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Forensic Evidence at
Murder Trials in Phoenix, Arizona

Final Report

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Table of Contents

Chapter 1: Forensic Evidence at Trials	1
Background.....	1
Charges and Dispositions.....	2
Impact of Forensic Analysis	6
Chapter 2: Trial Proceedings	11
Introduction.....	11
Jury Selection.....	11
Preliminary Instructions.....	13
Trial Procedure.....	16
Final Jury Instructions.....	17
Proof of Murder	18
Aggravation Phase	19
Chapter 3: Evidence Collection	20
Introduction.....	20
Details at the Crime Scene.....	21
Volume of Evidence	24
Chain of Custody and Evidence Storage	27
Release of Evidence.....	27
Value of Reports	28
Questions from Jurors.....	29
Chapter 4: Role of Forensic Evidence at Trials	31
Introduction.....	31
DNA Analysis.....	31
The CSI Effect	32
Gunshot Residue Analysis	33
Ballistics Analysis.....	35
Latent Print Analysis.....	37
Appendix A Summaries of Case Investigations and Trials	38
Appendix B Forensic Evidence Collected and Analyzed.....	100
Appendix C Terms.....	119

List of Exhibits

Exhibit 1-1: Information on Trials.....	4
Exhibit 1-2: Forensic Analysis at Trials	7

Chapter 1

Forensic Evidence at Trials

Background

This report is on the impact of forensic evidence at murder trials. The results are based on transcript reviews of 22 trials from arrests made during the two years of the Phoenix Homicide Clearance project. At these trials, forensic scientists testified on analytical results in the areas of DNA, ballistics, gunshot residue, latent prints, and trace evidence. They testified, for example, that shell casings from the scene were fired from a handgun found at the scene, or that the DNA profile from blood on the defendant's clothes matched the victim's DNA profile.

Other witnesses also testified at these trials for either the prosecution or defense: eyewitnesses who were at the scene when the murder took place, witnesses who heard something at the scene, and others who had knowledge about the circumstances or persons involved. Police officers and investigators were important witnesses with testimony about activities at the scene, interviews conducted, and the follow-up investigation that led to the defendant's arrest. A variety of other witnesses—medical examiners, psychologists, and expert witnesses—also testified.

Our focus on forensic evidence was to answer the following questions:

- What areas of forensic analysis (DNA, gunshot residue, ballistics, etc.) are presented at trials?
- Do all trials include these areas of forensic analysis?
- What are the issues that arise about the collection and analysis of forensic evidence?
- What appears to be the impact of forensic analysis on the outcome of a trial?

To address these questions, we obtained trial transcripts for the 22 trials (due to a mistrial in one case and a retrial in another case, there were 20 defendants). The transcripts provided insight into the issues that arose at trials on the collection of forensic evidence and on results obtained from analysis of forensic evidence.

ILJ staff already had a considerable amount of information about the cases because of our evaluation of the Phoenix Homicide Clearance Project. Our information included the original report and all supplements on the cases from the police department's management information system (PACE) and results of forensic analysis from the crime lab's information system. We also had the opportunity to talk with investigators about many of the cases and to observe portions of some trials.

ILJ staff also conducted personal interviews with three prosecutors in the Maricopa County District Attorney's office and telephone interviews with four attorneys who had represented defendants at trials included in the study. These interviews were beneficial in gaining additional insight into the role of forensic evidence in murder trials.

Charges and Dispositions

By way of background, investigators at the Phoenix Police Department made 187 arrests, including multiple arrests for some cases, from the cases that occurred during the two-year project period. The highest charges placed by prosecutors against the 187 arrestees were as follows:

- 77 charged with 1st degree murder
- 53 charged with 2nd degree murder
- 25 charged with manslaughter
- 9 charged with negligent homicide
- 4 charged with attempted child abuse
- 4 charged with assisting a crime syndicate (e.g., gang)¹
- 15 charged with other offenses (aggravated assault, misconduct involving weapons, etc.)¹

The case dispositions of defendants charged with 1st degree murder included 13 defendants who pled guilty as charged; 13 released because the prosecutor decided not to prosecute; 11 found guilty at trial; two found not guilty at trial; five dismissed without prejudice; four dismissed by prosecution action; three who fled before prosecution; one who pled guilty to a reduced charge; and one who was declared not guilty by reason of insanity.

¹ In cases with multiple offenders, prosecutors often charged a main offender with a serious charge and other offenders with less serious charges.

Of the defendants charged with 2nd degree murder: 11 pled guilty as charged; 16 pled guilty to a reduced charge; 13 were found guilty at trial; three were found not guilty at trial; five were dismissed by prosecutor action; one was dismissed on this charge due to plea to an offense in an unrelated case; one was dismissed without prejudice; and the trial of one defendant was declared a mistrial. The cases for 24 defendants charged with 1st degree murder and two defendants charged with 2nd degree murder had not been completely adjudicated by our cutoff date.

Exhibit 1-1 on the following two pages provides information about the 22 trials reviewed for this report. Five trials were for 1st degree murder as the highest charge, 13 trials for 2nd degree murder, three trials for manslaughter, and one trial for aggravated assault. Excluding the mistrial, the juries found defendants guilty in 17 trials and not guilty in four trials. For those found guilty, sentences ranged from 7.5 years (aggravated assault) to natural life (1st degree murder). For 2nd degree murder, the average sentence was 20 years. The median time between arrest and trial was about 15 months, which reflects the time that cases take for pretrial motions and hearings. Finally, trial lengths ranged from four to 18 days, with a median of seven days.

Exhibit 1- 1: Information on Trials²

<u>Defendant</u>	<u>Trial</u>	<u>Charges</u>	<u>Sentence</u>	<u>Type of Arrest</u>	<u>Time Between Arrest and Trial</u>	<u>Trial Length</u>
Defendant 1	Trial 1	2 nd Degree Murder	19 years	Immediate Arrest	205 days	6 days
Defendant 2	Trial 2	2 nd Degree Murder	20 years	Immediate Arrest	414 days	4 days
Defendant 3	Trial 3	2 nd Degree Murder	20 years	Whodunit	455 days	7 days
Defendant 4	Trial 4a	Aggravated Assault	11.25 years ³	Immediate Arrest	416 days	4 days
	Trial 4b	1 st Trial: 1 st Degree Murder	Life Sentence			
Defendant 5	Trial 5	2 nd Trial: 2 nd Degree Murder	18 years	Immediate Arrest	735 days ⁴	5 days
		2 nd Degree Murder	16 years			
Defendant 6	Trial 6	1 st Degree Murder (Count 1)	Natural Life ⁵	Quick Action	530 days	10 days
Defendant 7	Trial 7	1 st Degree Murder (Count 2)	Natural Life	Whodunit	356 days	8 days
Defendant 8	Trial 8	2 nd Degree Murder	22 years			
Defendant 9	Trial 9	Manslaughter	7 years	Immediate Arrest	563 days	8 days
Defendant 10	Trial 10	2 nd Degree Murder	22 years	Whodunit	439 days	15 days
		1 st Degree Murder	Natural Life ⁶	Whodunit	341 days	4 days
Defendant 11	Trial 11	Armed Robbery	21 years	Quick Action	685 days	8 days
		Burglary in the 1 st degree	21 years			
		2 nd Degree Murder	16 years ⁷			
Defendant 12	Trial 12	Aggravated Assault	7.5 years	Quick Action	358 days	8 days
		Discharge of a Firearm at Structure	7.5 years			
		1 st Degree Murder	25 years			
		Aggravated Assault	7.5 years			
		Burglary in the 1 st Degree	10.5 years			
Armed Robbery	10.5 years ⁸					

² ILJ chose not to use actual names of defendants because many of these trial verdicts were in the appeal process.

³ In a separate trial held during February 2006, the defendant was found guilty on one count of aggravated assault, and two counts of disorderly conduct. On May 5, 2006, he was sentenced to 7.5 years for the aggravated assault, and 2.25 years for each of the disorderly conducts to be served consecutive to the sentence for the aggravated assault. On May 5, 2006, he was sentenced for the two counts resulting from the murder trial to be served consecutive to the other sentences.

⁴ Time between trials.

⁵ Sentenced on Count 1 to natural life without the possibility of parole and on Count 2 for natural life with the possibility of parole after serving 25 years.

⁶ Sentenced on Count 1 (1st degree murder) to natural life with the possibility of parole after 25 years. Sentenced on Count 2 (Armed Robbery) to 21 years concurrent with counts 1 and 3. Sentenced on Count 3 (Burglary in the 1st degree) to 21 years concurrent with counts 1 and 2. Found not guilty on Count 4 (Aggravated Assault).

⁷ Sentenced to Count 1 (2nd degree murder) for 16 years, Count 2 (Aggravated Assault) for 7.5 years consecutive to Count 1, and Count 3 (Discharge of a Firearm at a Structure) for 7.5 years concurrent with Count 1.

Exhibit 1- 1: Information on Trials²

<u>Defendant</u>	<u>Trial</u>	<u>Charges</u>	<u>Sentence</u>	<u>Type of Arrest</u>	<u>Time Between Arrest and Trial</u>	<u>Trial Length</u>
Defendant 13	Trial 13	Aggravated Assault ⁹	7.5 years	Immediate Arrest	501 days	7 days
Defendant 14	Trial 14a	1 st Trial: Mistrial declared		Immediate Arrest	854 days	4 days
	Trial 14b	2 nd Trial: 2 nd Degree Murder	12 years		39 days ¹⁰	6 days
Defendant 15	Trial 15	Manslaughter, a Dangerous Offense Misconduct Involving Weapons	28 years ¹¹ 12 years	Whodunit	562 days	9 days
Defendant 16	Trial 16	2 nd Degree Murder Aggravated Assault ¹²	20 years 1.75 years ¹³	Immediate Arrest	740 days	8 days
Defendant 17	Trial 17	Aggravated Assault Manslaughter	1.75 years Not Guilty	Immediate Arrest	230 days	5 days
Defendant 18	Trial 18	Negligent Homicide 2 nd Degree Murder	Not Guilty Not Guilty	Immediate Arrest	351 days	16 days
Defendant 19	Trial 19	2 nd Degree Murder Reckless Manslaughter	Not Guilty Not Guilty	Immediate Arrest	822 days	6 days
Defendant 20	Trial 20	Negligent Homicide	Not Guilty	Immediate Arrest	547 days	18 days
		1 st Degree Murder	Not Guilty			
		Aggravated Assault Attempted Robbery	Not Guilty Not guilty			

⁸ Sentence for Count 1 (Murder in the 1st Degree) was for 25 years before being eligible for parole; sentence for Count 2 was 7.5 years concurrent with Counts 1, 3, and 4; sentence for Count 3 was 10.5 years concurrent with Counts 1, 2, and 4; and sentence for Count 4 was 10.5 years concurrent with Count 1, 2, and 3.

⁹ Not guilty of 2nd degree murder for killed victim and not guilty of aggravated assault for second surviving victim.

¹⁰ Time between trials.

¹¹ Concurrent with Count 2.

¹² Guilty of two counts of aggravated assault on arresting officers, not guilty of one count of aggravated assault on arrest officer.

¹³ The periods of incarceration imposed on Counts 2 and 3 shall run concurrently with each other and shall run consecutively with Count 1.

Impact of Forensic Analysis

Exhibit 1-2 gives the results of our assessment of the impact that forensic analysis had at these trials. We found, for example, that forensic scientists from the crime lab's DNA section testified in eight trials and their testimony had a major impact in five of those trials. The impacts of their testimony are reflected in the following selections:

- In Trial # 2, the forensic scientist testified that the DNA profile from blood on the defendant's pants, boots, and t-shirt matched the victim's profile.
- In Trials # 4a and 4b, the DNA profile from blood on the defendant's pants and socks matched the blood of the victim, and all blood samples from inside the apartment matched the victim (thereby weakening the defense's theory that a third person broke into the apartment and fought with the defendant and victim).
- In Trial # 6, the DNA profile from blood on a witness's swim trunks, which he wore while in the vehicle where the two victims were killed, matched the profile of the male victim. This result placed the witness in the vehicle at the time of the shooting and gave credibility to his testimony.
- In Trial # 8, the DNA profile from biological (cellular) material on a bullet from the victim's vehicle matched biological (cellular) from a recovered revolver, which in turn matched the DNA profile of the defendant.

Testimony of this nature at trial is powerful because of the underlying science of DNA. Forensic scientists are able to say that a match is unique and that no other source could have been responsible for the biological material obtained from the evidence.

Investigators and prosecutors would like to have more cases in which DNA analysis provides links between forensic evidence and suspects. This situation does not occur more often because (1) biological evidence is not found at all primary scenes,¹⁴ (2) matches may not provide probative value because the match is to the victim or (3) the biological material is a mixture from which conclusions cannot be made.

¹⁴ Our summary (see Volume II, Chapter 5) of forensic evidence collected at primary scenes shows, for example, that scene agents collect biological evidence at 53 percent of all primary homicide scenes. Further, case agents do not request analysis in all cases.

Exhibit 1- 2: Forensic Analysis at Trials

<u>Defendant</u>	<u>Trial</u>	<u>Impact of Forensic Analysis Presented at Trial</u>					<u>Number of Persons Who Testified at Trial</u>			
		<u>DNA Analysis</u>	<u>Ballistics Analysis</u>	<u>GSR Analysis</u>	<u>Latent Print Analysis</u>	<u>Trace Analysis</u>	<u>Sworn Personnel</u>	<u>Lab Personnel</u>	<u>Civilian Witnesses</u>	<u>Defendant Testified</u>
Defendant 1	Trial 1	—	Major	Moderate	—	—	4	3	4	Yes
Defendant 2	Trial 2	Major	—	—	—	—	5	2	1	No
Defendant 3	Trial 3	—	Major	—	—	—	2	4	8	No
Defendant 4	Trial 4a	Major	Minor	—	—	—	5	2	2	No
	Trial 4b	Major	Minor	—	—	—	6	1	3	Yes
Defendant 5	Trial 5	—	Major	—	—	—	5	1	5	Yes
Defendant 6	Trial 6	Major	Major	None	None	—	6	10	8	No
Defendant 7	Trial 7	—	—	—	—	Moderate	7	1	3	No
Defendant 8	Trial 8	Major	Major	Moderate	—	—	5	3	4	No
Defendant 9	Trial 9	Minor	Moderate	—	None	—	6	3	6	Yes
Defendant 10	Trial 10	—	—	—	—	—	4	0	2	No
Defendant 11	Trial 11	—	Minor	—	—	—	3	1	10	Yes
Defendant 12	Trial 12	—	Moderate	—	—	—	5	1	2	Yes
Defendant 13	Trial 13	Moderate	—	—	—	—	9	3	6	No
Defendant 14	Trial 14a	—	—	—	—	—	3	0	1	No
	Trial 14b	—	Minor	Minor	—	—	6	2	1	Yes
Defendant 15	Trial 15	—	Minor	None	—	—	10	2	6	Yes
Defendant 16	Trial 16	—	—	—	—	—	6	1	3	Yes
Defendant 17	Trial 17	—	—	—	—	—	3	0	5	Yes
Defendant 18	Trial 18	Minor	—	—	None	Minor	5	4	3	Yes
Defendant 19	Trial 19	—	Minor	None	—	—	4	2	6	No
Defendant 20	Trial 20	—	—	—	—	—	9	2	7	No

Note: — indicates that this type of forensic evidence analysis was not presented at trial.

None indicates that the analysis testimony had no probative value at trial.

Minor indicates that the analysis testimony provided information (e.g., a weapon was operational with a pull of 3 pounds) to the jury about the analysis that was performed but did not include or exclude someone (e.g., victim, defendant, witness).

Moderate indicates that the analysis testimony supported the prosecutor or defense attorney's theory of the case (e.g., gun recovered at the scene was the murder weapon).

Major indicates that the analysis testimony confirmed a relationship between an item of evidence and someone involved in the incident (e.g., casings from the scene were fired from a revolver found on the defendant) or (2) DNA profile of blood on the defendant's clothes match DNA profile of the victim).

Forensic scientists provided testimony on ballistics analysis at 13 trials. ILJ determined that the testimony had a major impact at five trials, moderate impact at two trials, and minor impact at six trials. A few examples of major impacts are as follows:

- In Trial # 3, the forensic scientist from the ballistics section testified that shell casings from the scene matched shell casings from bullets fired in the crime lab from the Beretta found in the defendant's vehicle.
- In Trial # 5, the casing recovered at the scene was identified as fired from the defendant's Ruger handgun, and the bullet recovered at autopsy was "entirely consistent" with having been fired from this handgun.
- In Trial # 6, the forensic scientist testified that two shotgun shells were fired from the shotgun found at the defendant's home.
- In Trial # 8, the forensic scientist stated that the bullet found in the victim's vehicle was "consistent" with having been fired from the revolver found by investigators, which meant that it shared individual characteristics with the test-fired bullets but not enough to say conclusively that it was fired from the revolver. He stated that it was likely to have been fired from the revolver.

In other trials, forensic scientists usually testified about the operation of a firearm or the types of ammunition found by police. In Trial # 11, for example, the forensic scientist testified that the cartridge casing from the scene possessed marks consistent with those typically found on casings fired in AK-47 type rifles.

GSR analysis proved to have a moderate impact at two trials, minor impact at one trial, and no impact at four other trials. In Trial # 1, the forensic scientist who processed the GSR test kits from the defendant's hands testified that a single particle of lead was found from the kit administered to the right hand. In Trial # 8, the forensic scientist testified that (1) one particle highly specific to GSR and one particle containing two components indicative of GSR were detected on the sample from the left hand, (2) two particles containing one or more components indicative of GSR were detected on the sample from the right hand, and (3) no particles consistent with GSR were detected on the samples taken from the kits administered on the victim at autopsy. For the four trials at which we determined there was no impact from the GSR analysis, forensic scientists testified that particles specific to GSR were found on the victim's clothes or hands, which only meant that the victim may have been near a firearm when it was discharged.

Another interesting result from Exhibit 1-2 is that latent print analysis and trace analysis had very limited impact. Latent print examiners were called to testify in only three trials. We judged their testimony to have had no impact on the outcomes of these trials for two reasons. First, an outcome of “no match” was the result of many comparisons made between latent prints obtained from the crime scene against the fingerprints of suspects and victims from the case. Second, no probative value resulted from the matches that were found because the matches were easily explained.

As an example, in Trial # 6, the latent print examiner testified that:

- No matches resulted from the two latents from the shotgun compared with the two victims and the defendant.
- No matches resulted from two latents from the victim’s vehicle compared with the two victims and the defendant.
- No identifications were made between latents from any items of evidence to a key witness who testified he was in the vehicle when the shootings occurred.
- The defendant’s fingerprints were identified to nine items of evidence obtained from his residence.
- Four other latents from the victim’s vehicle were matched to the victim.

The first two results are “no matches” between latent prints from evidence against the fingerprints of the defendant and the two victims. The third result is “no match” with over 10 latent prints from the defendant’s residence against the fingerprints of an eyewitness. The next result are nine matches in which latent prints from items at the defendant’s residence did, in fact, match the defendant. The last result is a group of four matches between latent prints from the victim’s vehicle and the victim’s fingerprints.

We noted in prior discussions¹⁵ that crime scene specialists obtained latent prints in about 38 percent of primary scenes, and that about 11 percent of comparative analyses between a latent print and a standard resulted in a positive identification. Based on those findings, it is not surprising that analysis of latent prints is presented in only a few trials and that the testimony does not have any significant impact on the proceedings.

Finally, forensic scientists from the crime lab presented trace analysis at only two trials. In Trial # 7, the forensic scientist testified that two pieces of glass from the scene were tempered

¹⁵ See Volume II, Chapters 5 and 6 on forensic evidence collected and analyzed from homicide scenes.

(safety) glass from a vehicle's side window and that the two pieces could have originated from a common source. The testimony was important because a surviving victim had testified that one of the vehicle's windows had been broken out during the attack that resulted in the driver's death. In Trial # 18, the forensic scientist testified his analysis determined that three pieces of wood from the scene were once a single piece. The result supported the prosecutor's theory of the case.

The right side of Exhibit 1-2 summarizes the number of people who testified at trials divided into sworn personnel (patrol officers and investigators), lab personnel (crime scene specialists and forensic scientists), and civilian witnesses. Medical examiners are not included in the exhibit because either they testify at a trial or the prosecutor and defense attorney provide a stipulation on results from autopsy reports. The exhibit also shows whether the defendant testified at trial.

We provide these figures to make the obvious point that forensic evidence is only one part of a trial. As previously mentioned, witnesses provided information on what they saw, heard, or knew about an incident. Their testimony provides direct evidence on a case, while forensic scientists provide circumstantial evidence. Results from analysis of forensic evidence may support or refute the testimony of other witnesses.

The remainder of this chapter provides our assessment on the impact of forensic evidence at trials. Chapter 2 is an overview of trial proceedings for those unfamiliar with the steps of a murder trial in Maricopa County. Chapter 3 discusses issues that arose about collection of forensic evidence at homicide scenes. The last chapter provides examples from the cases on the presentation of forensic evidence at several of the trials included in our study. The emphasis is on DNA, ballistics, GSR, and latent print analysis.

As further support for the results in this report, Appendix A summarizes each police investigation and trial proceedings for this study. Each summary includes a discussion about the forensic evidence presented at trial and our subjective assessment on the impact of that evidence on the outcome of the trial. Appendix B summarizes the evidence collected and analyzed for each case.

Chapter 2

Trial Proceedings

Introduction

In the Superior Court of Maricopa County, a trial for defendants charged with 1st or 2nd degree murder will have the following sequential phases:

- Jury selection
- Preliminary instructions by the judge
- Opening statement by the prosecutor
- Opening statement by the defense attorney (optional)
- Testimony by witnesses for the state
- Testimony by witnesses for the defense (optional)
- Final instructions by the judge on the law pertaining to the case
- Closing arguments by the prosecutor and defense attorney
- Dismissal of alternate jurors, instructions to jury on how to proceed in their deliberations.
- Jury deliberations and verdict
- Determination of aggravation factors

The following sections describe these phases with an emphasis on the influence of forensic evidence in the proceedings. As will be seen in the descriptions, the Superior Court in Maricopa County has a history of innovation for jury selection and deliberations.

Jury Selection

Potential jurors are summoned by the Maricopa County jury commissioner based on a list of all registered voters with driver's licenses. To qualify as a juror in Maricopa County, a person must (1) be a citizen of the United States, (2) be a resident of the county, (3) never have been convicted of a felony (unless their civil rights have been restored), and (4) not currently be adjudicated mentally incompetent or insane. To reduce the burden of jury service statewide, Arizona statutes mandate a one-day or one-trial rule.

On the day of jury service, summoned jurors report to the jury assembly room for orientation. Panels for particular trials are randomly selected, and each panel is sent to a courtroom for voir dire (Norman French for “to speak the truth”). This process, during which prospective jurors are questioned about their backgrounds and potential biases, is an attempt to select an impartial jury to ensure a fair trial.

For 1st and 2nd degree murder trials, a panel may be between 40 and 60 persons, and can be more for high profile cases. Prior to voir dire, the presiding judge in the courtroom introduces the attorneys and courtroom staff, and welcomes the potential jurors. To start the voir dire, the judge will ask the jurors a series of questions to determine whether any potential jurors may need to be dismissed from consideration because of potential biases or other reasons. The list of topics, as shown below, is extensive:

- Has anyone been a victim of a serious crime or knows of someone (relative, friend, etc.) who was a victim?
- Does anyone have family members or friends who have ever worked in or trained in law enforcement?
- Has anyone had legal training, or have family members with legal training?
- Does anyone have strong views on the constitutional right to bear arms or on gun control?
- Has anyone had training in forensic sciences, such as toxicology, DNA analysis, causes of death, or related topics?
- Has anyone ever testified in court?
- Has anyone ever been convicted of a crime?
- Does anyone have a hardship or scheduling problem that would interfere with jury service?
- The judge reads a list of potential witnesses and asks if any names sound familiar.

When a potential juror responds to any of these questions, the judge will ask whether the juror can be fair and impartial. Based on the answer, the judge may dismiss the juror at that time.¹⁶ After the judge has completed his or her questions, the prosecutor and defense attorney may pose questions to the panel or may ask follow-up questions to specific jurors. Interestingly, the prosecutor may ask about the “CSI effect” from the television series. As one prosecutor put the issue to the panel,

¹⁶ Dismissed jurors may be asked to serve on a jury for a trial with a less serious offense.

Folks, my first question is really kind of a product of our times. There are some television shows, a number of them allegedly have to do with criminal investigation, crime scene investigation, police stories, etc. One of the primary examples of that is a show, of which there are many episodes, called CSI. I don't particularly care whether you watch them or not, but my question to you really has to do with if you do watch them, is there anyone here who in watching them believes that everything that happens in them is the real world? Is there anybody who watches them who is convinced now that they accurately portray in every detail criminal investigation, crime lab work, etc. (Trial # 4a)

In this case, no jurors raised their hands to indicate any influences that television may have on their deliberations.

After all jury voir dire issues have been addressed, the judge informs the panel that the prosecutor and defense counsels will be given time to select the jury from the remaining members. Lawyers for both sides of the case may be able to excuse prospective jurors using two types of “challenges”: (1) peremptory—challenges that require no reason or explanation (each lawyer is allowed 10 of these challenges if the offense charged is punishable by death and six in all other cases tried in Superior Court) and (2) for cause—an attorney may appeal to the judge to remove a juror because his or her answer to a question showed potential partiality or bias that might affect their decisions regarding the case. The judge has discretion to act or not on this type of challenge.

In Arizona, a criminal jury trial with a potential sentence of death or imprisonment for 30 years or more requires a 12-person jury; other criminal cases require eight jurors. With either circumstance, verdicts must be unanimous. In homicide cases, the judge usually will impanel at least two alternate jurors as insurance against the possibility that someone will have to leave the jury during the trial (e.g., family emergency, undue hardship, etc.) or be removed for cause. In homicide trials, all jurors hear the case—no one knows if they are alternates or not during the trial.

Preliminary Instructions

Preliminary instructions from the presiding judge are the first order of business for a jury. The bailiff provides copies to the jury and they are encouraged to take notes on the documents as they wish. They remain with the jurors throughout the trial. The purpose of the preliminary instructions is to inform the jurors about their duties as jurors and to provide information on what

they can expect during the course of the trial. The judge states that final instructions will be given after closing arguments.

The preliminary instructions cover a variety of topics and contain standard language developed by the court. Topics covered include:

- Importance of jury service
- Note taking permitted
- Order of trial
- Conduct of jurors
- Functions of a jury
- Evidence, statements of lawyers, and rulings
- Direct and circumstantial evidence
- Credibility of witnesses
- Questions by jurors
- A charge is not evidence
- Presumption of innocence, burden of proof
- Exclusion of witnesses
- Scheduling during trial
- Media coverage

Some of these instructions reflect innovations that the state has made in recent years. For example, jurors are provided notebooks and papers for note taking. The preliminary instructions say that notes are to help jurors remember what has been said, but do not take the place of independent memory of the testimony. The notebooks are collected and stored each night by the bailiff and provided to the jurors when the trial resumes. At the end of the case, the bailiff collects the notebooks and destroys them.

