ORIGINAL

In the
Supreme Court of Ohio

STATE OF OHIO,	:	Case Nos. 2006-0294,
	:	2006-0298
Plaintiff-Appellant,	:	
	:	On Appeal from the
v.	:	Marion County
	:	Court of Appeals,
LEE CRAGER,	:	Third Appellate District
	:	
Defendant-Appellee.	:	Court of Appeals Case
	:	No. 9-04-54

SUPPLEMENTAL BRIEF OF *AMICUS CURIAE*
OHIO ATTORNEY GENERAL RICHARD CORDRAY
IN SUPPORT OF PLAINTIFF-APPELLANT STATE OF OHIO

BRENT YAGER (0033906)
Marion County Prosecutor
134 East Center Street
Marion, Ohio 43302
740-223-4290

Counsel for Plaintiff-Appellant
State of Ohio

KEVIN P. COLLINS (0028911)
Collins & Lowther
132 South Main Street
Marion, Ohio 43302-3889
740-223-1470

Counsel for Defendant-Appellee
Lee Crager

RICHARD CORDRAY (0038034)
Attorney General of Ohio

BENJAMIN MIZER* (0083089)
Solicitor General
**Counsel of Record*
STEPHEN P. CARNEY (0063460)
ELISABETH A. LONG (0084128)
Deputy Solicitors
ELISE PORTER (0055548)
JAMES SLAGLE (0032360)
Assistant Attorneys General
30 East Broad Street, 17th Floor
Columbus, Ohio 43215
614-466-8980
614-466-5087 fax
benjamin.mizer@ohioattorneygeneral.gov

Counsel for *Amicus Curiae*
Ohio Attorney General Richard Cordray

FILED
DEC 08 2009
CLERK OF COURT
SUPREME COURT OF OHIO

TABLE OF CONTENTS

Page

TABLE OF CONTENTS i

TABLE OF AUTHORITIES iii

INTRODUCTION 1

STATEMENT OF AMICUS INTEREST 2

ARGUMENT 3

A. No confrontation problem arises when a qualified expert testifies about his interpretation of scientific data generated by another analyst, because the testifying expert is available for cross-examination. 3

1. As an expert, Wiechman testified about his own conclusions, based on his own observations of the pertinent data. 4

2. Wiechman's expert testimony did not violate Crager's confrontation rights. 6

3. The admission of the DNA reports likewise did not violate Crager's confrontation rights, and, even if the reports had been admitted in error, that error would be harmless. 9

B. *Melendez-Diaz* does not call into question, either explicitly or implicitly, this Court's holding that a defendant's confrontation rights are not violated when a qualified expert DNA analyst testifies about his own opinions based on data generated by a different DNA analyst. 12

C. Retreating from the second holding of *Crager I* would unnecessarily burden Ohio laboratories and courts, and would generally slow the criminal process in Ohio. 14

1. DNA testing is time-consuming and labor-intensive, and it "represents the work of more that one person." 15

2. DNA laboratories across the country have worked to increase accuracy and efficiency as demand for DNA testing continues to rise. 17

3. Disallowing experts from testifying about their own interpretations of data generated by scientific testing would significantly burden Ohio laboratories and slow the criminal process in Ohio. 19

CONCLUSION 22

CERTIFICATE OF SERVICE ..... unnumbered

APPENDIX

BCI DNA Testing Overview, Elizabeth Benzinger. ..... Ex. 1

TABLE OF AUTHORITIES

Cases **Page(s)**

Coy v. Illinois (1988),
487 U.S. 1012 11

Delaware v. Van Arsdall (1986),
475 U.S. 673 11

Ellis v. Phillips (S.D.N.Y. 2005),
2005 U.S. Dist. Lexis 13910 7

Engebretsen v. Fairchild Aircraft Corp. (6th Cir. 1994),
21 F.3d 721 9

Farkas v. Detar (9th Dist. 1998),
126 Ohio App. 3d 795 4

Hamilton v. Texas (Tex. App.),
2009 Tex. App. Lexis 6923 14

Illinois v. Johnson (Ill. App.),
915 N.E.2d 845, 2009 Ill. App. Lexis 1103 13

Illinois v. Lovejoy (Ill.),
2009 Ill. Lexis 1302 10

Kansas v. Appleby (Kan.),
2009 Kan. Lexis 1080 ..... 10, 13

Kansas v. Lackey (Kan. 2005),
120 P.3d 332 8

Larkin v. Yates (C.D. Cal.),
2009 U.S. Dist. Lexis 60106 13

Louisiana v. Garner (La. Ct. App. 2005),
913 So. 2d 874 8

Melendez-Diaz v. Massachusetts (2009),
129 S. Ct. 2527 ..... *passim*

North Carolina v. Forte (N.C. 2006),
629 S.E.2d 137 21

North Carolina v. Golphin (N.C. 2000),
533 S.E.2d 168 10

North Carolina v. Mobley (N.C. Ct. App.),
2009 N.C. App. Lexis 1713 ..... 10, 14

North Carolina v. Walker (N.C. Ct. App. 2005),
613 S.E.2d 330 7

North Carolina v. Watts (N.C. Ct. App. 2005),
616 S.E.2d 290 7

Pendergrass v. Indiana (Ind. 2009),
913 N.E.2d 703 14

Rector v. Georgia (Ga. 2009),
681 S.E.2d 157 ..... 6, 13

State v. Boyd (8th Dist.),
1992 Ohio App. Lexis 2744 5

State v. Crager ("*Crager I*"),
116 Ohio St. 3d 369, 2007-Ohio-6840 ..... *passim*

