

CHAPTER 1

Confrontation: where forensic science meets the sixth amendment

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“There are few subjects, perhaps, upon which this Court and other courts have been more nearly unanimous than in their expressions of belief that the right of confrontation and cross-examination is an essential and fundamental requirement for the kind of fair trial which is this country’s constitutional goal.” (*Pointer v Texas*, 1965, Section I, para.4).

The Confrontation Clause compels the witness “to stand face to face with the jury in order that they may look at him, and judge by his demeanor upon the stand and the manner in which he gives his testimony whether he is worthy of belief.” (*Mattox v United States*, 1895, Section 3, para. 4).

Several United States (US) Supreme Court rulings, framed by the Confrontation Clause of the Sixth Amendment, have spoken directly to the admissibility of forensic analysis and the testimony of forensic scientists. The Confrontation Clause requires criminal defendants to have an opportunity to cross-examine witnesses against them. When the witness is an expert, like a Forensic Anthropologist, their reports can be considered “out-of-court testimony,” which means the expert has to appear in court and the defendant has to have an opportunity to question them. Supreme Court rulings on the Confrontation Clause have held that an opportunity for cross-examination is required even if the reports are considered to be reliable (*Crawford v. Washington*, 541 U.S. 36 (2004)), classified forensic analytical reports as out-of-court testimony subject to this requirement, (*Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009)), and limited the use of surrogate witnesses to meet this requirement (*Bullcoming v. New Mexico*, 564 U.S. 647 (2011)). But the Supreme Court has so far failed to define who must be called to testify when admitting complex analyses involving several analysts (*Williams v.*

Illinois, 567 U.S. 50 (2012)). In these rulings, the US Supreme Court responded to specific case facts set before it and provided guidance for the case at hand. Collaterally, however, these decisions have a ripple effect throughout the legal system, impacting cases with similar but not identical facts, creating significant room for interpretation and at times causing confusion for the lower courts. Furthermore, the Court issued contradicting rulings in two cases addressing the testimony of forensic analysts (*Bullcoming v. New Mexico*, *Williams v. Illinois*). These piecemeal rulings leave prosecutors, defendants, and judges to navigate complex forensic analyses that involve multiple analysts with little direction, catching forensic scientists in the turbulence. Forensic practitioners must be aware of these US Supreme Court decisions, understand their impact on the admissibility of forensic reports, and prepare their laboratory practice to meet the requirements of the legal system.

In this chapter, the US Supreme Court opinions that impact forensic practitioners are presented in chronological order. Some of the cases (*Melendez-Diaz v. Massachusetts*, *Bullcoming v. New Mexico*, *Williams v. Illinois*) directly address admissibility of forensic analytical reports and analyst testimony, while others (*Ohio v. Roberts*, 448 U.S. 56 (1980), *Crawford v. Washington*) provide historical background. Before the court cases are presented, the history of the Sixth Amendment and its importance to the legal system are reviewed. After the court cases, the impact of the Court's opinions on the practice of forensic science is discussed and suggestions for best practice to insure the admissibility of forensic analysis are presented.

1.1 Sixth amendment

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defense.

The Sixth Amendment was passed by Congress on September 25, 1789 and ratified on December 15, 1791 (Bibas and Fisher n.d.). The purpose of the Sixth Amendment was to legitimize criminal prosecution ensuring accuracy and fairness. At the time the Founding Fathers conceived the Bill of Rights, law was maintained by local sheriffs and unsworn men serving as constables or night watchmen. Typically, criminal cases were initiated by an accuser, not a public prosecutor. The accuser and defendant met in trial with no legal counsel, representing themselves and bringing forth witnesses to support their stories.

Trials were short sessions (minutes to hours) of arguing in front of a 12-member jury made up of local citizens who knew both the accuser and the accused. The jurors observed both the accuser and the accused throughout the trial, debated if the defendant was guilty and decided if he deserved mercy. Following the government's power to punish, the jury identified the appropriate punishment, including the death penalty. The process assured the community that justice was carried out swiftly, impartially, and fairly (Bibas and Fisher n.d.). The Sixth Amendment strengthened the adversarial process and maintained the process of each side conducting its own investigation, presenting its own evidence and arguing its side in open court.

