to be exempted from confrontation concerns, the proponent cannot be excused from offering suitable foundation testimony, and often the most suitable testimony for these purposes will require production of the analyst who conducted the tests or was at least involved in the process or in similar testing at the same lab.<sup>30</sup>

Constitutional Standard: Expert Testimony. As noted above,

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<sup>28</sup>Connecticut: *State v. Anwar S*, 61 A.3d 1129, 1137 (Conn. App. 2013) (in sexual abuse trial, medical reports indicating that victim had sexually transmitted disease were nontestimonial; testing was done at clinic and lab, and tests reported verbally by doctor; no indication that analysts were aware of law enforcement involvement; test results did not bear indicia of formality).

<sup>29</sup>See the discussion in § 8:13, *supra*.

<sup>30</sup>Fourth Circuit: *U.S. v. Summers*, 666 F.3d 192, 201–204 (4th Cir. 2011) (admitting expert testimony by lab supervisor S interpreting DNA tests performed at his direction by others; S “painstakingly explained the process whereby he, and he alone, evaluated the data to reach the conclusion that, to a reasonable degree of scientific certainty, [defendant] was the major contributor of the DNA recovered from the jacket,” and the “numerical identifiers” on the report prepared by others were nothing more than raw data produced by machine).

*U.S. v. Washington*, 498 F.3d 225, 228–229 (4th Cir. 2007), cert. denied, 129 S.Ct. 2856 (2009) (in DUI trial, admitting testimony by lab director and toxicologist based on gas chromatography and immunoassay tests using comput-

the plurality opinion in *Williams* points toward the view that a prosecution expert can testify on the basis of testimonial hearsay without violating the confrontation clause.

Some modern opinions, both before and after the split decision in *Williams*, have taken a similar course, approving expert testimony based on such things as autopsy reports<sup>31</sup> and other

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ers with software producing 20 pages of data; toxicologist can rely on such material).

Seventh Circuit: *U.S. v. Moon*, 512 F.3d 359, 362 (7th Cir. 2008), cert. denied, 555 U.S. 812 (approving testimony by DEA chemist D based on spectrometer and chromatograph; chemist O, who had left DEA, did original lab work; D rested conclusion on report O prepared, and lab notes that persuaded D that O prepared samples and ran tests correctly) (expert can rely on inadmissible evidence).

California: *People v. Lopez*, 286 P.3d 469, 478 (Cal. 2012) (approving printout of gas chromatograph measuring blood alcohol and concluding that handwritten chain-of-custody data were nontestimonial too).

Florida: *Smith v. State*, 28 So. 3d 838 (Fla. 2009) (admitting DNA test results on sample taken from defendant and semen sample found on victim's clothing, through testimony by FBI supervisor, a forensic DNA examiner who "interpreted the data, formulated the conclusions, and prepared the official report" on basis of work done by biologists who did DNA tests; author of report testified).

New York: *People v. Brown*, 918 N.E.2d 927, 931–932 (N.Y. 2009) (DNA report reflecting "machine-generated graphs, charts and numerical data," prepared by private lab under contract to state was nontestimonial; there were "no conclusions, interpretations or comparisons" in report since use of typing machine would not entail subjective analysis; report could not be "tainted by a pro-law-enforcement bias" as it was conducted before defendant was a suspect and neither state agency nor private lab were law enforcement entities; witness from agency testified that "technician incompetence" would not lead to accusations against defendant) (forensic biologist conducted analysis linking defendant's DNA to profile found in victim's rape kit did testify).

<sup>31</sup>First Circuit: *Nardi v. Pepe*, 662 F.3d 107 (1st Cir. 2011) (rejecting challenge to murder conviction where expert testified to cause of death on autopsy report not in evidence; can rely on unadmitted reports).

California: *People v. Dungo*, 286 P.3d 442, 450 (Cal. 2012) (approving forensic pathologist's testimony on "objective facts about the condition of the victim's body" based on autopsy report and offering "independent opinion" that victim died of strangulation; utility of autopsies is not limited to criminal investigation; they serve other purposes, like helping figure out whether death claim should be brought, and whether death is covered by insurance).

Illinois: *People v. Lovejoy*, 919 N.E.2d 843, 867–868 (Ill. 2009) (letting doctor H testify that victim had lethal level of pseudoephedrine, on basis of "toxicology testing done by someone else," as doctor can rely on such material; report itself was admitted only to show jury "the steps [H] took" to reach an opinion).