State v. Crager ("*Crager II*"),
123 Ohio St. 3d 1210, 2009-Ohio-4760 2

State v. Crager (3d Dist.),
164 Ohio App. 3d 816, 2005-Ohio-6868 8

State v. Craig,
110 Ohio St. 3d 306, 2006-Ohio-4571 ..... 5, 6

State v. Eley (1996),
77 Ohio St. 3d 174 ..... 4, 5

State v. Mack (1995),
73 Ohio St. 3d 502 4

State v. Solomon (1991),
59 Ohio St. 3d 124 4

Tennessee v. Street (1985),
471 U.S. 409 9

United States v. Johnson (4th Cir.),
2009 U.S. App. Lexis 26187 ..... 7, 8, 12

United States v. Moon (7th Cir. 2008),
512 F.3d 359 ..... 6, 10

Washington v. Sione P. Lui (Wash. Ct. App.),
2009 Wash. App. Lexis 2892 13

Wisconsin v. Barton (Wis. Ct. App. 2005),
709 N.W.2d 93 7

Wisconsin v. Williams (Wis. 2002),
644 N.W.2d 919 7

Wood v. Texas (Tex. App.),
2009 Tex. App. Lexis 7882 14

Statutes, Rules and Provisions

R.C. 109.02 2

Ohio Evid. R. 703 ..... 4, 5, 6

INTRODUCTION

Upon the State's motion for reconsideration, the Court asked the parties to "brief the issue of the impact of *Melendez-Diaz v. Massachusetts* on this Court's holding in paragraph two of the syllabus in *State v. Crager*." 11/18/2009 *Case Announcements*, 2009-Ohio-6015 (internal citations omitted). In *Crager*, this Court properly held that "[a] criminal defendant's constitutional right to confrontation is not violated when a qualified expert DNA analyst testifies at trial in place of the DNA analyst who actually conducted the testing." *State v. Crager* ("*Crager I*"), 116 Ohio St. 3d 369, 2007-Ohio-6840, syl. ¶ 2. And the United States Supreme Court's recent decision in *Melendez-Diaz v. Massachusetts* (2009), 129 S. Ct. 2527, did not impact that holding.

Melendez-Diaz held that drug analysis reports are "testimonial" and their admission without witness testimony therefore violates a defendant's confrontation rights under the Sixth Amendment of the United States Constitution. But *Melendez-Diaz* said nothing about whether a qualified expert can testify about his own interpretation of scientific data generated by another technician or analyst.

Unlike *Melendez-Diaz*, where a drug analysis report was introduced into evidence without any testimony, here a qualified expert testified about his own conclusions based on scientific data. Steven Wiechman, a DNA analyst at the Ohio Attorney General's Bureau of Criminal Identification and Investigation ("BCI"), testified about his *own* expert opinions, based on his own review of raw DNA data generated by another laboratory ("lab") analyst's work at BCI. Because Wiechman testified only about his own conclusions and was available for cross-examination, his testimony did not violate Defendant-Appellee Lee Crager's confrontation rights. Likewise, the admission of the DNA reports did not violate Crager's confrontation rights because they were introduced only to show the basis of Wiechman's expert opinions, and not for

their truth. (Even if the DNA reports had been admitted in error—and they were not—any such error was harmless because Wiechman testified about every finding included in the reports, and Crager did not even contest his presence at the scene.) *Crager I*'s second holding is correct, and is based on sound reasoning and sound policy.

If this Court vacates Crager's conviction and remands for a new trial, see *State v. Crager* ("*Crager II*"), 123 Ohio St. 3d 1210, 2009-Ohio-4760, at ¶ 3, it will create unnecessary uncertainty about what the Confrontation Clause requires. In other words, by abandoning the second holding of *Crager I*, the Court may inadvertently lead overly cautious courts and prosecutors to believe that the Confrontation Clause requires the testimony of the *testing* analyst (or possibly of every person who somehow contributes to a scientific test) to introduce the results of DNA and other scientific testing. And that would, in turn, encourage unnecessarily redundant testimony, take analysts away from already backlogged labs at BCI and other testing facilities, and generally slow the criminal process in Ohio.

As this Court correctly recognized, after full briefing and oral argument in *Crager I*, "[a] criminal defendant's constitutional right to confrontation is not violated when a qualified expert DNA analyst testifies at trial in place of the DNA analyst who actually conducted the testing." 2007-Ohio-6840, at syl. ¶ 2. *Melendez-Diaz* does not impact this holding.

STATEMENT OF AMICUS INTEREST

Attorney General Richard Cordray is Ohio's chief law officer. R.C. 109.02. He has a strong interest in ensuring that reliable scientific test results can be used to advance criminal justice in Ohio. Moreover, BCI is part of the Attorney General's Office, and the Attorney General has a strong interest in ensuring that analysts at BCI are able to testify about the results of their work in Ohio courts. Because the parties have not had an opportunity to fully develop the record below with respect to current developments in DNA testing and analysis, this brief

includes information about DNA testing at BCI and other labs that is pertinent to resolving the issue before the Court.

ARGUMENT

A. No confrontation problem arises when a qualified expert testifies about his interpretation of scientific data generated by another analyst, because the testifying expert is available for cross-examination.

The testimony of a qualified expert DNA analyst does not contravene a defendant's confrontation rights because the defendant can cross-examine the expert about his opinions, the basis for them, and any limitations of those opinions. That is true even when the expert's opinion is based in part on his review of information obtained or prepared by others, and even when the records containing that data are not admitted into evidence.

Wiechman's trial testimony was therefore both admissible and consistent with Crager's confrontation rights. As a DNA analyst at BCI, Wiechman had expertise in BCI protocols for DNA testing and analysis (he had conducted DNA testing in hundreds of cases and testified as an expert witness thirty-six times (Trial Tr. 792)), and he had extensive knowledge of the testing in this particular case. Before trial, Wiechman reviewed the case files, including the extensive data generated during the testing process, and reports about the two rounds of testing conducted in this case. *Id.* at 802-05. (BCI DNA analyst Jennifer Duvall initially conducted the tests, documented the results, interpreted the data, and wrote the test reports. *Id.* at 802-03.) With respect to the second set of tests, Wiechman also performed a technical review of Duvall's work before her report was finalized. In that capacity, Wiechman reviewed all of the testing records, the DNA profiles Duvall generated, and her conclusions. *Id.* at 803. He then "made sure that the decisions or the conclusions that she came up with were consistent and were supported by her work." *Id.* Based upon his own review of the data for both sets of tests, Wiechman agreed with Duvall's work and he *independently* concluded, as Duvall had, that several pieces of evidence

showed a DNA profile that matched Crager's. *Id.* at 804, 815, 827. Wiechman testified about his own conclusions at trial, *id.* at 790-848, and Crager's counsel cross-examined him, *id.* at 830-838, 845-46. This testimony was both admissible and consistent with Crager's confrontation rights for the reasons explained below.