The Compulsory Process Clause and the Confrontation Clause directly address the witness as well as the defendant. The Compulsory Process Clause enables a defendant to subpoena a witness and to force him to testify. The Confrontation Clause requires prosecution witnesses to testify under oath and subjects them to cross-examination. The witnesses must testify in court in the presence of the defendant. The Clauses also guarantee the defendant's right to be present in the courtroom throughout the trial (Bibas and Fisher n.d.).

Since the Sixth Amendment was ratified, the practice of law enforcement and the legal system has evolved. Professional police forces became responsible for investigating crimes and arresting suspects. Public prosecutors initiated legal proceedings and defendants hired lawyers to represent them. In some communities, public defender offices were created. Judges created rules of evidence and provided clear instructions to juries. Meanwhile, lawyers began selecting jurors. Trials grew longer and became more complex (Bibas and Fisher n.d.).

By the middle of the nineteenth century, the Supreme Court had ruled that the Sixth Amendment protections applied to state courts as well as federal, greatly expanding the reach of the Amendment. As a result, the Court has had multiple occasions to define the Amendment's protections.

1.1.1 *Ohio v. Roberts*, 448 U.S. 56 (1980). Argued November 26, 1979 – decided June 23, 1980

On January 7, 1975, Herschel Roberts was arrested and charged with forgery of checks in the name of Bernard Isaacs and possession of stolen credit cards belonging to Bernard Isaacs. A preliminary hearing was held in Municipal Court. The defense called Anita Isaacs, Bernard Isaacs' daughter, as their only witness. Anita testified that she knew the respondent and that she allowed him to use her apartment while she was away. Defense counsel questioned Anita at length in an attempt to have Anita admit that she gave the checks and credit cards to the respondent without informing him that she did not have permission to use them. Anita denied the allegation. The defense counsel did not ask to have the witness declared hostile nor request permission to cross-examine her. The prosecutor did not question Anita.

Between the preliminary hearing and the trial, five subpoenas for four trial dates were issued to Anita and sent to her parents' address. Anita was not at the address at the time the subpoenas were delivered and she did not appear for trial.

During the trial, Roberts testified that Anita provided him the checks and credit cards with the understanding that he could use them. Following Ohio state law which allows preliminary examination testimony of a witness who cannot for any reason be produced at the trial, the prosecution offered the transcript from Anita's testimony as a rebuttal. The defense objected to the use of the transcript under the Confrontation Clause of the Sixth Amendment. A *voir dire* hearing (a preliminary questioning of a witness to determine his competence to testify) was held and Anita's mother testified that she did not know her daughter's whereabouts, had spoken to her daughter on two occasions since the preliminary hearing, and did not know of anyone who knew her whereabouts. One of the phone conversations with Anita was facilitated by a social worker in San Francisco following a welfare application filed by Anita. The jury found the respondent guilty on all counts.

The Court of Appeals of Ohio reversed the finding on the basis that the prosecution failed to make a showing of "good faith effort" to find the witness. The State made no effort to find the daughter prior to trial; no one attempted to contact the social worker. The only effort made regarding Anita's whereabouts was the *voir dire* requested by the defense.

The Ohio Supreme Court upheld the Court of Appeals ruling, but based on different grounds. Anita's whereabouts were unknown and the trial judge could have reasonably concluded based on Anita's mother's *voir dire* hearing that efforts to find the witness would have been unsuccessful. However, the Court upheld that the transcript was inadmissible on the basis that the respondent did not have an opportunity to cross-examine the witness. The defense had an opportunity to question Anita during the preliminary hearing, but the purpose of the preliminary hearing is to determine probable cause. The Court felt that the mere opportunity to cross-examine a witness did not meet the Confrontation Clause requirement. The fact that the respondent did not cross-examine the witness during the preliminary hearing and the witness was not available for cross-examination during trial made the witness' transcript inadmissible.