Massachusetts: *Com. v. Avila*, 912 N.E.2d 1014, 1028–1029 (2009) (medical examiner could testify to cause of death on basis of autopsy report by an-

relatively simple tests,<sup>32</sup> and even DNA reports, as in *Williams* itself.<sup>33</sup> This approach should not be allowed to become an “end

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other; expert can testify on basis of facts personally observed, evidence in record or facts or independently admissible data that are permissible basis; autopsy report is permissible basis; underlying facts would be admissible through testimony) (error to admit autopsy itself, but harmless).

Maine: *State v. Mitchell*, 4 A.3d 478, 489–490 (Me. 2010), cert. denied, 133 S.Ct. 55 (2012) (chief medical examiner testified on basis of autopsy report prepared by another; state did not offer report itself; testimony could prove cause of death and identify defensive wounds).

<sup>32</sup>Seventh Circuit: *U.S. v. Maxwell*, 2013 WL 3766519 (7th Cir. 2013) (technician who did not conduct labwork could testify, on basis of that work, that substance was cocaine; expert can rely on inadmissible evidence; report not offered; witness never said she relied on it or earlier analyst's interpretation, she “reviewed the data” and reached “independent conclusion”) (defendant did not object or deny that the substance was crack cocaine).

*U.S. v. Turner*, 591 F.3d 928 (7th Cir. 2010) (prosecutor could call B, senior forensic chemist and head of drug identification unit of state lab, to testify in place of H, chemist who analyzed substances taken from defendant; B explained tests, described peer review process, saying he reviewed H's results; B did not introduce H's actual statements, so there was “no problem” with B's expert testimony).

South Carolina: *State v. Ortiz-Zape*, 743 S.E.2d 156 (N.C. 2013) (test indicating cocaine; qualified expert may provide “independent opinion based on otherwise inadmissible out-of-court statements; nontestifying analyst's machine-generated test results were not admitted).

<sup>33</sup>Arizona: *State v. Gomez*, 244 P.3d 1163, 1165–1166 (Ariz. 2010), cert. denied, 131 S.Ct. 2460 (2011) (admitting testimony by senior analyst and supervisor of lab to which police submitted items from crime scene with sample of defendant's blood; supervisor testified on basis of DNA profiles and checked and described protocols; not clear that “machine-generated DNA profiles” are hearsay, and profiles were not themselves proved; technicians who handle samples and obtain machine-made data need not testify, “as long as someone familiar with the profiles and laboratory procedures is subject to cross-examination”).

Massachusetts: *Commonwealth v. Greineder*, 984 N.E.2d 804 (Mass. 2013) (in murder trial, approving testimony by Cellmark analyst based on testing in her laboratory by nontestifying analyst; it was error, but harmless, to let her testify to test results on direct; she could give her expert opinion on basis of tests).

Wisconsin: *State v. Deadwiller*, 2013 WL 3612812 (Wis. 2013) (approving conviction on basis of testimony by state lab technician that DNA profiles generated by Cellmark matched DNA in state database).

Tenth Circuit: *U.S. v. Pablo*, 696 F.3d 1280 (10th Cir. 2012) (in sexual assault trial, admitting testimony by lab analyst S based on DNA report by analyst B and serology report by analyst D; expert may give opinion resting on “inadmissible facts or data, which at times may include out-of-court testimonial statements,” and disclosure can sometimes help jury evaluate opinion; extent to which testifying expert may disclose inadmissible testimonial hearsay is “a question of degree”).



run around” the confrontation concerns articulated so forcefully in *Melendez-Diaz* and *Bullcoming*. Expert testimony that depends in critical part on out-of-court testimonial statements generated in forensic lab work should not be admitted without calling a percipient witness who can be actually examined and tested on the substance of the underlying work.

There seems to be clear agreement in the cases that this exemption should not be used to offer expert testimony that simply “parrots” testimonial hearsay, or that functions as a “conduit” for hearsay.<sup>34</sup> The *Williams* plurality took the view that experts can rely on inadmissible hearsay (provided that it is reasonable to do so), pointing out that the Rules often block the introduction of inadmissible hearsay underlying expert opinion, and stressed that *Williams* itself was a bench trial. But the other five Justices in *Williams* were unpersuaded by those arguments, and were not persuaded that expert reliance on inadmissible hearsay as a crucial step in forming the opinion is permissible because it does not violate the “conduit” limitation (Justice Kagan for the four dissenters, and Justice Thomas in his concurring opinion). Expert testimony that depends on out-of-court testimonial statements should be viewed as violating defense confrontation rights, absent a percipient witness knowledgeable and involved in the underlying tests, who can be cross-examined.<sup>35</sup>

Constitutional Standard: Authentication and Other Peripheral Points. Replying to charges by dissenting Justices, the majority

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<sup>34</sup>Tenth Circuit: *U.S. v. Pablo*, 696 F.3d 1280 (10th Cir. 2012) (recognizing that expert who “simply parrots” another’s hearsay is just a “backdoor conduit”).