1. As an expert, Wiechman testified about his own conclusions, based on his own observations of the pertinent data.

Wiechman's expert testimony—although based in part on his review of data generated by Duvall's DNA testing—satisfies the requirements of Ohio Evid. R. 703. Under Evid. R. 703, "[t]he facts or data in the particular case upon which an expert bases an opinion or inference may be those *perceived by* the expert or admitted in evidence at the hearing." *Id.* (emphasis added). Thus, the data generated by Duvall did not even need to be introduced as evidence in order for Wiechman to rely on it as a basis for his expert opinion. Instead, Evid. R. 703 is satisfied when an expert bases his opinion "in major part" on facts or data that he personally perceives. *State v. Solomon* (1991), 59 Ohio St. 3d 124, 126; see also *State v. Mack* (1995), 73 Ohio St. 3d 502, 512 (when a detective conducts a personal analysis of [ballistics] evidence, "[t]he fact that his colleagues in the laboratory may have confirmed, or even debated, his findings does not remove his opinion beyond the boundaries for admissible expert testimony prescribed by Evid. R. 703"); *State v. Eley* (1996), 77 Ohio St. 3d 174, 181 (applying *Solomon* to uphold expert testimony about an autopsy by a coroner who "did not supervise the autopsy or tell the performing pathologist what to do," even though the coroner relied on the pathologist's report to refresh his memory and that report was not introduced into evidence). If a party opposes the expert's testimony, that party bears the "burden to establish that the expert . . . relied principally on facts not perceived by him and not properly admitted into evidence." *Farkas v. Detar* (9th Dist. 1998), 126 Ohio App. 3d 795, 801.

In *State v. Craig*, 110 Ohio St. 3d 306, 2006-Ohio-4571, this Court confirmed that an expert need not perform, observe, or direct every aspect of scientific testing so long as she personally reviews the test data upon which she bases her opinions. In *Craig*, the trial court permitted a medical examiner to testify about the time and cause of someone's death on the basis of a report written by a medical examiner who had since retired, even though the testifying expert had not conducted the autopsy. *Id.* at ¶¶ 73-79. The expert's testimony was proper under Evid. R. 703 because her opinions were "based upon her knowledge and experience, as applied to the facts and data included in the autopsy report." *Id.* at ¶ 77. Moreover, the expert's testimony did not violate the defendant's confrontation rights because "the defense had the opportunity to question [her] about the procedures that were performed, the test results, and her expert opinion about the time and cause of death." *Id.* at ¶ 79 (citing *Eley*, 77 Ohio St. 3d at 181; *State v. Boyd* (8th Dist.), 1992 Ohio App. Lexis 2744).

Here, Wiechman's testimony was based in major part on his independent review of the voluminous testing records documenting every step of Duvall's work. Wiechman had personal knowledge of BCI's uniform, standard procedures for DNA testing when he considered the raw data produced by Duvall. Trial Tr. at 802; *id.* at 804 (Wiechman "look[ed] at the same data [Duvall] looked at" and "independently verif[ied] the correct calls that she made."). Even though Duvall had primary responsibility for preparing the samples and generating data on those samples, both Duvall and Wiechman had independent responsibility to interpret that data. Each of them looked at the same electropherograms (charts showing raw DNA test data), developed a DNA profile for each sample, and concluded that the samples matched. *Id.* at 803-04. Wiechman thus formed his *own* expert opinion based in major part on his own personal observations and analysis of the raw data. After all, to render an opinion about whether two

DNA profiles match, an analyst-expert must look at electropherograms—not at the test tubes containing the sample that was tested. Because Wiechman personally verified the crucial findings in this case and reached his own conclusions, his expert testimony was proper under Evid. R. 703.

As the Court explained in *Crager I*, it was "of no import that [Wiechman] did not actively participate in both rounds of DNA testing." 2007-Ohio-6840, at ¶ 73. An expert need not observe *every* step along the way, or *every* sample analyzed, to render an opinion. See *Craig*, 2006-Ohio-4571, at ¶¶ 73-79. Wiechman reviewed the extensive files in this case and interpreted the DNA evidence for himself.

2. Wiechman's expert testimony did not violate Crager's confrontation rights.

This Court also correctly concluded that Wiechman's testimony did not violate Crager's confrontation rights. *Crager I*, 2007-Ohio-6840, at syl. ¶ 2. Wiechman testified about his own opinions, and Crager had a meaningful opportunity to cross-examine Wiechman about those opinions—thus eradicating any confrontation concerns. See *id.* at ¶ 76. As the Court explained, when Wiechman gave his expert opinion about the DNA evidence in this case, *he* was "the witness who [was] subject to cross-examination and [was] the one who present[ed] the true 'testimonial' statements." *Id.* at ¶ 79.

No confrontation problem arises where an expert relies on scientific data generated by another scientist as a basis for his or her opinion. "[T]he Sixth Amendment does not demand that a chemist or other testifying expert have done the lab work himself." *United States v. Moon* (7th Cir. 2008), 512 F.3d 359, 362; see also *Rector v. Georgia* (Ga. 2009), 681 S.E.2d 157, 160. "[T]he presence and availability for cross-examination of a highly qualified witness, who is familiar with the procedures at hand, supervises or reviews the work of the testing analyst, and renders her own expert opinion is sufficient to protect a defendant's right to confrontation,

despite the fact that the expert was not the person who performed the mechanics of the original tests." *Wisconsin v. Williams* (Wis. 2002), 644 N.W.2d 919, 926; see *Wisconsin v. Barton* (Wis. Ct. App. 2005), 709 N.W.2d 93, 98 (affirming that *Williams* is still valid after *Crawford*). Although an expert witness cannot take the stand merely to "summarize[] the work of others," it is acceptable for an expert to "form[] an opinion based in part on the work of others." *Williams*, 644 N.W.2d at 926; see also *Barton*, 709 N.W.2d at 96 (allowing testimony by an expert who relied on an absent expert's report); *North Carolina v. Walker* (N.C. Ct. App. 2005), 613 S.E.2d 330, 332-33 (no confrontation problem when a state agent testified about the results of testing initially prepared by another agent after reviewing pertinent forensic firearms testing data). "As long as [the expert] is applying his training and experience to the sources before him and reaching an independent judgment," there is typically no confrontation problem. *United States v. Johnson* (4th Cir. 2009), 2009 U.S. App. Lexis 26187, at *21.