The US Supreme Court reversed the ruling by the Ohio Supreme Court. Justice Blackmun wrote the opinion of the Court and was joined by Justices Burger, Stewart, Powell, and Rehnquist. The Justices found that the original testimony by Anita met the "indicia of reliability" requirement and that Anita was unavailable for trial. Based on these two facts, the transcript of her testimony was admissible.

The dissent, written by Justice Brennan and joined by Justices Marshall and Stevens, argued that the State failed to meet the requirement of producing Anita for court. Sending five subpoenas to the residence of Anita's parents was not a

“good-faith effort” to locate the witness. Justice Brennan opined that the State would have exerted a much greater effort to locate the witness if it didn’t have her statement from the preliminary hearing.

Ohio v. Roberts set forth the standard that a statement is admissible if it is found to be reliable and trustworthy. If the statement is deemed sufficiently reliable, cross-examination is not necessary and the Confrontation Clause is not violated. This opinion set the precedent that an analytical report found to be trustworthy could be admitted without testimony, and likewise cross-examination, of the witness.

1.1.2 Crawford v. Washington, 541 U.S. 36 (2004). Argued November 10, 2003 – decided March 8, 2004

The opinion of *Ohio v. Roberts* was overturned by *Crawford v. Washington*. In this case the Court opined that cross-examination is the only way to satisfy the Confrontation Clause. The witness must be available to be questioned by the accused and the jury must be able to observe his response and measure his truthfulness. The facts of the case are given in the following.

Michael Crawford and his wife Sylvia entered the apartment of Kenneth Lee to confront him. Sylvia claimed that Kenneth had attempted to rape her. An altercation ensued and Michael stabbed Kenneth. Michael and Sylvia were arrested, received their Miranda warnings and were separately interrogated by detectives on two separate occasions. Both individuals gave ambiguous and similar statements regarding whether or not the victim wielded a weapon at the time of the stabbing. Sylvia did not testify during the trial. Washington has a state marital privilege which bars a spouse from testifying without the other spouse’s consent. However, the court admitted Sylvia’s statement under the standard set forth by *Ohio v. Roberts* reasoning that the out-of-court statement was sufficiently reliable based on the fact that the defendant and the witness gave similar statements independently on two occasions. The defense argued that admission of the statement without the opportunity for cross-examination violated the accused’s right to confront the witness. The court found the statement admissible and the jury found the defendant guilty.

The Washington Court of Appeals reversed the decision. The court focused on the trustworthiness of Sylvia’s out-of-court testimony and found it to be unreliable on several points: it contradicted one of her earlier statements; the statement was a response to a specific question; and, she admitted to closing her eyes during the altercation. On appeal, the Washington Supreme Court reinstated the conviction. The court agreed with the trial court’s opinion that the statement of the defendant and the witness were nearly identical and therefore reliable.

The US Supreme Court reversed the decision on the grounds that Sylvia’s statement was inadmissible. The Justices came to this decision through careful

examination of the history of the Confrontation Clause, finding that it was not limited to in-court testimony. The spirit of the Sixth Amendment was to allow a witness to confront any accuser regardless of how the accusation was being introduced into the trial: out-of-court statement or in-court testimony. The Court's ruling and subsequent cases define a new standard that cross-examination was the only acceptable means of satisfying the Confrontation Clause for statements that are deemed to be testimonial (Garvey 2013). The following case defined "testimonial" in the eye of the Court.

1.1.3 *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009). Argued November 10, 2008 – decided June 25, 2009

Thomas Wright was a Kmart employee who was engaged in suspicious behavior. Wright regularly received a phone call during work after which he was picked up by a blue sedan in front of the store and then returned after a short time. The police were alerted to this suspicious activity by Wright's co-worker and set up surveillance in the Kmart parking lot. The police witnessed this activity and detained Wright when he returned from one of these short trips. They found four clear baggies containing a white powdery substance in Wright's possession. Additional police officers were called to the scene and they arrested two passengers in the car. The officers placed the three men in a police car and drove them to the police station. During the drive, the police witnessed one of the arrestees fidgeting in the back seat. Once they were back at the police station, the officer searched the car and found, hidden in the car seat, a baggie holding 19 smaller baggies each containing a white powdery substance.