Eleventh Circuit: *U.S. v. Curbelo*, 2013 WL 4038746 (10th Cir. 2013) (confrontation concerns are not limited to “express hearsay statements,” and prosecutors in *Bullcoming* and *Melendez-Diaz* could not have admitted “numeric or chemical results” without also offering “an analyst’s certification” indicating how he had reached those results).

Georgia: *Rector v. State*, 681 S.E.2d 157, 159–160 (Ga. 2009), cert. denied, 588 U.S. 1081 (state toxicologist could testify to toxicology report on deceased victim prepared by another doctor; toxicologist reached same conclusion that victim’s blood sample tested negative for cocaine; witness did not act as mere conduit, but reviewed data, presented conclusions based on other doctor’s report).

<sup>35</sup>District of Columbia: *Young v. U.S.*, 63 A.3d 1033 (D.C. 2013) (error to admit DNA match testimony based on report by member of witness’s staff, rejecting argument that she “did not quote” particular hearsay; she did relay hearsay by relying “throughout her testimony” on testing by others) (reversing).

Massachusetts: *Com. v. Banville*, 931 N.E.2d 457, 466 n3 (Mass. 2010) (in murder trial, DNA testimony by state police chemist that profiles she developed were a “match” of those developed by nontestifying chemist “constitutes testimonial hearsay” on the latter) (issue not preserved, and any error harmless).

New Hampshire: *State v. Connor*, 937 A.2d 928 (N.H. 2007) (state crime lab uses verification approach to fingerprints, where second technician indepen-

in *Melendez-Diaz* emphatically denied that everyone whose testimony might be relevant to show “chain of custody, authenticity of the sample, or accuracy of the testing device” must appear and testify.<sup>36</sup> Justice Breyer took the position in *Williams* that the case needed to be reargued, and he expressed discomfort in a doctrine that requires production of live witnesses without requiring production of all witnesses whose involvement in lab testing might be critical to the outcome (he saw “no logical stopping place” between requiring the prosecutor to call “one of the laboratory experts” and requiring the prosecutor to call “all” of them), and it seems true that even an error on what seems a minor and ministerial step could radically affect outcome.<sup>37</sup> Indeed, the dissenters in *Williams* cited an example of a case that produced a seeming match between the accused and the perpetrator until the testifying witness recognized at the last minute that the crime scene sample had been compared to the victim's sample, not the defendant's, so the match proved nothing in the case.<sup>38</sup>

Maybe the best that can be said for the compromise endorsed in *Melendez-Diaz* is that we must avoid making the best the enemy of the good. It is better to take some risks that the process will miscarry—hopefully rarely—than effectively to reject proof that is likely to be more reliable and persuasive than other kinds of circumstantial evidence, and even eyewitness testimony. At least sometimes the consequence of ministerial slipups can be caught in other ways because the data will not make sense. The plurality advanced this argument in *Williams*, claiming that mistakes in handling the crime scene sample could not have occurred because of the match found with defendant's DNA, and that contamination would have showed up in the test results.<sup>39</sup> In any event, it seems that the constitutional standard does not require production of every witness who handled a testing

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dently analyzes data; Rule 703 does not pave way for first analyst to testify to work of second; and first analyst simply parroted work of second) (reversing).

<sup>36</sup>*Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 311 n1 (2009).

<sup>37</sup>*Williams v. Illinois*, 132 S.Ct. 2221, 2247 (2012) (wondering how many witnesses prosecutor should call; each one of six to twelve technicians might say something critical; while we may need “some kind of limitation” on applying Crawford, we don't now have an answer) (Breyer concurrence).

<sup>38</sup>*Williams v. Illinois*, 132 S.Ct. 2221, 2264 (2012) (concluding that confrontation is the mechanism that our Constitution provides for “catching such errors”) (Kagan and three others in dissent).

