



NATIONAL COMMISSION ON FORENSIC SCIENCE



PRETRIAL DISCOVERY IN FORENSIC EVIDENCE CASES

POLICY RECOMMENDATION

1. Pretrial disclosure of forensic evidence should be comprehensive and reciprocal — subject to the U.S. Constitution and the law of privilege. The prosecution’s disclosure obligation should apply whether or not the information will be used at trial. The defense obligation should apply to evidence that is intended for use at trial, including the opinions of testifying experts who have not performed any testing.¹
2. The results of all forensic examinations and all expert opinions should be recorded; oral reports should be reduced to writing. The results of examinations and expert opinions should be recorded at the time the examination is conducted or an opinion is formed — or promptly thereafter.
3. The results of all forensic examinations, expert opinions, and related case documents (e.g., bench notes, graphs, electropherograms, calibration reports, etc.) should be subject to disclosure.
4. An expert witness’s qualifications should be subject to disclosure, including a list of publications authored and a list of recent cases in which the witness testified as an expert at trial.²
5. Disclosure should be timely, although all items need not be disclosed at the same time:
 - a. Disclosure of initial laboratory reports should occur as soon as

¹ The opinions of consulting experts are not subject to disclosure due to constitutional protections. Moreover, the attorney-client privilege and work product doctrine may foreclose discovery of certain material.

² For example: FED. R. CIV. P. 26(a)(2)(B) (“the witness’s qualifications, including a list of all publications authored in the previous 10 years”; “a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition”). [One subcommittee member believes this requirement may be too onerous.]

practicable after completion of the examination so that counsel has sufficient time to consult with an expert — which may require applying for funds to retain an expert — and to permit retesting.

b. Disclosure of all other items should occur as requested and no later than 90 days before the scheduled trial date.³

6. There should be a continuing duty to disclose throughout the trial until sentencing. For exculpatory evidence, the duty to disclose should apply after sentencing.⁴

7. Information, such as laboratory testing protocols, quality assurance procedures, accreditation and audit reports, proficiency testing results, and internal validation studies, should be readily accessible — preferably by posting on the internet or electronically upon request.

8. Forensic evidence should be preserved both before and after trial — until appeals are exhausted and sentences served. Jurisdictions should promulgate procedures concerning the preservation and retention of evidence.⁵ Evidence should not be unnecessarily consumed during testing, and consumptive testing should not be done without notice to the defense if a defendant has been charged.

9. The defense has the right to inspect and retest forensic evidence that is under the custody or control of the prosecution. The prosecution has the right to inspect and retest forensic evidence that is under the custody or control of the defense and that the defense intends to use at trial.

DIRECTIVE RECOMMENDATIONS

1. The Attorney General should direct federal prosecutors, forensic laboratories within the Department of Justice, and laboratories under contract with the Department of Justice to follow the policies outlined above that are applicable to their duties.

2. The Attorney General should recommend amendments to the Federal Rules of Criminal Procedure that are consistent with the above policies.

³ For example: FED. R. CIV. P. 26(a)(2)(D) (“at least 90 days before the date set for trial or for the case to be ready for trial”).

⁴ See ABA MODEL RULES OF PROF’L CONDUCT, R. 3.8(9) (discussing prosecutor’s obligation when he or she learns of credible and material evidence of innocence after trial).

⁵ The regulations will need to take account of bulk items and situations in which representative samples are sufficient. See ABA STANDARDS FOR CRIMINAL JUSTICE, DNA EVIDENCE § 16-2.6 (b) (3d ed. 2007).

3. The Attorney General should request that the Organization for Scientific Area Committees (OSAC) consider these policies in their best practices and standards development.

4. The Attorney General should ask other jurisdictions to consider adopting the policies outlined above.

BACKGROUND

Discovery requires adversaries in litigation to exchange certain categories of information before trial. Discovery procedures were introduced in civil litigation in the 1930s. This reform effort was based on a belief that justice would be better served if “trials by ambush” were avoided. Moreover, once both sides had a better understanding of the evidence, the chances for a settlement were thought to increase.

The same policies should apply in criminal cases. According to President Bush’s DNA Initiative, “[e]arly disclosure can have the following benefits: [1] Avoiding surprise and unnecessary delay. [2] Identifying the need for defense expert services. [3] Facilitating exoneration of the innocent and encouraging plea negotiations if DNA evidence confirms guilt.”⁶

The first part of this document addresses general considerations relating to pretrial disclosure, such as the policy arguments supporting comprehensive discovery, the timing of discovery, prosecutorial discovery, etc. The second part examines different types of discoverable materials such as reports, bench notes, etc. The last part discusses the *Brady* rule, which concerns the disclosure of exculpatory evidence.

I. GENERAL CONSIDERATIONS

A. Need for Discovery

The need for pretrial discovery of forensic evidence in criminal cases is critical. “[E]xpert witnesses are almost impossible to cross-examine and expert testimony almost impossible to rebut without intensive pretrial preparation.”⁷ An advisory note to the federal discovery rule echoed this view: “[I]t is difficult to

⁶ PRESIDENT BUSH’S DNA INITIATIVE: PRINCIPLES OF FORENSIC DNA FOR OFFICERS OF THE COURT.

⁷ Reznick, *The New Federal Rules of Criminal Procedure*, 54 GEO. L.J. 1276, 1278 (1966).

test expert testimony at trial without advance notice and preparation.”⁸

Moreover, the failure to disclose exculpatory forensic evidence has played a role in many DNA exonerations.⁹ The Earl Washington case is an example.

The State did not give the defense the report indicating Washington was excluded by that characteristic [lack of the Transferrin CD protein]. Instead, the State gave the defense an “amended” report. Without having done any new tests, the altered report stated that the results of the Transferrin CD testing “were inconclusive.” The original lab report came to light decades later when Washington filed a civil rights lawsuit after his exoneration¹⁰

Washington came within nine days of execution.

The leading neutron activation case, *United States v. Stifel*,¹¹ illustrates the dangers of restrictive discovery. Stifel was charged with sending a bomb through the mail. The bomb exploded and killed a victim after delivery. The prosecution’s evidence included the results of neutron activation analysis, which was used to compare bomb debris (vinyl tape, metal cap, cardboard mailing tube, and paper gummed label) and similar items obtained from Stifel’s place of employment. The prosecution expert testified that the metal cap and tape were “of the same manufacture” and from the “same batch” — one day’s manufacturing production.¹² This testimony “depends on the existence of sufficient background information.”¹³ Stifel was convicted, and his conviction

⁸ See FED. R. CRIM. P. 16 (1975), advisory committee’s note reprinted at 62 F.R.D. 312 (1974). See also Commentary, ABA STANDARDS RELATING TO DISCOVERY AND PROCEDURE BEFORE TRIAL 67 (Approved Draft 1970) (“The need for full and fair disclosure is especially apparent with respect to scientific proof and the testimony of experts.”).

⁹ Some of these cases, such as the Rolando Cruz and Roy Brown cases are discussed below. See Brandon L. Garrett & Peter J. Neufeld, *Invalid Forensic Science Testimony and Wrongful Convictions*, 95 VA. L. REV. 1, 47 (2009) (discussing cases of Curtis McCarthy, Earl Washington, Williams Gregory, Lafonso Rollins, Kenneth Waters).