Luis Melendez-Diaz was one of the three men arrested during the event and was charged with distributing and trafficking cocaine. The trial judge admitted into evidence the baggies of white powdery substance seized from Wright and the police car and three certificates of analysis. The certificates of analysis showed that the seized substance was found to contain cocaine. The certificates of analysis were sworn to before a notary public by analysts of the State Laboratory Institute of Massachusetts Department of Public Health.

Defense counsel objected to the admission of the certificates, stating that the US Supreme Court's decision in *Crawford v. Washington* required the analysts to testify in person. The objection was overruled and the certificates were admitted pursuant to state law that recognized the certificates as accurate until proven otherwise. The jury found Melendez-Diaz guilty.

Melendez-Diaz appealed on the grounds that the admission of the certificates violated the Confrontation Clause. The Appeals Court of Massachusetts rejected the claim and upheld the guilty verdict.

The US Supreme Court accepted review of the case. The majority decision saw the crux of the issue as whether a certificate of analysis was "testimonial,"

rendering the analyst who authored it a witness subject to the defendant's right of confrontation under the Sixth Amendment. The majority concluded that the certificates of analysis were affidavits created for the purpose of establishing or proving a fact, and accordingly were equivalent to live, in-person testimony. Further, the Justices stated that it was reasonable to assume that the analyst was aware of the evidentiary purpose of the certificate. In light of the *Crawford* decision, certificates of analysis were testimonial statements and analysts were witnesses for the purpose of the Sixth Amendment.

Four Justices dissented, arguing that the analyst was not an "accusatory" witness, and that the analyst's testimony was impactful only when considered with other evidence linking the defendant to the contraband. However, the majority clearly articulated that the Confrontation Clause of the Sixth Amendment speaks to two types of witnesses: witnesses against the defendant; and witnesses in his favor. There is no third type of witness, i.e. a witness that is advantageous to the prosecution, but immune to cross-examination.

The dissent further argued that the testimony provided at trial (certificate of analysis) is neutral, resulting from scientific testing. They suspected that the analyst would not alter the findings of his report when forced to confront his witness. The majority responded that the National Academy of Sciences report *Strengthening Forensic Science in the United States: A Path Forward* is contrary to this argument, in as much as it highlights the weaknesses of forensic science and identifies serious deficiencies that have been found in forensic evidence used in trial (Edwards 2010). The Justices recognized that an honest analyst will not change his testimony, but a fraudulent analyst may. Further, a poorly trained and deficient analyst may be disclosed during cross-examination. The Justices accordingly confirmed the right of confrontation as one means of assuring accurate forensic analysis, although not the ideal method to identify poor science.

Also, of importance was the quality of the certificate of analysis. The report solely identified the seized substance as containing cocaine. The report did not identify the method used to test the substance or indicate if the method was routine, nor did it state if the results involved interpretation, thereby increasing the potential for human error. These concerns additionally could have been explored during cross-examination.

Of interest, the dissent noted that the majority's decision referred to "an analyst," but failed to define that term. Therefore, an analyst could be anyone who played a role in the testing including analysts, technicians, and even the individual who calibrates the equipment. The dissent warned that this vagueness could put undue pressure on the forensic science community as prosecutors called and defense required a parade of witnesses.

1.1.4 *Bullcoming v. New Mexico*, 564 U.S. 647 (2011). Argued March 2, 2011 – decided June 23, 2011

In *Bullcoming v. New Mexico*, the Supreme Court was faced with evaluating the appropriateness of surrogate witnesses. Donald Bullcoming was arrested on charges of driving while intoxicated (DWI). During trial, the prosecution admitted the laboratory report certifying that Bullcoming's blood alcohol concentration was above the legal limit. The prosecution did not call the original analyst, who was on unpaid leave at the time of the trial, to testify; instead, they called an alternate analyst. The alternate analyst was certified and performed the same analyses following the same methods on a regular basis; however, he did not observe the original analyst perform the test or supervise his work.