Courts have found no confrontation problem where a DNA expert testified at a criminal trial in place of the testing analyst. For example, in *North Carolina v. Watts* (N.C. Ct. App. 2005), 616 S.E.2d 290, 293, 296-97, a North Carolina appellate court found no confrontation violation when a state agent testified as a forensic DNA analysis expert after reviewing the analysis of another state agent who was on vacation during trial. And in *Ellis v. Phillips* (S.D.N.Y. 2005), 2005 U.S. Dist. Lexis 13910, at *14, *79, *87, a New York federal district court found no confrontation problem when a DNA expert testified—after reviewing lab notes, worksheets, photographs, and the report generated by the testing analyst—in place of the testing analyst, who was undergoing cancer treatment at the time of trial. Here, Wiechman, a qualified DNA expert testified—after reviewing Duvall's extensive case file and the data generated by her testing—in place of Duvall, who was on maternity leave at the time of Crager's trial.

Courts have reached the same conclusion in other contexts as well. For example, a coroner can rely upon a deputy coroner's report as long as the coroner offers his own expert opinion as to cause of death. See *Louisiana v. Garner* (La. Ct. App. 2005), 913 So. 2d 874, 884. As a Louisiana appellate court explained:

> [The coroner's] testimony was not merely repeating [the deputy coroner's] autopsy report, but was his own expert medical opinion as to the fact that the victim was dead and the cause of his death. . . . The defendant has cited no authority to support his argument that the *Crawford* case bars a medical expert from rendering his own opinion, based on a review of medical records done by other doctors and health care providers.

Id. at 884-85. Accord *Kansas v. Lackey* (Kan. 2005), 120 P.3d 332, 352 (allowing expert testimony of a pathologist who did not conduct the autopsy, regarding time of death, based on expert's review of underlying data). And pathologists who testify about an autopsy regularly also testify about a toxicologist's findings of drug or alcohol content in bodily fluids collected during the autopsy. See Merit Br. of Appellant State of Ohio at 34.

The Third District below mistakenly concluded that there was a confrontation problem because Wiechman did not acquire "personal knowledge of the actual DNA testing process in this case" simply by reviewing Duvall's reports. *State v. Crager* (3d Dist.), 164 Ohio App. 3d 816, 2005-Ohio-6868, ¶ 49. But Wiechman did not just review Duvall's reports; instead, he examined all of the raw data generated during the testing process. Moreover, the Third District's conclusion was illogical because an expert's trial testimony as to his *own opinion* cannot raise confrontation concerns: *That expert* is available for cross-examination. See *Johnson*, 2009 U.S. Lexis 26187, at *21 ("The expert's opinion [is] an original product that can be tested through cross-examination."). It matters only that Crager had an opportunity to cross-examine Wiechman about his own opinions and his reliance on the raw DNA data.

3. The admission of the DNA reports likewise did not violate Crager's confrontation rights, and, even if the reports had been admitted in error, that error would be harmless.

The trial court's admission of two DNA reports into evidence likewise did not violate Crager's confrontation rights. Because both reports were offered only to show the basis of Wiechman's opinions—and not for their truth—they did not implicate Crager's confrontation rights. Moreover, even if the trial court had erred by admitting either report—and it did not—any such error was harmless because Wiechman testified to every conclusion that was included in the reports and because Crager did not challenge the accuracy or reliability of the DNA test results.

As an initial matter, this Court had no doubt in *Crager I* that the second report (Ex. 57) was properly admitted. Wiechman participated in the second round of DNA testing as a technical reviewer and the second report was properly introduced in conjunction with his testimony. As the dissent in *Crager I* explained, "[s]ince more than one person is responsible for the production of a DNA report, more than one person can testify as to the contents of a report." 2007-Ohio-6840, at ¶ 110 (Pfeifer, J., dissenting). (The dissenters disagreed only with the majority's conclusion that the *first* report (Ex. 56) was properly admitted, because Wiechman had first reviewed the first round of testing in preparation for trial. *Id.* at ¶ 90.)

The first report was properly admitted as well, because—like the second report—it was admitted to show the basis of Wiechman's expert opinion about the first round of DNA testing. The Confrontation Clause "does not bar the use of testimonial statements for purposes other than establishing the truth of the matter asserted." *Crawford*, 541 U.S. at 59 n.9 (citing *Tennessee v. Street* (1985), 471 U.S. 409, 414). When a qualified expert offers his opinion based upon his review of data generated by scientific testing, the underlying reports or data may be "admitted to explain the basis of the expert's opinion." *Engebretsen v. Fairchild Aircraft Corp.* (6th Cir.

1994), 21 F.3d 721, 728-29 (internal quotation omitted). Under these circumstances, the underlying reports were not offered for the truth of the matter asserted and do not raise any confrontation concerns. See *North Carolina v. Mobley* (N.C. Ct. App.), 2009 N.C. App. Lexis 1713, at *10-11 ("[E]vidence offered as the basis of an expert's opinion is not being offered for the truth of the matter asserted."); *Moon*, 512 F.3d at 361 ("When an expert testifies, the facts or data need not be admissible in evidence in order for the opinion or inference to be admitted."); *Kansas v. Appleby* (Kan.), 2009 Kan. Lexis 1080, at *78-79 (listing courts that have "reasoned that the Confrontation Clause is not violated if materials that form the basis of an expert's opinion are not submitted for the truth of their contents but are examined to assess the weight of the expert's opinion."); *Illinois v. Lovejoy* (Ill.), 2009 Ill. Lexis 1302, at *67-68 (explaining that toxicology evidence was admitted to show the jury the steps the testifying expert took to reach an opinion). "Allowing disclosure of the bases of an expert's opinion is essential to the factfinder's assessment of the credibility and weight to be given to it." *North Carolina v. Golphin* (N.C. 2000), 533 S.E.2d 168, 235 (internal quotation and citation omitted).