<sup>39</sup>*Williams v. Illinois*, 132 S.Ct. 2221, 2237, 2244 (2012) (asserting that there is “no plausible explanation” for the match with defendant's DNA if Cellmark had tested “any sample other than the one” taken from her; also stating that “defects in a DNA profile may often be detected from the profile itself,”

sample, nor those who calibrate the machinery used in the process.<sup>40</sup>

Constitutional Standard Generalized Data. It seems that general statistical data, which are collected for such purposes as assessing the frequency of genetic markers in the population or tracing phonecalls or internet “hits,” are nontestimonial if the data in question are gathered for generalized law enforcement or regulatory purposes, in efforts that are not undertaken with any particular criminal investigation or prosecution in mind.<sup>41</sup> The same conclusion seems warranted where tests are run completely outside the investigative context, as may happen if they are conducted before the alleged crime even occurred.<sup>42</sup>

Hearsay Issues. Almost lost in the shuffle of constitutional is-

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and witness testified that “she would have been able to tell from the profile” if the sample had degraded).

<sup>40</sup>Arizona: *Bohsancurt v. Eisenberg*, 129 P.3d 471, 475 (Ariz. App. 2006) (maintenance and calibration records for breath-testing machine).

Kentucky: *Com. v. Walther*, 189 S.W.3d 570 (Ky. 2006) (certificate reflecting maintenance and tests of intoxilyzer machine).

Maine: *State v. Ducasse*, 8 A.3d 1252 (Me. 2010), cert. denied, 131 S.Ct. 3091 (2011) (certificate of compliance prepared by manufacturer of blood alcohol kit to prove that equipment did not contain material that would disturb integrity of blood sample; certificate addressed manufacturing specifications).

Mississippi: *Deeds v. State*, 27 So.3d 1135 (Miss. 2009) (in DUI trial, admitting blood alcohol test results despite claim that state failed to preserve chain of custody by not saying who drew blood; can rely on testimony by officer G, who saw attending nurse draw blood and label sample).

New York: *People v. Pealer*, 985 N.E.2d 903 (N.Y. 2013) (records on routine inspection, maintenance, and calibration of breathalyzer).

North Carolina: *State v. Forte*, 629 S.E.2d 137, 144 (N.C. 2006), cert. denied, 549 U.S. 1021 (state bureau report on chain of custody of DNA material).

Texas: *Settlemyre v. State*, 323 S.W.3d 520, 521–522 (Tex. App. 2010) (“intoxilyzer maintenance records”).

West Virginia: *State v. Dilliner*, 569 S.E.2d 211, 215 (W.Va. 2002) (inspection report on accuracy of intoxilyzer).

<sup>41</sup>Eighth Circuit: *U.S. v. Scholle*, 553 F.2d 1109, 1124–1125 (8th Cir. 1977) (printouts on drugs seized across country, including lab analyses).

Kansas: *State v. Appleby*, 221 P.3d 525, 552 (Kan. 2009) (lab analyst provided “data” upon which she relied “in reaching her opinion regarding population frequency of specific DNA profiles,” which material was not testimonial; writing computer programs allowing comparison of samples “are nontestimonial actions,” and “neither the database nor the statistical program are functionally identical to live, in-court testimony”) (only expert’s opinion is testimonial).

<sup>42</sup>Iowa: *State v. Musser*, 721 N.W.2d 734, 753–57 (Iowa 2006) (in trial for criminal transmission of disease, lab reports showing that defendant was HIV positive were nontestimonial; they had been ordered and prepared by medical clinic two years before alleged crime).

issues is the question whether forensic lab reports fit one or more exceptions to the hearsay doctrine. Yet hearsay issues are important, as the rule against hearsay evidence rests on judgments relating to trustworthiness and necessity that are independent of constitutional values. The shift from the Roberts approach to Crawford, which severed the constitutional inquiry from trustworthiness considerations and focused instead exclusively on the question whether statements are testimonial, makes it all the more important to apply faithfully the criteria of the hearsay exceptions, even when constitutional concerns have been dealt with.<sup>43</sup>

The right exception to apply in this circumstance is the public records exception in Rule 803(8), often cited as Fed. R. Evid. 803(8). For reasons that require some explanation, the public records exception does not allow use of forensic lab reports against criminal defendants. Equally important, the use restrictions in that exception, in the best understanding of their meaning, lead to the conclusion that the only available exception for lab reports is the one for past recollection recorded, which has its own requirements that should be satisfied before such reports are admitted, which of course includes calling as a witness the lab technician who prepared the report as a witness. The exception for past recollection recorded is found in Rule 803(5), often cited as Fed. R. Evid. 803(5). The decision in the Oates case<sup>44</sup> addressed use of Rule 803(8) in this setting (the case involved a Customs Service laboratory analysis of white powder, which concluded that the powder was cocaine). Oates addressed four major hearsay issues:

First, forensic lab reports, whether prepared in official laboratories (state or federal crime labs) or in private laboratories by arrangement with prosecuting authorities, ought to be viewed as public records. Arrangements between law enforcement or prosecutors and private labs makes the latter into what amounts to state or government agencies, and private labs assisting in investigating or prosecuting crime take on the mindset or orienta-

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<sup>43</sup>Seventh Circuit: *U.S. v. Hatfield*, 591 F.3d 945, 952 (7th Cir. 2010) (calling investigating officer “might seem to cure any objection to the introduction into evidence of the records of that case” because he became cross-examinable, but use restrictions in Rule 803(8) reflect deeper concern that “reports by law enforcers are less reliable than reports by other public officials because of law enforcers' adversary relation to a defendant”).

<sup>44</sup>Second Circuit: *U.S. v. Oates*, 560 F.2d 45, 77 (2d Cir. 1977) (discussed in § 8:90, *supra*).

tion of their employers and cannot reasonably be viewed as independent.<sup>45</sup>

Second, hearsay issues relating to forensic lab reports should be addressed by applying Rule 803(8). Most other exceptions should not be used for this purpose, particularly the business records exception and the catchall. The reason is that if the restrictions in Rule 803(8) can be gotten around by resorting to an exception that does not have such restrictions, then their purpose is not well served. Resort to the business records exception is particularly problematic, as its requirements are often satisfied with respect to lab reports, and yet that exception lacks the safeguards built into Rule 803(8)(A)(ii) and (A)(iii). Resort to the catchall seems inadequate because analyzing trustworthiness is a particularly difficult task when it comes to lab reports on account of motivational factors and many others. Equally important, even private laboratories are not really private when they act under contract with law enforcement or prosecutors, as such arrangements make them part of the investigative and prosecutorial effort, and they too should be treated as public agencies, which again points away from applying the business records exception. In the end, then, in the absence of a special statute such as many states have enacted, hearsay issues should usually be resolved under the public records exception.<sup>46</sup> We note here that some courts continue to reject this conclusion.<sup>47</sup>

Third, even laboratory technicians should be viewed as part of

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<sup>45</sup>Supreme Court: See *Davis v. Washington*, 547 U.S. 813, 823 n2 (2006) (911 operators may not be law enforcement, but they are “agents of law enforcement when they conduct interrogations of 911 callers,” and Court considers them law enforcement for purposes of for purposes of confrontation analysis).

<sup>46</sup>Fifth Circuit: *U.S. v. Cain*, 615 F.2d 380, 381–382 (5th Cir. 1980) (error to use business records exception for escape report by federal prison; exception “does not open a back door” for evidence barred by use restriction) (reversing).

Idaho: *State v. Sandoval-Tena*, 71 P.3d 1055, 1059 (Idaho 2033) (effect of restrictions in Rule 803(8) would be “meaningless” if a report were admissible under business records exception) (citing *Oates*).

Maine: See *State v. Tomah*, 736 A.2d 1047 (Me. 1999) (excluding forensic report on blood spatter patterns, offered by defense; forensic expert reports are “the antitheses of the business records” in Rule 803(6); they are “advocacy reports, expressly prepared for litigation to support one party,” and preparation is not routine, nor is the record “the type that is contemplated by” Rule 803(6)).

Texas: *Cole v. State*, 839 S.W.2d 798, 810 (Tex. App. 1990) (documents inadmissible under second clause of 803(8) “may not be admitted under Rule 803(6),” meaning that the business records exception cannot be used as a “back door” for evidence inadmissible under the second clause).