The defense learned of the surrogate analyst during the trial and was caught by surprise. Bullcoming's counsel argued that admission of the laboratory report without an opportunity to cross-examine the original analyst was a violation of the defendant's Sixth Amendment right. The judge overruled the objection and admitted the analytical report as a business record. The court convicted Bullcoming on the charge of aggravated DWI.

The New Mexico Court of Appeals upheld the lower court ruling. The Court of Appeals concluded that the blood alcohol report was non-testimonial and routinely prepared. The nature of the documents ensured trustworthiness under the *Ohio v. Roberts* opinion.

While Bullcoming's case was pending appeal before the New Mexico Supreme Court, the US Supreme Court delivered its opinion in *Melendez-Diaz v. Massachusetts*. As previously stated, this opinion clearly identified analytical reports as testimony. In light of this ruling, the New Mexico Supreme Court recognized the analytical report as testimony, but still found it admissible. The Court reasoned that the original analyst was simply transferring information from a machine (gas chromatograph) to a report. And, although the surrogate analyst did not observe the original analyst at work or supervise his work, the surrogate analyst, being qualified to operate the gas chromatograph, could testify to the findings in the report. The Court acknowledged that it was imperative for an analyst to testify because neither the analytical machine nor the report could be questioned; however, the surrogate was sufficient to preserve the defendant's right to confrontation.

On appeal, the US Supreme Court rejected this reasoning, holding that the witness who made the out-of-court testimony (in this case signed the analytical report) must be available for cross-examination. The Justices found that there was much more involved in performing the analytical test than simply transferring data from an instrument to a report. For example, the analyst received the evidence in its original state, ensured the case number was correctly reported, and determined that the instrument was functioning correctly. The accused had

the right to confront the analyst who actually handled the evidence and produced the certificate. A surrogate witness could not answer to what the original witness knew or observed about the events he certified, nor expose any of that analyst's deficiencies. Justice Ginsburg summarized the Court's opinion by stating, "we hold that surrogate testimony of that order does not meet the constitutional requirement" (*Bullcoming v. New Mexico* 2011, para. 4).

The dissenting Justices (Kennedy, Roberts, Alito, and Breyer) raised concerns regarding multistep forensic analysis that involved more than one analyst. They questioned how the court, prosecution, and defense would know which analyst or technician should be called to testify. Should every analyst and technician who was involved in the analysis be called?

1.1.5 *Williams v. Illinois*, 567 U.S. 50 (2012). Argued December 6, 2011 – decided June 18, 2012

In this case, the Justices made the muddy waters even murkier by failing to reach a majority decision. In *Williams v. Illinois*, a female was abducted, robbed, and raped by a stranger. The victim immediately reported the crime to the police and a rape kit was collected. The vaginal swabs were sent to a private laboratory for analysis. DNA profiles of the perpetrator were identified and uploaded into the state's DNA database. The computer system indicated a match with a DNA profile obtained from a sample of Sandy Williams. The victim later identified Sandy Williams as the perpetrator from a police lineup.

During trial, the prosecution called the analyst from the state laboratory that obtained Williams' DNA profile as well as the DNA analyst who compared the profile obtained at the private laboratory and the profile obtained at the state laboratory, but did not call the analyst from the private laboratory. The analyst who compared the DNA profiles testified that the private laboratory was accredited and the results reported by the laboratory were regularly relied upon, but did not elaborate on the procedures used by the private laboratory. The defense counsel argued that not being able to cross-examine the analyst who obtained the DNA profile from the vaginal swabs violated the defendant's right to confront the witness. The prosecutor countered that the defendant's rights were satisfied, because he had the opportunity to cross-examine the analyst who had matched the two DNA profiles, i.e. the analyst who had identified Mr. Williams as the perpetrator. The court admitted the evidence and found the defendant guilty. The Court of Appeals and State Supreme Court upheld the ruling.