Here, the trial court admitted both DNA reports in conjunction with Wiechman's testimony to show "a basis for opinion of an expert who independently reviewed and confirmed the results, and is therefore not offered for the proof of the matter asserted." *Mobley*, 2009 N.C. App. Lexis 1713, at *11. Wiechman unquestionably conducted an independent review of the complete files for both rounds of DNA testing—and even served as the technical reviewer for the second round—before he reached his own conclusions about the significance of the raw scientific data. (Notably, Wiechman's review of Duvall's first round of testing in preparation for trial was identical to his review of Duvall's second round of testing, in his capacity as a technical reviewer.) Thus, the DNA reports were offered to show the data upon which Wiechman relied as

a basis for his opinions, not for their truth. Accordingly, the admission of the DNA reports did not implicate Crager's confrontation rights.

Even if the admission of one or both of these reports had violated Crager's confrontation rights, however (and it did not), that error was harmless beyond a reasonable doubt. Confrontation Clause violations "are subject to harmless-error analysis," which is evaluated "on the basis of the remaining evidence" in a case. *Coy v. Illinois* (1988), 487 U.S. 1012, 1021, 1022; see *Delaware v. Van Arsdall* (1986), 475 U.S. 673, 684 (applying several factors to determine whether a Confrontation Clause violation was harmless). Any alleged error in admitting the DNA reports in this case was unquestionably harmless for two reasons. First, Wiechman testified to all of the conclusions contained in the two reports so the same conclusions would have been before the jury even if the reports had not been admitted. Second, Crager never challenged the accuracy or reliability of the DNA test results. Crager did not argue that he was not present at the crime scene; instead, he suggested that someone else was present, too, and that person committed the murder. Trial Tr. at 785; see *id.* at 835, 846 (suggesting that Crager's DNA may have been on the victim because he came in contact with her while trying to prevent another individual from sexually assaulting her). Consistent with this theory, Crager argued that additional evidence should have been tested, *id.* at 990-93, but he "did not challenge the specific testing protocol or the accuracy of the raw data." *Crager I*, 2007-Ohio-6840, at ¶ 74 ("There is no indication in the questions or in Wiechman's responses that there were any flaws in the testing itself.").

In any event, Crager had a full opportunity to contest the results of the DNA tests when his trial counsel extensively cross-examined Wiechman, see Trial Tr. at 830-838, 845-46, and

Wiechman's responses were basically identical to what Duvall's would likely have been, *Crager I*, 2007-Ohio-6840, at ¶ 76.

B. *Melendez-Diaz* does not call into question, either explicitly or implicitly, this Court's holding that a defendant's confrontation rights are not violated when a qualified expert DNA analyst testifies about his own opinions based on data generated by a different DNA analyst.

Melendez-Diaz held that certain scientific reports are testimonial and thus trigger a defendant's confrontation rights. But *Melendez-Diaz* said nothing about whether a defendant's confrontation rights are violated when one qualified analyst testifies about his opinions based, at least in part, on data initially generated by another qualified analyst's scientific testing. Because *Melendez-Diaz* did not contradict or even undermine *Crager I*'s second holding, this Court should now confirm that a defendant's confrontation rights are "not violated when a qualified expert DNA analyst testifies at trial in place of the DNA analyst who actually conducted the testing." *Crager I*, 2007-Ohio-6840, at syl. ¶ 2.

In *Melendez-Diaz*, the United States Supreme Court considered whether drug lab reports admitted in Massachusetts courts, known as "certificates of analysis," are testimonial statements triggering the Confrontation Clause. The Court concluded that the certificates of analysis were "quite plainly affidavits" and therefore were "functionally identical to live, in-court testimony." 129 S. Ct. at 2532. Accordingly, the United States Constitution guaranteed the defendant the right to "to challenge or verify the results of [the] forensic test" in one particular way: confrontation. *Id.* at 2536. Because the defendant had no opportunity to cross-examine someone about these forensic tests, his confrontation rights were violated. *Id.* at 2542.

The facts of this case are "a far cry" from those of *Melendez-Diaz*, "where the expert was nowhere to be found," *Johnson*, 2009 U.S. App. Lexis 26187, at *25; here a qualified expert testified about the DNA evidence during Crager's trial, *Crager I*, 2007-Ohio-6840, at ¶ 73. As

explained above, BCI analyst Steven Wiechman "fully reviewed the complete file[s]" and "reached his *own* conclusions about both [DNA] reports 'to a reasonable degree of scientific certainty'" before testifying. *Id.* (emphasis added). As this Court's second holding in *Crager I* recognized, for the purposes of a Confrontation Clause analysis, there is a significant difference between introducing a scientific report without any testimony—as happened in *Melendez-Diaz*—and introducing a report alongside the testimony of a qualified expert who thoroughly reviewed all of the underlying data and testified about his own conclusions—as happened here. Wiechman did not testify about the contents of or the conclusions in Duvall's report; instead, he reviewed all the data in Duvall's file and testified about his *own* opinions as a qualified expert DNA analyst. It was "of no import that [Wiechman] did not actively participate in both rounds of DNA testing," *id.*, because Crager was able to cross-examine Wiechman about his interpretation of the DNA evidence, *id.* at ¶ 76.

Stated simply, *Melendez-Diaz* did not change the fact that "[a]n expert may base [his] opinions on data gathered by others." *Rector*, 681 S.E.2d at 160 (internal citation and quotation omitted). Accordingly, "*Melendez-Diaz* is distinguishable from instances in which a witness testifies at trial about scientific analyses in which he or she did not participate." *Illinois v. Johnson* (Ill. App.), 915 N.E.2d 845, 2009 Ill. App. Lexis 1103, at *25; see *Appleby*, 2009 Kan. Lexis 1080, at *76. As numerous courts have already confirmed after *Melendez-Diaz*, a qualified expert may still offer an expert opinion in reliance on another expert's work. For example, where a lab supervisor testifies about the results of DNA testing, there is no confrontation problem because "the tests results . . . at best, served as a partial basis for the opinion of a testifying expert." *Larkin v. Yates* (C.D. Cal.), 2009 U.S. Dist. Lexis 60106, at *4; see *Johnson*, Ill. App. Lexis 11032, at *24 (quoting *Larkin*); *Washington v. Sione P. Lui* (Wash.