Another innovation is that jurors are allowed to submit questions for witnesses on forms provided by the court. If the question is for a witness who is about to leave the witness stand, the juror signals the bailiff or judge before the witness leaves. At the end of testimony, judges also ask the jury whether there are any questions. An example of a preliminary instruction about questions from jurors is as follows:

If you have a question, please write it down on the form provided. Do not put your name or juror number on the question. The questions must be directed to the witness and not to the lawyers or the judge. The purpose of a question is to clarify the evidence that has been presented, not to explore theories of your own or to discredit a witness.

Do not discuss your questions with other jurors. The bailiff will collect the questions, and I will then consider whether they are permitted under our rules of evidence and relevant to the subject matter of the witness's testimony. I will also discuss them with counsel. If the Court determines that the question may be properly asked, I will then read the question to the witness. It is important to understand that rejection of a proposed question because it's not within the rules of evidence or because it's not relevant is no reflection upon you. (Trial # 8)

Jurors submitted questions in every trial included in this research project, with many of the questions directly related to forensic evidence. Examples are provided later in this report.

Another instruction especially relevant to forensic evidence focuses on the difference between circumstantial and direct evidence. A typical instruction on the distinction is as follows:

Evidence may be direct or circumstantial. Direct evidence is the testimony of a witness who saw, heard, or otherwise observed an event. Circumstantial evidence is the proof of a fact or facts from which you may find another fact. The law makes no distinction between direct and circumstantial evidence. It is for you to determine the importance to be given to the evidence regardless of whether it is direct or circumstantial.

The analysis of forensic evidence presented at trials is circumstantial evidence, while testimony by eyewitnesses is direct evidence.

The issues of burden of proof and reasonable doubt are always considerations in criminal cases, especially capital punishment cases. In preliminary instructions, judges provide these guidelines about reasonable doubt:

The defendant has pled not guilty. The defendant's plea of not guilty means that the State must prove every part of the charge beyond a reasonable doubt. The law does not require a defendant to prove innocence. Every defendant is presumed by law to be innocent.

The State has the burden of proving the defendant guilty beyond a reasonable doubt. In civil cases it is only necessary to prove the fact is more likely true than not, or that its truth is highly probable. In criminal cases such as this, the State's proof must be more powerful than that. It must be beyond a reasonable doubt. Proof beyond a reasonable doubt is proof that leaves you firmly convinced of the defendant's guilt.

There are very few things in the world that we know with absolute certainty. And in criminal cases, the law does not require proof that overcomes every doubt. If, based on your consideration of evidence, you are firmly convinced that the defendant is guilty of the crime charged, you must find him guilty. If, on the other hand, you think there is a real possibility that he is not guilty, you must give him the benefit of the doubt and find him not guilty. (Trial # 3)

Trial Procedure

After preliminary instructions, the judge directs the prosecutor to make an opening statement giving the State's preview of the case. Immediately after the prosecutor's statement, the defendant's attorney may make an opening statement outlining the defense case, or may postpone his or her opening statement until after the state's case has been presented.

After opening statements, the prosecutor calls witnesses for testimony and introduces physical evidence. Witnesses typically called by the prosecutor include:

- Patrol officers who initially responded to the scene
- Criminal investigators (case and scene agents)
- Crime scene specialists
- Eyewitnesses and others with information about the case
- Forensic scientists from the crime lab
- Medical examiner

The lawyers elicit testimony from witnesses by asking them questions within a well established set of procedural rules using direct testimony, cross-examination, and re-direct.

Besides witness testimony, criminal cases are won or lost on the forensic evidence presented in the case. Forensic evidence is presented to the court via introduction of exhibits—photos, charts, bullets, shell casings, analytical reports, etc. An evidence exhibit must first be identified by a witness, who will be asked how the exhibit was created or how the evidence was found and how the witness knows about it. The court then rules on whether the exhibit may be introduced into evidence. After that, the witness may testify about what the evidence exhibit shows. After all the testimony and arguments are concluded, the evidence exhibits are sent into the jury room with the jurors.

The exhibits are assigned numbers before trial and referred to by number in the testimony. Because of the large number of exhibits typically introduced in homicide cases, attorneys on both sides often agree and stipulate to their admission, and the court may admit several at one time with a single ruling. This helps the parties focus on the few exhibits to which there may be objections.

After all witnesses have testified and the evidence for both sides has been introduced, the judge gives final instructions to the jury (discussed more below). The attorneys for both sides then make closing arguments on what they think the evidence shows, and how they think the case should be decided: prosecution goes first, defense responds, and prosecution gets the last word. Closing arguments are a mixture of explanation and persuasion, with emphasis on persuasion. Counsel will highlight some evidence that puts his or her case in the best light, denigrate the other side's evidence, question the absence of particular evidence, call the credibility of witnesses into question, and more.

After closing arguments, alternate jurors are randomly selected and dismissed from the case. However, because they might be called back if a juror cannot participate in the full deliberations, alternate jurors are instructed not to discuss the case until it has been concluded. Finally, the jury is removed to the jury room to deliberate until it reaches a unanimous verdict.

Final Jury Instructions

After the state and defense have rested their cases, the judge provides the jury with final instructions. The instructions cover a variety of topics and contain standard language that has been developed through statutory and case law. Prior to giving the instructions, the judge will review the contents with the prosecutor and defense attorney and will make modifications as needed based on any objections and arguments about what has been presented at trial.

Most of the attorney arguments for modifications to the standard instructions center on specific offenses to be considered by the jury. For example, in Trial # 3, there was an argument over whether the court should give an instruction on recklessness, which would be an element of the lesser included offenses of 2nd degree murder and manslaughter. The prosecutor argued:

However, I don't believe there's any evidence in this case that shows that this conduct was reckless. All of the evidence from the state's witnesses is that it was purposeful, intentional, and premeditated. There's been no proffer of evidence nor any evidence deduced by the defense that this was reckless or heat of passion. Defendant's statement is he did not do it.

The court disagreed and gave an instruction on recklessness.

Another example from Trial # 3 was an expansion of the standard instruction on limiting the use the jury may make of a particular piece of evidence. Evidence was introduced about a

prior incident involving the defendant and evidence found at the defendant's house. The judge told the jury:

Evidence also was admitted that three shell casings were found at the defendant's house on September 19, 2004. You may consider that evidence only for the limited purpose of determining whether the defendant possessed a gun on October 2 or October 3, 2004 [the time of the murder].

Proof of Murder

During initial jury instructions in homicide cases, the judge will outline requirements for proof (elements of the case) that a specific type of crime has been committed. Typical instructions are as follows:

1st Degree Murder

The crime of 1st degree murder requires proof that: (1) the defendant caused the death of another person; (2) the defendant intended or knew that he would cause the death of another person; and (3) the defendant acted with premeditation.

Premeditation means that the defendant intended to kill another human being or knew he would kill another human being. And that after forming that intent or knowledge, reflected on the decision before killing. It is this reflection, regardless of the length of time in which it occurs, that distinguishes first-degree murder from second-degree murder. An act is not done with premeditation if it is the instant effect of a sudden quarrel or heat of passion. The time needed for reflection is not necessarily prolonged. And the space of time between the intent or knowledge to kill and the act of killing may be very short. (Trial # 3)

2nd Degree Murder

The crime of 2nd degree murder requires proof that (1) the defendant intentionally caused the death of another person, or (2) the defendant caused the death of another person by conduct which he knew would cause death or serious physical injury, or (3) under circumstances manifesting extreme indifference to human life, the defendant recklessly engaged in conduct which created a grave risk of death and thereby caused the death of another person.

Recklessly means that a defendant is aware of and consciously disregards a substantial and unjustifiable risk that the conduct will result in the death of another. The risk should be such that disregarding it is a gross deviation from what a reasonable person would do in the situation.

Manslaughter

Manslaughter requires proof that (1) the defendant caused the death of another person and (2) the defendant acted recklessly.

Aggravated Assault

Aggravated assault requires proof of the following: (1) the defendant committed an assault, which requires proof that the defendant intentionally put another person in reasonable apprehension of imminent physical injury; and (2) the assault was aggravated by the fact that the defendant used a deadly weapon.

Aggravation Phase

If a guilty verdict is reached, there will be an aggravation phase to the trial. The sentence imposed on a guilty party may be increased as a result of finding aggravating factors in the case. The aggravation phase usually starts on the day following the verdict and is decided by the same jury. Typical aggravation factors sought by the prosecution for a person found guilty of 1st or 2nd degree murder include the following:¹⁷

- Offense included the use of a deadly weapon.
- Offense caused emotional and financial harm to the victim's immediate family.
- Offense involved the presence of an accomplice.
- Defendant committed the offense in an especially heinous, cruel, or depraved manner.
- Defendant was previously convicted of a felony within the 10 years immediately preceding the date of the offense.
- Victim of the offense is at least 65 years of age or is a disabled person.
- Evidence shows that the defendant committed the crime out of malice toward a victim because of the victim's identity in a group defined by law.

Other witnesses, including members of the victim's family, may be called in the aggravation phase.

¹⁷ See A.R.S. § 13-703 for a complete list of aggravating factors.

Chapter 3

Evidence Collection

Introduction

This chapter summarizes ILJ's conclusions on the "lessons learned" about collection of evidence at homicide scenes and the issues that arise at trials about evidence collection. Before discussing these results, it is beneficial to review the protocol established by the Phoenix Police Department for homicide investigations. With most homicides, patrol officers are the initial responders and their immediate responsibility is the care of any surviving victims and the integrity of the crime scene. They may call for the dispatch of paramedics and they will immediately notify their field sergeant if a person has been killed or seriously injured. The field sergeant, in turn, notifies the front desk of the Violent Crime Bureau (staffed 24 hours a day), which then notifies the appropriate homicide sergeant to respond with investigators to the scene. Crime scene specialists are also notified to respond, and a prosecutor from the Maricopa County's Attorney's Office is alerted.

After the investigative team and crime scene specialists arrive, a briefing is held, usually by the patrol field sergeant. Until that briefing, the field sergeant from patrol is in charge and no one, including investigators and crime scene specialists, can enter the scene area or conduct interviews without the field sergeant's permission. At the completion of the briefing, the homicide investigative team takes control of the scene, and patrol officers provide a supporting role with activities such as perimeter security, neighborhood canvassing, and searching for suspects.

The sergeant in charge of the investigative team selects one investigator as the *case agent*. This is an important assignment because the case agent will have primary responsibility for investigating the case to its conclusion, with the aim of arresting suspects and closing the case. The sergeant will also designate a *scene agent*, who will be responsible for collecting evidence at the scene, submitting the evidence to the department's property room, and preparing

the scene report along with crime scene diagrams. The case agent and scene agent usually testify at trial on their activities at the scene.

During the Homicide Clearance Project, the scene agent for the comparison squads was a homicide investigator, specially trained in evidence collection, while for the experimental squads, the scene agent was one of the four crime scene specialists assigned from the crime lab to the homicide unit during the duration of the project. After the Homicide Clearance Project, the department established a unit within the crime lab of crime scene specialists devoted to homicide investigations, and revised its protocol so that one of these crime scene specialists is always assigned as the scene agent.

The remainder of this chapter presents conclusions (**in bold face type**) about forensic evidence collection at homicide scenes followed by discussions regarding the conclusions.

Details at the Crime Scene

- **Scene agents should be prepared to testify at trial on all scene activities—evidence collected, measurements taken, photographs, invoice numbers on evidence bags, scene diagrams, and more. Because a trial may occur many months or years after the incident, it is important that scene agents carefully document their scene activities.**

Scene agents generally have to spend many hours at the primary scene to collect and document all the physical evidence for a case. Evidence collection is a systematic effort, starting with walking through the entire area to locate evidence, followed by photographs, measurements, and collection of all relevant items of evidence. Success of investigation and prosecution may depend on how well scene agents perform at the scene and how well they document their activities. Prosecutors and defense attorneys will question scene agents at trial on many aspects of their activities.

Several examples of the types of questions at trial can be drawn from the trials in this project. We selected the following exchange from Trial # 14a to show how a prosecutor guides a scene agent through the steps taken for evidence collection at a scene:

- Q. So you walked through the house and made note of various things you saw as you came across them, right?
- A. Yes.
- Q. Now, what do you do in order to identify the things that you want to take as evidence in the case?

- A. Once evidence is located, we photograph it as found without any letters or numbered placards. Once those photographs of the items of evidence are taken, we also take what we call relationship photos so we can show how that evidence item relates to the particular room or wherever it's found. Once those photographs are taken, then the items of evidence are marked with plastic, we call them plastic tents. Basically they are numbered or lettered placards which have rulers on it. We photograph that next to the evidence and once that is done, the evidence is measured from a reference point and collected.
- Q. And when you collect the evidence, what do you do with it?
- A. Once the evidence is collected it is placed into an evidence receptacle, such as vials or plastic bags. Each item of evidence is given an evidence number and is retained by the scene agent, which in this case was myself. I retained those until a later time when I was able to impound those in our facility at the main police station.
- Q. So do you keep track of the evidence taken in a case by report number?
- A. Yes, by report number. And like I say, each item of evidence is given a number and that's how it's logged and entered in the report and that's how you refer to it in the report as well as in the photographs and the diagram.
- Q. So you write a report and in your report you state the items that you took and they're referred to by a number or a letter?
- A. Yeah, number or letter.
- Q. Where those items were located or taken from?
- A. Yes.
- Q. In this case did you also then go in and make some scene diagrams?
- A. Yes.

After asking these initial questions, a prosecutor usually has the scene agent describe the most significant items of evidence found at the scene. The scene agent may refer to his or her scene report to recall details about what items were collected and where they were found.

As seen in the next two conclusions, photographs of evidence and precise measurements of evidence location play important roles at trials.

- **Photographs are essential at trials in providing the jury with information on the surroundings of the incident, items of evidence found at the scene, and where the items were found.**
- **Precise measurements at a crime scene are important for documenting where evidence was located and the relationship between the locations of items of evidence.**

A picture is worth a thousand words. Photographs from a crime scene play the following important roles for investigators and prosecutors:

- Provide a timeframe or timeline of the progression of a crime event.

- Allow the explanation of critical facts by providing a visual to tell the story of the crime.
- Provide the setting and context of the crime.
- Show severity of injuries to the victim.
- Show evidence in its location and in proportion to other items at the scene.
- Sometimes the photos will be truly dispositive evidence, e.g., show that the witness did not have a line of sight to see what she said she saw from her angle.

Scene agents in the Phoenix Police Department have digital cameras for taking pictures of a scene. The photos are then copied to a secure computer at headquarters. Usually a scene agent takes photographs right after walking throughout the immediate scene and surrounding area to identify evidence.

Photographs in a murder trial form the basis for questions by prosecutors to the majority of witnesses. As seen in the case summaries, photographs were introduced into evidence at every homicide trial: sometimes over 100 photographs might be provided to the jury during testimony and for reference during their deliberations. The use of digital photography is a recent innovation within the police department and its use has been accepted by the courts.

Measuring the scene is another important activity performed by scene agents. The precise location of each item of evidence must be documented in the scene report. A scene agent initiates this task by establishing a reference point and then taking all measurements in relation to that point. At trial, a scene agent will respond to questions about how the reference point was established and how measurements were taken. The following exchange between the prosecutor and scene agent from Trial # 3 reflects the precision of measurements typically taken at a scene:

- Q. Let's talk about item number 1, which was a .380 [caliber handgun shell] casing, correct?
- A. Yes, item 1 is a shell casing, located nine feet, 10 inches south and 40 feet, zero inches west of the reference point [southwest corner of a building].
- Q. Now let's turn to item number 8, which was a red stain that you found.
- A. That's a swab of red staining in the parking lot pavement located 17 feet, eight inches north and 62 feet, zero inches west.

The testimony was important because the defense attorney had raised questions about where certain items of evidence were found, and the scene agent, recalled on the trial's fourth day, was able to provide the information with precision.

Volume of Evidence

- **Using experienced judgment, scene agents should take as much evidence as practicable from a homicide scene rather than trying to make judgments at the scene about what is most important.**

At issue in this conclusion is a debate on whether it is better to collect a large volume of evidence from a homicide scene or make judgments on the most important items of evidence for the investigation. The decision is not a trivial matter. More evidence collected means more evidence to be transported, more storage room, and more documentation. On the other hand, leaving an item at the scene may prove detrimental if that item is later identified as crucial to the investigation.

During Trial # 7, the scene agent, who had retired but was still called to testify, replied to a prosecutor's question on his approach to evidence collection:

When I did scene investigations, my theory on doing them was to take as much evidence as I could. You could never go back to the scene and recreate it the next day as far as the evidence. Once we secure the scene, if something is inside of that cordoned off area, I take it.

The scene agent's reference to the security of the scene relates to the responsibilities of responding patrol officers to cordon off the immediate area (usually with yellow tape) to preserve the scene and keep passersby and non-essential police personnel from entering and contaminating the scene.

The scene agent continued his testimony to indicate that his past experiences included cases where something left behind proved to be important:

If there was a drink cup, for example, laying there, I would take that because it's happened many times where, down the road, you get some new information that you didn't know before, such as broken glass or a drink cup. Like I said, you can't go back.

Even with their best efforts, a scene agent may fail to collect a crucial piece of evidence, as seen in the following discussion from Trial # 3.

In the incident leading to Trial # 3, several shots were fired in the early morning hours in a parking lot outside a bar; one person was killed and another injured. The scene agent responded while it was still dark and collected what he believed to be all the items of evidence from the scene. However, on the next day, a witness called the case agent stating that she had

just found a shell casing near the spot where the victim had been killed. A forensic scientist from the crime lab later determined that the shell casing was from a firearm recovered by investigators.

The scene agent testified that his evidence collection was at night and that it would have been possible for him to miss an item of evidence. He gave testimony on the difficulties in finding shell casings:

- Q. When you do an investigation of a crime scene, you don't always recover every casing that is there, do you?
- A. Every casing that I become aware of, yes, I will pick up, because it may or may not relate to it. But I only have one occasion to pick the evidence up. If I see it, I will recover it. Can something be on the scene and me not see it? Yes, it's very possible.

This example highlights the importance of taking as much time as needed at a homicide scene to locate all forensic evidence. A scene agent may even return the next day to see if any additional evidence is at the scene.

Trial # 6 provides an example of another problem, one in which the scene agent photographed a letter opener located in the vehicle but did not collect it as evidence because it did not fit the investigator's theory of the case. The defense argued that the letter opener could have been used as a weapon, lending support to defendant's claim of self-defense, and questioned the scene agent about the letter opener:

- Q. I'm showing you what's been marked as Exhibit 269. Can you tell me what you can see in that picture, particularly this item down here.
- A. Yes. This is the front passenger seat door. You can see at the center of the photograph is the map pocket part of the door. And inside of that we found what looked like a letter opener with a brown handle and a silver colored blade.
- Q. Showing you Exhibit No. 268. Is that the same item?
- A. Yes.
- Q. Now, that's not your standard ordinary letter opener, is it?
- A. I don't know what you mean.
- Q. Well, it's been filed down to a point and sharpened, has it not?
- A. I can look in my supplement here and see if I reflected that. I don't remember that it had been altered or appeared to be altered, but I don't --I'm going off of my memory here.
- Q. It appears it's been ground, correct?

- A. Well, I mean, I guess you could say that. I didn't notice anything like that at the time that I inspected it from the photograph. I don't know if it's been ground or not.

The car's owner, a sister of one of the victims, testified that the letter opener belonged to her and was just a "normal" letter opener. However, the defense called its own expert witness who testified that, based on examination of the photograph, the opener had been "honed with some type of grinding device and the metal is discolored" and that it had a pointed tip. In closing arguments, the defense attorney severely criticized the police for not collecting the letter opener:

But for some reason they made a mistake with the letter opener. You know, there was some testimony here, well, you know, I wasn't looking for a shank, because this is a gun case. Yet they take the CD's and the batteries and the shotgun shells and the drugs that are in the purse and the Taser.

Come on. They have to know it's significant. That's why they are taking pictures of it. Something happened. We don't have the placard with the number on it. Maybe it was seen after the other stuff was seen, but they didn't collect it. And that's really too bad, because it would have been nice to see what lab results on that knife would have been.

There is an instruction in your package that says: If you find that the State of Arizona has lost, destroyed or failed to preserve evidence whose contents or quality are important to the issues of this case, then you should weigh the explanation, if any, given for the loss or unavailability of the evidence. If you find that any such explanation is inadequate, then you may infer that the evidence is against the State's interests, which may create a reasonable doubt about the defendant's guilt.

In summary, our review supports the obvious need for collection of as much evidence as practicable from a homicide scene, rather than making judgments at the scene on what is most important to collect. While sometimes a difficult goal to attain, failure to collect and keep all relevant evidence can have an adverse impact on investigations and prosecutions.

Chain of Custody and Evidence Storage

- **Maintaining and documenting the chain of custody for physical evidence is critical in homicide cases.**

Police and forensic witnesses often are called to testify to the “chain of custody” in homicide cases. This is the step-by-step documentation of who handled and/or analyzed an item that is to be introduced into evidence. The purpose of maintaining this paper trail is to forestall any later efforts to say that the evidence has been tampered with or some other object substituted for the original.

It begins when an officer, detective, or crime scene technician collects a physical object—weapon, cartridge case, piece of clothing, any object with fingerprints, etc.—at the crime scene, or legally seizes it at some other place (e.g., defendant’s vehicle). The item will be tagged with identifying information or, if possible, placed in a bag with a tag. The identifying information will include the time and place the item was found or taken, person making the tag, and any other relevant information about the circumstances. When the item is submitted to the evidence clerk in the Property Room for storage, that transfer is also documented, and the evidence clerk is then responsible for the object’s security. If the object is transferred to a forensic specialist for analysis, that transfer and the return to the evidence clerk are also documented.

The net effect of this careful documentation is that the witness who identifies the object at trial will be able to testify credibly that it is the object either found at the crime scene or legally seized elsewhere. It can then be introduced as evidence at trial.

Release of Evidence

- **Homicide investigators have to be careful in their decisions to release evidence.**

Most evidence in homicide cases is kept indefinitely. However, there are exceptions, especially with large items such as vehicles. In the case for Trial # 8, the defense criticized the police for the release of the victim’s vehicle before they had an opportunity to conduct their own examination. The scene agent searched the vehicle for evidence about two weeks after the incident. He collected two cases of beer (allegedly stolen by the victim from the convenience store) and a baseball cap, and he cut out a portion of seat cover with a reddish substance on it. Three weeks later, the case agent contacted the victim’s next of kin who stated that he did not

want the vehicle and that it could be treated as an abandoned vehicle. The vehicle was then released to a towing company for disposition. The police were unable to locate the vehicle at the time of trial.

The defense questioned the scene agent on whether a thorough examination of the vehicle had been conducted:

- Q. We now know you failed to keep any part of that vehicle, the seats, among other things, aside from this little piece of evidence in custody, correct?
- A. We released the vehicle. I don't agree with the term failed. We released the vehicle.
- Q. Did you perform any microscopic analysis inside the interior of the vehicle?
- A. No.
- Q. Did you perform any chemical analysis inside the interior of the vehicle?
- A. No.
- Q. Did you dismantle the Subaru vehicle's tires?
- A. No, sir.
- Q. You never took apart the tire that had the trajectory rod close to it?
- A. Correct.
- Q. Would you agree with me that that tire right there looks flat?
- A. Yes.
- Q. Now, we know that you did not dismantle the seats of the vehicle, but did you dismantle the vents on the interior of the vehicle?
- A. You mean, like the air-conditioning vents?
- Q. The air-conditioning vents, anything that had a viable opening?
- A. No, I did not.

Challenges to the release of the vehicle in this case did not seem to affect the jury as they issued a guilty verdict after their deliberations. Nevertheless, the example illustrates the care that needs to be taken in deciding whether to release items of evidence.

Value of Reports

- **The accuracy and comprehensiveness of police reports are often critical for investigators and scene agents to refresh their memories before and during homicide trials.**

The obvious rule is that government witnesses should always come to trial prepared to testify and prosecutors almost always spend time prior to trial preparing their witnesses. However, with the passage of time between a homicide investigation and the trial, witnesses' memories may fade. When this happens, everyone has to rely on the written reports.

Witnesses at trial are permitted under rules of evidence to look at a document, picture, or any other object to see if it triggers some recollection. But the testimony then given is from the witness's memory, not from the document itself. It is not necessary for the jury to know what the document says because the document is not introduced into evidence.

This "present recollection refreshed" is a common human experience. Witnesses will often say, "Oh, now I remember." But if the document does not trigger a recollection, then a different evidentiary rule comes into play—"past recollection recorded." If the witness can identify the document as one he or she created in the ordinary course of his or her routine duties, then the document may be introduced into evidence. The witness must also testify that the document was created when the facts recorded were fresh in the writer's memory and that the document was correct when it was written.

Thus, the difference is that under the first example, the report is not admitted into evidence; under the second example, it is. In either situation, the reports should be accurate and comprehensive to be useful to the government witnesses but also might be useful to the defense.

However, based on ILJ's review of the sample homicide trial transcripts, in cases where witnesses were asked to look at reports to refresh their recollections about specific dates, times, or events, these witnesses were never challenged on whether they were testifying from their independent recollections or from the documents themselves.

Questions from Jurors

- **Jurors frequently ask questions about the details on items of evidence collected at a scene.**

As previously indicated, jurors can submit questions for a witness to answer. The juror writes the question on a piece of paper, which is given to the judge for consideration. Usually, the judge holds an off-the-record discussion with both attorneys to determine whether to ask the question. In Trial # 4a, jurors submitted several questions for the judge to ask the scene agent about the collection of evidence:

Q. : Detective, you said the first battery was triple A, and the battery in the car was double A. Were they both the same battery type?

A. : Yes. I'm sorry if I said triple A. That was an error. They were both double A batteries.

Q. : Was there a number on the mailbox? And if so, what was the number?

- A. : The number corresponded to the address that the mailbox was in front of.
- Q. : Other than the letter opener, were there other items in the vehicle which were not seized by you or your department?
- A. : Yes. We take thorough photographs of everything that's in the vehicle. If something seems to be of evidentiary value, then we'll seize it, so I couldn't tell you exactly what other items were in there, but they were photographed. The car was photographed. So, yeah, some items were not seized, as in the case of the letter opener.
- Q. : If the doors and windows were closed on the car, how did the CD player get so far west of the accident?
- A. : Once again, when I arrived on scene this is after the fire department was already there and the doors of the vehicle were open. So I don't know prior to the vehicle colliding with the telephone pole or the light pole, I don't know what condition those two front doors were in, if they were open or if they were closed. So I would have no way of knowing if the compact disk player was in the vehicle, how it got out or anything of that nature.

Allowing jurors to ask questions is an innovation in the state of Arizona that has proven to be successful in clarifying testimony from witnesses. Jurors submitted questions in virtually all the trials reviewed by ILJ staff, and the answers assisted jurors in understanding the circumstances surrounding an incident.

Chapter 4

Role of Forensic Evidence at Trials

Introduction

We conclude this report with additional details on some of the trials to bolster the reasons for our assessments on the role of forensic analysis. Appendix A provides more information on the forensic evidence analyzed in the crime lab and the analysis presented at trial. This chapter gives more discussion on the issues and limitations of forensic analysis in its presentation at trials. Areas covered in this chapter are DNA analysis, gunshot residue, ballistics, and latent prints.