¹⁰ Brandon L. Garrett, CONVICTING THE INNOCENT: WHERE CRIMINAL PROSECUTIONS GO WRONG 108 (2011) (discussing John Willis case). See also MARGARET EDDS, AN EXPENDABLE MAN, THE NEAR-EXECUTION OF EARL WASHINGTON JR. (2003) (examining the Washington case); Eric M. Freedman, *Earl Washington’s Ordeal*, 29 HOFSTRA L. REV. 1098 (2001); Paul C. Giannelli, *Wrongful Convictions and Forensic Science: The Need to Regulate Crime Labs*, 86 N.C. L. REV. 163 (2007).

¹¹ 433 F.2d 431 (6th Cir. 1970).

¹² *Id.* at 436.

¹³ Dennis S. Karjala, *The Evidentiary Uses of Neutron Activation Analysis*, 59 CAL. L. REV. 997, 1014 (1971): “No comprehensive background studies have been published on any of the materials involved in this case. . . . The Sixth Circuit opinion does not say whether the

upheld on appeal. During his imprisonment, Stifel filed a request under the Freedom of Information Act (FOIA), which revealed several things, including discrepancies about the background tests on the vinyl tape.¹⁴ As a result, Stifel filed a post-conviction petition, alleging a due process violation — the failure to disclose exculpatory evidence. The district court disagreed that the expert had misrepresented the facts on this issue, but noted the misleading character of this information in overturning the conviction.¹⁵ In short, Stifel was entitled, through FOIA, to more information about the prosecution’s case *after* he was convicted than he was entitled to when preparing for his trial.¹⁶ This material would have been discoverable in a civil trial.

B. Constitutional Considerations

In addition to the policy reasons supporting discovery, a defendant’s rights to confrontation,¹⁷ effective assistance of counsel,¹⁸ and due process often turn on pretrial disclosure. As the Supreme Court has noted, due process “speak[s] to the balance of forces between the accused and his accuser.”¹⁹ One commentator remarked that “the inequality of investigative resources between prosecution and defense is likely to have its maximum impact in the presentation of evidence which must be analyzed and developed in the laboratory or hospital.”²⁰ Hence, pretrial discovery “lessen[s] the imbalance which may result from the State’s early and complete investigation in contrast to [defendant’s] . . . late and limited investigation.”²¹

expert attempted to substantiate his claims with purported background studies carried out in government laboratories, but the available evidence indicates that such studies should in any event be regarded with suspicion.” The experts were also criticized: “[F]ew experts have used appropriate care in limiting their testimony . . .” *Id.* at 1024.

¹⁴ United States v. Stifel, 594 F. Supp. 1525 (N.D. Ohio 1984). The FOIA request also disclosed the existence of another suspect.

¹⁵ “[H]ad the defense known of the November 1968 tests performed by Scott on tape obtained from Plymouth Rubber Company, it could have used this evidence to further impeach the credibility of Scott’s scientific methods.” *Id.* at 1543.

¹⁶ After his release, Stifel went to law school and became an attorney.

¹⁷ The Supreme Court’s recent confrontation jurisprudence makes pretrial disclosure of the basis of expert testimony critical. *See Williams v. Illinois*, 132 S. Ct. 2221 (2013).

¹⁸ In a recent case concerning ineffective assistance of counsel, the Supreme Court wrote: “Criminal cases will arise where the only reasonable and available defense strategy requires consultation with experts or introduction of expert evidence.” *Harrington v. Richter*, 131 S. Ct. 770, 788 (2011). *See also Hinton v. Alabama*, 134 S. Ct. 1081 (2014) (finding counsel ineffective for failing to understand how to retain a defense expert).

¹⁹ *Wardius v. Oregon*, 412 U.S. 470, 474 (1973).

²⁰ *Rezneck*, *supra* note 7, at 1278.

²¹ *State v. Cook*, 206 A.2d 359, 363 (N.J. 1965).

C. Evidentiary Considerations

Finally, Rule 705 of the Federal Rules of Evidence presupposes comprehensive discovery.²² The rule provides: “Unless the court orders otherwise, an expert may state an opinion — and give the reasons for it — without first testifying to the underlying facts or data. But the expert may be required to disclose those facts or data on cross-examination.” According to the drafters, Rule 705 “assumes that the cross-examiner has the advance knowledge which is essential for effective cross-examination. . . . Rule 26(b)(4) of the Rules of Civil Procedure, as revised, provides for substantial discovery in this area, obviating in large measure the obstacles which have been raised in some instances to discovery of findings, underlying data, and even the identity of the experts.”²³ Unfortunately, as explained below, there is no “substantial discovery” in criminal cases.²⁴

D. Civil vs Criminal Litigation

Discovery in civil cases is far more comprehensive than in criminal litigation. This is somewhat surprising because “the policy of avoiding trial by ambush or surprise has even greater application in the criminal context, where the stakes are much higher and the obligation of the State to see that justice is done is much greater than that of the private litigants in a civil dispute.”²⁵

In civil cases, discovery includes (1) automatic identification of expert witnesses, (2) their qualifications, (3) comprehensive written reports, and (4) special deposition procedures for experts.²⁶ In contrast, unsupported conclusory reports are permitted in criminal cases — i.e., those that “summariz[e] the results of an unidentified test conducted by an anonymous technician.”²⁷ Moreover, only a few states authorize discovery depositions in criminal litigation. Depositions in criminal cases are typically limited to the preservation of testimony.²⁸ Thus, counsel may depose their own witnesses if that witness may be unavailable at trial, but counsel may not depose the other party’s witnesses.

²² Over forty jurisdictions have adopted evidentiary rules based on the Federal Rules of Evidence.

²³ FED. R. EVID. 705 advisory committees note (1975).

²⁴ Comprehensive pretrial discovery may also serve a quality assurance function. Experts, like most people, may be more conscientious if they know that their work will be critically reviewed.

²⁵ *Scipio v. State*, 928 So. 2d 1138, 1145 (Fla. 2006).

²⁶ FED. R. CIV. P. 26. See *infra* Appendices A & B.

²⁷ *United States v. Bentley*, 875 F.2d 1114, 1123 (5th Cir. 1989) (dissenting opinion) (hospital report on urine test revealing presence of cannabinoids).

²⁸ See FED. R. CRIM. P. 15.

The disparity between discovery rules in civil and criminal actions is not based on science. As one court put it, “there are no scientific grounds for withholding information in the discovery process.”²⁹ A National Academy of Sciences DNA report recommended extensive discovery: “All data and laboratory records generated by analysis of DNA samples should be made freely available to all parties. Such access is essential for evaluating the analysis.”³⁰ The report goes on to state that “[t]he prosecutor has a strong responsibility to reveal fully to defense counsel and experts retained by the defendant all material that might be necessary in evaluating the evidence.”³¹

E. Arguments Against Defense Discovery

Opponents of liberal discovery in criminal cases have argued that discovery will (1) encourage perjury, (2) lead to the intimidation of witnesses, and, (3) be a one-way street because of the Fifth Amendment privilege against self-incrimination.³² With forensic evidence, however, these traditional arguments against criminal discovery lose whatever force they might otherwise have.

The first argument fails because “it is virtually impossible for evidence or information of this kind to be distorted or misused because of its advance disclosure.”³³ Also, there is no evidence that the intimidation of experts is a major problem, perhaps because the evidence can often be re-examined by another expert.³⁴ Finally, the Self-incrimination Clause, as presently interpreted by the Supreme Court, presents little impediment to reciprocal prosecution discovery of

²⁹ State v. Tankersley, 956 P.2d 486, 495 (Ariz. 1998).