Unfortunately, the US Supreme Court did not come to a majority opinion. Justices Alito, Kennedy, and Breyer concluded that the testimony did not violate the Confrontation Clause. Justice Thomas agreed, but based on different reasons. The plurality found that the question at hand was whether or not an analyst could speak to a testimonial statement (i.e. analytical report) of another analyst if that

report was not being admitted as evidence. The Justices felt that based on the circumstantial evidence (identifying the perpetrator from the police lineup) and the documented chain of custody, the DNA profile obtained by the private laboratory was what it purported to be. Furthermore, if the prosecution had questioned the analyst using the traditionally accepted practice of hypothetical questioning, there would be no concerns in regards to the Confrontation Clause. The Justices also concluded that the private laboratory report was not testimonial, because it did not identify a particular suspect and that the results could not be skewed to identify a particular suspect.

Justice Thomas agreed that the testimony did not violate the Confrontation Clause, but based on a different reason. Justice Thomas felt that the private laboratory's report was not testimonial. The report was not certified nor was it sworn to; therefore, it was not a testimonial statement.

Justice Kagan filed the dissenting opinion and was joined by Justices Scalia, Ginsburg, and Sotomayor. All four Justices saw no difference between this case and *Bullcoming* or *Melendez-Diaz*. They felt the private laboratory's report was offered for its truth and was out-of-court testimony; therefore, it was subject to the Confrontation Clause. They disagreed with the plurality opinion that a statement had to be directed at an individual to be recognized as testimonial. Also, they rejected Justice Thomas' rationale for admitting the uncertified laboratory report, noting that the formality requirement was rejected by the Court in *Bullcoming* (Garvey 2013).

1.2 Impact on forensic practitioners

Each US Supreme Court decision presented here is a direct response to a specific case issue that has repercussions on the general practice of forensic science without clear direction. The decisions do not provide judges, prosecutors, and defendants with defined pathways for handling complex forensic analyses and allow for a large amount of interpretation (see Appendix). Conservative prosecutors may choose to produce every technician or analyst who was involved in forensic testing at any level for court testimony (Garvey 2013). This creates a great burden on forensic laboratories. The laboratory management and employees should have an understanding of these US Supreme Court decisions and prepare the laboratory staff to respond appropriately.

The Court's opinion in *Melendez-Diaz* clarified that the analytical report is out-of-court testimony and the analyst is subject to the Confrontation Clause. However, it failed to define the analyst, leaving all individuals who handle evidence a potential witness. *Williams v. Illinois* further failed to clarify who should be called to testify when forensic analyses involve multiple individuals.

Justice Kagan notes that calling the “lead” analyst to testify should be adequate, but she is not writing for the plurality opinion and this note carries very little weight (*Williams v. Illinois*). The failure to define the analyst potentially puts untrained individuals on the stand jeopardizing the laboratory’s reputation and the bearing of the analytical findings on the trial. In response, laboratories must clearly define the role of each employee involved in handling evidence and prepare each for court testimony. Consider a student working in a Forensic Anthropology laboratory. The student may be trained and assigned to the role of receiving, inventorying, and accessioning skeletal evidence. However, in the learning environment of the laboratory, the student observes the development of the biological profile and attends pretrial meetings.

By the time of trial, the student has greater visibility of the case than simply the receiving, inventory, and accessioning of skeletal evidence. However, during testimony, the student must speak only to his or her role in the case and not to the analysis or conclusions. The student must be prepared to direct the questioner to the correct person when questioned about components of the analysis outside his or her defined role.

Learning to limit responses to information which is solely within an individual’s expertise is difficult, especially when the individual has much greater knowledge of the case in its entirety; however, it is essential to prevent the individual from speaking to elements of the case about which he/she is not trained nor qualified as an expert. Strong standard operating procedures and clearly written position descriptions are the laboratory’s best defense for preparing for the impact of *Melendez-Diaz*.

Despite the right to a speedy trial as dictated by the Sixth Amendment, the period between analysis of evidence and court testimony can be years. This lengthy interval creates a real need for surrogate witnesses; however, the *Bullcoming* decision severely limits the use of surrogate witnesses (*Bullcoming v. New Mexico*). Essentially, the ruling dictates that an analyst cannot testify to another analyst’s report; each analyst must reach a conclusion based on independent analysis.