DNA Analysis

Trial # 6 provides a good example on the role that DNA analysis can play in a trial. The example is unusual because it involves a witness rather than a defendant. In this incident, officers responded to an accident and found a male and female inside a vehicle that had collided with a telephone pole. Closer examination showed that both had gunshot wounds to their heads, and fire department personnel pronounced both victims dead at the scene. Investigation led to the arrest of the defendant who was alleged to have been in the back seat of the vehicle and had shot them from that position. From the defendant's residence, investigators recovered a shotgun that was eventually determined to be the murder weapon. The defendant claimed self-defense because he was afraid of the two individuals in the front seat.

Investigators eventually determined that another person had been sitting in the vehicle's back seat with the defendant. This witness told investigators that he saw the defendant shoot the two victims. The witness jumped from the vehicle and fled the area immediately after the shooting. He contacted investigators the next day to tell them what he had seen. The prosecutors became concerned that the defense would claim that this witness had contrived his story and was never in the vehicle.

Lab technicians located blood on the clothes that the witness wore on the day of the homicides. A forensic scientist developed a DNA profile from this blood and made comparisons with DNA profiles from the two victims. The scientist found a match to the victim who was sitting in the passenger seat. In effect, the match placed the witness in the vehicle and provided support to his account of what had transpired.

The CSI Effect

The *CSI Effect* is a reference to the influence that popular television shows can have on jurors' expectations of forensic science, especially crime scene investigation and DNA testing. In 1995, the Maricopa County Attorney's Office conducted its own survey of 102 prosecutors with jury trial experience asking them about their opinions on the extent to which juries exhibited signs of the CSI effect. The study's main conclusion was that the CSI effect had a "significant influence" on Maricopa County juries. That is, they believed that jurors had high expectations about the capabilities of forensic science. Many prosecutors worry that jurors may base their decisions on whether they have seen sufficient forensic analysis as evidence in trials.

Results from the survey convinced at least one prosecutor in the county to conclude that virtually all forensic analysis in a case should be presented at trial. In Trial # 9, she wanted to have a forensic scientist testify on the results of DNA testing that had been performed. With the jury recessed, the defense attorney objected on the grounds that the (1) DNA results were inconclusive, (2) testimony would be confusing to the jury (because DNA is a very complex issue), and (3) possibility of prejudice that might result from the testimony. The defense attorney said the following to the judge in a bench conference:

In other words, it's so confusing at times that one might reach a conclusion that there is some implication from the DNA evidence that could implicate my client, and I don't think that's the case, and I would ask the Court to consider not allowing the testimony, because I don't see any relevance for her testimony to begin with.

A dialogue between the prosecutor and judge then ensued in which the prosecutor explained why she wanted to introduce the analysis:

It will not tie anybody to the scene, but it will explain away, and what my practice normally is, especially in the CSI generation, or CSI effect, for lack of a better word, the jury is going to want to know, was there DNA testing, were there thumb prints, fingerprints, fibers, dog hairs. So what I

normally do in any case, especially a homicide, is explain the scientific evidence in terms of, in this case, given what she analyzed, she cannot include or exclude anyone, and it is to buffer against any claim there was no DNA evidence, and is to help to inform the jury as to the fact that tests were completed, and the case was investigated.

At this point, the judge sustained the objection to the testimony. Interestingly, the judge later reversed her decision due to a question by the defense attorney in asking the case agent whether the crime lab had conducted any analysis of two shotgun shells and a live shotgun cartridge found at the scene. Because of this line of questioning, the judge changed her ruling and allowed the forensic scientist from the DNA section to testify. The forensic scientist testified that the DNA analysis was “inconclusive,” because the DNA profile from the cartridge came from at least three individuals, and the defendant could not be included or excluded as a contributor. In ILJ’s assessment, we concluded that the testimony had only a minor impact on the outcome of the trial.

Gunshot Residue Analysis

Gunshot residue analysis is of limited value in investigations and prosecutions because it is an indicator, rather than definitive proof, that someone was near a firearm when it was discharged. When a firearm is fired, it releases gunshot residue into the surrounding area because of the pressure inside the chamber as the bullet moves through the barrel. GSR particles may attach to the shooter’s hands, the victim’s body, and nearby objects. The particles are typically lead, barium, or antimony, which are elements present in primers and cartridges of ammunition. The amount of GSR contamination released depends on the design and condition of the weapon, the type of ammunition, and the length of the barrel. Weapons of poor design and older weapons release greater amounts of GSR. With a GSR test kit, a crime scene specialist can wipe a person’s hands or a surface to collect any particles that might be present. The main part of the kit is a circular disk with a sticky tape on top. A crime scene specialist dabs the tape to collect possible GSR particles that might be present. The kit is then preserved as evidence.

There are several reasons that GSR may not be found. First, the person may not have been near the firearm when it was fired. Second, some firearms do not release enough GSR particles to be detected. Third, the particles may have been washed off prior to administration of the kit.

A forensic scientist in the crime lab examines the tape in an electron scanning microscope to check for the presence of lead, barium, or antimony. A positive test provides circumstantial evidence that the person or object was close to a firearm when it was fired. Forensic scientists are careful in explaining positive results, with a typical report reading as follows:

Five particles containing lead, a component known to be indicative of Gunshot Residue (GSR), were detected on each of the GSR collection kit samples from the right and left hands. The particles are not specific to GSR. However, they do indicate that the test subject may have either discharged a firearm, been in the close vicinity of a firearm when it was discharged, or contacted an item with GSR on it.

When no particles are found on the kit samples, the report will simply state the results with a qualifying statement:

No particles consistent with GSR were detected on the GSR collection kit samples. Note, that due to the nature of GSR, the lack of particles may not preclude the test subject from having either discharged a firearm, been in the close vicinity of a firearm when it was discharged, or contacted an item with GSR on it.

During the investigation leading to Trial # 6, the medical examiner administered GSR kits to the right and left hands of both deceased victims during the autopsies. The case agent collected the kits and requested that the crime lab conduct GSR analysis. The forensic scientist gave the following information at trial:

- From the right hand of the first victim, numerous particles containing lead, which is a component of gunshot residue. From the left hand, a few particles again of lead, indicative of gunshot residue were found.
- From the right hand of the second victim, four particles highly specific to gunshot residue and numerous particles containing one or more components were present. From the left hand, two particles highly specific to gunshot residue were detected, along with numerous particles containing lead.

As the defense attorney pointed out, these results were not surprising because it already had been established that the victims were killed in the vehicle and that particles would be expected to be released in the vehicle's relatively small space.

In Trial # 15, a forensic scientist from the crime lab analyzed the GSR kit taken from the victim's hands. He found a single particle containing lead on a sample from the left hand. The right hand had no particles consistent with gunshot residues. Asked what he meant in his report when he wrote, "the particle is not specific to GSR," he answered:

What that means is lead is found elsewhere, other than just gunshot residues, like car batteries, some paints. Obviously, bullets have lead, some pyrotechnics have lead. So there's various other sources in which lead is present and thus the reason for making that statement.

In summary, the problem that prosecutors have with GSR is that the testimony brings out that the residue may be present even when a firearm is not discharged or may not be found after a firearm is discharged.

Ballistics Analysis

As described in Chapter 1, forensic scientists testified in 11 of the 22 trials on the results of ballistics analysis. The most powerful testimony is when a shell casing or bullet has been matched to a firearm. For example, in Trial # 3, the forensic scientist from the ballistics section of the crime lab testified that the four shell casings from the scene were fired from a Beretta that had been recovered by police. The testimony was specific for each casing:

My conclusion was that this casing, Exhibit number 4, was identified as being fired from the same handgun as the test fires to the exclusion of all other handguns.

He provided similar testimony on comparison of the bullet from the victim against bullets test fired in the lab from the Beretta.

Ballistics comparisons cannot be quantified in the same way as DNA comparisons. In explaining how definitive conclusions are made, the forensic scientist in Trial # 3 stated that the examination is subjective and that it employs the same kind of thought process that a person uses to recognize a friend. Forensic scientists are checking for the “number of congruencies which are present, but we're also looking for the pattern in which they are laid out.” To overcome the subjective nature of the comparison, another forensic scientist verifies all results (positive and negative conclusions) from ballistics comparisons:

The City of Phoenix Police Department has set their own rules, which states that not only do I have to feel that it's an identification, but I have to get another qualified examiner to come over and look at it and verify it. Although I had my positive identification, another examiner did come over and verify they felt it was a positive identification.

Of course, these verifications are not “blind” because the second scientist knows the first scientist's results.

Results from ballistics analysis are not always conclusive. In Trial # 6, a forensic scientist testified on comparing three shotgun shells against test fires from a shotgun found in the defendant's residence. The scene agent found the three shotgun shells in the back seat of the vehicle in which the two victims were killed. The forensic scientist stated that two of the three shotgun shells matched the characteristics of the test fires, while results from a third shell were "inconclusive." By inconclusive, the forensic scientist stated that all the class characteristics were agreeable between the third shell and the test fires, but there was not enough quality of the microscopic characteristics to say that the shotgun fired the third shell.

In some cases, police investigators recover shell casings at the scene but never locate any firearms. In these instances, testimony may be given on whether the casings came from the same firearm, thereby supporting other testimony that there was only one shooter. In Trial # 12, the forensic scientist responded as follows to the prosecutor's questions:

- Q. So explain, then, to the jurors how it was that you went about to try to determine whether these four casings had been fired from the same weapon if you didn't have the weapon?
- A. When I first receive evidence as far as casings, I will look at each casing, noting the headstamp, any marks left on the primer from the firing pin, and by the bridge face of the weapon. Bridge face marks are caused by when the cartridge is fired not only does the bullet go out at the end of the barrel, but casings push back up against the bridge casing of the pistol. This leaves marks. If there's any marks that are on the bridge face of the weapon, these will be transmitted on to the bridge face, compression will be on the primer and possibly on the outer casing.
- Q. So are these things that you can see with the naked eye or does it require a microscope?
- A. I used a bullet compressor microscope.
- Q. What, if anything, did you conclude?
- A. I concluded that all four were fired by the same weapon.

Another area in ballistics testimony is on the "trigger pull" of a firearm, which is a measurement of the pressure (in pounds) needed to fire a weapon. As standard procedure, forensic scientists in the crime lab determined the trigger pull on all firearms submitted to them for analysis. Even though testimony is provided in trials on trigger pull, it is rarely a focus on the part of prosecutors and defense attorneys.

Latent Print Analysis

In Chapter 1, we stated that latent print analysis was of almost no value in the trials that we examined and we gave an example from one of the trials to support our conclusion. Other examples could have been given. In Trial # 16, the latent print examiner from the crime lab testified about the examination of two prints from photographs of a knife handle. She stated that the quality was so poor that she was unable to make a comparison.

In Trial # 18, a total of 18 photographs of latent prints found on evidence located at the crime scene were compared with the fingerprints of the defendant and two victims, but no matches were made. One latent print was matched to an individual whose fingerprints were in AZAFIS (Arizona Automated Fingerprint Identification System), but investigators were never able to locate this person. At this trial, the defense attorney reminded jurors that an unexplained fingerprint on the wooden board (murder weapon) did not belong to his defendant.

Appendix A
Summaries of Case Investigations and Trials

Defendant # 1

Summary of Case Investigation and Trial

On March 14, 2005, around 12:20 p.m., one young man shot another five times in the chest and once in the hand. The victim had been in Phoenix for only three days, having traveled from Nogales, Mexico.

On the day of the shooting, the suspect went to the house where the victim was staying and was greeted at the door by a woman who was visiting the household. After a brief conversation, she got the victim to come and speak with the suspect. The two men walked to the side of the house where the shooting took place.

The case agent for the investigation interviewed two neighbors, a father and daughter, at the scene. They had been playing basketball in their back yard when they heard shots. After hearing the shots, the father stated that he looked over the fence and observed someone running from the yard where the shooting occurred. He explained that this person was running to a car in front of the yard and was carrying a gun. The driver, who was later determined to be the suspect's cousin, could not get the car started. The father observed the suspect retrieve something from the glove compartment, open the hood, and do something under the hood. The suspect was then able to start the car and drive away. The suspect's cousin had already fled on foot.

The daughter gave a similar story to investigators. She observed the suspect running to the passenger side of the car. She did not know what happened next because she was calling 9-1-1 on her cell phone. She recalled that the suspect drove away after he closed the hood to the car. She told investigators that she first heard a single shot, then a pause, followed by more shots for perhaps a total of five shots. After calling 9-1-1, she went over to the house and saw the victim on the ground.

Dispatchers in the communications center had advised that a suspect in a vehicle had fled the area. A short time later, information was obtained that the vehicle was an older model Oldsmobile Cutlass with green stripes. A patrol officer was driving through the area looking for the vehicle in question and observed an older, green-striped Cutlass on the side of the road with the hood open and a person next to it. As the officer turned toward the vehicle, the person got back in the car and immediately made a u-turn away from the patrol car. The officer activated his emergency lights and the suspect vehicle immediately stopped. Other officers arrived at the same time and the arrest was made. The time between the 9-1-1 call and the arrest was approximately 15 minutes.

The officer later testified that after the suspect was handcuffed, he immediately said, "I shot him, I shot him, I had to protect my family." Officers found a silver .357 revolver in the front seat of the vehicle and seven rounds of .357 ammunition in the suspect's right front pocket.

During an interview with investigators, the suspect again admitted to shooting the victim and provided details on the reasons for the incident. He stated that he and the victim had been "jacking people" because they needed money. He believed that the victim was going to kill him because of what he, the suspect, knew. Because of his fear of the victim, the suspect had been carrying a gun with him. The suspect came to the house to retrieve a Nissan vehicle that they had been driving while committing their robberies. When the suspect told the victim that he was

taking the vehicle, the victim said “Okay,” and said that they would “take care of the other thing later.” The suspect took this to mean that he or his family would be killed. As the suspect was getting ready to remove the car from the yard, the victim said he would retrieve the suspect’s cell phone from the house. Because the suspect already had his cell phone, he believed that the victim was actually going to get his own gun, and because of this fear, he shot the victim several times.

The defendant was indicted on March 23, 2005. Compared with other homicide cases, this case moved relatively quickly with only two continuances. One of the continuances was to allow time to obtain a saliva sample from the defendant. The trial began on October 5, 2005, and lasted six days.

The following witnesses testified at the trial:

- Two occupants of the house at the time of the incident
- Two neighbors (father and daughter)
- Two responding patrol officers who arrested the defendant
- Scene agents (crime scene specialist and homicide investigator)
- Case agent
- Two forensic scientists from the crime lab (GSR and Firearms)
- Medical Examiner
- Defendant

The two people who were in the house at the time of the incident testified on the second day of the trial. One witness stated that she was awakened by gunfire and went to the side of the house where she discovered the victim. The other witness testified that she answered the door when the defendant came to the house and then located the victim to come to the door. The two neighbors (father and daughter) testified on what they observed from their back yard.

On the third day of the trial, the suspect testified on his own behalf. He admitted on the stand that he had shot the victim because, “I was afraid that he was pulling a gun to shoot me.” He stated that the victim had threatened him in the past and that he had seen the victim with a gun a few days prior to this incident. He stated further that at the time of the incident, the victim turned as if he were reaching into his waistband, and that he believed he was reaching for a gun. The suspect stated that he had involuntarily driven the victim to commit two robberies on the prior day, and had left his car where the victim was staying because he was concerned that it had been used in a crime. The suspect said that on the day of the homicide, he had come to retrieve his vehicle and carried a gun for protection. He stated that the victim had threatened him when they were together on the side of the house.

Forensic Evidence at Trial

Both the crime scene specialist and homicide investigator testified at the trial on their collection of evidence from the scene and from the two vehicles. Of particular importance was the investigator’s testimony on obtaining the revolver from the front seat of the defendant’s vehicle and the live cartridges given to him by officers at the car stop location. The investigator

described the procedure for administering a GSR kit test on both hands of the defendant and the process for towing vehicles to the department's secure impound lot.

The crime scene specialist testified on the collection of evidence at the crime scene and the processing of the two vehicles at the impound lot. The forensic scientist who processed the GSR test kits from the defendant's hands testified that a single particle of lead was found from the kit administered to the right hand.

The forensic scientist who processed the Smith & Wesson .358 Magnum revolver found in the defendant's vehicle at time of arrest testified to the following results at the trial:

- The revolver had a measured trigger pull of 3 ¼ pounds in single action mode and 9 ½ pounds in double action mode.
- Results were "inconclusive" with regard to whether two bullet fragments from the scene were fired from the revolver.
- Results were "inconclusive" but it was "likely" that a bullet fragment from the crime scene and the bullet fragment from autopsy were fired from the revolver.

The case agent testified about his interview of the defendant on the day of the homicide. A portion of the taped interview was played for the jury. In the videotape, the defendant responded "No" to a question about whether the victim had a gun when the shooting took place. The case agent stated further that the defendant never mentioned anything about the hammer found at the scene. He concluded his testimony by answering questions about evidence collected at the autopsy.

The medical examiner testified on the extent of injuries to the victim. He stated that he identified at least five separate gunshot wounds in the victim (two in upper right chest, one in side of chest, and two in abdomen). He testified that some of the wounds appeared to be from shots that were fired while the victim was lying on the ground. Finally, the medical examiner testified that methamphetamine was found in the victim's body.

In his instructions to the jury, the judge told the jurors that they would be given four verdict forms with each form prepared for a specific charge. The possible verdicts were (1) guilty/not guilty of 1st degree murder, (2) guilty/not guilty of 2nd degree murder, (3) guilty/not guilty of manslaughter by sudden quarrel, or (4) guilty/not guilty of reckless manslaughter. With a guilty verdict, the jury had to report whether they found the offense that the defendant committed was dangerous or not.

Trial Outcome

On the fifth day of the trial, the jury returned its verdict. The jury found the defendant guilty of 2nd degree murder and that a dangerous offense had been committed. The next, and final, day of the trial was determination of aggravating circumstances. After presentation by the prosecutor and defense counsel, the jury retired to deliberate and reached a consensus later that morning. They determined that the following four aggravating circumstances were proven:

- The offense involved the infliction or threatened infliction of serious physical injury.

- The offense involved the use, threatened use or possession of a deadly weapon or dangerous instrument.
- The offense involved the presence of an accomplice.
- The offense caused emotional and financial harm to the victim's immediate family.

On December 2, 2005, the defendant was sentenced to 19 years in prison.

In March 2007, the sentence was vacated and remanded for resentencing. As of the cutoff date for this report, the defendant had not been resentenced.

Impact of Forensic Evidence

The testimony on the GSR and ballistics analysis were important in this trial for two reasons. The forensic scientist testified that it was likely that the bullet fragments from the scene and the autopsy were fired from the revolver found in the defendant's vehicle. Another forensic scientist testified that the GSR collection kit sample from the defendant's right hand contained one particle of GSR. The combined effect of the testimonies implicated the defendant as the shooter.

The defense did not dispute the results of the GSR test kit and the ballistics comparisons. In fact, the defendant testified on his own behalf that he did shoot the victim in self-defense. He feared that the victim was going to retrieve a gun from the house and shoot him. The jury was obviously not persuaded by this argument.

Defendant # 2

Summary of Case Investigation and Trial

On December 3, 2003, a man approached a police officer who was working off-duty as security at a grocery store. He told the officer that he had done something wrong, and when the officer asked what he did wrong, the man replied, "I killed my girlfriend at our apartment." When asked if he was serious, he replied, "Yeah, I'm serious. I killed her with a frying pan. I hit her in the head." He stated that the incident had occurred the previous day; he gave the address of the apartment and said that his girlfriend's body could be found in the hallway. He later told the off-duty officer, "I left her in the hallway. I sat with her all day thinking about what I did. I just snapped and I hit her with a pan in the head. We were arguing yesterday morning and I just snapped and hit her. I know I killed her."

The off-duty officer called the department's communications center to request that an on-duty patrol officer be dispatched to the grocery scene. Upon arrival, the officer placed the suspect in the back of the patrol car and drove a few blocks to the apartment complex. At the complex, he was met by two other officers who were requested as assistance. As they approached the second floor apartment, they observed that a bedroom window and a larger living room window were broken out. When they pushed aside the horizontal blinds in the living room, they saw that the carpet had red stains in several locations and they could see the lower legs of someone lying in the hallway leading from the living room.

Based on their observations, the three officers entered the apartment (the suspect had informed the officers that the apartment was unlocked.). They found the victim in the hallway. She was not breathing and signs of rigor mortis were evident. Upon determining that no one else was in the apartment, they exited the apartment and established area security, and notified their supervising sergeant about the discovery of the body. Members of the homicide unit were then contacted and dispatched to the scene. The fire department dispatched paramedics to the scene for official determination of death.

The case agent assigned to the investigation requested that the arriving officer transport the suspect to headquarters for questioning about the incident. During the interview, the suspect told the case agent that he had left the apartment and when he returned, there were people in the apartment. He said the people left and something happened between him and the victim. He said he did not know what happened, but that he had held the victim in his arms in the apartment all day. Upon additional questioning about what events had taken place during the morning, the suspect became argumentative and asked for a lawyer. The interview lasted less than 10 minutes.

Several continuances were granted in this case, which delayed the scheduling of a trial. A complicating factor was that the defendant also had charges of narcotic drug violation (class 4 felony) and drug paraphernalia violation (class 1 misdemeanor) from an arrest in February 2002. A motion for a Rule 11 Pre-Screen was argued on July 28, 2004, and was denied by the court. However, in September 2004, the court granted a full Rule 11 examination for the defendant regarding his competency to stand trial. Two psychiatrists were appointed for the examination and submitted their reports by October 19, 2004. On that date, the court ruled that the defendant

understood the proceedings and was able to assist counsel with his defense, and that he was competent to stand trial.

On January 18, 2005, a voluntariness hearing was conducted in which the defendant's motion to suppress statements made at the grocery store was denied. At this hearing, the court reviewed the history of plea negotiations, and the defendant affirmed that he understood the last offer and wished to proceed to trial. The trial began on the following day with voir dire examination of prospective jurors, and the selection of nine jurors (eight jurors plus an alternate). Testimony from witnesses began the following day.

Over two days of the trial, the county's prosecutor called the following witnesses for testimony:

- Off-duty officer who was approached by the defendant
- Two officers who found the victim at the apartment
- Case agent and scene agent
- Forensic scientist from the forensic screening section of the crime lab
- Forensic scientist DNA analysis section of the crime lab
- Medical examiner
- Downstairs neighbor of the victim

The resident of the apartment immediately below the victim's apartment testified that during the early hours of December 3, she was awakened by loud noises from the victim's apartment. She stated that the noises lasted about 30 minutes. She further testified that she heard a window breaking and went to her living room window to make sure it was intact. The next morning, she saw broken glass in front of her apartment.

The defendant decided not to testify and his attorney called no witnesses.

Forensic Evidence at Trial

The DNA analyst testified about the results of the comparisons made from DNA profiles of the forensic evidence:

- The DNA profile from the defendant's pants, boots, and t-shirt matched the victim's profile.
- A mixed profile was obtained from the palm swabs of the defendant, with the major profile matching the defendant.

On the third day of the trial, the medical examiner testified about the autopsy performed on the victim. He stated that he had found three separate areas of bruising under the scalp and that the victim's liver was torn in several places. The cause of death was blunt force trauma with a minimum of three blows to the head.

Trial Outcome

Closing arguments by the prosecutor and defense attorney were completed by mid-afternoon on the trial's third day. The jury reached a verdict later that day that the defendant was guilty of 2nd degree murder. The next day was the aggravation phase of the trial. After arguments were presented on three aggravating circumstances, the jury retired for deliberations. They reached consensus later that morning and reported back to the judge with the following results:

Aggravating Circumstance	Unanimously Proven Beyond a Reasonable Doubt	Unable to Reach A Consensus Decision
1 (a). The defendant committed the offense in an especially cruel manner	X	
1 (b) The defendant committed the offense in an especially heinous manner.		X
1 (c) the defendant committed the offense in an especially depraved manner.		X
2. The offense involved the use or threatened use of a dangerous instrument during the commission of that offense, specifically a frying pan	X	
3. The offense caused physical, emotional or financial harm to the victim.	X	

On March 2, 2005, the defendant was sentenced to 20 years in prison.

Impact of Forensic Evidence

The main evidence against the defendant was that he told had an officer that he had killed his girlfriend, how he had committed the murder (with a frying pan), and exactly where they could find the body. In subsequent interviews, he did not repeat this information and merely stated that he could only remember that he held the victim all day before going to the police.

The DNA analysis matched blood from the defendant's clothing to the victim. Other testimony was given about several blood spatters throughout the apartment and about dents found in the frying pan. The analysis supported the defendant's confession and the prosecutor's theory of the case.

Defendant # 3

Summary of Case Investigation and Trial

Victim “A” was killed in the early morning hours of October 3, 2004, in the parking lot of a bar where he had been with victim “B” (his brother-in-law), and victim “C” (victim A’s brother), and two cousins. Victim A was shot once in the head with a Beretta .380 caliber pistol. Shots were also fired at victim B as he came towards victim A to assist him in the parking lot. Paramedics from the Phoenix Fire Department responded to the scene and transported victim A to the hospital where he died.

Victim B told police at the scene that it was the first time that he and victim A had been to this bar. He had driven victim A and his two cousins to the bar in his car, arriving about 12:30 a.m. They went inside the bar, had some drinks, and did not have problems with anyone in the bar. As they left the bar, victim A was behind them. Victim B was backing his car out of a parking lane when he noticed a passenger in another car arguing with victim A. Victim B exited his car and started walking toward victim A. He saw someone from the other car shoot at victim A, striking him in the face. Victim B told police that as he reached victim A, two or three more shots were fired in their direction. The other vehicle then left the scene.

On Monday, October 4, 2004, a witness called the case agent with information about what happened inside the bar prior to the shooting. She stated that the suspect had been drinking that evening and that his ex-girlfriend was also in the bar. The witness testified that the suspect wanted to dance with his ex-girlfriend and was told by the witness that the woman did not want to have anything to do with him. Sometime later, the ex-girlfriend was talking with victim C in the bar. According to the witness, the suspect became angry and told her that he was going to kill the man who was talking to his ex. At this point, the suspect is alleged to have called his son and a friend. The witness stated that both showed up, but were not allowed to come into the bar because they would not allow the security guard to frisk them for weapons.

The witness testified that she saw the suspect in the parking lot firing a gun like a .380 and that she saw victim A fall to the ground. She recognized the cowboy hat that the suspect was wearing while in the bar. The witness gave the case agent a shell casing that she found the following day in the parking lot near where victim A had been shot. The casing was later determined by forensic scientists to have been fired from the murder weapon.

During the subsequent investigation, the case agent interviewed another individual: a woman who had lived with the suspect for 20 years. They had never married but had five children together. She had separated from him about two years earlier. She stated that she purchased a Beretta .380 caliber pistol on December 16, 2000, as a gift to the suspect. She also testified that in mid-July 2004, the suspect visited where she lived and had the Beretta with him at that time. She also told the case agent that in mid-October 2004, the suspect told her during a telephone conversation that he had done something bad and that it was her fault because she would not agree to live with him. During her testimony at trial, this individual testified that her son could not have been involved in the shooting because they were in California on the weekend that the shooting occurred.

The suspect’s friend was arrested by police on October 8, 2004, while driving the suspect’s car. Police confiscated a Beretta pistol from the car. The suspect’s friend told police

that the suspect had given him the pistol. The friend was deported to Mexico and did not testify at the trial.