³⁰ NATIONAL RESEARCH COUNCIL, DNA TECHNOLOGY IN FORENSIC SCIENCE 146 (1992); *see also id.* at 105 (“Case records – such as notes, worksheets, autoradiographs, and population databanks – and other data or records that support examiners’ conclusions are prepared, retained by the laboratory, and made available for inspection on court order after review of the reasonableness of a request.”); NATIONAL RESEARCH COUNCIL, THE EVALUATION OF FORENSIC DNA EVIDENCE 167-69 (1996) (“Certainly, there are no strictly scientific justifications for withholding information in the discovery process, and in Chapter 3 we discussed the importance of full, written documentation of all aspects of DNA laboratory operations. Such documentation would facilitate technical review of laboratory work, both within the laboratory and by outside experts . . .”).

³¹ *Id.* at 146.

³² 2 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 252, at 36-37 (2d ed. 1982).

³³ Commentary, ABA STANDARDS FOR CRIMINAL JUSTICE, DISCOVERY AND PROCEDURE BEFORE TRIAL 67 (Approved Draft 1970).

³⁴ 2 WAYNE LAFAVE & JEROD ISRAEL, CRIMINAL PROCEDURE § 19.3, at 490 (1984) (“Once the report is prepared, the scientific expert’s position is not readily influenced, and therefore disclosure presents little danger of prompting perjury or intimidation.”).

scientific proof — as discussed the next section.³⁵

F. Prosecution Discovery

The policy reasons for defense discovery also apply to the prosecution. Prosecution discovery of expert reports and inspection of tangible objects is widely sanctioned. In some jurisdictions, prosecution discovery is permitted only if the defense first seeks discovery from the prosecution (i.e., reciprocal discovery).³⁶ In other jurisdictions, prosecution discovery is not conditioned on defense discovery.³⁷

1. Self-Incrimination Clause

The Supreme Court addressed the constitutionality of prosecution discovery in *Williams v. Florida*,³⁸ which involved a state statute requiring the defense to notify the prosecution of its intention to offer an alibi defense and to provide the names of its alibi witnesses. The defendant argued that the statute violated the Self-incrimination Clause. Rejecting this argument, the Court found that the statute did not amount to “compulsion” within the meaning of the Fifth Amendment: “At most, the rule only compelled petitioner to accelerate the timing of his disclosure, forcing him to divulge at an earlier date information that the petitioner from the beginning planned to divulge at trial.”³⁹

The “accelerated discovery” rationale applies to prosecution discovery of forensic reports that the defense intends to introduce at trial but not to reports prepared by experts who will not be witnesses (i.e., consulting experts). In *Binegar v. Eighth Judicial District Court*,⁴⁰ the Nevada Supreme Court ruled that a discovery statute violated the Fifth Amendment because it had “a greater effect than simply compelling the defendant to accelerate the timing of disclosures that the defendant intended to divulge at trial Under [one provision], the defendant would be forced to disclose witness statements and the results or reports of mental and physical examinations and scientific tests or experiments, even if the

³⁵ See discussion of prosecution discovery *infra*.

³⁶ Federal Rule 16 is an example. See also Del. Super. Ct. Crim. R. 16(b); Fla. R. Crim. P. 3.220(d)(2)(ii); Iowa R. Crim. P. § 2.14(2); N.J. R. Crim. P. 3.13-3(b); N.D. R. Crim. P. 16(b); R.I. Super. Ct. Crim. R. 16(b); Tenn. R. Crim. P. 16(b)(1); Va. S. Ct. R. 3A:11©; Wyo. R. Crim. P. 18(d).

³⁷ E.g., Alaska R. Crim. P. 16(b); Me. R. Crim. P. 16A© & (d); Minn. R. Crim. P. 9.02; Mo. R. Crim. P. 25.05(A)(1); N.M. R. Crim. P. 5-502(a) (mandatory); Or. Rev. Stat. § 135.835(2); Wash. Super. Ct. Crim. R. 4.7(g).

³⁸ 399 U.S. 78 (1970).

³⁹ *Id.* at 85.

⁴⁰ 915 P.2d 889 (Nev. 1996).

defendant never intended to introduce the statements or materials at trial.”⁴¹

There is a second ground for rejecting a Fifth Amendment challenge. The Self-incrimination Clause prohibits only compulsion directed at the suspect. According to the Supreme Court, “the Fifth Amendment privilege against self-incrimination, being personal to the defendant, does not extend to the testimony or statements of third parties called as witnesses at trial.”⁴² Accordingly, compelling defense counsel to reveal forensic reports would not necessarily violate the privilege.⁴³

2. *Due Process Clause*

The Supreme Court left several issues unresolved in *Williams*. The discovery statute in that case provided for liberal defense discovery, and the Court indicated that a due process issue would have been presented if reciprocal defense discovery had not been provided. In *Wardius v. Oregon*,⁴⁴ which also involved a notice of alibi rule, the Court confronted this issue. Because the statute in *Wardius* made no provision for reciprocal defense discovery, the Court found a due process violation: “[T]he Due Process Clause of the Fourteenth Amendment forbids enforcement of alibi rules unless reciprocal discovery rights are given to criminal defendants.”⁴⁵ In short, due process precludes prosecution discovery of forensic reports and evidence in the absence of reciprocal defense discovery.⁴⁶

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⁴¹ *Id.* at 894. Some state courts reject the *Williams* rationale as a matter of state constitutional law. *See* *Scott v. State*, 519 P.2d 774, 785 (Alaska 1974); *State v. Summerville*, 948 P.2d 469 (Alaska 1997) (reaffirming *Scott*).

⁴² *United States v. Nobles*, 422 U.S. 225, 234 (1975) (compelled production of defense investigator’s notes does not violate fifth amendment because it involved no compulsion of the defendant); *Gipson v. State*, 609 P.2d 1038, 1044 (Alaska 1980) (compelled disclosure of defense firearm expert’s report does not violate the fifth amendment); *Izazaga v. Superior Court*, 815 P.2d 304 (Cal. 1991).

⁴³ *See* 5 W. LAFAYETTE ET AL., *CRIMINAL PROCEDURE* § 20.4(b), at 450-51 (3d ed. 2007) (“Self-incrimination objections to disclosure of scientific reports have uniformly been rejected on the ground that ‘no disclosure of any kind, by defendant, is involved in this issue.’”).

⁴⁴ 412 U.S. 470 (1973).

⁴⁵ *Id.* at 472.

⁴⁶ *See* *Grey v. State*, 178 P.3d 154, 160 (Nev. 2008) (“[T]o the extent that NRS 174.234(2) imposes such a nonreciprocal burden of disclosure [regarding defense experts] on a criminal defendant, it is unconstitutional under the United States Constitution and the Nevada Constitution The State may not insist that trials be run as a ‘search for truth’ so far as defense witnesses are concerned, while maintaining ‘poker game’ secrecy for its own witnesses. It is fundamentally unfair to require a defendant to divulge the details of his own case while at the same time subjecting him to the hazard of surprise concerning refutation of the very pieces of evidence which he disclosed to the State.”).

In sum, there is neither a legal nor policy reason to prevent prosecution discovery of the forensic reports and opinions of defense experts who will testify at trial. Federal Rule of Criminal Procedure 16(b)(1)© requires a summary of defense witness testimony if the defense seeks a summary of prosecution experts' testimony. Defense experts who will not testify are typically exempt from discovery; the constitutional right to effective assistance of counsel (Sixth Amendment), the attorney-client privilege, and the work-product doctrine are the bases for this exemption.