This ruling directly impacts laboratory practices in two ways. First, adequate samples must be collected to allow for additional testing and these samples must be archived, when possible. In the written decision, the Justices recognized that an archived sample is often available for additional testing and advocate for retesting rather than use of a surrogate witness (*Bullcoming v. New Mexico*). The Court decisions do not provide guidance on required retention schedules of these samples; although, some state laws do. Secondly, when a sample cannot be archived or the analytical process is destructive (e.g. performing an autopsy, excavating a grave), the analysis must be sufficiently documented to enable

an alternate analyst to form an opinion based on independent observation of the data.

The role of Forensic Anthropology in medico-legal investigations is growing. More medical examiner offices are employing in-house anthropologists or consulting university-based anthropologists. As employment opportunities increase so does the movement of practitioners between these jobs. The transiency of practitioners along with retirement, injury, and death makes the need for surrogate testimony a reality. Furthermore, skeletal remains are often not available by the time a case is adjudicated. When the original analyst and the skeletal remains are unavailable, a second analyst must work from photographs, diagrams, and raw data to form an independent opinion. Depending on the attorney, the analyst may or may not have access to the original report. Therefore, the original analyst must document a case in a manner that allows another practitioner to form an independent opinion.

The original anthropologist must document and photograph each feature used to build the biological profile. The same holds for each traumatic finding and abnormality. All measurements must be clearly recorded. Any metric analyses must be retained as part of the case record. Documentation of negative findings should be considered as well. A unique case identifier must be clearly listed on each item in order to maintain chain of custody. These items must be archived in a way that ensures their availability for the foreseeable future. Poor record keeping can jeopardize the admissibility of the analysis. Chapters 6 and 7 in this volume provide extensive guidance for case report documentation.

The presented US Supreme Court decisions place a burden on forensic laboratories, but in many ways strengthen them. They guide laboratory management to develop well defined position descriptions and standard operating procedures. They underscore the need for adequate analyst training. They promote adequate record keeping. As the intersection between forensic science and the law broadens, forensic scientists must keep abreast of the impact of Supreme Court decisions.

1.A Appendix

Case study – confrontation clause

A forensic pathologist moved jurisdiction from Florida to Arizona. After being employed in the new office for several months she received a request to testify in a capital murder trial in Florida. Initially she cited the case load

at her new office and declined the request. The prosecutor's office issued a subpoena. Subpoenas are valid only for the jurisdiction in which they are served, therefore she was not compelled to respond. However she did begin discussions with her new Chief and the office attorney and they also cited the burden to the office in their refusal. The prosecutor in Florida filed an "Application for Certificate Compelling Witness to Appear" in the Superior Court in Arizona. The Arizona Judge granted the certificate and the pathologist was compelled to appear in Florida. The Florida Judge issued some fairly harsh criticism of the pathologist (see below).

Judge's Comments:

"We're not going to have a situation where a person who's having his life on the line ... is going to have the case jeopardized because of game playing," the judge said. He ordered [her] to prepare and to testify or face "direct criminal contempt."

[The Judge] noted that it's often hard to get witnesses with rap sheets "a mile long" to testify truthfully in criminal cases, and then remarked on "how absolutely amazing it is that we have a professional who is a medical examiner whose duty is to do justice ... who refuses to review the materials and wants to play games."

[Pathologist], who now has a similar position in Arizona, initially said she could not provide complete testimony until a formal agreement was worked out between her former employer and her current one.

(Krueger 2015)

Since that time, two other pathologists from that office have been subpoenaed back to their previous jurisdictions and in both cases the Arizona Judge has upheld the subpoena. The Judge's comments in this case may appear to be unfair given that the pathologist refused to testify because of a wrangle between her current office, the previous office, and the State's Attorney. However, it gives insight into the type of pressure and exposure that experts face due to the confrontation clause and the subsequent confusion created by the legal rulings about it.