The defendant was arrested on November 11, 2004. In an interview with the case agent, the defendant initially stated that he had been in the bar on the night of the shooting but left before the shooting took place. Later in the interview, he changed his story to say that he was there at the time of the shooting, but was not the shooter and was not involved.

The following persons testified at the trial:

- Case agent and scene agent
- Four forensic scientists from crime lab
- Patrol officer
- Surviving victim
- Security guard from bar
- Four witnesses from the bar
- Defendant's common law wife

Testimony about the Beretta pistol was provided by a patrol officer who had responded to the residence during the early morning hours of September 19, 2004. Both the suspect and his friend were in the house. The officer found three shell casings inside the residence and located a bullet strike in the window. A photograph taken by the officer showed a cowboy hat on top of a table in the residence. A forensic scientist from the crime lab testified at the trial that the three shell casings were from the Beretta.

The defendant's ex-girlfriend testified at trial that she had dated the defendant and that he had a gun like the Beretta pistol when they dated. She stated that she believed that the defendant was divorced at the time they were dating. She was in the bar on the night of the incident and was talking to victim C who eventually walked her to her car. She stated that the defendant arrived after she was at the bar and that he was wearing a cowboy hat. She did not see or hear the shooting, and became aware of the shooting only after victim B ran to the car to tell them.

Testimony at the trial from different witnesses was sometimes contradictory. Victim B told investigators that the weapon involved was an AK-47 (other witnesses told police that the defendant had been seen with an AK-47 earlier in the day and was trying to sell it). The prosecutor told the jury that victim B simply made a mistake because of the chaos of the moment: someone was shooting at him. Another witness testified that she had seen the shooting and that it was by a man in a cowboy hat and a white jersey with the number "10" on it and that the man was firing a rifle. She could not identify the defendant as the shooter.

The integrity of the first witness's testimony was questioned. The woman admitted that she had a previous felony conviction, that she was in the country illegally from Mexico, and that she had been using drugs that evening in the bar. During the trial, she was having problems with her vision and stated that she had cataracts.

An unusual feature during this trial was the appearance of a new witness, who was the wife of the defendant's son. This witness and the defendant's son were not living together at the time of the trial. She approached the case agent and prosecutor at the end of the day on which

the defendant's ex-girlfriend testified. She stated that she had not come forward previously because she had not wanted to get involved in the case. However, she was now willing to testify in support of the ex-girlfriend's testimony, stating that she was with the ex-girlfriend and the defendant's son during the weekend of the incident. Moreover, she would testify that the defendant had called on Sunday, October 3, and told her that he and his friend were at the bar and that he (the defendant) may have killed someone. The new witness provided this testimony during the next day of the trial.

A complicating factor in this case was that the defendant had also been charged with aggravated assault (one count) and disorderly conduct (two counts) from a prior incident. A separate trial on those charges was held starting on February 2, 2006, at which the defendant was found guilty of all three charges. Several continuances in regard to the defendant's arrest for murder and aggravated assault had been approved because of the charges from the previous incident. The trial for the murder of victim A and assault of victim B began on February 16, 2006, and lasted five days.

Forensic Evidence at Trial

The crime scene specialist who collected evidence at the scene and three forensic scientists from the ballistics section of the crime lab provided testimony at this trial.

The crime scene specialist described each of the 14 items of evidence that he recovered from the parking lot. A large diagram of the parking lot with numbered locations for the items had been developed for the trial and the crime scene specialist made reference to the diagram throughout his testimony. On cross-examination, the crime scene specialist testified that he processed two vehicles in the parking lot for latent prints. On the next day of the trial, the crime scene specialist was called back to testify about the process of taking measurements at the parking lot on the exact location of each item of evidence. He explained the establishment of a reference point at the parking lot and the procedure for taking measurements from the reference point.

One forensic scientist testified on the results of test firing the Beretta pistol and the packaging of the fired projectiles and shell casings for subsequent comparisons by another forensic scientist. A second forensic scientist from the ballistics section gave the results that compared the shell casings from the scene (including the shell casing that the female witness found at the scene) against the shell casings from bullets fired in the crime lab from the Beretta. He also compared the projectile recovered from the victim at autopsy against a projectile fired from the Beretta pistol in the crime lab. As previously indicated, his testimony was that the shell casings from the scene and the projectile from the victim were fired from the pistol. The third forensic scientist testified that the three shell casings recovered in September 2004 from the defendant's residence were fired from the Beretta pistol.

Interestingly, the judge did not allow testimony on the analysis of ballistics evidence collected on December 24, 2004. The analysis showed that one of the two shell casings had been fired from the Beretta pistol, and the result on the other shell casing was inconclusive. The decision was made after arguments from the prosecutor and defense attorney on the relevance of the analysis to this case. At issue was the fact that the ballistics evidence had been collected after the defendant's arrest. The prosecution argued that the analysis was simply more evidence connecting the murder weapon to the house, which was linked to the defendant.

Trial Outcome

The jury found the defendant not guilty of 1st degree murder but guilty of 2nd degree murder of victim A and guilty of aggravated assault against victim B. After the verdict, the jury was dismissed and a bench discussion was held in regard to aggravating factors. The result was that both counsels waived a jury trial as to the aggravating factors. The defendant acknowledged the existence of the prior felony conviction on one count of aggravated assault and two counts of disorderly conduct.

On May 5, 2006, the defendant was sentenced on verdicts from both trials. He received a sentence of 7.5 years for aggravated assault stemming from the first trial, and 2.25 years for each of the disorderly conduct verdicts to be served concurrent with each other and consecutive to the previous sentence. For the murder verdict, he received a sentence of 20 years after the completion of the sentences from the previous trial, and an additional 11.25 years for the aggravated assault verdict to be served after the completion of the sentence for the murder.

Impact of Evidence

The ballistics evidence was important in this case because it verified that the projectile from the victim at autopsy was fired from the Beretta pistol. The difficulty in the case was that police found the Beretta in the defendant's vehicle, which was driven by a friend of the defendant at that time.

Defendant # 4

Summary of Case Investigation and Trial

On August 11, 2003, patrol officers from the Phoenix Police Department responded to a call in reference to a body inside a dumpster at a low-rise apartment complex. Upon arrival, the officers were directed to a dumpster in the corner of the apartment complex. They looked into the dumpster and saw the body of a white female, partially covered by trash. They immediately secured the area around the dumpster and cordoned it off with yellow crime scene tape. During the course of securing the crime scene, the officers learned that the victim had possibly lived in Apartment #9 at the complex. They contacted the occupant of that apartment, who told the officers that the victim was his girlfriend. He also stated that they had a verbal argument the previous evening and that she then left their apartment. He told the officers that he believed the body inside the dumpster was his girlfriend and that he had not left the apartment during the night.

Several witnesses were interviewed by patrol officers and homicide investigators at the scene. The investigators were told that the suspect had been seen making several trips on the previous evening (August 10, 2003) and into the early morning hours from his apartment to the dumpster where the victim was found. When the suspect was questioned at headquarters, he initially denied that he had anything to do with his girlfriend's death. In the meantime, police examined the interior of the apartment and located several drops of blood in the hallway and bathroom areas. It was also determined that the victim had a single gunshot wound to the right eyebrow area of her forehead.

Based on this information, the suspect was again questioned and confessed to the police. He stated that after killing her, he kept her inside the apartment for three to four hours, and then wrapped the body in plastic and carried it to the dumpster. The suspect also agreed to take the investigators to the area where he had disposed of the murder weapon. A search of the area was conducted but the gun was never found.

The suspect was indicted on August 19, 2003. In June 2004, the court approved a motion for a competency screening evaluation report to be prepared by a doctor from the Superior Court's Forensic Services Unit. The order was amended in July 2004 to direct a further evaluation of the defendant to take into consideration his blood sugar levels at different times. On August 16, 2004, the court ruled that a full Rule 11 examination was not warranted based on the findings of the screening evaluation report.

On September 27, 2004, at oral arguments on motions, the prosecutor informed the court that the State did not intend to introduce into evidence at trial the DNA evidence discussed in the defendant's motion to preclude State's DNA evidence due to lack of notice. A voluntariness hearing was also discussed at this court proceeding, and the court ordered that any such hearing be reserved until a necessity was incurred at trial.

The trial for 1st degree murder was four days in duration, a portion of which was devoted to a voluntariness hearing. The voluntariness hearing was held without the jury present. At issue was whether the defendant had fully understood his Miranda rights when the homicide investigator read them to him and whether certain admissions by the defendant during the subsequent interview could be admitted as evidence in the trial. The defense claimed that the

defendant had not been receiving his medications for blood sugar and high blood pressure over the course of the times that he was interviewed. Testifying at the hearing were the following:

- First patrol officer responding to the scene
- Homicide investigator who interviewed the defendant at headquarters
- Physician who conducted the preliminary screen evaluation of the defendant
- The defendant

On Day 3 of the trial, the court ruled as follows on voluntariness:

- There was compliance with Miranda vs. Arizona.
- The defendant did not invoke any of his Constitutional rights.
- There were no equivocal statements that required the homicide investigator at that time to clarify any further.
- The defendant's statements were voluntarily made to the officers at the scene and to the homicide investigator.
- There was no legal impact as to the voluntariness of statements made.

After the voluntariness hearing was concluded, the defense attorney stated that they would be using an accidental discharge defense. However, he raised objections to the conduct of the trial, arguing that the prosecution had been allowed to go beyond what they had agreed upon prior to the trial and that the prosecution now intended to introduce statements at trial as a result of the voluntariness hearing.

At the trial, the jury heard evidence from the following persons:

- Two patrol officers who responded to the scene
- Case agent and scene agent
- Homicide investigator who interviewed defendant
- Forensic scientist from the ballistics unit of the crime lab
- Forensic scientist from the biological screening unit of the crime lab
- Medical examiner
- Two residents of the apartment complex

The two patrol officers testified on responding to scene, finding the victim in the dumpster, and conducting interviews of residents in the complex. They also testified to incriminating statements made by the defendant that he was involved in the death of his girlfriend. The homicide investigator who interviewed the defendant testified on how the Miranda rights were read to the defendant and his subsequent confession to the murder. She further testified on how the defendant showed investigators where he had thrown the murder weapon and that after an extensive search the weapon was not found.

One of the residents from the apartment complex testified about finding the victim in the dumpster and immediately calling the police. The other resident testified that she saw the

defendant near the dumpster early on the morning of August 11, 2003. She testified further that she had heard the defendant and the victim arguing and heard the defendant tell the victim, “I will kill you.”

Forensic Evidence at Trial

The forensic scientist from the ballistics unit provided the jury his results after analyzing the bullet recovered at autopsy. He stated that it could have been fired from a .38 special caliber revolver and cited several possible manufacturers. The forensic scientist from the forensic screening unit described how she found blood on the defendant’s pants and socks that had been taken as evidence at the time of his arrest. Interestingly, DNA analysts from the crime lab were not required to testify because the prosecutor and defense attorney agreed to a stipulation that:

- Blood found on the defendant’s pants and socks was the blood of the victim;
- All the blood samples taken by the scene agent insider the apartment were the blood of the victim.

The defendant did not testify on his own behalf at the trial.

The defense attorney asked for a mistrial several times throughout the trial. He objected to the prosecutor’s introduction of statements from witnesses at the voluntariness hearing, saying that prior to the trial an agreement had been reached that these statements would not be introduced. On the third day of the trial, he asked for a Rule 20 judgment of acquittal, which the judge denied. On the same day, he asked for a mistrial because his defendant was not getting his medications and meals at the correct times of the day. Finally, after closing statements, he asked for a mistrial based on certain comments made by the prosecutor.

Trial Outcome and Appeal

As a result of deliberations, the jury found the defendant guilty of 1st degree murder. On February 10, 2005, he received a life sentence.

The defense appealed to the Court of Appeals for a reversal of the verdict. In July 2006, the Court of Appeals did, in fact, reverse the conviction and sentence, and remanded the matter back to the Superior Court. The retrial began on October 5, 2006 and lasted five days.

Retrial

With regard to witnesses, there were two differences in the retrial. The first is that another officer responding to the scene testified about his conversation with the defendant. The officer stated that the defendant told him that his girlfriend was pregnant by him. The officer asked no follow-up questions, and the defendant did not volunteer any additional information. The second difference was that the defendant testified on his own behalf in the retrial.

Retrial Outcome

At the retrial, the jury found the defendant guilty of 2nd degree murder. In addition, they found one aggravating circumstance: use of a deadly weapon during the commission of the crime. On November 30, 2006, the defendant was sentenced to 18 years in prison.

Impact of Forensic Evidence

The DNA analysis presented by the forensic evidence was significant in both trials. The forensic scientist testified that blood found on the defendant's pants and socks matched the victim's blood, and that blood samples from inside the apartment matched the victim. These results strongly implicated the defendant in the shooting. The testimony by the ballistics expert from the crime lab had only a minor impact. He testified that the bullet recovered at autopsy could have been fired from a .38 special caliber revolver. However, because the revolver was never found, no comparative analysis could be performed.

Defendant # 5

Summary of Case Investigation and Trial

A suspect was arrested on June 19, 2004, for shooting and killing another man during an altercation. At the time, the victim was visiting his ex-wife and their three children (ages 14, 11, and 9) at the ex-wife's apartment in Phoenix. The victim resided in California and was visiting for Father's Day. The suspect and his girlfriend lived in the apartment next door. On the day of the incident, the girlfriend's son was visiting.

On the morning of June 19, 2004, the victim's ex-wife went to work at around 7 a.m., while the victim and the three children stayed at the apartment. Later in the morning, the victim took them to Target where he bought several gifts for them. They then returned to the apartment.

At approximately 12:30 p.m., the suspect's girlfriend and her son were leaving her apartment to go to an ATM machine at a bank and then to a store. As they walked out, the victim, who was outside smoking a cigarette, approached them and began making disparaging remarks. The suspect's girlfriend, who did not know the victim, immediately told him to "back up." The victim returned to his apartment but made other remarks to the suspect's girlfriend and her son from the balcony as they walked to her car. When the woman arrived at the bank, she called the suspect at the apartment because she could not remember her PIN. During the conversation, she told the suspect about remarks the victim had made.

The suspect immediately went next door and confronted the victim about what he had said. An argument ensued and at one point, the victim said, "I've got something for you," and retrieved a bamboo stick approximately 41 inches in length (the stick was used as a walking stick by one of his sons). In the meantime, the suspect obtained a Ruger 9 mm handgun from his apartment and came back to confront the victim. As the victim opened the door, the suspect forced himself into the apartment and a fight started between the two. The fight moved outside the apartment to the landing. At one point, the suspect held the victim leaning over the balcony. The victim regained his balance and swung the stick at the suspect but missed him and instead broke a nearby window. At this point, the suspect stepped back and shot the victim once in the chest. The victim was able to walk back into his apartment and fell on the couch where he died.

The suspect returned to his apartment where he called 9-1-1 to report the shooting. He then returned to the victim's apartment to check on him. In the meantime, the victim's oldest son called his mother, who immediately told him to dial 9-1-1 to get assistance for the victim.

The autopsy report stated that the victim had a blood alcohol content of .22 (legally intoxicated) and tested positive for two prescription drugs, Darvon and Prozac. It was verified that he had been prescribed these medications. In addition, the autopsy report indicated a post-operative orthopedic fusion of the right wrist, which reduced its strength and flexibility.

The grand jury indictment for 2nd degree murder was handed down on June 30, 2004. However, the defense filed a motion to remand and to dismiss the indictment on the basis that the grand jury had not been instructed correctly on relevant statutes and because the prosecutor did not present information it possessed supporting the defendant's version of what occurred. In February 2005, the court denied the motion to remand and the motion to dismiss the indictment.

The trial began on July 18, 2005, and lasted nine days. The following witnesses gave testimony at the trial:

- Victim's ex-wife and two oldest children
- Defendant's girlfriend and her son
- Three officers (two called by the defense) who assisted at the scene
- Case agent and scene agent
- Defendant

The defendant's girlfriend testified about the remarks made by the victim and her conversation with the defendant when she called from the bank to obtain her PIN. Her remarks were supported in testimony by her son. The victim's ex-wife testified about her relationship with her ex-husband, as well as details about his visit. Testimony from their two oldest children focused on the confrontations between the two men that led to the shooting.

The defendant testified that he was acting in self defense against the victim's attacks. He stated that at one point during their scuffles, he accidentally dropped his gun. He stated that the victim then picked up and pointed the gun at him but was unable to pull the trigger. He admitted that the problems escalated as the confrontation became louder and more intense, and he expressed regret over the outcome of the incident.

Forensic Evidence at Trial

No one from the crime lab was called to testify in this trial. Instead, the prosecutor and defense attorney provided stipulations to the jury on results from lab analyses. Specifically, on the fifth day of the trial, the prosecutor introduced stipulations on lab analysis of ballistics evidence, which can be summarized as follows:

- The Ruger 9-millimeter semiautomatic Luger handgun was operational.
- A trigger pull of 13 ¼ pounds was required to fire the Ruger handgun in double action mode
- A trigger pull of 6 ½ pounds was required to fire the Ruger handgun in single action mode.
- The 9 mm casing recovered at the scene was identified as fired from the Ruger pistol.
- The bullet recovered at autopsy was entirely consistent with having been fired from the Ruger handgun but did not have sufficient individual markings for "identification" as having been fired from the Ruger.

The medical examiner did not testify because the prosecutor and defense attorney agreed on stipulations in regard to the findings of the autopsy. In addition to the cause of death and toxicology results, the stipulations included language directly from the autopsy report about fresh abrasions on the victim's right knee, left knee, right flank, left back, and others.

Trial Outcome

The jury found the defendant guilty of 2nd degree murder. They further determined that the offense involved the use of a deadly weapon (Ruger 9 mm handgun) and that the offense caused emotional or financial harm to the victim's immediate family. On October 14, 2005, he was sentenced to 16 years in prison.

Impact of Forensic Evidence

The results from the ballistics analysis were important in this case because it provided strong circumstantial evidence that the Ruger handgun was the murder weapon. The casing from the scene was identified as having been fired from the handgun. In addition, the bullet recovered at autopsy was entirely consistent with having been fired from the handgun. No challenges were made to the results as reflected by the fact that stipulations signed by the prosecutor and defense attorney were provided to the jury rather than having lab personnel testify.

Defendant # 6

Summary of Case Investigation and Trial

On June 16, 2004, around 2 a.m., officers responded to an accident with probable injuries. Upon arriving at the scene, they located a male and female inside a vehicle that had collided with a light pole. The female was the driver and the male was in the front passenger seat. The engine area of the vehicle had ignited and officers had to pull the two individuals from the vehicle. They then discovered that both had gunshot wounds to their heads; they were pronounced dead at the scene by fire department personnel.

During the investigation, three expended shotgun shells were located in the back seat of the vehicle. Because there were no obvious holes to the back of the vehicle, detectives surmised that the shooter was inside the vehicle when the victims were shot. Several witnesses interviewed at the scene stated they heard gunshots just prior to the accident. Two witnesses reported that after the accident, they observed a male exiting the vehicle and walking away from it. He was seen returning to the vehicle and pulling a long object from it and then walking away. As he walked away from the vehicle, he wrapped the object in a t-shirt; the shirt dropped as he left the scene.

A passing motorist told investigators she had called 9-1-1 to report the accident and that as she was stopping to make the call, a male walked up to her car and asked for a ride. He appeared to be injured with blood on the right side of his face. She refused to give him a ride and sped away as he attempted to get in the back seat.

The female victim's mother told investigators that she had received a call from her daughter earlier from "B's" house. Investigators were able to find and interview B, who told them that he had taken both victims to the home of the male victim's sister, and that the male victim was going to borrow his sister's car to collect a debt of \$60 owed to him. B remembered that one of the male victim's friends owed \$60 to the victim, and he therefore believed that the victim was intending to collect the outstanding amount.

The male victim's mother led investigators to a residence in the vicinity that she said her son visited regularly. Investigators determined the name of the individual who lived at this residence, and determined that this was the young man who owed the male victim \$60. Upon contacting the residence, they interviewed the young man's caretakers, a couple who told them that they had raised the young man almost from birth because his mother was unable to care for him. The caretakers told investigators that the young man was not there and had not been seen since the evening of June 16. A search of the residence resulted in locating a box of shotgun shells on the coffee table in the young man's bedroom. In addition, numerous red stains that appeared to be blood stains were found on the mattress and pillows of the bed. The male caretaker told investigators that he had found a shotgun in the young man's bedroom on June 16 at about 5 a.m. He said that he had removed the shotgun and placed it in the trunk of his own vehicle. Investigators subsequently obtained the shotgun from the vehicle, and the shotgun was later determined to have been the murder weapon.

Investigators located and arrested the young man, now the suspect, on the afternoon of June 18, 2004. He admitted to the shooting of both victims and stated that it was done in self-defense. The suspect eventually told police that a fourth person, "C," was in the car at the time

of the shooting. Subsequent investigation resulted in locating C, who came forward to police stating that he was in the vehicle at the time of the shooting. He later testified at trial.

The suspect admitted to the police that he had shot the two victims but said that it was self-defense because he feared that they intended to kill him. He stated that he had paid the remaining money to the victim, but that the victim was claiming that he had been shortchanged and was still owed money. The suspect stated to investigators that an argument ensued in the vehicle that led to the shooting.

Several continuances were granted before the trial took place. The reasons for continuances included the need for additional time for discovery, depositions of key witnesses, rulings on allowing the introduction of criminal histories, and others. The 10-day trial began on November 29, 2005.

The following witnesses gave testimony at the trial:

- 3 witnesses from the scene
- 2 officers who responded to the scene
- Sergeant and detective who made arrest
- Victim's mother
- Victim's friends
- Defendant's caretakers
- Eyewitness who was in vehicle
- Friend of defendant
- Owner of vehicle
- Case agent and scene agent
- Medical examiner and M.E.'s lab director
- 2 crime scene specialists on evidence collection
- 2 forensic scientists from latent prints units
- Forensic scientist from controlled substances unit
- Forensic scientist from ballistics (GSR) unit
- Forensic scientist from ballistics forensic unit
- Forensic scientist from evidence processing unit
- Forensic scientist from biological screening unit
- Forensic scientist from DNA analysis unit

The three witnesses at the scene testified that they had seen a person walk from the vehicle, return to the vehicle to retrieve something, and then leave the scene. The two officers who responded to the scene described what they observed when they arrived and responded to questions on interviews at the scene.

"C" was a key witness for the prosecution because he was in the vehicle when the shootings took place. He testified that the defendant had hidden the shotgun in his pants leg before entering the vehicle. The defendant then retrieved the shotgun and placed it across his lap. C stated that he and the defendant were in casual conversation when the defendant raised the shotgun and shot the male victim who was seated in the front passenger seat. C became frightened at this point and began to exit the vehicle. As he did so, he heard two more shots from the shotgun.

During cross-examination, the defense questioned C about inconsistencies between his testimony and a previous deposition. For example, during the deposition, C talked about a handgun that the defendant had shown him, but no handgun was ever found. In response to several questions, C stated that he did not remember what he had told the case agent during their initial interview and what he had stated during the deposition. He was asked about a blunt that he and the defendant had smoked earlier in the evening of the incident. The defense was allowed to introduce information that C was on probation for misdemeanors.

Forensic Evidence at Trial

Latent print examiners testified to the following:

- The defendant's fingerprints were identified to nine items of evidence obtained from his residence: Pepsi can, plastic box (3), aluminum can, plastic container, paper (3). No identifications were effected on 13 other items of evidence from his residence.
- No identifications were effected from the two latents from the shotgun compared with the two victims and the defendant.
- No identifications were effected from two latents from the victim's vehicle compared with the two victims and the defendant.
- Four other latents from the victim's vehicle were matched to the male victim.
- No identifications were effected between latents from any items of evidence to C.

A forensic scientist from the controlled substances unit testified that a clear plastic bag from the female victim's purse found in the vehicle was determined to contain 200 milligrams of usable methamphetamine.

The medical examiner provided the jury with information on the wounds suffered by the victims and the manner of death. The lab director from the medical examiner's office testified that both victims tested positive for methamphetamine and marijuana, but not for alcohol.

A forensic scientist from the ballistics unit testified to the following:

- Particles of lead were found on the GSR collection kit from the right hand of the male victim and a few particles of lead from the left hand.
- Four particles highly specific to GSR and numerous particles containing one or more components known to be indicative of GSR were detected on the kit sample from the right hand of the female victim and two particles highly specific to GSR and numerous particles containing a component known to be indicative of GSR were detected on the GSR sample from the left hand.

Another forensic scientist from the ballistics unit described the results of his analysis of the shotgun:

- The handle on the shotgun had been modified to a shorter length; the trigger pull of the shotgun was six pounds.
- Two of the three shotgun shells from the back seat of the vehicle were fired from the shotgun and results of the third shell were inconclusive. By inconclusive, he testified that there was agreement of all discernible class characteristics, but the agreement was insufficient for identification and that it was "highly likely" that the casing was fired in the firearm.

A forensic scientist from the DNA analysis unit gave testimony as well as the results of several comparisons made from DNA profiles obtained through analysis of biological evidence:

- A DNA profile from a t-shirt left at the scene was consistent from having come from a male, but no other determinations could be made.
- A mixed DNA profile was obtained from two swabs from the shotgun and no determinations could be made from the profile.
- DNA profiles from blood on the defendant's shoes, pillow case (from residence), and sink (at residence) matched the defendant's DNA profile.
- A mixed DNA profile was obtained from the defendant's left outside shoe. The major component matched the DNA profile of the male victim and no conclusions were drawn on the source of the weaker alleles.
- A mixed DNA profile was obtained from the defendant's right inside shoe. The major component matched the DNA profile of the male victim and the defendant could not be excluded as the minor component of the mixed profile.
- The DNA profiles from cuttings from three areas of a shirt (from scene) used to hide the shotgun as the suspect fled matched the male victim.
- The DNA profiles from wet/dry swabs from the shotgun matched the male victim.
- The DNA profile from scrapings from the shotgun matched the male victim.
- The DNA profile from C's swim trunks, which he wore in the vehicle, matched the male victim.

Another area of testimony regarding evidence was on a taser found in the purse that the female victim had with her in the car. At the scene, the purse was removed by the crime scene specialist at the request of the scene agent in order to locate possible identification for one of the victims. Sometime later, the contents of the purse were examined in more detail and a taser was located in one of the compartments. The crime scene specialist at the scene took photographs to document the process of locating items, including the taser, in the purse. The scene agent testified that the taser was of the type that had to have physical contact with a person in order to have an effect. The suspect told investigators that he knew the female victim carried a taser and he feared that she might use the taser on him. The scene agent testified that the taser had been tested and was in working condition.

One area of controversy regarding evidence from the scene was about a letter opener located in the map pocket part of the front passenger door where the male victim was sitting. The letter opener had a brown handle and silver-colored blade. The male victim's sister, owner of the vehicle, testified that the letter opener belonged to her. The letter opener was photographed at the scene but was not collected as an item of evidence. Through expert testimony, the defense claimed that the letter opener had been sharpened and was turned into a "shank" that could be used as a weapon. The defense was critical of the scene agent for not collecting the opener while at the scene. In closing arguments, the defense stated that they believed that analysis would show the male victim's fingerprints on the letter opener and that this was one of the reasons for the fear that the suspect had while in the vehicle.