Ct. App.), 2009 Wash. App. Lexis 2892, at *24 (medical examiner and DNA expert testified based partly on forensic evidence developed by others, but autopsy report and DNA reports were not introduced); *Hamilton v. Texas* (Tex. App), 2009 Tex. App. Lexis 6923, at *19 (DNA expert's opinion based on data generated by scientific instruments operated by other scientists did not violate the Confrontation Clause); *Wood v. Texas* (Tex. App.), 2009 Tex. App. Lexis 7882, at *33 ("[T]he Confrontation Clause is not violated merely because an expert bases an opinion on inadmissible testimonial hearsay."); *Mobley*, 2009 N.C. App. Lexis 1713, at *10 (confirming after *Melendez-Diaz* that well-settled North Carolina case law allows an expert to testify to her own conclusions based on the testing of others in the field). The underlying data is not being presented as evidence against a defendant; instead, the *expert's opinion* is evidence against the defendant—and the expert is available for cross-examination. Prosecutors can still "choose among the many ways of proving up scientific results" after *Melendez-Diaz*, "as long as the way chosen featured live witnesses" who are subject to cross-examination. *Pendergrass v. Indiana* (Ind. 2009), 913 N.E.2d 703, 708.

C. Retreating from the second holding of *Crager I* would unnecessarily burden Ohio laboratories and courts, and would generally slow the criminal process in Ohio.

This Court's guidance about who can testify about scientific evidence—such as the second holding of *Crager I*—is all the more important in the wake of *Melendez-Diaz*. As Justice Kennedy explained, *Melendez-Diaz* has "vast potential to disrupt criminal procedures that already give ample protections against the misuse of scientific evidence" because it leaves so many questions unanswered. 129 S. Ct. at 2544 (Kennedy, J., dissenting) (critiquing the majority for failing to clearly define which (or how many) of the analysts contributing to each scientific test must testify to satisfy the Confrontation Clause). By reaffirming *Crager I*'s second holding, this Court can limit the disruption *Melendez-Diaz* causes in Ohio.

As the Court explained in *Crager I*, requiring the State always to produce the testing analyst (or analysts) when it admits a DNA report—rather than allowing any qualified expert to testify about his conclusions based on data generated by DNA testing—would have significant adverse consequences. *Crager I*, 2007-Ohio-6840, at ¶ 77. For example,

> If all DNA analysts who had actively participated in the testing and review process that generated the DNA reports were unavailable to testify (for example, if all had died), should that mean that no expert DNA witness, after reviewing the relevant materials, would have been qualified to testify? If that were the situation, would the DNA tests have to be redone, even though there are no questions about the accuracy of the tests, and there are no indications of any discrepancies?

Id. Not only is it unnecessary to conclude that the Confrontation Clause requires the testimony of a testing analyst, but in light of current trends in DNA testing and analysis, it would be seriously impractical to require testimony from every analyst, technician, and lab employee who has a hand in a scientific test.

1. DNA testing is time-consuming and labor-intensive, and it "represents the work of more that one person."

DNA testing and analysis is a multi-step process, extending over several days, Trial Tr. at 798, and "the practical reality of a DNA analysis is that it represents the work of more than one person," *Crager I*, 2007-Ohio-6840, at ¶ 110 (Pfeifer, J., dissenting) (explaining that BCI protocol required input from two analysts and a supervisor on both DNA reports in this case). In Ohio, DNA testing and analysis occurs at BCI's nationally accredited crime labs, Trial Tr. at 795-97, and at eight other laboratories.[1]

[1] In addition to BCI's three labs, the following public labs in Ohio conduct DNA testing and analysis: Hamilton County Coroner's Office, Miami Valley Regional Crime Laboratory, Columbus Police Department Crime Laboratory, Mansfield Police Department Crime Laboratory, Cuyahoga County Coroner's Laboratory, Lake County Crime Laboratory, and Canton/Stark County Crime Laboratory. DNA Diagnostics, Inc., a privately-owned company located in Fairfield, Ohio, also conducts forensic DNA testing and analysis. BCI outsources additional cases to Laboratory Corporation of America ("LabCorp"), located in Burlington, North Carolina.

The process of extracting DNA and determining a DNA profile is labor-intensive. At BCI, DNA analysts are responsible both for physically testing samples and for interpreting the data generated by those tests. (This differs from some labs, where technicians perform the physical testing and analysts are responsible only for interpreting the data.) Every DNA analyst at BCI follows a standardized, written protocol for the many steps involved in testing and analysis. The process is repetitive and laborious. See Ex. 1 ("BCI DNA Testing Overview") (depicting the stages and the timing of DNA testing and analysis at BCI).

The first stage of DNA testing involves lab work. An analyst examines evidence from a crime scene, performs chemical tests to determine which body fluids are present, and summarizes these findings in a written report. See Trial Tr. at 807. Next, an analyst chemically extracts DNA from the body fluid stains. *Id.* After verifying that a sample contains enough material to be tested, the analyst "amplifies" the samples (to allow testing of even minute amounts), and processes them through a "genetic analyzer." The genetic analyzer generates an electropherogram, which can be viewed on a computer screen or on paper.

After lab work is completed, an analyst engages in the more difficult work of interpreting the data. Using the electropherogram, the analyst interprets the data to arrive at a genetic profile for the sample. *Id.* at 803-04. The analyst then uses the genetic profile to determine whether a victim or subject can be excluded as a source of the DNA found on the item(s) tested. If a victim or subject cannot be excluded, the analyst determines the expected frequency of occurrence of the DNA profile(s) identified by using FBI software and data. See *id.* at 814, 840. This final step—interpreting profiles, making comparisons to reference standards, and generating estimates of profile frequency—requires more training and experience than any other step of DNA testing.

Before BCI issues a final report about the results of a DNA test, a second analyst conducts a thorough "technical review" of the first analyst's work. The second analyst reviews the entire case file—which includes detailed descriptions of the tests performed, methodology used, and the data generated—verifies the methodology, ensures that the correct information was entered into the genetic analyzer, and interprets the electropherogram to confirm the DNA identification. See *id.* at 803-04. The technical reviewer then uses that information independently to verify the first analyst's analysis and conclusions. See *id.* at 797-98. In other words, before BCI issues a report, two analysts each independently complete the most challenging part of DNA testing—interpretation and analysis.