G. Timeliness of Discovery

To be useful, disclosure must occur sufficiently before trial for counsel to have adequate time for preparation. For example, in one case the Eighth Circuit observed: "The government not only produced the DNA evidence a month late, but it did so almost literally on the eve of trial, making it virtually impossible, absent a continuance, for defendants to evaluate and confront the evidence against them. DNA evidence is scientific and highly technical in nature; it would have required thorough investigation by defense counsel, including almost certainly retaining an expert witness or witnesses."⁴⁷

However, all discoverable material need not be provided at one time. Defense counsel needs some information, such as initial laboratory reports, as early as possible in order to consult with an expert. Because the overwhelming majority of defendants are indigent, counsel may need time to file an application for funds to retain an expert. In contrast, disclosure of other material may often be postponed or never requested if plea negotiations commence. Federal Civil Rule 26 makes a distinction between "initial disclosure" and subsequent disclosure.

H. Continuing Duty to Disclose

Federal Rule of Criminal Procedure 16 recognizes a "continuing duty to disclose" forensic reports if, prior to or during trial, new reports are prepared.⁴⁸ In *United States v. Kelly*,⁴⁹ neutron activation tests were conducted after the trial court ordered discovery of forensic reports. The defense, however, was not informed of the tests until trial. After recognizing the prosecution's continuing duty to disclose the tests results, the Second Circuit wrote: "The course of the

⁴⁷ *United States v. Davis*, 244 F.3d 666, 671 (8th Cir. 2001). *See also* *Miller v. State* 809 P.2d 1317, 1319-20 (Okla. Crim. App. 1991) ("[I]t was approximately two weeks after the deadline ordered by Judge Owens that Ms. Gilchrist mailed the hair evidence to the appellant's expert. Thus, appellant's expert received the evidence six and one-half days before trial began.").

⁴⁸ FED. R. CRIM. P. 16(c).

⁴⁹ 420 F.2d 26 (2d Cir. 1969).

government smacks too much of a trial by ambush, in violation of the spirit of the rules. A new trial is required, with a fair opportunity for the defense to run its own neutron activation tests of the material”⁵⁰

In *Scipio v. State*,⁵¹ a medical examiner investigator realized that he had been mistaken in his deposition testimony, but this information was not given to defense prior to the trial. The court held that the State “had an obligation to disclose any material change in that statement.”⁵²

II. TYPES OF DISCOVERABLE MATERIAL

A. Oral Reports

Most jurisdictions make forensic reports discoverable but many do not make preparing a report mandatory. Roy Brown spent fifteen years in prison for murder before he was exonerated by DNA evidence.⁵³ The case rested largely on bite marks on the victim’s body, which a local dentist testified matched Brown’s teeth.⁵⁴ Unbeknownst to the defense, a forensic odontologist had analyzed the bite marks on the victim and concluded that the one mark he could interpret excluded Brown as the source of the mark. The prosecutor, however, “never asked [the odontologist] to file an official report Instead, the prosecutors relied on another expert, a local dentist, whose testimony helped convict Mr. Brown.”⁵⁵ Only later did the opinion of the forensic odontologist come to light.

At one time, oral reports were not discoverable under Criminal Rule 16. As a result, the defendant in *United States v. Shue*⁵⁶ was not entitled to the verbal report of an FBI photographic expert who compared pictures of Shue with those of a bank robber. The expert made the comparison the night before he testified —

⁵⁰ *Id.* at 29. See also *United States v. Barrett*, 703 F.2d 1076, 1080–81 (9th Cir. 1983); *United States v. Boney*, 572 F.2d 397, 403 (2d Cir. 1978) (drug report); *United States v. Bockius*, 564 F.2d 1193, 1197–98 (5th Cir. 1977) (polarimeter test); *State v. Wilson*, 507 N.E.2d 1109, 1110–12 (Ohio 1987) (failure to update NAA report resulted in “trial by ambush”); *Acevedo v. State*, 467 So. 2d 220, 224 (Miss. 1985) (state violated continuing duty to disclose regarding gunshot residue test).

⁵¹ 928 So. 2d 1138 (Fla. 2006).

⁵² *Id.* at 1142. Florida is one of few states that permit discovery depositions.

⁵³ See *People v. Brown*, 600 N.Y.S.2d 593 (A.D. 1993) (upholding conviction). The odontologist’s opinion could also be characterized as *Brady* material. See *infra*.

⁵⁴ Fernanda Santos, *Evidence from Bite Marks, It Turns Out, Is Not so Elementary*, N.Y. TIMES, Jan. 28, 2007, at WK4.

⁵⁵ Fernanda Santos, *With DNA From Exhumed Body, Man Is Finally Free*, N.Y. TIMES, Jan. 24, 2007, at A21.

⁵⁶ 766 F.2d 1122, 1135 (7th Cir. 1985).

without the defense's knowledge. Similarly, a police officer in *United States v. Johnson*⁵⁷ testified as an Emergency Medical Technician without notice to the defense. Although the defense argued that the testimony was "highly prejudicial" because it contradicted an important aspect of the defense case, the Eleventh Circuit merely noted that there is no right to a witness list and Rule 16 was not implicated because "no . . . reports were made in this case."⁵⁸ This omission was rectified in federal practice with an amendment to Rule 16, which now requires a summary of an expert's testimony.⁵⁹ Most states have not adopted a comparable provision.

B. Forensic Reports

Although virtually all jurisdictions make laboratory reports discoverable, the contents of the reports are not specified. *Melendez-Diaz v. Massachusetts*,⁶⁰ a recent Supreme Court case, illustrates this problem. The laboratory report in that case "contained only the bare-bones statement that '[t]he substance was found to contain: Cocaine.' At the time of trial, petitioner did not know what tests the analysts performed, whether those tests were routine, and whether interpreting their results required the exercise of judgment or the use of skills that the analysts may not have possessed."⁶¹ The 2009 NAS report made similar comments: "Some reports contain only identifying and agency information, a brief description of the evidence being submitted, a brief description of the types of analysis requested, and a short statement of the results (e.g., 'the greenish, brown plant material in item #1 was identified as marijuana'), and they include no mention of methods or any discussion of measurement uncertainties."⁶²

In 1989, the *Journal of Forensic Sciences*, the official publication of the American Academy of Forensic Sciences, published a symposium on the ethical responsibilities of forensic scientists. One article described a number of unacceptable laboratory reporting practices, including (1) "preparation of reports containing minimal information in order not to give the 'other side' ammunition for cross-examination," (2) "reporting of findings without an interpretation on the assumption that if an interpretation is required it can be provided from the witness box," and (3) "[o]mitting some significant point from a report to trap an

⁵⁷ 713 F.2d 654 (11th Cir. 1983).

⁵⁸ *Id.* at 659.

⁵⁹ FED. R. CRIM. P. 16(a)(1)(G).

⁶⁰ 129 S. Ct. 2527 (2009).

⁶¹ *Id.* at 2537. A laboratory report stating that a seized substance is "Heroin HCl" is not very informative. *United States v. Parker*, 491 F.2d 517, 525 (8th Cir.1973) (Bureau of Narcotics and Dangerous Drugs lab report).

⁶² NATIONAL RESEARCH COUNCIL, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: THE PATH FORWARD 21 (2009).

unsuspecting cross-examiner.”⁶³ All of these practices undermine the purpose of pretrial discovery.