Trial Outcome

After deliberation, the jury found the defendant guilty of 1st degree murder on both counts. For the first count, he was sentenced to natural life without the possibility of parole, and on the second count, he was sentenced to natural life with the possibility of parole after 25 years have been served.

Impact of Forensic Evidence

The forensic evidence was important in this trial. In particular, the analysis of DNA profiles linked the defendant to one of the victims. The DNA profile from one of the victims matched profiles from blood found on the defendant's shoes and swabs from the shotgun. In addition, the DNA profiles from swabs from the shotgun matched the male victim and the DNA profile from scrapings from the shotgun matched the male victim. In summary, the shotgun was linked to one of the victims. Further, the DNA profile from one of the victims matched blood on the swim trunks that C was wearing in the vehicle, which gave credibility to C's testimony and supported the prosecution's theory about what happened inside the vehicle.

The ballistics evidence was also important because the forensic scientist from the ballistics section testified that two of the three shotgun shells from the back seat of the vehicle were fired from the shotgun (results from a third shell were inconclusive but it was "highly likely" that the casing was fired in the shotgun).

Results from the GSR test indicated only that the victims were near the firearm when it was fired. The defense attorney questioned the forensic scientist from the lab on whether that should be expected given the firearm was fired inside a closed vehicle, and the expert answered in the affirmative. Results from analysis of latent prints provided no information of value in the case.

Defendant # 7

Summary of Case Investigation and Trial

On April 10, 2005, a victim was shot and killed in his Nissan station wagon. His female companion (“A”), an admitted prostitute, was seated in the passenger seat and was not injured. A testified at trial that the shooting incident may have resulted from an incident in which she was involved on the previous day. She said that money from her prostitution activities had frequently been extorted from her by a man (“B”) in the area where she worked and that she had been beaten in the past by B and another individual. On the previous day, she argued with B’s girlfriend who wanted to call B. A claimed that B’s girlfriend charged at her with a cloth wrapped around her closed fist. A drew a knife and stabbed her. A then went to a nearby store and asked them to call police to assist the woman. Just after the incident, A saw the her friend drive by in his Nissan and she got into his car. They later purchased drugs and spent the rest of the day and night together.

On the day of the incident, they went to a location to buy drugs. They left the location quickly because A spotted someone she knew making a telephone call. A feared that he was calling B or B’s friend, and she urged the victim to drive away as quickly as possible. As they stopped at an intersection, their vehicle was blocked in by other vehicles. A male, later identified by A as the suspect, exited one of the vehicles holding a gun and ran to the Nissan. After trying unsuccessfully to get into the Nissan, the suspect put his hand with the gun through the sunroof and shot several times, resulting in the death of the victim. A testified that she turned away into a crouched position as he put his hand through the sunroof. She heard but did not see the gunfire.

A nearby witness testified that he saw someone exit a vehicle and run to the Nissan holding a firearm. He did not see anyone else with a firearm. Another witness heard gunshots and saw someone running from the Nissan to another vehicle holding a firearm.

After several days of investigation, the suspect was identified. He was arrested and charged with the murder of the victim and aggravated assault of B (because her life was in danger during the attack).

The following witnesses gave testimony at the trial:

- 3 witnesses from the scene
- 5 patrol officers
- Case agent and scene agent
- Detective from accident investigation
- Medical examiner
- Forensic scientist from trace examination unit
- Probation officer from the county’s department of probation

A was the key witness for the prosecution. She protested her appearance in court because she feared retaliation for her testimony. At trial, she was questioned about a telephone threat by

the defendant if she testified. Her activities as a prostitute and a user of illegal drugs were brought out during the trial. She gave a positive identification of the defendant because she had known him from the past, and she relayed events at the scene that were supported by two other witnesses in the vicinity.

Forensic Evidence at Trial

The only forensic evidence presented at trial was an analysis of two pieces of broken glass found at the scene. A forensic scientist from the crime lab's trace unit testified that the glass was determined to be tempered (safety) glass used in vehicle side windows. He testified further that the two pieces could have originated from a common source.

The testimony was important because A had told the jury that one of the vehicle's windows had been broken out at some point during the attack. The testimony by the forensic scientist gave credence to the truthfulness of the key witness.

On the fourth day of the trial, arguments were made by the prosecutor and defense attorney on whether a forensic scientist from the ballistics unit would be allowed to testify. His analysis was completed only a week before trial. The judge did not allow him to testify on the results because sufficient notice had not been given to the defense attorney to review and react to the results. The judge ruled that the forensic scientist could only testify in rebuttal if the "door is opened" by the prosecutor or defense attorney in questioning other witnesses. The forensic scientist was to have testified that the eight shell casings found at the scene were all from the same firearm, thereby establishing there was only one shooter. The scene agent had requested the comparison in mid-April 2005. It was again requested by the prosecutor in preparation for trial and completed in late June 2006.

Trial Outcome

After deliberations, the jury found the defendant guilty on three counts:

- 2nd degree murder
- Aggravated assault
- Misconduct involving a dangerous weapon

The first count was for the death of the victim and the second count was the assault against A as her life was in danger during the attack. The third count on misconduct involving a dangerous weapon was due to the fact that the defendant was on probation and a condition of probation was that he could not possess a firearm. His probation officer testified at trial on the conditions of his probation.

During the aggravation phase of the trial, the jury returned its verdict that two factors had been proven:

- Defendant was previously convicted of a felony (attempted promotion of prison contraband).
- Defendant committed the present offenses while released on his own recognizance in another case.

In October 2006, the defendant was sentenced to 22 years for count 1 (2nd degree murder), 15 years for count 2 (aggravated assault), and 12 years for count 3 (misconduct involving weapons). The sentences for the latter two counts were to be served concurrently but consecutive to the first count.

Impact of Forensic Evidence

The testimony in regard to the broken glass was important in this trial because it assisted in establishing the credibility of the key witness. Without the testimony, the defense may have challenged the veracity of the witness.

Defendant # 8

Summary of Case Investigation and Trial

On May 21, 2004, a shooting death took place at a convenience store at approximately 7:45 a.m. Prior to the shooting, two delivery men and their supervisor had stacked cases of beer outside the store while awaiting the arrival of the suspect, a clerk, to open the store. After he arrived, they began to move the cases into the storage room. The suspect was seen rushing from the store to confront a man who was putting two cases of beer into his vehicle in an apparent theft. Details from eyewitnesses differed on the extent of the argument and confrontation between the suspect and the man in front of the store. Eyewitnesses did agree, however, that the suspect fired several shots toward the victim's vehicle as it sped from the scene. The victim was able to drive his car only a couple of blocks before it came to a stop. An eyewitness spotted an ambulance in the area and waved it down to transport the victim to a hospital, where he died.

As he came back into the store, the suspect told an eyewitness that the victim had stolen beer and had threatened to kill him during the confrontation. No weapons were found in the victim's vehicle or outside the convenience store. The murder weapon, a .38 Smith and Wesson revolver, was found in a cubbyhole under a carpet in the convenience store. When patrol officers arrived at the scene, the suspect gave them a different handgun that he kept on a shelf under the cash register.

The following witnesses gave testimony at the trial:

- 5 eyewitnesses from the scene (including one for the defense)
- Three patrol officers who had responded to the scene
- Three detectives including the case agent and scene agent
- Medical examiner
- Two criminalists from the ballistics section of the crime lab
- A psychiatrist with board certification in forensic psychiatry (for the defense)
- A forensic scientist with specialties in shooting reconstruction, firearms examination, and crime scene reconstruction (for the defense).

The defendant did not testify on his own behalf.

Forensic Evidence at Trial

The forensic evidence in this case was important for both the prosecution and defense. One of the forensic scientists from the crime lab gave testimony that he tested a .38 revolver and determined that it was functional. He further stated that he had swabbed the revolver for DNA material, including an area with a reddish paint-like substance. In cross-examination, the defense brought out the fact that the forensic scientist had stated in a previous deposition that he had not swabbed this area of the revolver because it appeared to be paint and that he was in training at the time of the testing.

The second forensic scientist provided testimony on a comparison between a bullet found in the victim's vehicle and bullets fired from the .38 revolver. His conclusion was that the bullet was "consistent" with having been fired from the revolver, which meant that it shared individual characteristics with the test-fired bullets but not enough to say conclusively that it was fired from the revolver. He stated that it was likely to have been fired from the revolver.

He also testified on a comparison between a bullet from the side of the convenience store and bullets test-fired from the revolver. Because the bullet from the store had been damaged, he concluded that he could not identify or exclude it as having been fired from the revolver.

In this trial, the case agent gave testimony on the results of other analyses of forensic evidence completed by the crime lab. The analysis showed the following:

- GSR results from the test kit on the defendant were positive.
- GSR results from the test kit on the victim were negative.
- The victim's right hand clippings had blood and possible tissue.
- The victim's left hand clippings had neither blood nor tissue.
- The DNA profile from blood on the bullet in the vehicle matched the victim's DNA profile.
- The DNA profile from blood on a fabric sample from the driver's seat matched the victim's DNA profile.
- The mixed DNA profile from a baseball cap found in the vehicle had a major component that matched the victim's DNA profile.
- The mixed DNA profile from the .38 revolver matched the DNA profile of the defendant.

The defense questioned the case agent extensively on the release of the victim's vehicle. On June 3, 2004, the scene agent had collected evidence from the vehicle and had a crime scene specialist take photographs of the vehicle. On June 24, 2004, the vehicle was released to a towing company because the victim's father did not want the vehicle, and the towing company subsequently sold the vehicle to a used car company. A report on the release was not done by the case agent until almost a year later on May 6, 2005, and resulted from requests by the defense to have their forensic expert check the vehicle, especially for the trajectory of shots fired into the vehicle. Because the vehicle had been released and sold, it was not possible for the defense to perform its own analysis.

A stipulation prepared by the prosecution and defense attorneys provided the jury with information on cocaine found in the victim's blood and bile, and the general effects of cocaine intoxication. With regard to effects, the stipulation read:

The State and the defense agree that common characteristics of cocaine intoxication are: one, aggression; two, bizarre behavior; three, irrational conduct; four, hyper-emotional state; five, poor judgment and euphoria.

Introduction of the stipulation was apparently an attempt to explain the victim's behavior at the scene and the defendant's reaction to the behavior. To support the defendant's actions, the defense called a forensic psychiatrist to testify that the defendant suffered from post-traumatic

stress disorder (PTSD). After interviewing the defendant on two occasions, the psychiatrist concluded that the defendant had PTSD from previous robbery incidents at the convenience store. In one incident, three gunmen robbed the store while pointing guns at the defendant, and in a more serious incident, two gunmen robbed the store, shot the defendant in the arm, and shot and killed the defendant's brother.

Trial Outcome

After deliberations, the jury determined a "not guilty" verdict on the charge of 2nd degree murder, and "guilty" of the lesser included offense of manslaughter. They found further that the defendant had committed a dangerous offense involving the discharge of a deadly weapon and that the offense involved the intentional or knowing infliction of serious physical injury upon the victim. He was sentenced to seven years in prison.

Impact of Forensic Evidence

The forensic evidence was significant in this case. The DNA analysis matched the bullet from the victim's vehicle to the .38 revolver, and the defendant's DNA was found on the revolver. Results from the GSR test kits showed positive for the defendant and negative for the victim. These results supported the prosecution's theory of the case that the victim was not armed at the time of the shooting. No weapons were found in his vehicle or outside the convenience store. The ballistics expert from the crime lab testified that a bullet found in the victim's vehicles was "likely" to have been fired from the revolver.

Defendant # 9

Summary of Case Investigation and Trial

On September 3, 2004, at approximately 3 a.m., a young man was killed as a result of a shot into his back from a shotgun. The victim was killed outside a trailer located in a fenced commercial yard. Another young man lived in the trailer and was inside at the time of the shooting along with his friend, a young woman. Both were friends with the victim, who was visiting them prior to the shooting. Another friend, "A" (age 17), had been with them earlier and had borrowed the other young woman's car, perhaps without permission, to get something to eat. According to A at trial, the victim became angry with her for taking the car and confronted her outside the trailer. A testified that the victim slapped her as a result of the argument, which greatly upset her.

On September 29, 2004, homicide investigators arrested a suspect for the murder. He never confessed to the killing, and instead provided an alibi witness who testified at trial that they had spent the night together. Other testimony, especially from witnesses at the scene, told a different story about what happened at the trailer. Testimony by A and two of her friends, "B" and "C," is summarized in the following paragraphs.

Sometime after the slapping incident, a car pulled up with B, C and a young man who would later be named the suspect. After the car arrived, B got out of the car to talk to A, who was still visibly upset. A told B about taking the car, the argument with the victim, and that the victim had slapped her. Both B and A then walked back to the car with C and the suspect. Upon prompting from the suspect, A repeated the details of the incident in which she was slapped. After hearing the story, the suspect got out of the vehicle with a shotgun, walked over to the trailer, and knocked on the door. When the door opened, the suspect asked, "Are you [victim's name]?" Both men walked outside the trailer where the suspect confronted the victim about the slapping incident. As the victim returned to the trailer, the suspect fired his shotgun twice, hitting the victim in the back with one of the shots. Arriving patrol officers were able to talk briefly to the victim, who could only tell them that a Hispanic male had shot him.

There were no eyewitnesses to the actual shooting. The victim's two friends were inside the trailer at the time of the shooting and did not see the person who knocked on the door. A, B and C were inside the vehicle at the time of the shooting, which was outside their viewing area.

At trial, the following gave testimony:

- Two responding patrol officers and supervising sergeant
- Case agent and two other homicide investigators
- Forensic scientist from DNA section and forensic scientist from ballistics
- Medical examiner
- Spanish interpreter (on telephone calls made by defendant from jail)
- Six witnesses (two for the defense)

Two shotgun shells and a live cartridge were found at the scene but the shotgun was never located. In addition, homicide investigators found a medical insurance card close to the

location where the vehicle apparently parked. After investigation, they determined that the name on the card was C's son. An interview with C led to other witnesses who eventually identified the suspect.

Other incriminating evidence was developed prior to trial. While in jail, the suspect made several telephone calls to friends and relatives in an apparent effort to have them contact witnesses to stop them from testifying at the trial. Because these calls were made from the jail, they were recorded and portions of the suspect's conversation were introduced at trial.

At trial, the defendant's lawyer provided an alibi defense with a witness who testified that the defendant was with her during the night of the incident and could not have committed the offense. The defendant also took the stand to relay the same information to the jury.

Forensic Evidence at Trial

The prosecutor's viewpoint in this trial was that all analysis of forensic evidence should be presented regardless of whether the results were favorable or unfavorable to her case. She specifically stated that providing all results was in response to the CSI effect: that jurors expect forensic analysis to be conducted. Even though the DNA results were "inconclusive" in this case, the testimony would show that a thorough investigation had been performed by the homicide investigators and forensic scientists.

Interestingly, the defense attorney objected to the appearance of a DNA analyst on the grounds that the results were inconclusive. The judge agreed with the defense attorney and initially precluded the testimony. However, during cross examination of the case agent, the defense attorney asked whether any evidence had been analyzed by the crime lab, and the case agent responded that DNA analysis had been performed on biological material found on the shotgun cartridge. As a result of this line of questioning, the judge changed her ruling to allow the testimony of the DNA forensic scientist from the crime lab.

The forensic scientist testified that the results were "inconclusive" because the DNA profile from the shotgun cartridge had at least three contributors. The defendant could not be included or excluded as a contributor.

A forensic scientist from the ballistics section testified about the shotgun cartridge and casings. He was asked several questions about the operation of a shotgun and how shells are discharged from a shotgun. His main testimony was that the two shells and cartridge had been loaded into the same shotgun. He could not testify further because the shotgun was never found.

During other testimony, the case agent was asked about the results from analysis of other forensic evidence. He provided several results on the efforts of crime lab personnel:

- No latent prints were found on two eyeglass lenses or a soda can from the scene.
- Latent prints from the doors of vehicles at the scene were not useable.
- The medical insurance card was not submitted for latent print analysis because C admitted that the card belonged to her.
- Latent prints from a pellet gun at the scene did not match with the defendant or another suspect in the case.

The case agent also testified that a choice had to be made between the possible presence of biological material on the shotgun shell versus checking for latent prints on the shotgun shells. Both could not be done. The case agent responded to questioning, “You’re more likely to find DNA evidence versus fingerprints on specific items: in this case, the three shotgun shells.”

Trial Outcome

The jury found the defendant guilty of 2nd degree murder. An aggravation phase of the trial was conducted that resulted in the following findings by the jury:

- The offense involved the use, threatened use or possession of a deadly weapon or dangerous instrument during the commission of the crime, specifically a shotgun.
- The offense involved the infliction or threatened infliction of serious physical injury.
- The offense involved a factor that qualifies as an aggravating circumstance, specifically premeditation.
- The offense involved factors that qualify as aggravating circumstances, specifically two prior convictions older than 10 years (Possession of Drug Paraphernalia and Attempted Armed Robbery).

In April 2007, the defendant was sentenced to 22 years in prison as a day-to-day sentence.

Impact of Forensic Evidence

The value of forensic evidence in this trial is based on the extent to which a CSI effect exists for jurors. As previously stated, the prosecutor believed that a CSI effect existed and that the analysis of forensic evidence needed to be presented to the jury regardless of whether it assisted in supporting the state’s theory of the case. Testimony was therefore provided on the lack of latent prints on some items of evidence, the finding that some latent prints were not usable, and that latent prints found on a pellet gun did not match the defendant or another suspect. The forensic scientist from the ballistics unit testified that the shotgun shells and cartridge were from the same shotgun. Finally, the DNA analysis of the shotgun cartridge was inconclusive because the profile had at least three contributors.

Defendant # 10

Summary of Case Investigation and Trial

Patrol officers were dispatched to the scene of this homicide from a call made by a woman (“N”), who was residing with the victim. She testified at the trial on what had occurred inside the residence. By way of background, she stated that the victim rented out a room to prostitutes and allowed them to bring customers there. He charged five dollars for half an hour and it was also known by several prostitutes that he would sometimes videotape them with their customers. Around 10:45 p.m. on the evening of the incident, a prostitute (suspect “A”) came to the door with a man (suspect “B”). N recognized suspect A and let them in the house, thinking that they were there to use the bedroom. Suspect A told N to leave the residence. N was confused by the request and started to argue until she saw that suspect B had a gun. N ran into the bathroom and hid.

After a few minutes, N heard a gunshot and ran toward the bedroom. She saw the couple running out the door and she saw the victim bleeding profusely. The victim walked to the front door where he collapsed. As N started to call 9-1-1, the couple reentered the house, stepping over the victim, and went to the bedroom where they retrieved the victim’s wallet, which they had forgotten. As they left the house for the second time, the gun was pointed at N but not fired.

After three weeks of investigation, both suspects were arrested. Both were charged with 1st degree murder, armed robbery, burglary, and aggravated assault (on N). Four months after arrest, suspect A accepted a plea agreement for 2nd degree murder. A stipulation of the agreement was that she would testify at suspect B’s trial.

At trial, suspect A testified that she and suspect B had conspired to rob the victim because she believed that he had “thousands” of dollars in his wallet. She knew the victim because she had rented his room for customers on numerous occasions. After they entered the victim’s bedroom, they grabbed his wallet and found that it contained only \$200. They started ransacking his room looking for more money. At the same time, she said they were yelling at the victim, asking where the rest of the money was. The victim responded that he had taken the money to the bank.

The bedroom had a small television monitor connected to a surveillance camera outside the victim’s home. The victim had been robbed a month earlier and had installed the surveillance camera for protection. Suspect A testified that suspect B did not understand that it was a surveillance camera, and thought instead that he was being taped. The victim told him that this was not the case, and an argument ensued that ended with suspect B shooting the victim. Suspect A stated she then grabbed a VCR/DVD player and that they started running out of the house. When they got to the car, they realized that they had forgotten to take the wallet. They then returned to the bedroom, retrieved the wallet, and drove away from the residence.

The following people testified at the trial:

- Responding patrol officer
- Case agent and scene agent
- Police sergeant who had prepared a composite sketch of the offender

- Medical examiner
- Defendant's accomplice (suspect A)
- Eyewitness (N)

In addition to these witnesses, the prosecutor showed a videotape of the case agent's interview with the defendant (suspect B). During that videotape, the defendant gave details about what had occurred inside the residence. He did not testify at the trial.

Forensic Evidence at Trial

None of the forensic scientists from the crime lab testified at this trial. In fact, they were not requested by the case agent and scene agent to conduct any analysis of the evidence. One of the reasons for the lack of analysis was that the handgun used in the murder was never found. In addition, admissions by the defendant and testimonies from the accomplice and eyewitness were believed to provide strong evidence at trial.

Interestingly, the defense attorney commented on the lack of forensic evidence in his closing statement:

... it appeared that it was a very hasty scene investigation....It looks like they were hasty in terms of collecting fingerprints. If the blood was spilled out all over the floor and the pair had gone over it, wouldn't you expect to see some type of shoe print and in this type of case, it's a first degree murder case, wouldn't you expect the State to find some type of physical evidence, bullets, the gun, blood evidence, clothing, hair, anything, something directly linking [the defendant] to this case so they make sure that they have the right guy?

The scene agent testified at the trial on each item of evidence that was collected. During that testimony, he responded to questions about the blood patterns at the scene. In particular, he testified about the amount of victim's blood in the bedroom and the trail of blood spatters from the bedroom to the front door. His testimony gave additional credence to what the accomplice and eyewitness had said at trial.

Trial Outcome

The jury found the defendant guilty of 1st degree murder, armed robbery, and burglary. They found him not guilty of aggravated assault. During the aggravation phase following the verdict, the jury unanimously agreed on two aggravating factors:

- The offenses involved the presence of an accomplice.
- The defendant committed the offenses as consideration for the receipt, or in the expectation of the receipt, of anything of pecuniary value.

The jury could not reach a unanimous decision on a third factor: that the offenses involved the taking of property in an amount sufficient to be an aggravating circumstance.

For the guilty verdict on 1st degree murder, the defendant was sentenced to life imprisonment with the possibility of parole after 25 years. For the two other charges, he was sentenced to 21 years, with the sentences to be concurrent with the life imprisonment sentence.

Based on her plea agreement for 2nd degree murder, suspect A was sentenced to 16 years of imprisonment.

Impact of Forensic Evidence

This trial is an example of a case in which analysis of forensic evidence did not play any role. The testimony of the two key witnesses and the videotape of the case agent's interview of the defendant were strong enough to convince the jury.

Defendant # 11

Summary of Case Investigation and Trial

On August 29, 2004, around 8:30 p.m., the victim and his cousin were driving home from the grocery store. Their route took them along the street where the suspect lived. As they drove by, the suspect and several friends in front of his house made some comments to the victim and his cousin. They stopped their truck and exchanged words with the suspect and his friends. The suspect went into his house and retrieved an AK-47 combat rifle. He loaded the rifle, came out to the street, and positioned himself behind the truck. As the victim started driving the truck away, the suspect fired several shots at the truck. One of the shots hit the victim. He was able to drive the truck a short distance; the truck then went through a guardrail and crashed into the side of an embankment. Before police arrived, the suspect had fled the scene. After hiding for two days, he turned himself in to police.

At the scene, one of the responding officers found a shell casing in grass near the area where the suspect had been standing at the time of the shooting. The suspect told police that he discarded the AK-47 rifle at an unknown location. The rifle was never recovered.

At trial, four charges were placed against the defendant:

- 1st degree murder
- Aggravated assault (against the victim's cousin)
- Discharge of a firearm at a structure
- Assisting a criminal street gang.

The last charge stemmed from allegations that the defendant was a member of a local gang.

The defendant admitted to police and in testimony at his trial that he was the shooter. He stated that he and his family were in fear of the victim and his family. The defense presented several witnesses from the neighborhood who testified about problems with the victim and restraining orders they have obtained against the victim and his family. They also testified that the defendant was not a member of any gang.

The following people testified at the trial:

- Responding patrol officer
- Case agent
- Gang unit investigator
- Forensic scientist from ballistics unit
- Medical examiner
- Victim's cousin
- Victim's brother
- Defendant

- 10 civilian witnesses (seven for the defense)

The case agent provided testimony on the collection of evidence at the scene, his initial investigation, and his interview with the defendant.

Forensic Evidence at Trial

The forensic scientist from the ballistics unit testified that the cartridge casing from the scene possessed marks that were consistent with those typically found on cartridge casings fired in AK-47 type rifles.

Trial Outcome

The defendant was found not guilty on the charge of 1st degree murder, but guilty on the lesser included charge of 2nd degree murder. He was also found guilty on the two charges of aggravated assault and discharging a firearm at a structure. He was found not guilty on the charge of assisting a criminal street gang.

Impact of Forensic Evidence

The forensic evidence had minimal impact in this trial. The only testimony given was by the forensic scientist on the fact that the casing had markings similar to those found on casings fired from AK-47 type rifles.

Defendant # 12

Summary of Case Investigation and Trial

On the afternoon of March 13, 2005, the suspect bicycled from his residence to a crack house located in the neighborhood a few blocks away. He had purchased drugs at this crack house several times in the last few months and on this occasion wanted to obtain \$20 worth of cocaine. The suspect's wife had given him a \$50 bill for the purchase. Victim "A" and victim "B," who were brothers, operated the crack house. The suspect carried a handgun with him because of his concern about the neighborhood and because he knew that one of the brothers carried a handgun. He had no problems entering the house because he was a known customer. The suspect gave the \$50 bill to victim A, expecting to receive \$20 worth of cocaine and \$30 back in change. Instead, he received only the cocaine.

At trial, victim B gave the following account of what had occurred inside the crack house. He stated that the defendant asked for his \$30 change several times but victim A insisted that he was given a \$20 bill and owed the defendant nothing. The argument subsided as the defendant smoked some of his cocaine and shared it with a woman who was present. The argument over the \$30 then continued between victim A and the defendant. During the argument, the defendant pulled out his handgun and pointed it at victim A, demanding money from him and victim B. The woman fled the room as victim B ran toward the defendant and tried to get the handgun away from him. As they struggled, the defendant struck victim B over the head with the handgun, causing him to bleed. Victim B continued to try to get the handgun away from the defendant. The handgun discharged, striking victim B.

Victim A then grabbed his own handgun. The defendant fired two shots at victim A, hitting him in the stomach and chest, and causing him to collapse on the floor. The defendant walked over to where victim A was lying and fired one more shot into his back. He then removed the handgun and money from victim "A's" pants and a wallet from victim B's pocket. At that point, defendant fled the house. At trial, the defendant stated that he ran to a friend's house where he stayed the night.

Victim B and the woman carried victim A to his vehicle in front of the house. However, the vehicle would not start and they called 9-1-1 for assistance. EMS personnel pronounced victim A dead at the scene and transported victim B to a hospital where he recovered from his wounds.

On the following day, investigators conducted a surveillance of the suspect's home. They observed the suspect arriving on a motorcycle operated by another person. The suspect's wife came out of the residence and handed a pair of shoes and money to the suspect. The suspect and his friend then drove away from the residence on the motorcycle. The investigators followed and were able to stop the motorcycle and arrest the suspect several miles later.

At trial, the defendant's testimony varied from that of other witnesses. While he did not deny the shootings, he stated that victim B had threatened him with a baseball bat and that victim A had pointed a handgun at him. He testified further that victim B had handed him money from victim A's pocket and his handgun.