After the technical review is completed, a supervisor at BCI reviews the draft report to ensure that it complies with BCI procedures and standards. *Id.* at 797-98. Once the technical reviewer and supervisor have both approved a report, it becomes final and can be released to the requesting agency. See *id.* at 803-04.

2. DNA laboratories across the country have worked to increase accuracy and efficiency as demand for DNA testing continues to rise.

The utility of DNA testing in investigating and prosecuting sexual offenses and homicides is well-established and, more recently, DNA testing has proved increasingly useful in solving property crimes. As this tool becomes increasingly popular, government labs have struggled to keep up with demand. According to BCI, in the early 1990s, it was typical for a single forensic scientist, working with a small number of samples, to perform every step of DNA testing and analysis, ranging from scanning evidence for body fluid stains to writing a report. But, in light of increasing demand, that generalist model is no longer feasible for most labs.[2]

[2] Some smaller labs with smaller caseloads, such as the Miami Valley Regional Crime Laboratory in Dayton, Ohio—still use the generalist model.

For example, annual DNA case submissions at BCI rose from 1058 in 2004 to 2885 in 2008. These increases can be attributed to several factors, such as improvements in the sensitivity of DNA tests, the ability of the Combined DNA Index System ("CODIS") database (an ever-growing database that compares DNA samples against convicted offender samples and forensic samples from other cases) to provide leads, and the desire of prosecutors to respond to jurors' increased expectations of DNA evidence. Current DNA testing requests are also generated in part by cold cases and post-conviction proceedings.

In light of these increasing caseloads, BCI and countless other labs are working to make DNA testing and analysis more efficient, without sacrificing accuracy. As DNA technology has evolved, allowing for greater collaboration among forensic scientists, BCI has responded by adopting more collaborative testing protocols. For instance, as DNA technology developed greater sensitivity, BCI began to separate reference standards from the questioned samples and process the standards together in batches. In 2009, BCI created separate specialized units for (1) forensic biology, or examining evidence to identify bodily fluid stains, and (2) DNA testing. Also in 2009, BCI began using automation—robotics—to perform many lab manipulations. Assisted by robots, one analyst performs the first stages of testing on a large batch of samples encompassing many cases—extracting the DNA, determining the amount of human DNA present, and amplifying and processing it through a genetic analyzer. Then, other analysts interpret the profiles, make comparisons and conclusions and write reports for the individual cases. See Ex. 1 ("BCI DNA Testing Overview").

Some other labs now employ technicians, who have less training and are paid less, to perform the first stage of DNA testing.[3] (An electropherogram produced by a lab technician is

[3] For example, according to BCI, LabCorp—which handles outsourced DNA testing from BCI—employs technicians to perform the first stages of testing. LabCorp has only two forensic scientists, who both sign every

identical to one that would be produced by an analyst who performed the same lab testing.) After the lab work is completed, a DNA analyst analyzes and interprets the results.[4] This division of labor reduces turn-around time in labs, and can alleviate testing backlogs because a technician can continue to process samples even when an analyst is out of the lab to testify in court.

3. Disallowing experts from testifying about their own interpretations of data generated by scientific testing would significantly burden Ohio laboratories and slow the criminal process in Ohio.

As explained above, Justice Kennedy's dissenting opinion in *Melendez-Diaz* predicted that the majority's opinion would "disrupt forensic investigations . . . and put prosecutions . . . at risk of dismissal" whenever a lab technician "simply does not or cannot appear." *Melendez-Diaz*, 129 S. Ct. at 2549 (Kennedy, J., dissenting). If this Court were to abandon *Crager I*'s second holding, this risk would be realized in Ohio—and the harm would be further exacerbated if this Court reaches even further than the United States Supreme Court did in *Melendez-Diaz*. The Confrontation Clause does not require that either (1) *only* a testing analyst—as opposed to any qualified expert—can discuss the conclusions of scientific tests, or (2) every person at all involved in a scientific test must testify. Either of these holdings would significantly undercut Ohio's recent strides to make DNA and other forensic testing widely available to prosecutors.

If this Court were to decide that prosecutors cannot call any qualified expert to testify about the raw data produced by scientific testing and ask that expert about his own conclusions, then, as a logical matter, prosecutors would have to call *every* person who had a hand, however

---

DNA test report. These two scientists each handle testimony for half of LabCorp's cases and, if both of them are unavailable, the lab supervisor testifies. LabCorp follows this practice in trials throughout the country. By using this model, LabCorp is able to process more DNA testing requests than BCI in the same amount of time.

[4] The relationship between a lab technician and DNA analyst is analogous to that between an X-ray technician and a physician who reviews X-rays. An X-ray technician knows how to position a patient and what settings to use for any view that a physician may request. Thus, regardless of who the technician is, a lateral wrist view is the same. And, once the X-ray is made, any physician trained to read X-rays can interpret it.

insignificant, in the testing and analysis of each sample. In other words, if this Court were to conclude that a defendant's confrontation rights require the State to produce the testing analyst, then there would be no principled way to distinguish between the various people involved in the testing process. After all, if a defendant is entitled to confront the testing analyst, how could that constitutional right not extend to every other person involved in the testing, from the person cataloging evidence when it is received at the lab to the analyst who conducts a final technical review of a testing analyst's work? But cf. *Melendez-Diaz*, 129 S. Ct. at 2532 n.1 ("[D]ocuments prepared in the regular course of equipment maintenance may well qualify as nontestimonial records.").

Subjecting each lab technician and analyst to cross-examination every time she somehow contributes to a report that is later used at trial would also significantly burden BCI and other testing facilities across the State. In addition to the widespread use of DNA testing, these facilities perform many other scientific tests on various materials, including fingerprints, firearms, and even blood-spatter patterns. BCI and other forensic laboratories process thousands of forensic samples annually. In 2008, BCI received 2885 requests for DNA and forensic biology testing. This represents 4223 individual DNA analyses. Abandoning the second holding of *Crager I* could therefore affect countless criminal investigations and prosecutions.