1. *Ultimate Conclusions*

Along with information specifying the procedure used in the analysis, the report should set forth the expert’s ultimate conclusions as well as specific test results. For example, in *Pierce v. State*,⁶⁴ the prosecution expert conducted serological tests on body fluids in a rape case. Her report, which was turned over to the defense, contained specific test results but not her conclusion — that the rapist was a non-secretor. On appeal, the court ruled the report sufficient: “An expert’s opinion of the conclusions which can be drawn from test results in a particular case in no way alters the actual facts of the case. Accordingly, the ultimate opinion of the expert is not necessary for either the preparation or the presentation of the defense.”⁶⁵ This approach undermines the purpose of discovery. Civil Rule 26 requires disclosure of “a complete statement of all opinions.”

Similarly, a federal court wrote that Rule 16 entitles the accused to the lab report but not to a “comprehensive preview of the government’s [expert] opinion testimony.”⁶⁶ This problem was rectified somewhat in the federal system when the “summary” provision was added to Rule 16 — a provision that most states do not have.

2. *Limitations of the Analysis*

The report should contain an express statement of the *limitations* of the technique. The 2004 NAS report on bullet lead noted:

The conclusions in laboratory reports should be expanded to include the limitations of compositional analysis of bullet lead evidence. In particular,

⁶³ Douglas M. Lucas, *The Ethical Responsibilities of the Forensic Scientist: Exploring the Limits*, 34 J. FORENSIC SCI. 719, 724 (1989). Lucas was the Director, The Centre of Forensic Sciences, Ministry of the Solicitor General, Toronto, Ontario. As one scientist has observed: “For a report from a crime laboratory to be deemed competent, I think most scientists would require it to contain a minimum of three elements: (a) a description of the analytical techniques used in the test requested by the government or other party, (b) the quantitative or qualitative results with any appropriate qualifications concerning the degree of certainty surrounding them, and (c) an explanation of any necessary presumptions or inferences that were needed to reach the conclusions.” Professor Anna Harrison, Mount Holyoke College, *Symposium on Science and The Rules of Legal Procedure*, 101 F.R.D. 599, 632 (1984).

⁶⁴ 786 P.2d 1255 (Okl. Crim. 1990).

⁶⁵ *Id.* at 1263.

⁶⁶ *United States v. Cole*, 707 F. Supp. 999, 1004 (N.D. Ill. 1989).

a further explanatory comment should accompany the laboratory conclusions to portray the limitations of the evidence. . . . Finally, measurement data (means and standard deviations) for all of the crime scene bullets and those deemed to match should be included.⁶⁷

The 2009 NAS forensic science report also addressed this issue: Reports “must include clear characterizations of the limitations of the analyses, including measures of uncertainty in reported results and associated estimated probabilities where possible.”⁶⁸

3. *Comprehensible Reports*

The 2004 NAS bullet lead report also recommended that “a section of the laboratory report translating the technical conclusions into language that a jury could understand would greatly facilitate the proper use of this evidence in the criminal justice system.”⁶⁹ The *ABA Standards on DNA* contain a comparable provision. The commentary to Standard 16-3.3 explains:

This Standard requires that a section of the laboratory report translate the scientific result into language that a nonscientist would understand. The purpose of forensic DNA testing is to assist the criminal justice system in fulfilling its function to convict the guilty and exonerate the innocent. Accordingly, participants in the system need to understand the significance of the test results. Overworked prosecutors and defense attorneys do not always have time to sort through data in order to appreciate the probative value of the lab analysis. They will, in any case, find a comprehensible summary useful in consulting with and questioning persons with greater expertise than they possess. Jurors may also welcome a written summary that they can understand without “translation” by an expert. Nobody is in a better position to summarize the results for the participants than the examiners themselves.⁷⁰

C. Bench Notes & Related Documents

The lack of bench notes is often cited in laboratory scandals. The West

⁶⁷ NATIONAL RESEARCH COUNCIL, FORENSIC ANALYSIS: WEIGHING BULLET LEAD EVIDENCE 110-11 (2004).

⁶⁸ NRC FORENSIC SCIENCE REPORT, *supra* note 62, at 21-22.

⁶⁹ WEIGHING BULLET LEAD EVIDENCE, *supra* note 67, at 110-11.

⁷⁰ DNA STANDARDS, *supra* note 5, at § 16-3.3(c) cmt. at 75.

Virginia,⁷¹ Chicago,⁷² Houston,⁷³ and FBI explosive unit⁷⁴ investigations all found inadequate documentation in forensic case files. Moreover, in one Supreme Court case, *Delaware v. Fensterer*,⁷⁵ an analyst testified that he could not remember which of three methods he had used to determine that hair found at a murder scene had been forcibly removed. He apparently neglected to record this critical information.

1. *Contemporaneous Recording*

DNA Advisory Board Standards require laboratories to adopt and follow written procedures for taking and maintaining case notes to support the conclusions drawn in laboratory reports — in particular, a case record containing all documentation generated by examiners relating to case analysis is standard

⁷¹ See *In re Investigation of the W. Va. State Police Crime Lab., Serology Div.*, 438 S.E.2d 501, 508 (W. Va. 1993) ((1) reporting that multiple items had been tested, when only a single item had been tested; (2) reporting inconclusive results as conclusive; (3) repeatedly altering laboratory records; (4) grouping results to create the erroneous impression that genetic markers had been obtained from all samples tested; (5) failing to report conflicting results); Walter F. Rowe, *Commentary*, in EDWARD CONNORS ET AL., CONVICTED BY JURIES, EXONERATED BY SCIENCE: CASE STUDIES IN THE USE OF DNA EVIDENCE TO ESTABLISH INNOCENCE AFTER TRIAL xvii-xviii (1996) (“It is also clear that in case after case, defense counsel failed to review the case notes of the prosecution’s forensic serologists. Even a layperson would have seen the Fred Zains’s written reports and sworn testimony were contradicted by his case notes.”).

⁷² See Letter from Professor George F. Sensabaugh, University of California at Berkeley, Oct. 16, 2003 (“Overall, the documentation of the lab work as described in the three pages of lab notes is inadequate and incomplete. Moreover, the formal lab reports described results of testing for which there is no record in the lab notes. In short, the documentation in this case falls short of accepted scientific standards.”).

⁷³ See THIRD REPORT OF THE INDEPENDENT INVESTIGATOR FOR THE HOUSTON POLICE DEP’T CRIME LABORATORY AND PROPERTY ROOM 28 (June 30, 2005) (“Among other problems it identified, the 2002 DPS audit found that no such written procedures [for case notes and lab reports] existed and identified numerous deficiencies in the documentation contained in the lab reports.”).

⁷⁴ See OFFICE OF INSPECTOR GENERAL, U.S. DEP’T OF JUSTICE, THE FBI LABORATORY: AN INVESTIGATION INTO LABORATORY PRACTICES AND ALLEGED MISCONDUCT IN EXPLOSIVES-RELATED AND OTHER CASES (April 1997) (recommending the preparation of adequate case files to support reports; “The Rudolph files and some of Martz’s work underscore the importance of case files containing all the documentation necessary for another appropriately qualified examiner to be able to understand and replicate the examiners’s data and analysis. We encountered the problem of incomplete or missing documentation in many case files.”).