In total, the following people testified at the trial:

- Two responding patrol officers
- Case agent and scene agent
- Homicide investigator who conducted interviews
- Medical examiner
- Forensic scientist from ballistics section
- Surviving victim
- Defendant's wife
- Defendant

Forensic Evidence at Trial

The defendant's handgun and victim's handgun were not recovered during the investigation. As a result, the forensic scientist at trial could testify only about the shell casings and bullets recovered at the scene. His testimony was as follows:

- Four shell casings (from scene) were identified as having been fired from the same firearm.
- One shell casing (from scene) showed no correspondence of individual characteristics to the other four casings.
- Three bullets (from scene) were comparable to bullets known to be loaded into 9 mm Lugers.
- It was likely that the three bullets were fired from the same firearm.
- Firearms known to possess similar rifling characteristics include, but are not limited to, some models of 9 mm Luger semi-automatic pistols manufactured by Hi-Point.

Trial Outcome

The jury found the defendant guilty on all four counts for which he was charged:

- 1st degree murder
- Aggravated assault
- Burglary in the 1st degree
- Armed robbery

He received a sentence of 25 years for count 1, 7.5 years for count 2 (concurrent with counts 1, 3, and 4), 10.5 years for count 3 (concurrent with counts 1, 2, and 4), and 10.5 years for count 4 (concurrent with counts 1, 2, and 3).

Impact of Forensic Evidence

The ballistics evidence supported the prosecution's theory on what had occurred at the crime scene. It showed that the victim had not fired his handgun (since all the casings were from one handgun) and that the shell casings and bullets were from the type of handgun that the defendant said he owned.

Defendant # 13

Summary of Case Investigation and Trial

On December 22, 2003, patrol officers responded to an aggravated assault call. Upon arrival, they found the first victim lying in the street in front of the location. They called for paramedics after observing stab wounds in the chest. Paramedics conveyed victim "A" to the hospital where he died. At the scene, a woman approached officers to report that her boyfriend (victim "B") had also been stabbed and was sitting in her apartment. He was taken to the hospital for treatment. The woman told police that two others had fled from the scene -- one on foot and the other in a truck heading south on 17th Avenue.

Patrol officers canvassed the neighborhood and found an individual about two blocks from the scene, hiding under a large jacket behind a building. He had blood on his hand, face, and clothing, and he fit the description given at the scene. Police took the suspect into custody and transported him to headquarters for an interview.

At trial, the woman testified on events that led up to the stabbings that occurred outside her apartment. She and her boyfriend, victim B, were at a neighborhood barbecue earlier in the day. While at the barbecue, they spent time and had drinks with two friends, the suspect and victim "C." The woman and victim B returned later in the afternoon to her apartment. The suspect and victim C showed up at her apartment, and all four continued to talk and drink into the evening. During the evening, victim A joined them from a nearby apartment.

The woman testified that the conversations started friendly, but later in the evening, the suspect and victim C began to argue loudly. She stated that no one else was joining into the argument. Because the suspect and victim C were starting to yell at each other, she asked everyone to leave. She said that victim A headed home and that her boyfriend, victim B, came back to the apartment after a few minutes. She could still hear what sounded like a physical fight between the suspect and victim C outside her apartment. She then saw victim B and victim A go outside, but she did not hear any more arguing or fighting because they had walked farther away from her apartment.

After a few minutes, she decided to go outside to see what was happening. She saw victim B by the gate, and the suspect and victim C a few feet away standing by victim C's truck. She stated that victim A walked up to the suspect and victim C, and that the suspect turned and immediately began fighting with victim A. She saw victim A immediately start stumbling around and walking out into the street. The suspect and victim B then began to fight, and she saw victim B immediately fall toward a nearby tree. Victim C got into his truck and drove away from the scene. By this time, the woman realized that victim A had been stabbed and was bleeding profusely. She started yelling for help and a neighbor came out to assist with the two victims. She helped victim B back to her apartment and called police for assistance. The woman testified that she never saw the suspect with a knife in his hand and assumed that she had observed a physical fight until she saw the actual injuries.

Prosecutors charged the suspect with one count of 2nd degree murder (victim A) and two counts of aggravated assault (victims B and C).

The woman's testimony at trial was important because the defendant and two surviving victims did not testify. In total, the following testified at the trial:

- Four responding patrol officers
- Case investigator and scene investigator
- Two other investigators who assisted in the case
- Three forensic scientists (biological screening, DNA, and toxicology)
- Medical examiner
- Attending physician at hospital
- Five civilian witnesses

Forensic Evidence at Trial

The forensic scientist from the Biological Screening Section provided testimony on finding blood on several items of clothing:

- Blood was indicated on defendant's jeans, tennis shoes, and jacket.
- Blood was indicated on swabs from defendant's hands and face.
- Blood was indicated on swabs from victim C's truck.
- No stains consistent with blood were observed on defendant's socks or t-shirt.

The forensic scientist testified further about difficulties encountered in finding the blood on the defendant's clothes because it was mixed with dirt and grass stains. She stated that it was necessary to examine the clothes with a microscope to see underneath a layer of dirt for possible blood stains.

Investigators provided testimony during the trial that (1) blood was taken from the defendant at arrest and (2) buccal swabs were obtained from the two surviving victims.

The forensic scientist from the DNA Analysis Section testified on results from comparisons of DNA profiles:

- DNA profiles from defendant's t-shirt areas (right sleeve, right chest, left shoulder, and back) matched the DNA profile of the defendant.
- The DNA profile of one swab from victim's vehicle (at scene) and five swabs (from scene) matched the killed victim.
- A mixed DNA profile was obtained from defendant's t-shirt hem. The major component matched the defendant. The three victims were excluded as contributors to the minor component.
- The DNA profile of four swabs from victim C's vehicle (at scene) and three swabs (from scene) matched the DNA profile of victim C.
- The DNA profile from blood on defendant's right hand, left hand, face, jeans (92), left shoe, and jacket (5) matched the defendant.

- A mixed DNA profile was obtained from the defendant's jeans and right shoe. The major component matched the DNA profile of the defendant. All three victims were excluded as contributors to the minor component.

Finally, the forensic scientist from the Toxicology Section testified that the ethyl alcohol concentration of the blood sample (from defendant at arrest) was .112.

Trial Outcome

The jury found the defendant not guilty of 2nd degree murder, guilty of aggravated assault on victim B, and not guilty of aggravated assault on victim C. He was sentenced to 7 ½ years for the aggravated assault of victim B.

Impact of Forensic Evidence

In closing arguments, the prosecutor told the jury that the DNA analysis performed by the forensic scientist supported the testimony of witnesses. For example, she pointed out that blood swabs from victim C's truck and surrounding area matched the killed victim, and the locations of swabs were in the area where witnesses said the fight occurred. In addition, other swabs of blood matched victim C, thereby placing him at the scene during the fight. Finally, she noted that none of the swabs of blood from the scene matched the defendant but confirmed that blood obtained from inside his jacket did match the defendant.

The defense attorney in this case pointed out that his defendant's clothes had no one else's blood except his own, and that blood was due to the fight in defending himself against the victims. Moreover, the extent of the fight is reflected by the fact that the forensic evidence showed that the defendant got dirt and grass stains mixed with the blood that had accumulated on his clothes. He also noted for the jury that the case agent made no requests for determining whether biological evidence could be located on clothing from the three victims.

The DNA analysis from blood identified to the victim C was also important in this case. The defense noted that the back of victim C's truck was the only place with his blood.

Defendant # 14

Summary of Case Investigation

A woman shot and killed her husband early in the morning of May 27, 2004. She was brought to trial in October of 2006. Her first trial resulted in a mistrial because of testimony by a police officer that she had asked to talk to a lawyer. She was retried a month later and convicted of 2nd degree murder.

This was a domestic violence case in which the defense was to be self-defense, but the defense case was never presented in the first trial. Self-defense was weakened by the fact that the woman shot her husband through a wall while he was sitting on the toilet in the bathroom. However, it is clear from defense counsel's opening statement at trial that the defense was to be that a battered wife had reached the point where she thought her husband was about to kill her.

Officers responding to a 911 call early in the morning of May 27, 2004, found the defendant pacing up and down on the first floor of her house. She told the officers that her husband was upstairs and that she believed he was dead. The officers found the defendant's husband slumped over on the toilet of the master bathroom. He was obviously dead. The officers searched the house to see if there were any other witnesses or victims, secured the crime scene, and awaited the arrival of detectives.

Two officers sat with the defendant in her kitchen. They found a Colt .22 caliber semi-automatic handgun gun and a magazine for it on a counter and seized them as potential evidence. They also found three letters from the son of the defendant and victim, a phone/address book, and a key ring with five keys and car alarm for a Hyundai.

The defendant talked continuously, although she was not being questioned. She repeatedly asked that someone take care of her dog, which was running around the back yard. At one point, she asked if she should have a lawyer. It was an officer's testimony about her question that led to a mistrial.

When the detectives arrived and took over the scene, they collected evidence from the second floor of the house, where the victim was found. The investigators found bullet strikes through the wall and the door jamb. They also found 12 .22 caliber shell casings in the bedroom and hall outside the bathroom.

The autopsy physician found three bullet wounds: in the head, the neck, and the thigh. The medical examiner determined the cause of death to be multiple gunshot wounds.

Trial Proceedings

There were several pre-trial continuances so that court-appointed experts could assess the defendant's competence to assist in her own defense. After examination by court-appointed experts, she was determined competent to stand trial.

There was also argument over admissibility of expert testimony about the defendant's being a battered wife. The parties eventually agreed that a psychiatrist could testify to the general character of battered women and not as to the mental state of the defendant. The

psychiatrist was not reached in the first trial because of the mistrial, but she testified in the second trial.

Because the defendant was on the scene and admitted the shooting, there was no other site to be investigated nor anyone else to be sought. The only other possible witness was the defendant's sister, whom she had called after the shooting. When she was contacted by the case officer, the sister refused to discuss the call until she had talked to a lawyer. She did not play any further role in the investigation.

In the first trial, the responding officers, the medical examiner, and the case agent testified at length. One of the officers responding to the scene had sat with the defendant in her kitchen while his fellow officers searched and secured defendant's house. He referred to the fact that defendant had asked if she could contact an attorney. Defense counsel immediately moved for mistrial on the ground that defendant had invoked her Fifth Amendment right to counsel, and that in the context of her defenses of self-defense and justification, prejudicial inferences could be drawn from her statement. After hearing argument on the motion the following morning, the Court granted the motion.

Unfortunately, the transcripts of the retrial were not available by the data collection deadline for this report, but the court docket minutes show that the prosecution witnesses called in the first trial were called again in the second trial. There was enough information from police reports, the transcripts of the first trial, and the opening arguments of both the prosecutor and defense counsel to construct a narrative of the case with reasonable confidence that it is fair and accurate. There is also the forensic evidence, which is the focus of the team's research, as it was presented in the first trial and presumably repeated in the retrial.

Witnesses at the second trial were:

- Medical examiner
- Scene and case officer
- Patrol sergeant and officers who responded to the scene
- The original case agent, who had retired before the trial
- Defendant
- Psychiatrist
- Officer called by the defense

Presumably the medical examiner, scene and case officer, the patrol sergeant and responding officers and the original case agent repeated their testimony from the first trial, without the officer's reference to defendant's mention of calling a lawyer.

As noted earlier, the psychiatrist, testifying as an expert witness, could testify to the general character of battered women and not as to the mental state of the defendant. She had interviewed defendant, but the court ruled that her testifying about her conversations with defendant would open the door to calling the other experts who had interviewed her.

The defendant testified, but in the absence of a transcript of her testimony, it must be assumed that it followed the themes set out by defense counsel in the opening statement in the

first trial. As set forth in that statement, the defense was built around 40 years of verbal, physical, and emotional abuse of the defendant by her husband.

That evidence would come from the defendant as well as reference to police contacts and some police reports. The defendant went to the hospital twice in 2002 with injuries inflicted on her by her husband; no charges were filed. She would also awaken with her husband holding a pillow over her face, threatening to smother her.

Forensic Evidence at Trial

There was extensive evidence on the number of shots fired and the course of the bullets. Using the crime scene photos to show where shell casings were found and where bullets had gone through the bathroom wall, a detective gave a clear picture of how the shooting most probably took place. He showed how he had marked each entry and exit through the wall, and how he had used trajectory rods to determine the probable courses the bullets had followed.

The medical examiner testified at length on where the bullets entered the victim's head, neck, and thigh. The lack of stippling on the wounds showed that the rounds had not been fired at close range. But the pseudo-tattooing of the wounds showed that the rounds had gone through the wall, carrying small particles of wallboard or other materials with them.

Forensic scientists testified that the GSR kit from the defendant's right hand had numerous particles containing lead, and a few particles containing lead were detected on the sample from the left hand. These results supported the defendant's statement that she shot her husband.

Trial Outcome

The jury convicted defendant of 2nd degree murder, and the court later sentenced her to 12 years.

Impact of Forensic Evidence

Given that defendant admitted shooting her husband and claimed self-defense, the forensic evidence was not dispositive. The state did not introduce all the forensic evidence it had developed. But evidence that defendant had fired 11 rounds, some of them wildly, but several going through the bathroom wall, almost certainly defeated her claim of self-defense.

Defendant # 15

Summary of Case Investigation and Trial

The victim and his girlfriend dealt crack from an apartment of a mutual female friend in an apartment complex known on the street as “the jungle.” On April 23, 2004, a customer shot the victim during an argument outside the apartment. The victim’s girlfriend and mutual friend were present during the shooting. The mutual friend disappeared shortly after the shooting and was not found again before the trial. The victim’s girlfriend testified as an eyewitness to the shooting, and several neighbors testified to hearing shots. One neighbor tried to help the victim, who lived for a short while before dying at the scene. The customer fled but was arrested two days later and charged with the murder. At first he denied any involvement, then blamed another person, and finally claimed self-defense.

On the way to the police station after his arrest, the suspect made several comments showing his awareness of the incident. A detective photographed the suspect at the police station and prepared a photo lineup to be shown to the victim’s girlfriend who was an eyewitness to the shooting. It included pictures of the suspect with and without his head scarves on, and pictures of other Hispanic men. Detectives returned to the apartment complex and showed the photo lineup to the victim’s girlfriend, who immediately identified the defendant as the shooter.

Little physical evidence was found at the scene. It included a Yammuni Brand .22 cal shell casing, a brown sweat shirt cut off victim, blood samples from the dirt area, and a small piece of yellow metal. The clothing worn by defendant at the time of his arrest was seized and sent off for laboratory analysis, with specific requests that the lab examine the clothing for blood and GSR. No blood stains were found on these clothes. At the autopsy of the victim’s body, the medical examiner took GSR samples from victim’s hands and bullet fragments from his head. Later examination of the GSR samples found one particle of lead not specific to GSR.

On further examination of the two bullet fragments from victim’s head, both were found to be consistent with being from a plated bullet of unknown caliber and manufacture:

The damaged, .22 caliber, copper plated lead bullet fragment (item 3192874-4) is consistent with being from a bullet that could have been loaded into .22 Short, .22 Long or .22 Long Rifle ammunition. The surviving rifling information indicates that the bullet fragment was fired by a weapon that possessed six lands and grooves and a right twist. The firearms known to utilize these general rifling characteristics include rifles, pistols and revolvers of various manufacturers and are too numerous to list. The nature and extent of damage to the bullet precluded individual land and groove measurements. The bullet is unsuitable for entry into the National Integrated Ballistic Information Network (NIBIN).

Twenty-eight latent fingerprints were examined and compared with the defendant’s prints. Nothing usable was found. Among the objects examined for latents was a yellow sheet notebook paper with handwritten letter written by defendant and given by him to another inmate who was released from jail during July of 2004.

Trial Proceedings

Eighteen witnesses and the defendant testified at the trial, which took nine days:

- The eyewitness to the shooting
- 3 neighbors and another person interviewed by investigators during their attempts to find the defendant
- 2 responding officers and a patrol sergeant
- Case agent and scene agent
- 4 other detectives and a detective sergeant
- Medical examiner
- 2 forensic scientists from ballistics section (firearms identification and GSR)
- Defendant

The victim's girlfriend testified that she and the victim were at their friend's apartment when the defendant arrived. The victim and defendant stepped outside the apartment and began to argue. She testified that the defendant then shot the victim. She stated that she slammed the door at this point so that she would not be shot too. She was unsure about how many shots were fired, but believed that there was more than one. When things quieted down, she went out in front of the apartment and found the victim, who had been shot in the face. Several neighbors who had heard a shot or shots came out to see what had happened.

Other civilian witnesses testified that they heard gunshots and came to the scene in front of the apartment. They were unclear as to whether they had heard only one or more than one shot. Several of the police officers who had responded to the call appeared as witnesses for the state. They had called for medical help for the victim, had identified and talked to witnesses, and had secured the scene.

The defendant took the stand on his own behalf. He admitted to having two prior felony convictions and to being forbidden to possess a gun. He said that he had known the victim and the woman at the apartment for a short while and that he bought crack from them. He did odd jobs to get money to support his crack habit. On the night of the shooting, he met "A," whom he had not known before. "A" gave him a .22 caliber gun, which he put in his pocket, and the two went to the apartment to buy some crack. Defendant's account was that the victim had threatened him for paying him with a bogus fifty dollar bill the day before. The two got into an argument and the victim pulled a gun and shot at him. The defendant said he fired back in self-defense and left the scene. "A" had already left, and the defendant had to walk away. He later found "A" and gave him his gun back. No gun was ever found in the investigation.

On cross-examination, the defendant admitted to having lied to the case agent in the interview because he had been afraid to be found out to have had a gun. He also admitted having sent a letter from the jail to a friend. Among other things, the letter had an X through the name of the victim's girlfriend name, which the prosecution construed as a gang symbol indicating that she was to be killed. The letter said, "We'll take care of this out on the streets."

The prosecutor challenged all aspects of defendant's story about "A," whom the police had never located.

Forensic Evidence at Trial

A Maricopa County medical examiner testified that she found a penetrating gunshot wound entering at the right eye and lodging in the brain. She recovered several bullet fragments. A bullet entering the skull fragments when it hits something hard, like the skull itself, and also fragments the skull. She said that her findings would be consistent with testimony that the person firing the shot "was standing directly in front of the victim face-to-face about 3 feet away." Soot and stippling would appear only from a shot at extremely close range, within an inch. Without either soot or stippling, the distance of the shot would be indeterminate.

In this case, the detectives had authorized use of a GSR kit on the victim's hands at autopsy. In response to a question about a prior comment about "inaccurate GSR tests," the medical examiner replied:

It's widely known throughout the field that if you're in the room with a gun that goes off, gunshot residue can be deposited on anybody's clothing, on anybody's person. You do not necessarily have to be the shooter. But again, I'm not ballistics expert and I really can't testify as to what was found or the indications of that.

A forensic scientist assigned to the crime lab's trace section analyzed the GSR kit taken from the victim's hands. He found a single particle containing lead on a sample from the left hand. The right hand had no particles consistent with gunshot residues. Asked what he meant in his report when he wrote "the particle is not specific to GSR," he answered:

What that means is lead is found elsewhere, other than just gunshot residues, like car batteries, some paints. Obviously, bullets have lead, some pyrotechnics have lead. So there's various other sources in which lead is present and thus the reason for making that statement.

A forensic scientist in the firearms identification section testified about his analysis of the bullet fragments recovered from the victim during the autopsy. He was able to determine that the larger fragment was from a .22 caliber bullet. The two smaller fragments were of the same composition, being lead with copper plating, although he could not identify them as being from a specific .22 caliber lead bullet or any other lead bullet. The fragments were so damaged that he could not identify them with any weapon, even if he were to be given a weapon with which to match them.

On cross-examination, he was told some witnesses had testified to hearing multiple shots and was asked if he had examined several projectiles. He had not. On redirect, the prosecution further explored the question of what people hear when they hear gunshots.

Q. [C]an you give us some information regarding factors that cause people to hear things with regard to firearms being discharged? . . .

A. Only in the [most] general of terms. Typically an unmuffled firearm produces two sounds. Typically you have what's called the sonic crack, if the projectile is moving faster than the speed of sound, and then you have the initial blast, if you will, of the

expanding gas out of the muzzle. So if a projectile is moving faster than the speed of sound you could ostensibly hear the blast and the crack as it goes through the sound barrier. That's just the typical dynamics of a projectile.

Q. Have you heard of instances where people will report one gunshot as being two gun shots because of that effect?

A. I have reviewed cases where there have been witnesses who stated they heard more than one and sometimes those have been attributed to the echoing effects of the sound bouncing off fixed hard objects. In other cases they were not able to explain why they heard more than one sound.

The prosecution's purpose in eliciting this testimony was to offset the defense contention that there were several shots, that defendant fired back at the victim in self defense.

Trial Outcome

The jury convicted the defendant on two counts:

- Count 1: lesser included offense of: Manslaughter, a dangerous offense.
- Count 2: Misconduct Involving Weapons

The court sentenced the defendant to 28 years on Count 1, 12 years on Count 2, to run concurrently. The court's minute entries show that he also pled guilty on two other charges:

- Count 3: Possession of Drug Paraphernalia with 2 historical prior felony convictions
- Count 4: Possession of Drug Paraphernalia with 2 historical prior felony convictions

The court sentenced him to 3.75 years on each of these counts, to run concurrently with the sentences on counts 1 and 2.

Impact of Forensic Evidence

The forensic evidence in this case was outweighed by the eyewitness testimony and the defendant's shifting stories. The forensic evidence was a cartridge at the scene that would be consistent with the fragments found in the victim's brain. But no gun was ever found to match the casing or the fragments. No blood was found on defendant's clothing. The GSR on the victim's hand showed virtually nothing.

Defendant # 16

Summary of Case Investigation

On June 2, 2005, police responded to a call at an apartment complex that a female in a long white dress had stabbed a man in the parking lot, and further calls reported that the woman was running around the front of a strip mall, possibly attempting to cut other people.

The first officers on the scene saw a woman fitting that description. She saw them and began to move quickly away, dropped a shiny object into a garbage can, and then started to run. Officer "A" overtook and handcuffed the woman, taking her into investigative custody. She violently resisted, digging her finger nails into the officer's left hand. Officer "B", who was with Officer A, retrieved the object from the garbage can, a 3- to 4-inch black-handled pocket knife, then came to A's aid. The officers managed to get the woman into the back seat of their patrol car, where she continued to shout obscenities at them and kicked at the bars on the window.

Bystanders called the officers' attention to a Native American man lying on the ground in the strip mall. He was covered with blood and was unresponsive to the officers. The fire department arrived and took the victim to the hospital, where he died early the next morning. Another two-man patrol arrived. When officers have been attacked, departmental policy is to have other officers transport the assailant. The two new officers on the scene, Officers "C" and "D", transferred the suspect out of the other patrol car to their patrol car, but they were also attacked in the process.

Other officers and detectives arrived on the scene. They began to interview witnesses and to secure the scene. While there were variations in details, the witnesses all told basically the same story.

The story they heard was that several people had gathered at the strip mall adjacent to the apartments. The mall had a liquor store, a convenience store, a laundromat, and some other shops. It was common for homeless people to hang out there, drinking beer they had bought at the liquor store. A passage connected the strip mall to apartment parking lot where the crime took place.

The suspect had been in a fight with another woman. The victim had attempted to break up the fight. She pulled the victim's pony tail, and he said something to the effect, "Oh, we're grabbing hair now!" and grabbed her hair. It turned out that what he grabbed was a wig (or a weave according to the defendant's testimony at trial). He pulled it off and threw it on top of a nearby carport. At that point, she pulled a knife and stabbed the victim. She then pursued him and stabbed him again. The other woman called 9-1-1 from a pay phone but hung up when she thought that the suspect was coming after her.

An investigator interviewed the other woman, who told him that the fight had been over a pair of shoes she was wearing. In addition to her basic account of the fight and the stabbing, she told the investigator that she had seen the suspect struggling with the police officers trying to put her in the patrol car. The investigator also interviewed the manager of the apartments, who had been in the parking lot when the fight broke out. The manager had been about 30 feet away from the fight, and said there were also four other people present, two men and two women. He had had problems with the suspect and had called the police on her in the past.

Another investigator interviewed a witness who had seen the victim pull the suspect's wig off and had seen her stab the victim, then chase him and stab him again. This witness would later testify at the trial.

Evidence collected at the scene included:

- Folding knife recovered by patrol
- Hair piece found on top of the parking awning
- Shoes found just south of the wall separating the two properties
- Photographs of blood drops from three different parking places.

Trial Proceedings

The defendant was eventually charged with 2nd degree murder and assault on Officers A, B, and C. Two years passed between the incident (June 2, 2005) and the trial (June 12–26, 2007). There were several pre-trial proceedings pertaining to the defendant's competence to assist in her own defense. At one point, she was declared incompetent. But she was finally declared competent for trial and even testified on her own behalf. Part of her defense was that she had been raped by the victim.

Testifying at the trial were:

- The woman who had argued with the defendant over her shoes
- Eyewitness to the stabbing
- Victim's mother
- Officer A, B, C, and D
- Case agent and scene agent
- Medical examiner
- Forensic scientist from fingerprint section (latent prints)
- Defendant

The woman who had argued with the defendant over her shoes testified that defendant the defendant had started the fight claiming that the shoes were hers. The victim stepped between the two women. She testified that the defendant then attacked him, pulling his ponytail, at which time the victim grabbed the defendant's wig and threw it on top of a nearby carport. The witness stated that the defendant then pulled a knife and stabbed the victim in the chest. He staggered away, back to the strip mall. The defendant pursued him and stabbed him again. Then she ran around the strip mall parking lot, yelling and brandishing the knife. The witness also testified that she had seen defendant's confrontation with the police trying to get her into their patrol car.

The eyewitness to the stabbing testified that he was drinking with some friends when the argument broke out. He saw the defendant stab the victim, but did not see any of the confrontations between defendant and the police.

Officers A and B testified about arresting the defendant and her attacks on them as they made the arrest. They also testified about recovering the knife that was the murder weapon.

After placing her into the patrol car, they fastened a tape recorder to the seat in front of her and recorded her for about an hour. That tape was admitted as an exhibit and played to the jury. No mention of rape was indicated on the tape.

Officers C and D testified about taking the defendant from the other patrol car and the restraints they had to put on her. She hit both of them in the process.

The medical examiner testified about the autopsy he performed on the victim and stated that the victim died of two deep stab wounds to the chest.

Forensic Evidence at Trial

The latent print examiner from the crime lab testified about the processes for lifting latent prints. She had been asked to examine photographs of two prints from the knife handle, but the quality was so poor that she could make no comparison. They were not useful for any kind of analysis.

On cross-examination, defense counsel made clear that the latent print examiner had not seen the knife before the day of trial and that she had not lifted the latent prints.

Q. And so when you testified about the part of the knife the latents were lifted from, that was your information from another criminalist?

A. That was the -- it was the information that was listed on the latent by one of our crime scene specialists.

Q. Like a crime scene technician?

A. Right, and they process our evidence.

Q. Are these like the people in CSI?

A. A little bit, but not very much.

The net effect of this testimony is that there was no forensic evidence presented at this trial.

The defendant testified on her own behalf. She said that she sold CDs and jewelry on the street, and that she wore the long white dress, an evening gown, so that she could show off the jewelry to best effect. She was also wearing some leather boots on the day of the incident. Her hair piece was a weave, not a wig, and it was glued on. It was very painful to have it torn off her head.