All of these analyses are vital to criminal prosecutions in Ohio. And for many types of scientific testing, the forensic analysis of a sample involves *several* steps, performed by *several* scientists and technicians. BCI does not require analysts to collaborate on scientific tests other than DNA analyses, but other Ohio labs do. And every scientific test involves persons other than analysts. For example, someone receives the evidence, logs it, and secures it until a forensic scientist is ready to examine it. And if it is not clear whether every single scientist or technician

or even every person in a chain of custody must testify about a scientific report, see, *supra*, at pp. 13-14, it is likely that the number of witnesses at criminal trials will increase, trial costs will rise, and trial delays will occur whenever a required witness is unavailable. Requiring more lab employees to testify will frustrate victims, law enforcement, and the courts, and, by exacerbating backlogs at labs, could result in more crime because offenders will remain free longer.

Given the sheer number of DNA tests performed in Ohio and the number of lab employees who might be involved in generating the results of a single scientific test, it would be virtually impossible—and highly inefficient—to require each of these individuals to testify at trial. Moreover, even if the Court were to conclude that only the analyst with primary responsibility for a particular test must testify, with all testing, there is always a danger that the primary analyst will not be available at trial. In some cases, prosecutions do not occur until years after a crime, such as when a suspect cannot be located or identified until years later. See, e.g., *North Carolina v. Forte* (N.C. 2006), 629 S.E.2d 137, 140-42 (DNA tests conducted in 1990 for three related aggravated murder cases yielded no match; suspect not identified until 2001). By that time, an analyst may no longer work for the lab, no longer reside in the state, be ill, or have passed away. If the primary analyst were unavailable, the State would have to either attempt to prosecute without the scientific evidence, or assign another analyst to perform the test again and testify at trial. But retesting years after initial testing is impossible in many cases. This is especially true of DNA testing, because the analysis itself may destroy most or all of a sample. Even when reanalysis is possible, however, it would be a huge expenditure of time, money, and resources to retest materials that have already been competently and accurately analyzed—simply because a particular analyst is not available to testify. A defendant's confrontation rights do not entitle him

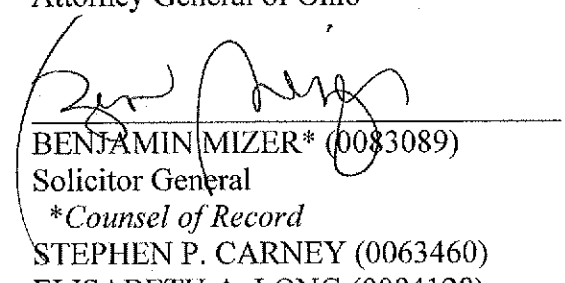
to decide how a prosecutor must present the evidence against him—as long as the defendant has an opportunity to confront the witness who *does* testify.

CONCLUSION

For the above reasons, this Court should reaffirm the second holding of *Crager I* and reverse the decision below.

Respectfully submitted,

RICHARD CORDRAY (0038034)
Attorney General of Ohio



BENJAMIN MIZER* (0083089)
Solicitor General
**Counsel of Record*
STEPHEN P. CARNEY (0063460)
ELISABETH A. LONG (0084128)
Deputy Solicitors
ELISE PORTER (0055548)
JAMES SLAGLE (0032360)
Assistant Attorneys General
30 East Broad Street, 17th Floor
Columbus, Ohio 43215
614-466-8980
614-466-5087 fax
benjamin.mizer@ohioattorneygeneral.gov

Counsel for *Amicus Curiae*
Ohio Attorney General Richard Cordray

CERTIFICATE OF SERVICE

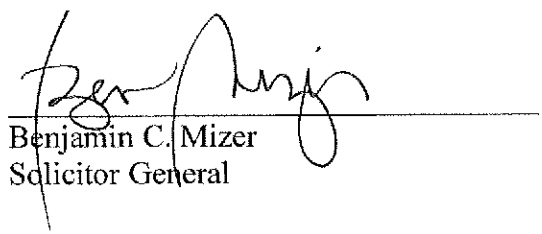
I certify that a copy of the foregoing Supplemental Brief of *Amicus Curiae* Ohio Attorney General Richard Cordray in Support of Plaintiff-Appellant State of Ohio was served by U.S. mail this 8th day of December, 2009, upon the following counsel:

Brent Yager
Marion County Prosecutor
134 East Center Street
Marion, Ohio 43302

Counsel for Plaintiff-Appellant
State of Ohio

Kevin P. Collins
Collins & Lowther
132 South Main Street
Marion, Ohio 43302-3889

Counsel for Defendant-Appellee
Lee Crager



Benjamin C. Mizer
Solicitor General

BCI DNA Testing Overview

Elizabeth Benzinger
DNA Quality Assurance Administrator, BCI

Day	Hands on time	Task	Activities
1	30 minutes per case	Make analysis plan	Review case facts, request missing information, determine investigative needs, select items to examine.
1	60 minutes to two or more days per case	Screen evidence items – rape kits, bloody clothes, etc.	Perform chemical tests to confirm body fluid presence, cut out and preserve stains of interest.
1	30 minutes to two hours per case	Write report	Document findings for each item.
2	2 hours	Begin DNA extraction	Put cuttings into test tubes, add DNA extraction chemicals, incubate for 2 hours to overnight.
3	5 hours	Complete DNA extraction	Several centrifugations and reagent changes.
3	1.5 hours	Begin human DNA quantitation	Add chemicals to each sample, incubate 2 hours.
4	30 minutes	Finish human DNA quantitation	Interpret quantitation data, make calculations.
4	3 hours	Amplify DNA	Add chemicals to each sample, incubate 2 hours.
5	2 hours	Analyze amplified DNA	Add chemicals to each sample, load into genetic analyzer, process requires several hours to overnight.
6	1-2 hours per case	Interpretation of results and reporting	Analyze raw data, print electropherograms, compare profiles to reference standards. Write report, calculate frequencies.
7	1-3 hours, depending on complexity	Technical review of case file by second analyst	Review case facts, review records created during analytical steps, complete own interpretations, comparisons, check frequency calculations.
8	15 minutes to several hours, depending on complexity and specifics	Administrative review and approval	Review file for adherence to BCI policy and protocol, review data and conclusions, verify that no more testing is required.

This is a typical schedule for a batch of 3 cases, totaling 24 samples. The days for each step are not necessarily consecutive. For instance, an analyst may be out of the lab to give testimony on one or more days. The activities on Days 2-5 can be consolidated in large batches of 75 or more samples and completed in two days with automation.

EXHIBIT 1