⁷⁵ 474 U.S. 15 (1985). Nevertheless, the Supreme Court declined to find a confrontation violation in this situation. However, on remand the Delaware Supreme Court held the opinion inadmissible, but on evidentiary, rather than constitutional, grounds. According to the court: “While a witness’s mere lack of memory as to a particular fact may go only to the weight of that evidence, an expert witness’s inability to establish a sufficient basis for his opinion clearly renders the opinion inadmissible under D.R.E. 705.” *Fensterer v. State*, 509 A.2d 1106, 1109-10 (Del. 1986).

practice.⁷⁶ However, the standards do not specify that the notes be recorded contemporaneously with the examination, a deficiency noted in a 2004 Inspector General Report:

[C]ontemporaneous documentation is important to ensure that the case file accurately reflects the work performed on each evidence item that is tested. If staff members are allowed to delay recording observations and test results until after they have examined all the items for a case or have completed all of their work for the day, their documentation may not be fully accurate. Also, staff members may be unduly influenced by protocol requirements when relying on memory, and document what they know should have occurred when their recollection is vague.⁷⁷

In other words, delayed entries are subject to cognitive bias.

2. *Discovery Bench Notes*

Timothy Spencer was the first person executed based on DNA evidence.⁷⁸ Yet, when the defense sought discovery of the prosecution expert's "work notes," which formed the basis of his report, the motion was denied, and the Virginia Supreme Court upheld this ruling.⁷⁹ In contrast, the Minnesota Supreme Court has recognized that "fair trial and due process rights are implicated when data relied upon by a laboratory in performing tests are not available to the opposing party for review and cross examination."⁸⁰

D. Qualifications of Examiner

In criminal cases, the disclosure of background information about the qualifications of the expert is often not required to be disclosed. According to one court, "Certainly, the identity of a particular expert witness would not be of significance."⁸¹ In contrast, Civil Rule 26 rejects this view; it requires the following: (1) the witness's qualifications, including a list of all publications authored in the previous 10 years; (2) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and (3)

⁷⁶ DNA Advisory Board Standard 11.1 (1998).

⁷⁷ OFFICE OF INSPECTOR GENERAL, U.S. DEP'T OF JUSTICE, AUDIT REPORT, THE COMBINED DNA INDEX SYSTEM 107 (2001).

⁷⁸ *See Murderer Put to Death in Virginia: First U.S. Execution Based on DNA Tests*, N.Y. TIMES, Apr. 28, 1994.

⁷⁹ Commonwealth v. Spencer, 384 S.E.2d 785, 791 (Va. 1989).

⁸⁰ State v. Schwartz, 447 N.W.2d 422, 427 (Minn. 1989).

⁸¹ United States v. Holland, 884 F.2d 354, 357 (8th Cir. 1989). *See also* United States v. Krohn, 558 F.2d 390, 394 (8th Cir. 1977).

a statement of the compensation to be paid for the study and testimony in the case.

An unacceptable number of experts — both prosecution and defense witnesses — have lied about their credentials.⁸² In one case a serologist testified that he had a master’s degree in science, “whereas in fact he never attained a graduate degree.”⁸³ In another case the death penalty was vacated when it was discovered that a prosecution expert, who “had testified in many cases,” had lied about her professional qualifications: “[S]he had never fulfilled the educational requirements for a laboratory technician.”⁸⁴

E. Right to Inspect and Retest Forensic Evidence

Many jurisdictions recognize a defendant’s right to retest evidence in the prosecution’s possession⁸⁵ but not all. For example, in *Frias v. State*,⁸⁶ the defense sought to analyze independently the cocaine exhibits used by the state at trial. The trial court refused, and the Indiana Supreme Court found no error. The court reasoned that the defense had the opportunity to cross-examine the expert, had access to the laboratory reports, and had raised no question about the accuracy of the results.⁸⁷ Other courts impose conditions on retesting — for example,

⁸² *E.g.*, *Maddox v. Lord*, 818 F.2d 1058, 1062 (2d Cir. 1987) (serologist testified falsely about academic credentials); *Kline v. State*, 444 So. 2d 1102 (Fla. Dist. Ct. App. 1984) (psychologist convicted of perjury for claiming he had a doctorate during Ted Bundy trial); *People v. Alfano*, 420 N.E.2d 1114, 1116 (Ill. App. 1983) (arson expert testified falsely about his academic credentials); *State v. Elder*, 433 P.2d 462 (Kan. 1967) (lab technician convicted of perjury for misrepresenting his educational background); *State v. DeFronzo*, 394 N.E.2d 1027, 1030 (Ohio C.P. 1978) (lab analyst pleaded guilty to 8 counts of falsification for misstating his academic credentials). *See also* Michael Saks, *Prevalence and Impact of Ethical Problems in Forensic Science*, 34 J. FORENSIC SCI. 772 (1989) (listing other cases); James Starrs, *Mountebanks Among Forensic Scientists*, in 2 FORENSIC SCIENCE HANDBOOK 1, 7, 20-29 ©. Saferstein ed. 1988); Annotation, *Perjury or Wilfully False Testimony of Expert Witness as Basis for New Trial on Ground of Newly Discovered Evidence*, 38 A.L.R.3d 812.

⁸³ *Doepel v. United States*, 434 A.2d 449, 460 (D.C. App. 1981).

⁸⁴ *Commonwealth v. Mount*, 257 A.2d 578, 579 (Pa. 1969).

⁸⁵ ABA STANDARDS FOR CRIMINAL JUSTICE, DISCOVERY § 11-32(b) (3d ed. 1996) (“Upon motion, either party should be permitted to conduct evaluations or tests of physical evidence in the possession or control of the other party which is subject to disclosure.”).

⁸⁶ 547 N.E.2d 809 (Ind. 1989).

⁸⁷ *Id.* at 813. Other cases have also denied the right to retest because the defendant’s right to cross-examine the prosecution’s experts was deemed sufficient. *See People v. Anderson*, 276 N.W.2d 924, 926 (Mich. App. 1979); *People v. Bell*, 253 N.W.2d 726, 729 (Mich. App. 1977); *Commonwealth v. Dorsey*, 405 A.2d 516, 521 (Pa. Super. 1979).

requiring a preliminary showing that a retest is “critical”⁸⁸ or will be “favorable.”⁸⁹ Cross-examination is not a substitute for retesting, and whether the results will be favorable cannot be determined until testing.

In contrast, a number of courts have recognized that the right to retest evidence is constitutionally based: “[F]undamental fairness is violated when a criminal defendant . . . is denied the opportunity to have an expert of his choosing . . . examine a piece of critical evidence whose nature is subject to varying expert opinion.”⁹⁰

Retesting is a safeguard against deliberate misrepresentation — for example, cases where a serologist “reported results of lab tests that he did not in fact conduct”⁹¹ or where a laboratory analyst represented that tests had been performed when “no such tests were ever conducted.”⁹² More commonly, it is a protection against negligence. For example, in some instances, the defense may find something that was overlooked. *Imbler v. Craven*⁹³ exemplifies this point. At Imbler’s murder trial, a prosecution fingerprint expert testified that two partial fingerprints were found on a razor case that the killer had left at the scene. A positive identification could not be made because of the fragmentary nature of the prints. After the trial, a defense expert examined the razor case, discovering a third print that excluded Imbler.⁹⁴ In another fingerprint case, the expert simply got it wrong: “The fingerprint expert’s testimony was damning — and it was false.”⁹⁵

⁸⁸ Gray v. Rowley, 604 F.2d 382, 384 (5th Cir. 1979) (examination of semen evidence not “critical”).

⁸⁹ State v. Koennecke, 545 P.2d 127, 133 (Or. 1976) (right to test weapons conditioned on preliminary showing that results will be favorable to defendant).