Defendant told a story of having been raped at knife point by the victim in a field behind the apartments. She had come back to the parking lot looking for her shoes, which the victim had taken from her. She found another woman (previous witness) wearing them and tried to get them back. When the victim intervened, she resisted. He pulled a knife out of his belt. In the struggle, she was cut on the neck, but she managed to get the knife away from him and stab him in self-defense.

Trial Outcome

In the course of his closing argument, the prosecutor made the point that defendant had been in jail for several days (the exact number of days was in dispute) before she said anything

about having been raped, before she asked for a medical examination. He also stressed how much time defendant had had in jail to make up her story. Before trial, she had seen all the police reports and could make her story consistent with them.

He also made explicit reference to the CSI effect:

Now, this is a case where there is not a lot of physical evidence and sometimes despite the TV shows like CSI that we see, there's just not a lot of physical evidence.

And this is a case where we have a knife, we have the wig, we have photographs to document the scene but [the medical examiner] told you this is a case where because of the large amount of internal bleeding that we see with the victim, not going to be a whole lot of external blood. We see blood from the victim right in the area where he got stabbed, right underneath the carport, or the wig was thrown where he threw the wig on top of this during this deadly dispute.

And we see some photographs documenting blood. Was the blood tested? No. Because we have no evidence whatsoever of somebody else bleeding. The only person stabbed and the only person bleeding is the defendant.

Defense counsel directed much of his argument to the lack of forensic evidence—no rape kit, no examination of defendant's dress for semen or blood, no picture of the cut on defendant's neck, no fingerprints on the knife, no tests of the blood on the ground. If it only takes 10 minutes to do what the latent print examiner did, why did she not get the latents until the day before trial?

In rebuttal, the prosecutor reiterated that the case agent had reviewed the file when he took over as case agent, and he had tried to rectify the mistake of not getting the latents analyzed. He also returned to the CSI effect:

What does it tell us? Unfortunately, it tells us that fingerprint evidence is not as -- is not all that C.S.I. cracks it up to be. Because we know that the defendant handled this knife. She told you she handled the knife. She was seen handling the knife.

She threw the knife in the trash can. She admits that's the knife she used to stab the victim with. Yet, while there is two latents that were lifted from the knife, they are not of sufficient quality for comparison. So that issue is put to rest because that was done.

Yeah, it takes 10 minutes to look at the quality of the prints for somebody who has been doing it for 20 years, and determine these are not of sufficient quality for further identification to be performed.

Trial Results

The jury returned the following verdicts:

- Guilty For Count 1: Second Degree Murder. The offense is a “dangerous” offense.

- Guilty For Count 2: Aggravated Assault (Officer A).
- Guilty For Count 3: Aggravated Assault (Officer B).
- Not Guilty For Count 4: Aggravated Assault (Officer C).

Counsel stipulated that the aggravating factors of emotional impact on next of kin for Count 1 and defendant's prior felony convictions could all be considered by the court at sentencing. On August 13, 2007, the Court sentenced the defendant to 20 years for Count 1 and two 1.75 years each for Counts 2 and 3 (to be served concurrently with each other but consecutively with Count 1).

Impact of Forensic Evidence

As discussed above, there was no forensic evidence offered in this case. The defense tried, unsuccessfully, to make a case that there should have been forensic evidence to support defendant's rape claim. But eyewitness testimony overcame the lack of any such evidence. And the very facts of the case demonstrated that there was hardly anything to be sent for forensic analysis.

Defendant # 17

Summary of Investigation and Trial

This incident on January 8, 2004, was a fight between a woman's boyfriend and ex-boyfriend, who was the subject of an order of protection that he violated when he came into the apartment where the defendant and girlfriend (ex-girlfriend of victim) resided. The woman had obtained the order of protection after she ended her relationship with the ex-boyfriend because they had had several domestic violent incidents where police were called.

After the ex-boyfriend left the apartment, the current boyfriend followed him to a parking lot of a business near the apartment complex. A fight ensued and the boyfriend struck the ex-boyfriend knocking him to the pavement. The victim was transported to the hospital where he died from internal bleeding of the brain.

The woman stated to police that earlier in the day, the ex-boyfriend had come to the apartment and had put his hands around her neck in an attempt to strangle her. Her current boyfriend had come over to her house around 6:30 p.m. prior to this incident along with his two kids to play with her child. He was on the living room couch when the ex-boyfriend again came to the house and entered through the back door. An argument ensued between the two of them about who was allowed in the house. The ex-boyfriend left the residence and walked down an adjoining alley. The current boyfriend got in his car and drove around to the other end of the alley. He then got out of his car and argued with the ex-boyfriend. At some point, he hit the ex-boyfriend knocking him to the ground. He then went back to his girlfriend's house, where he gathered his kids and left. The next day he turned himself into police and admitted to the assault. He was charged with manslaughter and negligent homicide.

There was virtually no forensic evidence collected in this case. A swab of blood was obtained from the parking lot along with some of the victim's personal items. A vial of blood and fingernail clippings were obtained at autopsy. The investigators did not request the crime lab to perform any analysis.

Trial Results

Only one witness saw the fight. Other witnesses testified at the trial that they saw the defendant speed away in a car after the fight. The defense was self-defense. The defendant testified at the trial.

The jury found the defendant not guilty on both charges.

ILJ staff interviewed the defense attorney in this case who stated he believed the prosecution's case to be weak because of the circumstances of the incident and inaccuracies in some police reports. He believed that in other jurisdictions, the case might have been pled out.

Defendant # 18

Summary of Investigation and Trial

On July 18, 2004, around 11 p.m., the defendant allegedly struck victims “A” and “B” several times with a wooden board. Victim A died as a result of the beating. Victim B was injured on his arm and ran from the scene. All three were homeless. There are differing accounts on the reasons for the attack. Victim B stated to investigators that there was an argument earlier in the day between them and the defendant over paying for beer. The defendant did not pay and was asked to leave the group that was contributing for beer. Later that evening, after drinking several beers, the two victims were sleeping on the ground when the defendant attacked them with the board. Victim B was able to get up and run to a payphone where he called the police.

The defendant gave a different account on what had transpired. He said during his interview with detectives that they were all sitting in a circle earlier in the evening. They told A to leave because of his talking. A then left the area. Later they were all sleeping when A returned with a pipe and started arguing with the defendant. The defendant said he ran away and A started attacking Victim B and another person who was sleeping. The defendant said he came back within minutes and observed A on the ground, bleeding.

The scientific evidence in this case included DNA, fingerprints, and blood splatter. Because we do not have the trial transcripts, we cannot provide information on the testimony of the three forensic scientists at trial. However, the following is a summary of the results from their analysis of the evidence:

- The items of wood (from scene) were determined to be once a single piece.
- One latent was identified through AZAFIS to a possible witness, who was never located by police.
- None of the 18 latent prints from evidence at the scene matched the defendant or the two victims.
- The DNA profile from defendant matched the DNA profiles from blood on three rocks (from scene) and blood from the defendant’s pants.
- A mixed DNA profile was obtained from blood on a shirt (from scene). The major component matched the DNA profile from the killed victim.
- The DNA profile from blood on end of piece of wood matched the DNA profile from killed victim.
- The DNA profiles from blood on defendant’s left shoe, right shoe, and toe of right shoe matched the DNA profile from killed victim.
- The DNA profiles from blood on witness’s back right leg pants, front left leg pants, and right boot matched the DNA profile from killed victim.
- A mixed DNA profile was obtained from the toe of defendant’s left shoe. The major component of this mixed DNA profile matched the killed victim.

- A mixed DNA profile was obtained from blood on a witness's front right pants leg. The major component of this mixed DNA profile matched the killed victim.
- A mixed DNA profile was obtained from blood on a witness's left boot. The major component of this mixed DNA profile matched the killed victim.

Trial Results

According to the defense attorney interviewed by ILJ staff, the defense's theory blamed a second person for the homicide. A number of this individual's personal factors supported this theory, including his violent criminal history compared with that of the defendant who was substantially slighter and with no violent crime history.

A key defense point was that there was an unexplained fingerprint on the murder weapon (board) that did not belong to the defendant. Furthermore, the credibility of the police witnesses was undermined by discrepancies in the crime scene diagrams that varied significantly from the scene as described in the police reports and the crime scene photos. This was important because the prosecution theory of the case relied on the crime scene description to explain the blood splatter evidence. The defense offered its own blood splatter expert who testified that the blood splatter could not have been accomplished by the defendant who was too small to swing the 2-by-4 board murder weapon with such force as to match the blood splatter.

Also undermining the prosecution's case was the fact that none of the surviving victims could be located to testify at trial.

The jury found the defendant not guilty of 2nd degree murder. The prosecution had previously dropped an assault charge.

Defendant # 19

Summary of Investigation and Trial

On August 6, 2004, around 10:45 a.m., police responded to a “shots fired” call at a motel room. When they arrived, police found the female victim who had received a shot in the forehead with a .38 caliber Smith & Wesson revolver. She was transported to the hospital where she died. Her live-in boy friend was with her at the motel and told investigators that her wound was a self-inflicted suicide attempt, claiming that the gun was pointed upward when fired. The bullet wound on the victim’s head and the x-rays indicated otherwise. The prosecutor brought three charges for trial: 2nd degree murder, reckless manslaughter, and negligent homicide.

Two forensic scientists (GSA and ballistics) testified at the trial. Their analysis of the evidence showed the following:

- The damaged bullet (from autopsy) could not be identified or excluded as having been fired from the Smith & Wesson revolver. While there was agreement of all discernible class characteristics, no significant agreement or disagreement of individual characteristics was noted.
- No gunshot residues were identified on the victim’s shirt.
- Particles highly specific to GSR and numerous particles containing one or more components known to be indicative of GSR were detected on the GSR kit samples from the right and left hands of victim (from hospital).
- One particle highly specific to GSR and numerous particles containing one or more components known to be indicative of GSR were detected on the GSR kit of the defendant’s right hand.

Trial Results

According to the defense attorney, the medical examiner testified that his autopsy examination was inconsistent with the defense’s theory of suicide. However, his testimony was apparently challenged by the defense attorney on the certainty of his conclusions.

The jury found the defendant not guilty of 2nd degree murder, reckless manslaughter, and negligent homicide.

Defendant # 20

On Feb. 3, 2005, around noon, the defendant, along with three or four others, entered the victim's residence for the purpose of robbing him of approximately 140 pounds of marijuana. There were others in the residence at the time. A shootout took place in which the victim was killed and his brother seriously injured (shot five times). The victim was declared dead at the scene, while his brother was transported to a hospital where he eventually survived his injuries. However, after recovering from his injuries, he refused to cooperate with investigators on what had occurred. The defendant was also shot in the head and shoulder during the incident. He was dropped off at a hospital by the others with him along with another individual whom they had picked up on the way to the hospital. The others did not stay at the hospital after dropping the defendant and telling the other individual to stay with him.

Investigators interviewed the defendant three times while he was in the hospital. On the third interview, investigators read the Miranda rights to him. On all three occasions, he made admissions that he and his friends were going to the house to commit a robbery of a large quantity of marijuana that they had heard was stashed at the house. During the robbery, he shot one of the two victims in the house at least two times. He claimed that another individual also shot the victims.

On Feb. 18, 2005, he was well enough to leave the hospital, at which time he was taken to the county jail and booked on three charges—felony murder, aggravated assault, and attempted robbery.

Two forensic scientists from the ballistics section testified at the trial. Their lab reports gave the following results, which they presumably provided in testimony:

- There was nothing to indicate that the two PMC 9 mm Luger cartridge casings (from scene) were fired from more than one gun.
- Toolmarks on 16 .45 Auto cartridge casings (from scene) indicated that three guns were represented.
- The .45 Auto cartridge casings displayed insufficient information to predict a maker or model of firearm.
- The shotgun wads (from scene) were identified as having been from a 12 gauge cartridge.
- Rifling dimensions on the bullet jacket fragment (from scene) were consistent with those on the bullet (from scene).
- The two bullet jacket fragments (from scene) were unsuitable for a prediction of a gun.

Trial Results

In a pretrial hearing, the court ruled that failure to Mirandize (on the first two interviews of the victim in the hospital) was acceptable because the defendant was not in custody at the time. The court ruled that the confession was voluntary. However, at trial, the court held that the jury should determine the voluntariness of the confession.

According to the defense attorney interviewed by ILJ staff, there were credibility problems with the confessions. First, the police testimony about the circumstances surrounding the confessions was contradictory. Police said they had not placed any officer on duty at the hospital bed site. However, defense found an officer who said he had been stationed at the bed site while the second confession occurred. At trial, the officer recanted, but defense then produced a tape recording of his admission. Second, defense counsel produced an expert witness who testified that the defendant's head injuries were so serious that he could not have remembered the details of what occurred at the crime scene without police prompting. Third, there was testimony that the defendant suffered his head injuries outside the residence before he entered the home. Therefore, he was never inside the residence where the murder took place. If this testimony were correct, another unspent bullet inside the house similar to that found outside (where the defendant was shot) must have come from another shooter.

These problems were apparently sufficient to plant doubt in the minds of the jurors on the extent to which the defendant participated in the incident. The jury found him not guilty on all three charges.

Appendix B

Forensic Evidence Collected and Analyzed

This appendix is a table showing the evidence collected and analyzed during the investigations of each of the 20 defendants. The first column gives the defendant's identification number; the second column gives the evidence collected; and the third column summarizes the results of forensic analysis. Bold text in the third column indicates that the results were presented at the defendant's trial.

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
Defendant 1	<p><u>From scene:</u> 3 copper jacketed bullet fragments Ball peen hammer with wood handle Swab of possible bloodstain 3 beer cans/bottles Clothing (shoes, jeans, undershirt) Bloodstained towel and pillow</p> <p><u>From vehicle at crime scene:</u> 2 latent prints Soda bottle 3 business cards with telephone numbers Cellular telephone case Torn cardboard with numbers on it Miscellaneous items from glove box Beer bottle Portable radio Clothing (cowboy hat) Live 7.62 X 39 mm caliber cartridge</p> <p><u>From defendant's vehicle:</u> 2 latent prints Smith & Wesson .357 Magnum revolver .357 cartridge casing Cell phone Clothing (shirts, pants, boots, etc.) Soda can Photo identification card</p> <p><u>From defendant at time of arrest</u> GSR collection kits on both hands 7 .357 live cartridges in his pocket Fingerprints</p> <p><u>From autopsy:</u> Single projectile from body Vial of blood and fingernail clippings</p>	<ol style="list-style-type: none"> 1. The Smith & Wesson .357 Magnum revolver was determined to be operational. 2. Comparisons to determine whether one of the damaged bullet jackets from the scene and the damaged bullet from autopsy were fired from the Smith & Wesson were inconclusive. 3. Comparison to determine whether one of the other damaged bullet jackets from the scene was fired from the Smith & Wesson was inconclusive. 4. The .357 casing found in the defendant's vehicle was identified as having been fired in the Smith & Wesson revolver. 5. A particle containing a component known to be indicative of GSR was detected on the GSR collection kit sample from the right hand of the defendant. The DNA profile from swabs of blood from the scene matches the DNA profile of the victim at all 16 loci. A mixed DNA profile was obtained from the hammer. The major component of this mixed DNA profile matched the victim. Assuming only two sources, the defendant was excluded as one of the possible sources. The two latent prints from the defendant's vehicle were not of AZAFIS quality. The two latent prints from the vehicle at the scene were not of AZAFIS quality.
Defendant 2	<p><u>From scene</u> Broken glass from a window Broken glass from outside the apartment 3 swabs of blood from walls</p>	<ol style="list-style-type: none"> 1. The DNA profiles from blood on the defendant's t-shirt, left leg pants, and eyelets (from boots) matched the DNA profile of the victim at all 14 loci. No usable latents were developed from broken glass from

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p>Frying pan with red stains and a large dent 3 white metal earrings found on the floor Blue jeans jacket on couch with red stains Miscellaneous mail and other papers <u>From defendant at time of arrest</u> Clothing (boots, jeans, hooded sweat shirt, etc.) Buccal swab Swabs of dried blood from finger Swabs of right hand under fingernails Swabs of blood from both palms Fingerprints <u>From autopsy</u> Vial of blood and fingernail clippings</p>	<p>the window or the broken glass from outside the apartment. 3. No identifications were effected between a latent print found on the frying pan and the defendant's fingerprints. 4. A mixed DNA profile was obtained from the swabs of the defendant's palms. The major component of this mixed DNA profile matched the defendant. No conclusions were drawn as to the source(s) of the minor component.</p>
Defendant 3	<p><u>From scene</u> 4 shell casings of .380 caliber 1 shell casing 7.62 X 39 Swabs of bloodstains on parking lot 2 latent prints from vehicle in parking lot 5 latent prints from vehicle in parking lot 2 beer cans 2 Styrofoam cups Baseball cap Cell phone <u>From defendant's vehicle</u> Beretta .380 pistol <u>From defendant's home</u> 3 .380 caliber casings <u>From autopsy</u> Single projectile from body Vial of blood and fingernail clippings</p>	<p>1. The single project from autopsy was determined to be a .380 bullet and was identified as having been fired from the Beretta .380 pistol found in the defendant's car. 2. The four .380 caliber shell casings of found at the scene were identified as having been fired in the Beretta .380 pistol found in the defendant's car. 3. The three .380 caliber shell casings found in the defendant's home were identified as having been fired in the Beretta .380 pistol. 4. None of the seven latent prints from the two vehicles in the parking lot was of AZAFIS quality. 5. None of the four latent prints taken from the Beretta pistol by lab personnel was of AZAFIS quality. 6. No identifications were effected between a latent from the Beretta pistol and fingerprints from the defendant and from a second suspect.</p>
Defendant 4	<p><u>From apartment parking lot</u> Dumpster containing victim's body Bloodstained pizza box in dumpster <u>From victim's body</u> Plastic bag wrapped around victim's body <u>From defendant and victim's apartment</u></p>	<p>1. A mixed DNA profile was obtained from the blood on the defendant's jeans. The major component of this mixed DNA profile matched the DNA profile of the victim. 2. A mixed DNA profile was obtained from blood on the defendant's sock. The major component of this mixed</p>

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p>2 rolls of clear plastic wrapping material Cardboard box of several rolls of clear wrapping material Single section of plastic wrapping material 14 swabs of blood throughout the apartment (kitchen, bathroom, Clothing (t-shirt, socks, sandals etc.) Small glass bottle and papers with possible blood Plastic open container filled with water and unknown cleaning agents and 2 sponges Sample of water from container Section of paper towel Miscellaneous papers Cloth towel</p> <p><u>From behind apartment</u> Pair of bloodstained tennis shoes Black plastic bag</p> <p><u>From defendant at time of arrest</u> Buccal swab Clothing (shoes, socks, t-shirt, jeans) Fingerprints</p> <p><u>From autopsy</u> GSR kits on both hands of victim Single projectile from body Copper jacket recovered from body Vial of blood and fingernail clippings</p>	<p>DNA profile matched the DNA profile of the victim.</p> <ol style="list-style-type: none"> 3. The DNA profiles from blood on the kitchen tile, bathroom floor, and bathroom ceiling match the DNA profile of the victim at all 14 loci. 4. The DNA profile from blood on the tennis shoes (found behind apartment) matched the victim. 5. The bullet jacket from autopsy was a .38 caliber projectile and was comparable to bullets known to be loaded into .38 Special and .357 Magnum ammunition. 6. The plastic bag wrapped around the victim was found to correspond in general design and construction to the bags from the rolls found in the apartment. The rolls could not be excluded as having been the source of the single bag around the victim. 7. The single plastic bag from inside the apartment was excluded as having the same source as the plastic bag around the victim.
<p>Defendant 5</p>	<p><u>From apartment complex scene</u> Ruger 9 mm handgun Handgun magazine with nine cartridges 9 mm shell casing 41” bamboo stick Clothing (belt, clasp, necklace) Cell phone Broken plastic ash tray</p> <p><u>From autopsy</u> Single projectile from body Vial of blood and fingernail clippings</p>	<ol style="list-style-type: none"> 1. The Ruger 9mm, Luger semiautomatic handgun was determined to be operational with a measured trigger pull of 13 ¼ pounds in double action mode and 6 ½ pounds in single action mode. 2. The shell casing from the scene was identified as having been fired in the Ruger 9 mm handgun. 3. The bullet from the autopsy was entirely consistent with having been fired from the Ruger 9 mm handgun. While there was agreement of all discernible class characteristics and many individual characteristics, the agreement was not sufficient for

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	Clothing (shoes, socks, shorts, underwear, Change, wallet) Partial pack of cigarettes <u>From defendant at arrest</u> Clothing (jeans, shorts, shirt) Fingerprints	<p>identification.</p> <p>4. No stains consistent with blood were observed on the bamboo stick.</p>
<p>Defendant 6</p>	<p><u>From scene</u> 6 latent lifts from victim’s vehicle 4 latent lifts from victim’s vehicle (at impound) 5 swabs of possible blood from street 7 swabs from inside and outside vehicle 3 shotgun shells from inside vehicle Sock with 7 live shotgun shells lying outside vehicle SKS 7.62 X 39 rifle from trunk of vehicle Live round inside rifle Magazine for rifle with live rounds Black purse in front area of vehicle with Taser 5 white pills in zippered pocket of purse Plastic baggie with crystalline substance believed to be illegal drugs Miscellaneous items (battery, soda can, pieces of broken mirror glass, cell phone, shirt) CD Player and CD</p> <p><u>From witness’s vehicle at scene</u> 4 swabbed samples from rear driver’s side door 1 swabbed sample from rear driver’s outside door handle</p> <p><u>From autopsy of Victim 1</u> Shotgun pellets, wadding, and fragments GSR test kit on both hands Smoking pipe Vial of blood and fingernail clippings</p> <p><u>From autopsy of Victim 2</u> Shotgun pellets and wadding GSR test kit on both hands Vial of blood and fingernail clippings</p>	<p>1. No marijuana was detected on the brown wooden case containing glass pipe (from defendant’s residence).</p> <p>2. Three capsules and two tablets (from defendant’s residence) were determined to be butalbital.</p> <p>3. A ziplock baggie (from defendant’s residence) was determined to contain marijuana.</p> <p>4. A smoking pipe (from defendant’s residence) was determined to contain marijuana.</p> <p>5. No dangerous drugs or narcotic drugs were indicated with 5 white pills (from victim’s purse found in vehicle).</p> <p>6. A clear plastic bag (from victim’s purse found in vehicle) was determined to contain 200 milligrams of useable methamphetamine.</p> <p>7. A latent print (from 6 latent lift cards from victim’s vehicle) was entered into AZAFIS with negative results.</p> <p>8. Two latent lifts (from lab analysis of shotgun) were not AZAFIS quality.</p> <p>9. Three latent lifts from victim’s vehicle (at impound) were not AZAFIS quality latents.</p> <p>10. Three of 4 lifts from victim’s vehicle were of comparative value; 1 of 2 latents from CD was of comparative value; 1 of 2 latents from shotgun was of comparative value.</p> <p>11. The defendant’s fingerprints were identified to the following latents from evidence obtained from his residence: Pepsi can, plastic box (3), aluminum can, inside plastic container, paper (3). No identifications were effected on 13 other items of evidence from his residence.</p> <p>12. No identifications were effected from the two latents from the shotgun compared to the victim, the</p>

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p><u>From defendant's residence</u> Pistol grip Ithaca 12 gauge pump action shotgun from vehicle at residence 2 shotgun shells found with shotgun .22 cal. Ruger replica BB gun Box of 12 gauge shotgun shells with 15 live shells Case with shotgun cleaning kit and 5 shells 6 "creamer" cartridges Swab of stain in bathroom sink 4 pillows from bed Comforter and fitted sheet from bed Burned residue on nightstand Brown wooden case with glass pipe believed to be used for smoking illicit drugs Wooden pipe and metal pipe 2 metal scales 8 soda cans, 4 water bottles, 5 steel reserve cans Empty 30-pack beer box Video tape Clothes (jeans, socks, t-shirt, watch, etc) Fabric sample from box spring Miscellaneous items (paper cup)</p> <p><u>From defendant at arrest</u> Ziplock baggie with possible marijuana Syringe containing unknown liquid Metal style smoking pipe Prescription vial 3 green colored capsules and 2 white tablets Clothing (jeans, t-shirt, tennis shoes, cap, socks, etc.) Cash (\$240.00) Back pack with 3 beer cans and personal items Sleeping bag Cell phone Fingerprints</p> <p><u>From lab analysis</u> 2 latents from shotgun 2 latent lifts from CD 31 latents (from evidence recovered at defendant's</p>	<p>defendant, and others.</p> <p>13. No identifications were effected from two latents from the victim's vehicle compared to the victim, the defendant, and others.</p> <p>14. Four latents from the victim's vehicle were matched to the victim. Better major case inked prints were needed to complete the comparison of one of the latents to a witness. No latents were found to match the defendant.</p> <p>15. No identifications were effected between a witness and all items of evidence from the offender's residence.</p> <p>16. Two latents from CD (located at scene) were not AZAFIS quality latents.</p> <p>17. No latents were found on several items from defendant's home: empty beer can box, Wendy's cup, Gatorade bottle, water bottle, Pepsi can,</p> <p>18. Defendant's fingerprints were identified to latent prints found on 11 items of evidence from his residence: Pepsi can, Gatorade bottle on nightstand, Coke can on nightstand, Frappucino bottle, cookie wrapper, glossy paper inside CD box, gun cleaning case, beer can, metal cash box, plastic bottom, piece of paper.</p> <p>19. The shotgun was determined to be operational with a measured trigger pull of 6 pounds.</p> <p>20. The lead pellets (from autopsies) were of a size and weight consistent with #8 shot.</p> <p>21. The 12 gauge plastic wadding (from autopsy) were comparable in manufacture and design to 12 gauge wadding marked by the Remington Arms Company, Inc.</p> <p>22. The 12 gauge plastic wadding (from autopsy) could not be identified or excluded as having been fired from the shotgun. While there was agreement of all discernible class characteristics, no significant agreement or disagreement of individual characteristics was noted.</p> <p>23. Two of the three shotgun shells (from back seat of victim's vehicle at scene) were identified as having been fired in the shotgun.</p>

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p>(plastic box, soda cans, papers, etc.)</p> <p><u>From witness</u></p> <p>Buccal swab (at HQ)</p> <p>Fingerprints (at HQ)</p> <p>Witness's tennis shoes, t-shirt, swim trunks (from residence)</p>	<p>24. Comparisons of the third shotgun shell were inconclusive. There was agreement of all discernible class characteristics and many individual characteristics, but the agreement was insufficient for identification. It is highly likely the casing was fired in the firearm.</p> <p>25. A DNA profile from t-shirt (from scene) was consistent from having come from a male.</p> <p>26. A mixed DNA profile obtained from the two swabs from the shotgun and no determinations could be made.</p> <p>27. DNA profiles from blood on defendant's shoes, pillow case (from residence), and sink (from residence) match the DNA profile of the defendant.</p> <p>28. A mixed DNA profile was obtained from the left outside shoe (from defendant). The major component matched the DNA profile of the victim. No conclusions were drawn as to the source of the weaker alleles.</p> <p>29. A mixed DNA profile was obtained from the right inside shoe (from defendant). The major component matched the DNA profile of the victim. The defendant could not be excluded as the minor component of this mixed DNA profile.</p> <p>30. A mixed DNA profile was obtained from a stain on the leather portion of the tongue of the defendant's left shoe. The major component of this mixed profile matched the victim.</p> <p>31. A mixed DNA profile was obtained from the plastic eyelet piece of the left shoe. The major component of this mixed profile matched the victim. The victim could not be excluded as the minor component of this mixed profile.</p> <p>32. The DNA profiles from cuttings from 3 areas of a shirt (from scene) used by the defendant to hide shotgun as he fled matched the victim.</p> <p>33. The DNA profiles from wet/dry swabs from shotgun matched the victim.</p> <p>34. The DNA profile from scrapings from shotgun</p>

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
		<p>matched the victim.</p> <p>35. The DNA profile from the witness’s swim trunks matched the victim.</p> <p>36. The DNA profile from the witness’s t-shirt (from residence) matched his DNA profile.</p> <p>37. Numerous particles of lead were detected on the GSR collection kit from the right hand of the victim (from autopsy). A few particles of lead were detected on the sample from the left hand.</p> <p>38. Four particles highly specific to GSR and numerous particles containing one or more components known to be indicative of GSR were detected on the GSR collection kit sample from the right hand of the victim (from autopsy). Two particles highly specific to GSR and numerous particles containing a component known to be indicative of GSR were detected on the GSR sample from the left hand.</p>
<p>Defendant 7</p>	<p><u>From scene:</u> 8 shell casings 2 pieces of broken glass Metal fragments from expended projectiles Holster for handgun Cigarette butt Plastic tip for a cigar Towel</p> <p><u>From autopsy</u> Fragment of projectile Vial of blood and fingernail clippings Clothing</p> <p><u>From victim’s vehicle</u> 14 latent lifts Expended projectile Folding knife Kitchen knife Razor blade cutter Expended projectile</p>	<ol style="list-style-type: none"> 1. The glass fragments (from scene) were indicated to be slightly dissimilar in thickness and refractive index, similar in color and elemental composition, and determined to be tempered (safety) glass. However, both of the fragments could have originated from a common source. Tempered glass is used in vehicle side windows. 2. Two latent lifts (from victim’s vehicle) were entered into AZAFIS with negative results. 3. The eight shell casings (from scene) were identified as having been fired in the same firearm. 4. The .38/9mm caliber jacketed hollow point bullet (from victim’s vehicle) is of a caliber and construction that would normally be found in 9 mm Luger ammunition. 5. No identifications were effected in comparing 6 latent lifts (from victim’s vehicle) to defendant. 6. No identifications were effected in comparing 14 latent lifts (from victim’s vehicle) to two suspects.