<sup>47</sup>Second Circuit: *U.S. v. Feliz*, 467 F.3d 227 (2d Cir. 2006), cert. denied, 549 U.S. 1238 (2007) (admitting autopsy reports, which fit business records exception even though also being public records) (not testimonial).

law enforcement, regardless whether they work in state or government crime laboratories or in private laboratories under contract with the state or federal government. Even though the work of such technicians does not entail carrying a gun, interviewing witnesses, or making arrests, such persons are still part of law enforcement for the reason suggested in *Oates*, which is that such a person is part of the prosecutorial and investigative team.<sup>48</sup>

Fourth, forensic lab reports could fit clause (A)(ii) or (A)(iii), but the latter is the better fit. Clause (A)(ii) covers a “matter observed,” and one might argue that drug analyses or DNA profiles do reflect matters “observed” by those who do the tests and write up the results, but the language in this clause was clearly designed for the more mundane observations that are made when an investigating officer writes up a description of an accident or a crime scene—nontechnical descriptive material summing up observations by public officials in the exercise of their responsibilities, not scientific inquiries performed in laboratories with sophisticated equipment. Clause (A)(iii) covers “factual findings” from “a legally authorized investigation,” which is much closer in apparent meaning to the activities of a crime lab in carrying out scientific tests.

Regardless which clause applies, there are problems. Applying clause (A)(ii) leads to the conclusion that the prosecutor cannot introduce lab reports unless analysts can somehow be viewed as not being law enforcement personnel or the reports are viewed as “routine and nonadversarial,” thus fitting a court-made exception to the restriction in that clause. Decisions analyzing such reports under the confrontation clause occasionally stress factors that could lead to applying this judge-made exception in clause (A)(ii)—that indeed some lab reports are “routine,” at least in relation to some of their content, in two senses: First, they are part of the everyday activities of the analyst that involve following

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Seventh Circuit: *U.S. v. Ellis*, 460 F.3d 920 (7th Cir. 2006) (approving hospital lab reports showing illegal drug use; invoking business records exception; tests were made in “ordinary course,” although requested after defendant’s arrest).

*U.S. v. Blackburn*, 992 F.2d 666, 670–672 (7th Cir. 1993) (invoking catch-all exception for lensometer test results by private lab at FBI request; fact that test was produced for prosecution barred resort to business records exception; fact that findings were made by private lab foreclosed resort to public records exception).

<sup>48</sup>Michigan: See *People v. Lonsby*, 707 N.W.2d 610, 618 n7 (Mich. App. 2005) (report by analyst working for police crime lab was by nature “adversarial,” so it was not admissible under public or business records exceptions).

procedural steps that are more-or-less set in stone and apply across the board. Second, at least sometimes some parts of such reports are not “targeted” toward any particular person, and the setting in which the technician worked does not suggest that any one conclusion would be more useful than another.<sup>49</sup> Applying clause (A)(iii) is similarly problematic because the use restriction is so absolute—material within this provision is admissible in civil cases and “against the government” in criminal cases.

These arguments for admitting lab reports stretch the exception and minimize the concerns underlying the use restrictions, and often the arguments simply strain credulity. It seldom happens that analysts are clueless about the direction or significance of their findings: Persons asked to test baggies of white powder know that they are likely to discover a banned substance, and persons asked to compare two DNA samples are likely to know that investigators think there may be a match, and that in all likelihood finding a match advances an investigation already ongoing. The very fact that a prosecutor or law enforcement agency seeks an answer, coupled with even a little guesswork or information about the case, tells technical people what answer is expected (perhaps preferred) and how it “cuts” in an investigation or a pending prosecution.

As noted above, the one provision available in federal courts in this setting is the exception for recollection recorded in Rule 803(5). While the use restrictions in Rule 803(8)(A)(ii) and 803(8)(A)(iii) should block resort to the business and catchall exceptions, it is appropriate to allow use of the exception for past recollection, which has the virtue of producing a live percipient witness who can be cross-examined and who is likely to have considerable knowledge about the testing process and enough recollection to shed some light on the reliability of the record in question. This avenue does not reach the situation in which a supervising analyst takes the stand, which satisfies confrontation concerns in many decisions cited in this section, but it does pave the way to use lab reports where the preparer himself is on the stand.<sup>50</sup> Of course state courts, even in states that have adopted the Rules, generally have available “notice-and-demand” statutes that generally make the reports themselves admissible, although

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<sup>49</sup>Second Circuit: *U.S. v. James*, 712 F.3d 79, 95 (2d Cir. 2013) (admitting autopsy report by Office of Chief Medical Examiner and stressing that it's “routine” nature made it non testimonial).

<sup>50</sup>Oregon: See *State v. Rumler*, 110 P.3d 115 (Or. App. 2005) (approving use of intoxilyzer report as past recollection recorded; rejecting challenge under confrontation clause).

the “demand” feature enables defendants to require prosecutors to produce percipient witnesses as well.

Hearsay

**§ 8:91**  
**Rule 803**