⁹⁰ Barnard v. Henderson, 514 F.2d 744, 746 (5th Cir. 1975). *Accord* White v. Maggio, 556 F.2d 1352, 1357 (5th Cir. 1977); Warren v. State, 288 So. 2d 826, 830 (Ala. 1973); McNutt v. Superior Court, 648 P.2d 122, 124 (Ariz. 1982); State v. Hanson, 278 N.W.2d 198, 200 (S.D. 1979).

⁹¹ State v. Ruybal, 408 A.2d 1284, 1285 (Me. 1979).

⁹² State v. DeFronzo, 394 N.E.2d 1027, 1031 (Ohio C.P. 1978).

⁹³ 298 F. Supp. 795 (C.D. Cal. 1969), *aff’d*, 424 F.2d 631 (9th Cir. 1970).

⁹⁴ *Id.* at 809-10. After his release from prison, Imbler sued the prosecutor for unlawful prosecution. In *Imbler v. Pachtman*, 424 U.S. 409 (1976), the Supreme Court held that prosecutorial immunity precluded recovery.

⁹⁵ State v. Caldwell, 322 N.W.2d 574, 586 (Minn. 1982). *See also* Simon A. Cole, *More Than Zero: Accounting for Error in Latent Fingerprint Identification*, 95 J. CRIM. L. & CRIMINOLOGY 985, 1040 (2005) (“in fingerprint practice the concept is vacuous”). Professor Cole identified twenty-two misidentifications, which he argues “are most likely only the tip of the proverbial iceberg of actual cases of fingerprint misattribution.” *Id.* at 991. The misidentification cases include some that involved (1) verification by one or more other examiners, (2) examiners certified by the International Association of Identification, (3) procedures using a sixteen-point standard, and (4) defense experts who corroborated misidentifications made by prosecution

F. Right to Preservation of Evidence

1. U.S. Constitution

Retesting, of course, is possible only if the evidence is preserved. In *Arizona v. Youngblood*,⁹⁶ the Supreme Court addressed a defendant's right to the preservation of evidence. The case involved the failure to preserve semen in a sexual assault case. The evidence was critical. Nevertheless, the Court held that due process is violated only if the government acted in *bad faith* in destroying the evidence, a very restrictive standard. The police conduct in the case did not satisfy this standard: "The failure of the police to refrigerate the clothing and to perform tests on the semen samples can at worst be described as negligent."⁹⁷

Commentators have criticized the *Youngblood* bad-faith test because it focuses on the individual officer's state of mind and not the police department policies. Thus, it provides no incentive for police departments to adopt standard operating procedures to ensure the proper collection and preservation of evidence. Larry Youngblood was later exonerated through DNA testing — after having spent nine years in prison. In response, a DNA scientist, told a reporter:

We now have before us a flawed legal precedent that stands on the shoulders of an innocent man For those organizations that are poorly run or mismanaged or don't give a damn, . . . the *Youngblood* case was a license to let down their guard and be lazy. The effect that had was generally to lower the standards of evidence collection.⁹⁸

2. State Constitutions

Most state courts have rejected the bad-faith test as a matter of state constitutional law.⁹⁹ The Alabama Supreme Court, for instance, has recognized

experts.

⁹⁶ 488 U.S. 51 (1988).

⁹⁷ *Id.* at 58.

⁹⁸ Barbara Whiteaker, *DNA Frees Inmate Years After Justices Rejected Plea*, N.Y. TIMES, Aug. 11, 2000, at A12 (quoting Dr. Edward Blake).

⁹⁹ See *State v. Morales*, 657 A.2d 585, 594 n.20 (Conn. 1995) ("Apparently only Arizona and California . . . have concluded that their state charters offer the same limited degree of protection as the federal constitution"; "Like our sister states, we conclude that the good or bad faith of the police in failing to preserve potentially useful evidence [semen stains that could have been tested for DNA] cannot be dispositive of whether a criminal defendant has been deprived of due process of law. Accordingly, we, too, reject the litmus test of bad faith on the part of the police, which the United States Supreme Court adopted under the federal constitution in *Youngblood*."); *Thorne v. Department of Public Safety*, 774 P.2d 1326, 1331 n.9 (Alaska 1989); *State v. Matafeo*, 787 P.2d 671, 673 (Haw. 1990); *Commonwealth v. Henderson*, 582 N.E.2d 496,

an exception to the bad faith test where the evidence is so critical to the defense as to make a criminal trial without it “fundamentally unfair.”¹⁰⁰ The court applied this exception in a toxic waste dumping prosecution where the sole evidence, the samples tested, was not preserved. Similarly, the Delaware Supreme Court rejected *Youngblood* and set forth a three-pronged analysis: (1) the degree of negligence or bad faith involved, (2) the importance of the missing evidence, considering the probative value and reliability of secondary or substitute evidence that remains available, and (3) the sufficiency of the other evidence used at trial to sustain the conviction.¹⁰¹

3. DNA Preservation Statutes

The problem is that most jurisdictions have not prescribed procedures for the retention of evidence after trial. Only with the advent of DNA profiling have some states legislated on the issue.¹⁰² The ABA Standards on DNA¹⁰³ and NIST

497 (Mass. 1991); *State v. Osakalumi*, 461 S.E.2d 504, 512 (W. Va. 1995); *State v. Delisle*, 648 A.2d 632, 643 (Vt. 1994).

¹⁰⁰ *Ex parte Gingo*, 605 So. 2d 1237, 1241 (Ala. 1992). *See also* *Gurley v. State*, 639 So.2d 557 (Ala. Crim. App. 1993) (failure to preserve murder victim’s wallet for defense testing violates state constitution).

¹⁰¹ *Hammond v. State*, 569 A.2d 81, 87 (Del. 1989) (“We remain convinced that fundamental fairness, as an element of due process, requires the State’s failure to preserve evidence that could be favorable to the defendant ‘[to] be evaluated in the context of the entire record.’ . . . When evidence has not been preserved, the conduct of the State’s agents is a relevant consideration, but it is not determinative.”) (citation omitted).

¹⁰² *E.g.*, CAL. PENAL CODE § 1417.9(a) (West Supp. 2005) (“Notwithstanding any other provision of law and subject to subdivision (b), the appropriate governmental entity shall retain all biological material that is secured in connection with a criminal case for the period of time that any person remains incarcerated in connection with that case.”); D.C. CODE § 22-4134 (2001) (“Law enforcement agencies shall preserve biological material that was seized or recovered as evidence in the investigation or prosecution that resulted in the conviction or adjudication as a delinquent for a crime of violence and not consumed in previous DNA testing for 5 years or as long as any person incarcerated in connection with that case or investigation remains in custody, whichever is longer.”); TEX. CODE CRIM. PROC. ANN. art. 38.39(a) (Vernon Supp.2003) (“In a criminal case in which a defendant is convicted, the attorney representing the state, a clerk, or any other officer in possession of evidence described by Subsection (b) shall ensure the preservation of the evidence.”); TEX. CODE CRIM. PROC. ANN. art. 38.39(b) (Vernon Supp.2003) (This requirement applies to evidence that (1) was in possession of the State during the prosecution of the case, and (2) at the time of conviction was known to contain biological material that, if subjected to scientific testing, would more likely than not establish the identity of the person committing the offense or exclude a person from the group of persons who could have committed the offense.).

¹⁰³ *See* ABA STANDARDS FOR CRIMINAL JUSTICE, DNA EVIDENCE § 16-2.6 (b) (3d ed. 2007) (“Property containing DNA evidence obtained in an investigation which has resulted in the prosecution of a person or persons for homicide, rape or other serious offense, and the extract from such evidence, if any has been obtained, should be retained in a manner that will preserve the DNA evidence until all persons charged have been convicted of an offense, or adjudicated as

recommendations¹⁰⁴ use the completion of a convict’s sentence as the termination date.