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	Portion of an expended projectile Rear side reflector Handwritten letter Baseball cap	
Defendant 8	<p><u>From scene:</u> GSR kit from defendant Spent projectile from victim’s vehicle at scene Spent projectile from sidewalk .40 shell casing from rear parking lot Rossi Interarms .44 revolver (with 5 bullets) Open box of .44 bullets Smith and Wesson .38 special 6-shot revolver (with 6 expended shell casings in cylinder) 8 .38 special bullets 2 .44 bullets 6 .38 semi-automatic handgun (with magazine and 4 live bullets) 2 Holsters Cell phone VHS video tape</p> <p><u>From hospital</u> Clothing from victim</p> <p><u>From autopsy</u> GSR kit from both hands Vial of blood and fingernail clippings Clothing</p> <p><u>From defendant at time of arrest</u> Buccal swab Clothing</p> <p><u>From victim’s vehicle at impound</u> 2 sealed cardboard cases with 20 sealed beer bottles in each case Cutout portion of seat cover with reddish substance Baseball cap 4 latent lifts from vehicle</p>	<ol style="list-style-type: none"> 1. 1 particle highly specific to GSR and 1 particle containing 2 components indicative of GSR were detected on the GSR collection kit from the defendant’s left hand. 2. 2 particles containing one or more components indicative of GSR were detected on the sample from the defendant’s right hand. 3. No particles consistent with GSR were detected on the samples from the victim’s GSR collection kit. 4. The Rossi .44 revolver was determined to be operational with a trigger pull of 10 ½ pounds in double action mode. 5. The Smith & Wesson .38 revolver was determined to be operational with a measured trigger pull of 8 ¾ pounds in double action mode and 3 ¼ pounds in single action mode. 6. The bullet (from victim’s vehicle) was consistent with having been fired from the Smith and Wesson .38 revolver. 7. The bullet (from sidewalk) could not be identified or excluded as having been fired from the Smith and Wesson .38 revolver. 8. The .40 shell casing was excluded as having been fired in either the Smith and Wesson .38 revolver or the Rossi .44 revolver. 9. No useable latents were developed from the 4 latent lifts from victim’s vehicle. 10. A mixed DNA profile was obtained from the Smith and Wesson revolver. The major component matches the DNA profile of the defendant. 11. The DNA profiles from swabs of the bullet (from victim’s vehicle) and from the cutout portion of the seat cover match the DNA profile of the victim. 12. A mixed DNA profile was obtained from the baseball

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
		<p>cap (from victim’s vehicle). The major component matched the victim.</p> <p>13. Blood was detected on the right fingernail clippings (from autopsy); no blood was indicated on the left fingernail clippings.</p> <p>14. Possible tissue was indicated on the right fingernail clippings; no tissue-like material was observed on the left fingernail clippings.</p>
Defendant 9	<p><u>From scene:</u> 1 live 12 gauge shotgun shell 2 expended 12 gauge shotgun casings Plastic wadding from shotgun shell 1 air pellet gun Black colored case containing: Scale 2 Smoking pipes Cigarette case containing package of rolling papers Small amount of green leafy substance Eye glass case with drug paraphernalia Wooden box with drug paraphernalia Key case with 2 straws and baggie with white crystal type substance 2 swabs from driver’s side door of vehicle 2 swabs from passenger’s side door of vehicle 6 latent lifts from vehicle (by crime scene specialist) 2 lens from eyeglasses 1 pair of wire rimmed eyeglasses 1 soda can 3 burned cigarette butts Earring Baseball cap T-shirt</p> <p><u>From hospital:</u> Clothing from victim</p> <p><u>From autopsy</u> GSR kit from both hands</p>	<ol style="list-style-type: none"> 1. 6 latents (from vehicle) were entered into AZAFIS with negative results. 2. 10 latents (from evidence in lab) were not AZAFIS quality. 3. No latents were found on other items of evidence (e.g., eyeglasses, soda can, etc). 4. The live shogun shell and two shotgun casings could not be processed for latent prints because of prior DNA analysis. 5. No identifications were effected between 6 latents (from evidence in lab) and defendant. 6. No identifications were effected between 6 latents (from evidence in lab) and another suspect. 7. Crystal substance (from scene) was determined to be methamphetamine. 8. Green leafy substance (from scene) was determined to be marijuana. 9. The two shotgun casings (from scene) were identified as having been fired from the same firearm. 10. The live shotgun shell (from scene) was consistent with having been chambered in and extracted from the same firearm as one of the casings. 11. The plastic shotgun wad (from scene) is consistent with being from a 12 gauge shotgun cartridge. 12. DNA profiles were developed from buccal swabs from the defendant and a second suspect. 13. The DNA profile from the live shotgun shell (from scene) was a mixture from at least three individuals.

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p>Vial of blood and fingernail clippings Clothing Shotgun pellets <u>From apartment at arrest of defendant</u> .38 revolver with 6 .22 unfired cartridges 2-shot Derringer gun 13 unfired cartridges Body armor <u>From defendant at jail</u> Buccal swab <u>From evidence in lab:</u> 5 latent lifts from wooden box (from scene) 3 photos of recovered latents from air gun (from scene) 2 photos of latents from wooden box</p>	<p>No conclusions could be drawn. The defendant could not be identified or excluded as a contributor to the biological material on the shell.</p>
Defendant 10	<p><u>From scene</u> Expended copper jacketed projectile Folded pocket knife Swabs of blood from drops on wall in bedroom Swabs of blood from bed in bedroom Swabs of blood from front porch Clothes (socks and shirt) with blood Notebooks Packaging material for night vision color camera 4 elimination shoeprints from officers at scene</p>	<p>No analysis was requested in this case.</p>
Defendant 11	<p><u>From scene</u> Expended 7.62 X 39 shell casing Styrofoam cup GSR kit on suspect <u>From autopsy</u> Vial of blood and fingernail clippings Clothing <u>From defendant (at arrest)</u> GSR kit</p>	<ol style="list-style-type: none"> 1. No particles consistent with GSR were detected on the GSR kit from the defendant (at arrest). 2. A particle containing lead, a component known to be indicative of GSR was detected on the GSR kit from the left hand of a suspect (at scene). 3. The cartridge casing (from scene) possesses marks that are consistent with marks found on cartridge casings fired in AK-47 type rifles. 4. No friction ridge detail was preserved from the cartridge casing (from scene). 5. A latent (from Styrofoam cup) was entered into AZAFIS

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
		with negative results.
<p>Defendant 12</p>	<p><u>From scene</u> Swab of blood from car door handle Swab of blood outside vehicle near gas tank door Swab of blood from driver’s side, rear door Swab of blood from kitchen floor 2 swabs of blood from rear door of kitchen 12 latent lift cards 5 9 mm Luger shell casings 3 expended projectiles 9 live bullets Handgun (from secondary suspect) Plastic baggie with possible marijuana Cookie box with possible drug paraphernalia Scale with plastic bag Metal box with unknown white substance Pipe of style commonly used to smoke marijuana Hi-point firearms box of unopened 50 .38 bullets, gun locking device Baseball bat Clothing (shoe, rag inside shoe, dime in shoe, robe, sock) Plastic baggie (inside shoe) Plastic baggie 2 burned cigarette butts Cash Smirnoff ice bottle Beer can Miscellaneous items (piece of paper, can of air freshener, 2 cigarette lighters, business cards, pieces of plastic baggies, paper) <u>From autopsy</u> Vial of blood and fingernail clippings Clothing Projectile GSR kit from both hands Traces from face (stippling)</p>	<ol style="list-style-type: none"> 1. Four shell casings (from scene) were identified as having been fired from the same firearm. 2. One shell casing (from scene) showed no correspondence of individual characteristics to the other four casings. 3. Three bullets (from scene) are comparable to bullets known to be loaded into 9 mm Luger ammunition. 4. It is likely that the three bullets were fired from the same firearm. 5. Firearms known to possess similar rifling characteristics include, but are not limited to, some models of 9 mm Luger semi-automatic pistols manufactured by Hi-Point. 6. Two latent prints (from handgun) were compared to the defendant, both victims, and another suspect and no identifications were effected. 7. Five latents (from scene) were not AZAFIS quality prints. 8. Three latents (from scene) were not AZAFIS quality prints.

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<u>From suspect (at arrest)</u> Buccal swab Clothing <u>From suspect's residence</u> Small can with white rocks believed to be crack cocaine <u>From second victim (at hospital)</u> Clothing	
Defendant 13	<u>From scene</u> 15 swabs of blood Possible hair 2 towels Plastic drinking cups Popcorn bag Clothing (baseball cap, sunglasses, change) <u>From autopsy</u> Vial of blood and fingernail clippings Clothing <u>From vehicle (at scene)</u> 5 swabs of blood <u>From victim 2 (at hospital)</u> Buccal swabs Clothing <u>From victim 3 (at headquarters)</u> Buccal swab Clothing <u>From defendant (at arrest)</u> 3 swabs of possible blood Blood sample Clothing (pants, shorts, tennis shoes, t-shirt, jacket)	<ol style="list-style-type: none"> 1. Usable latents from plastic drinking cups did not match defendant's fingerprints. 2. Hairs were found on defendant's jeans, shoes, and socks. 3. Blood was indicated on defendant's jeans, tennis shoes, and jacket. 4. Blood was indicated on swabs from defendant's hands and face. 5. Blood was drawn from the defendant at arrest. 6. No stains consistent with blood were observed on defendant's socks or t-shirt. 7. The ethyl alcohol concentration of the blood sample (from defendant at arrest) was .112. 8. DNA profiles from defendant's t-shirt areas of right sleeve, right chest, left shoulder, and back match the defendant. 9. A mixed DNA profile was obtained from defendant's t-shirt hem. The major component matched the defendant. The three victims were excluded as contributors to the minor component. 10. The DNA profile of four swabs from vehicle (at scene) and three swabs (from scene) matched the DNA profile of the third victim. 11. The DNA profile of one swab from victim's vehicle (at scene) and five swabs (from scene) matched the killed victim. 12. The DNA profile from blood on defendant's right hand, left hand, face, jeans (2), left shoe, and jacket (5) matched the defendant. 13. A mixed DNA profile was obtained from defendant's

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
		<p>jeans and right shoe. The major component of this mixed profile matched the defendant. All three victims were excluded as contributors to the minor component.</p>
<p>Defendant 14</p>	<p><u>From defendant and victim's house</u> Colt .22 cal semi-automatic handgun Magazine for above weapon 12 .22 caliber shell casings Three handwritten letters Phone/address book on kitchen table Key ring with five keys and car alarm 187 color photos <u>From defendant at police station</u> GSR from defendant's hands <u>From victim's body</u> Fingerprints White t-shirt, sweatpants, briefs Fingernail clippings Particles from shirt <u>From autopsy</u> Bullet fragments from spine Bullet fragments from left temporal muscle Vial of victim's blood</p>	<ol style="list-style-type: none"> 1. Numerous particles containing lead, a component known to be indicative of GSR, were detected on the GSR kit sample from the right hand. A few particles containing lead were detected on the sample from the left hand. 2. The five .22 casings were entirely consistent with having been fired in the Colt .22 long rifle semiautomatic pistol. While there was agreement of all discernible class characteristics and many individual characteristics, the agreement was not sufficient for identification. The six .22 casings were consistent with having been fired in the Colt .22 long rifle semiautomatic pistol. While there was agreement of all discernible class characteristics and some individual characteristics, the agreement was not sufficient for identification. The box of 42 Winchester .22 was not compared to the Colt .22 long rifle semiautomatic pistol. 3. The Colt .22 long rifle semiautomatic pistol was determined to be operational. The firearm has a measured trigger pull of 3 ½ pounds in single action mode. 4. The three damaged bullets could not be identified or excluded as having been fired from the Colt .22 long rifle semiautomatic pistol. While there was agreement of all discernible class characteristics, no significant agreement or disagreement of individual characteristics was noted. 5. The magazine was determined to have a 10-round capacity.
<p>Defendant 15</p>	<p><u>From defendant at time of arrest</u> Red, white and green head scarf Dark blue head scarf Black t-shirt, jean shorts, belt, shoes, socks</p>	<ol style="list-style-type: none"> 1. No blood was detected on scarves, t-shirt, jean shorts, belt, shoes, or socks. 2. Hairs were found on black t-shirt. 3. Two bullet fragments from victim's head were both

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p>Bag containing white substance <u>From victim's body</u> Clothing <u>From autopsy</u> GSR samples from victim's hands Bullet fragments from victim's head</p>	<p>consistent with being from a plated bullet of unknown caliber and manufacturer.</p> <p>4. The two damaged copper plated lead fragments were consistent with being from a plated bullet of unknown caliber and manufacturer.</p> <p>5. The damaged .22 caliber, copper plated lead fragment was consistent with being from a bullet that could have been loaded into .22 short, .22 long, or .22 long rifle ammunition. The surviving rifling information indicated that the bullet fragment was fired by a weapon that possessed six lands and grooves and a right twist. The firearms known to utilize these general rifling characteristics include rifles, pistols, and revolvers of various manufacturers and are too numerous to list. The nature and extent of damage to the bullet precluded individual land and groove measurements.</p> <p>6. One particle of lead, a component known to be indicative of GSR was detected on the GSR kit sample from the left hand (from autopsy).</p> <p>7. 28 photo latents: No identifications were effected on 6 latents. Better fingerprint impressions were needed to complete the comparisons on 7 latents. Better major case prints were needed to complete the comparisons on 8 latents. Eight latents were determined to be of no value.</p> <p>8. Yellow sheet notebook paper with handwritten letter written by suspect was analyzed.</p> <p>9. Four latents (from 28) were entered into AZAFIS with negative results.</p>
Defendant 16	<p><u>From scene:</u> Black folding knife in trash can Black wig on top of covered parking stall Brown pair of shoes in parking lot Clear baggie containing small pills 3 blood drops from parking spaces 95 color photographs <u>From autopsy</u></p>	<p>1. Two photo latent fingerprints from knife handle were not useable.</p>

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	Victim's pants, socks, shoes, hair tie Fingernail clippings Vial of blood	
Defendant 17	<u>From scene:</u> Swab of blood Duffle bag with personal items (clothing, papers hygiene items, medication vials) <u>From autopsy:</u> Vial of blood and fingernail clippings Clothing	No lab analysis was requested on this case.
Defendant 18	<u>From scene:</u> 46" 2X4 wood, broken and bloodstained 20" 2X4 wood, broken and bloodstained Piece of wood 16 bloodstained rocks Bloodstained leaves Beer can 3 Water bottles 5 Beer bottle(40 oz.) bottles Bottle cap Dentures Clothing (jacket, hat, shirt, tissue, comb, green shorts, 2 bags of clothing) Cigarette package <u>From defendant (at headquarters)</u> Buccal swab Blood stained t-shirt Blood stained jeans Blood stained right shoe Left shoe Blood stained t-shirt Jeans with blood spatters Work boots with blood spatters <u>From witness (at headquarters)</u> Buccal swab <u>From killed victim (at hospital)</u>	<ol style="list-style-type: none"> 1. Three items of wood (from scene) were determined to be once a single piece. 2. Useable latents were developed from two pieces of wood, beer can, 3 beer bottles, 2 water bottles, but not from another water bottle and 2 other beer bottles (evidence from scene). 3. No identifications were effected between latent prints and defendant, killed victim, and injured victim. 4. One latent was identified through AZAFIS to a possible witness. 5. The DNA profile from defendant matched the DNA profiles from blood on three rocks (from scene) and blood from the defendant's pants. 6. A mixed DNA profile was obtained from blood on a shirt (from scene). The major component matched the DNA profile from the killed victim. No conclusions were drawn as to the source(s) of the minor component. 7. The DNA profile from blood on end of piece of wood (from scene) matched the DNA profile from killed victim. 8. The DNA profile from blood in middle of piece of wood (from scene) matched the DNA profile from defendant. 9. The DNA profiles from blood on defendant's left shoe, right shoe, and toe of right shoe matched the DNA

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p>Tennis shoes with blood stains Pants with blood stains White socks <u>From witness</u> Buccal swab <u>From autopsy</u> Vial of blood</p>	<p>profile from killed victim.</p> <ol style="list-style-type: none"> 10. The DNA profiles from blood on witness’s back right leg pants, front left leg pants, and right boot matched the DNA profile from killed victim. 11. The DNA profiles from blood on killed victim’s t-shirt and gray cap matched his DNA profile. 12. A mixed DNA profile was obtained from the toe of defendant’s left shoe. The major component of this mixed DNA profile matched the killed victim. The defendant could not be excluded as one of the sources in the minor component. 13. A mixed DNA profile was obtained from blood on a witness’s front right pants leg. The major component of this mixed DNA profile matched the killed victim. Another witness could not be excluded as one of the sources in the minor component. 14. A mixed DNA profile was obtained from blood on a witness’s left boot. The major component of this mixed DNA profile matched the killed victim. Another witness could not be excluded as one of the sources in the minor component.
<p>Defendant 19</p>	<p><u>From scene</u> Smith and Wesson .38 caliber revolver 5 live bullets and 1 shell casing in revolver 1 bullet lodged in ceiling Purse Cell phone Miscellaneous papers <u>From defendant (at headquarters)</u> Buccal swab GSR kit on hands Clothing (shirt, pants, shoes) <u>From autopsy</u> 1 .38 caliber bullet Vial of blood and fingernail clippings Clothing</p>	<ol style="list-style-type: none"> 1. The Smith and Wesson revolver was determined to be operational with a measured trigger pull of 11 pounds in double action mode and 4 pounds in single action mode. 2. The damaged bullet (from autopsy) could not be identified or excluded as having been fired from the Smith & Wesson revolver. While there was agreement of all discernible class characteristics, no significant agreement or disagreement of individual characteristics was noted. 3. The damaged lead bullet was comparable to bullets known to be loaded into .38 caliber special ammunition. 4. No gunshot residues were identified on victim’s shirt. 5. Particles highly specific to GSR and numerous

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	<p><u>From hospital</u> Clothing (boots, belt, socks, etc.) GSR kit on victim's hands</p>	<p>particles containing one or more components known to be indicative of GSR were detected on the GSR kit samples from the right and left hands of victim (at hospital).</p> <p>6. One particle highly specific to GSR and numerous particles containing one or more components known to be indicative of GSR were detected on the GSR kit from the defendant's right hand.</p> <p>7. A mixed DNA profile from at least three sources was obtained from swabs of revolver. The major component of this mixed DNA profile matched the victim's DNA profile. The defendant could not be excluded as one of the sources in the minor component. Assuming only three sources, this profile is consistent with the combined DNA profiles from the victim, defendant, and an unidentified source.</p> <p>8. Two possibilities: a. The DNA is a mixture of victim, defendant, and an unidentified source. b. The DNA is a mixture of victim and two unidentified sources. The mixed DNA profile is 2300 times more likely to be obtained if it is a mixture of the victim, defendant, and an unidentified source than if it is a mixture of the victim and two unidentified sources.</p>
Defendant 20	<p><u>From scene:</u></p> <p>1 Taurus PT 140 .40 caliber semi-automatic handgun 25 casings 5 spent projectiles 23 live bullets 7 shotgun wads Piece of Glock magazine Inner spring of a magazine 6 swabs of bloodstains Cigar in cellophane wrapper Small broken cigar</p>	<p>1. 5 latents (from vehicle) were determined to be of no comparative value.</p> <p>2. 5 latents were entered into AZAFIS with negative results.</p> <p>3. No identifications were effected between 10 latents (from vehicle) and the defendant.</p> <p>4. No latents were developed from the cigar, Cigarillo, and soda can (from scene).</p> <p>5. There was nothing to indicate that the two PMC 9 mm Luger cartridge casings (from scene) were fired from more than one gun.</p> <p>6. Toolmarks on 16 .45 cartridge casings (from scene) indicate that three guns are represented.</p>

Appendix B. Forensic Evidence Collected And Analysis

Defendant	Evidence Collected	Crime Lab Analysis Results
	5 Cigarillos and box Soda can 3 cell phones Homemade cigarette (believed to be marijuana) Rolling papers for marijuana Clothing (shirt, undershirt) Small folding knife <u>From defendant (at hospital)</u> Clothing (tennis shoes, jeans, sweater, socks, Underwear, belt) Cell phone <u>From suspect (at hospital)</u> Clothing (hat, t-shirt, sweatpants, shoes) <u>From vehicle</u> 16 latent lifts Driver's license Disposable camera Swab of bloodstain Cell phone Miscellaneous papers <u>From defendant (after arrest)</u> Buccal swab <u>From autopsy</u> Bullet Vial of blood and fingernail clippings GSR kit Clothing	<ol style="list-style-type: none"> 7. The .45 cartridge casings display insufficient information to predict a make or model of firearm. 8. The shotgun wads (from scene) were identified as having been from a 12 gauge cartridge. 9. The bullet (from scene) was of a type and weight that would normally be found in .45 ammunition. 10. Rifling dimensions on the bullet jacket fragment (from scene) were consistent with those on the bullet (from scene). 11. The flattened bullet (from scene) was of a type and weight that would normally be found in .45 ammunition. 12. The two bullet jacket fragments (from scene) were unsuitable for a prediction of a gun.

Appendix C

Terms

Definitions of Terms

These are definitions of terms typically used during a trial.

1st degree murder: Crime of 1st degree murder requires proof that (1) the defendant caused the death of another person, (2) the defendant intended or knew that he/she would cause the death of another person, and (3) the defendant acted with premeditation.

2nd degree murder: Crime of 2nd degree murder requires one of the following: (1) the defendant intentionally caused the death of another person, or (2) the defendant caused the death of another person by conduct which he or she knew could cause death or serious physical injury.

Accomplice: A person who, with the intent to promote or facilitate the commission of a crime, does any of the following: solicits or commands another person to commit the offense or aids, counsels, agrees to aid or attempts to aid another person planning or committing the offense or provides means or opportunity to another person to commit the offense. A person is criminally accountable for the conduct of another if the person is an accomplice of such other person in the commission of the offense.

Aggravated assault: Crime of aggravated assault requires proof that (1) the defendant committed an assault, which requires proof that the defendant intentionally put another person in reasonable apprehension of imminent physical injury, and (2) the assault was aggravated by the fact that the defendant used a deadly weapon.

Aggravating circumstances: Factors that the Court can consider when sentencing the defendant.

Burglary in the 1st degree: The defendant or an accomplice entered or remained unlawfully in or on a residential structure with the intent to commit any theft or felony therein. The defendant or an accomplice knowingly possessed explosives, a deadly weapon or a dangerous instrument in the course of committing that felony.

Circumstantial evidence: Proof of a fact or facts from which the existence of another fact may be determined.

Class characteristics: A term used in ballistics analysis which means characteristics that are common to all weapons of a certain class (such as characteristics of all Beretta .380s). These are in contrast to microscopic characteristics that are unique to a particular gun.

Criminal negligence: The defendant failed to recognize a substantial risk of causing the death of another person. The risk must be such that the failure to recognize it as a gross deviation from what a reasonable person would do in the situation.

Dangerous offense: An offense is a dangerous offense if it involved the discharge, use, or threatening exhibition of a deadly weapon.

Direct evidence: A physical exhibit, or the testimony of a witness who saw, heard, touched, smelled, or otherwise actually perceived an event.

Kastle-Meyer Test: A forensic presumptive test for determination of whether blood is present on a sample. A few drops of ethanol, followed by a few drops of hydrogen peroxide are applied to a sample. Blood is indicated by the sample turning a pink color. This test is nondestructive to the sample, which can be kept and used in further tests at the lab.

Knowingly: Means that a defendant acted with an awareness of or belief in the existence of conduct or circumstances constituting an offense. It does not mean that a defendant must have known the conduct is forbidden by law.

Lesser Included Offense: A criminal offense typically contains several distinct elements, each of which must be proved by the prosecution.. A lesser included offense would be an offense that includes some, but not all, of those elements. For example, first degree murder requires proof that: (1) the defendant caused the death of another person; (2) intended or knew that he would cause the death of another person; and (3) acted with premeditation. Second degree murder includes the first two of these elements but not premeditation. Thus it is a lesser included offense.

Negligent manslaughter: The defendant caused the death of another person.

Premeditation: The defendant intended to kill another human being or knew he would kill another human being, and after forming that intent or knowledge, reflected on the decision before killing (it is this reflection, regardless of the length of time in which it occurs, that distinguishes 1st degree murder from 2nd degree murder).

Reckless manslaughter: Reckless manslaughter require proof that (1) the defendant caused the death of another person and (2) the defendant showed a conscious disregard of substantial and unjustifiable risk of death of another person.

Recklessly: Recklessly means that a defendant is aware of and consciously disregards a substantial and unjustifiable risk that conduct will result in the death of another. The risk should be such that disregarding it is a gross deviation from what a reasonable person would do in the situation.

Serious physical injury: Physical injury which creates a reasonable risk of death, or which causes serious and permanent disfigurement, serious impairment of health, or loss or protracted impairment of the function of any bodily organ or limb.