1.A.1 Example of Florida application to compel testimony

Application:

IN THE CIRCUIT COURT OF THE SIXTH JUDICIAL CIRCUIT OF THE STATE OF FLORIDA

[Case number redacted]

STATE OF FLORIDA

v

MURDER IN THE FIRST DEGREE

Defendant

APPLICATION FOR CERTIFICATE COMPELLING ATTENDANCE OF WITNESS

Comes now, [prosecutor name] State Attorney for the Sixth Judicial Circuit of Florida, and moves this Honorable Court to grant this Application for Certificate Compelling Attendance of Witness, pursuant to Florida Statute 942.03, and bases the said application on the following:

1. [Pathologist], M.D. is a material and necessary witness for the State of Florida in prosecution of the above criminal case now pending before this Court... [Redacted].
2. Trial in the above case is currently set on... [Redacted] at the [Redacted]. This Court has jurisdiction to try this felony case in...[Redacted].
3. The presence of [pathologist] will be required on [Redacted] at the Office of the State Attorney, for the entire day beginning at 8:30 a.m. at the [Redacted] County Justice Center [Redacted], Florida to give testimony for the State of Florida in this criminal case.

1.A.2 Example of Arizona court order in response to Florida request

WILLIAM G. MONTGOMERY
MARICOPA COUNTY ATTORNEY

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA IN AND FOR THE COUNTY OF MARICOPA

THE STATE OF ARIZONA,
IN THE MATTER OF THE
APPLICATION OF THE STATE
OF FLORIDA FOR AN ORDER
REQUIRING ONE
[PATHOLOGIST]
TO APPEAR AS WITNESS BEFORE ORDER DIRECTING WITNESS
THE SIXTH JUDICIAL CIRCUIT COURT TO APPEAR AND TESTIFY
OF THE STATE OF FLORIDA, IN [REDACTED] COUNTY,
COUNTY OF [REDACTED] FLORIDA

Whereas, IT APPEARING to the satisfaction of this court that [PATHOLOGIST] is a necessary and material witness for the State of Florida, in Case No. [Redacted], entitled *State of Florida v [Redacted]*.

NOW THEREFORE IT IS HEREBY ORDERED AND DIRECTED that the said [Pathologist] appear before the Sixth Judicial Circuit Court of the State of Florida, in and for the County of [Redacted], located in the [Redacted] County Justice Center, [address redacted], on or about the [Redacted] as witness for the State of Florida in the above stated cause.

FURTHERMORE, failure without good cause to appear as directed may subject the said witness to citation for contempt of court and, if convicted, imprisonment and/or fine.

DATED this ____ day of ____, ____

____signature redacted____
Judge of the Superior Court of the
State of Arizona, in and for the County
Of Maricopa

References

- Bibas S, & Fisher JL. (n.d.). Common interpretation: The Sixth Amendment. <https://constitutioncenter.org/interactive-constitution/amendments/amendment-vi> (accessed May 29, 2018).
- Bullcoming v. New Mexico*, 564 U.S. 647 (2011). Justia. <https://supreme.justia.com/cases/federal/us/564/647> (accessed June 6, 2018).
- Crawford v. Washington*, 541 U.S. 36 (2004). FindLaw. <https://caselaw.findlaw.com/us-supreme-court/541/36.html> (accessed May 29, 2018).

- Edwards, H.T. (2010). *The National Academy of Sciences report on forensic sciences: What it means for the bench and bar*. District of Columbia.
- Garvey, T.M. (2013). *Williams v. Illinois* and forensic evidence: the bleeding edge of Crawford. *Strategies: The Prosecutor's. Newsletter on Violence Against Women* 11: 1–11.
- Krueger, C. (2015). Pinellas man facing death penalty in killing of two year old girl. *Tampa Bay Times* (January 21). www.tampabay.com (accessed June 19, 2018).
- Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009). FindLaw. <https://caselaw.findlaw.com/us-supreme-court/557/305.html> (accessed May 29, 2018).
- Ohio v. Roberts*, 448 U.S. 56 (1980). FindLaw. <https://caselaw.findlaw.com/us-supreme-court/448/56.html> (accessed May 29, 2018).
- Williams v. Illinois*, 567 U.S. 50 (2012). FindLaw. <https://caselaw.findlaw.com/us-supreme-court/10-8505.html> (accessed May 29, 2018).