III. BRADY RULE: EXCULPATORY EVIDENCE

In *Brady v. Maryland*,¹⁰⁵ the Supreme Court ruled that the prosecution is required to disclose exculpatory information to the defense if it is material. *Brady* issues are not uncommon in expert-testimony cases. For example, in *Connick v. Thompson*,¹⁰⁶ the prosecution failed to provide the defense with a laboratory report, which stated that the perpetrator had blood type B. The defendant had blood type O. Thompson was convicted of murder. A month before his scheduled execution, the lab report was discovered. After his acquittal at a retrial, the defendant filed a civil rights action against the prosecutor for failing to adequately train his staff on their *Brady* obligations. Although the *Brady* violation was conceded, the Supreme Court ruled that “a pattern of violations is necessary to prove deliberate indifference in § 1983 civil rights actions alleging failure to train prosecutors concerning their *Brady* obligations.”¹⁰⁷ However, the Court added: “Among prosecutors’ unique ethical obligations is the duty to produce *Brady* evidence to the defense. An attorney who violates his or her ethical obligations is subject to professional discipline, including sanctions, suspension, and disbarment.”¹⁰⁸

A. Limitations of Brady Rule

Brady is far more limited than may first appear. First, the rule applies only to exculpatory evidence. In many prosecutions, the inculpatory evidence is more significant. *Brady* does not address this type of evidence, and there is no general constitutional right to discovery.¹⁰⁹

Second, only evidence that is both exculpatory and “material” is subject to disclosure under *Brady*. This requirement has produced much litigation. For example, in one case an inconclusive handwriting report “was not exculpatory, but

having engaged in conduct constituting such an offense, and have exhausted their appeals and served their sentences or commitments.”).

¹⁰⁴ TECHNICAL WORKING GROUP ON BIOLOGICAL EVIDENCE PRESERVATION, NIST, THE BIOLOGICAL EVIDENCE PRESERVATION HANDBOOK: BEST PRACTICES FOR EVIDENCE HANDLERS (2013).

¹⁰⁵ 373 U.S. 83 (1963).

¹⁰⁶ 131 S. Ct. 1350 (2011).

¹⁰⁷ *Id.* at 1366.

¹⁰⁸ *Id.* at 1362-63.

¹⁰⁹ *See Weatherford v. Bursey*, 429 U.S. 545, 559 (“There is no general constitutional right to discovery in a criminal case . . .”).

merely not inculpatory.”¹¹⁰ Similarly, a report showing that hair from a rape defendant was not found at the scene of the crime was deemed a “neutral” report.¹¹¹ Yet, as one court correctly understood, “such a characterization [as neutral] often has little meaning; evidence such as this may, because of its neutrality, tend to be favorable to the accused. While it does not by any means establish his absence from the scene of the crime, it does demonstrate that a number of factors which could link the defendant to the crime do not.”¹¹² Similarly, in *Bell v. Coughlin*,¹¹³ the prosecution failed to turn over FBI ballistics test results to the defense. “The lab positively matched a cartridge shell (B3) to the .45 caliber pistol but reported that no conclusion could be reached with respect to the two bullets (J/R2 and J/R4) in its possession. . . . Thus, although the results of the FBI tests may be characterized as mixed, they clearly contained exculpatory material.”¹¹⁴

In the *Brady* context, “materiality” has a distinct meaning. It does not mean relevant; it means “outcome determinative,”¹¹⁵ a stringent standard. The issue has arisen in numerous scientific evidence cases.¹¹⁶ In *Nelson v. Zant*,¹¹⁷ the critical evidence was a hair found on the victim’s body. The state’s expert testified that the hair not only could have come from the defendant but that it could only have come from about 120 people in the entire Savannah area. The prosecution failed to disclose that the FBI had also examined the hair and had concluded that the hair was not suitable for comparison purposes. On review, the prosecution argued that this evidence was not “material” within the meaning of

¹¹⁰ United States v. Hauff, 473 F.2d 1350, 1354 (7th Cir. 1973).

¹¹¹ Norris v. Slayton, 540 F.2d 1241, 1244 (4th Cir. 1976). In *Sadler v. State*, 846 P.2d 377 (Okla. Crim. App. 1993), prosecution’s failure to turn over “inconclusive” DNA report did not violate *Brady*.

¹¹² Patler v. Slayton, 503 F.2d 472, 479 (4th Cir. 1974) (FBI lab report on shoeprint, soil sample, hair sample, murder weapon, and clothing).

¹¹³ 820 F. Supp. 780 (S.D.N.Y.), *aff’d*, 17 F.3d 390 (2d Cir. 1993).

¹¹⁴ *Id.* at 786-87.

¹¹⁵ The suppressed evidence is material “only if there is a reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different.” United States v. Bagley, 473 U.S. 667, 682 (1985).

¹¹⁶ *E.g.*, *Bonnell v. Mitchell*, 301 F. Supp. 2d 698, 726-27 (N.D. Ohio 2004) (“Regarding the negative test result of the gun nitrates on the defendant’s jacket, there is no reasonable probability that the outcome of the trial would have been different had this test result been admitted. As the forensic scientist in this case testified regarding another matter, a negative test result does not make a positive finding.”). *But see* *People v. Salazaar*, 3 Cal. Rptr. 3d 262, 279 (Cal. Ct. App. 2003) (“[W]hile there is sufficient evidence in the record to affirm the conviction, we cannot be confident in the jury’s verdict because of the *Brady* violation. Had the jury been aware of Dr. Ribe’s credibility problems, which would have cast doubt on the prosecution’s investigation, the case would have been cast in a different light with a reasonable probability of a different result.”).

¹¹⁷ 405 S.E.2d 250 (Ga. 1991).

Brady. The Georgia Supreme Court reversed.¹¹⁸

Finally, *Brady* is a trial right; it does not necessarily guarantee timely *pretrial* disclosure.

Many commentators have concluded that the *Brady* doctrine is ineffective in accomplishing its goal and that an “open file” discovery statute is far more effective than *Brady* in ensuring a fair trial. In sum, comprehensive pretrial discovery obviates most *Brady* issues and covers inculpatory evidence, which *Brady* does not.

B. Ethical Rules

Rules of professional responsibility require the disclosure of exculpatory evidence.¹¹⁹ The rule does not require “materiality” — all exculpatory evidence should be disclosed, whether material or not. However, not all states have adopted such rules.

C. Application of Brady Rule to Crime Labs

The Supreme Court has extended *Brady* to cover exculpatory information in the control of the police,¹²⁰ and some courts have explicitly included crime labs.

¹¹⁸ See also BARRY SCHECK ET AL., ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED 174 (2000) (“Analyst Maria Pulling reported that Reynolds matched none of the trace evidence. She signed the report and forwarded it to the front desk of the lab for delivery to the prosecutor and the defense. But the exculpatory report was never delivered to the defense. Ten years later, the volunteer counsel . . . obtained DNA exonerations of both men That was when Pulling first learned the case had gone to trial. When she found out that her report had been concealed, she was astonished.”).

¹¹⁹ ABA MODEL RULES PROF’L CONDUCT, R. 3.8 (Special Responsibilities Of A Prosecutor: “(d) make timely disclosure to the defense of all evidence or information known to the prosecutor that tends to negate the guilt of the accused or mitigates the offense, and, in connection with sentencing, disclose to the defense and to the tribunal all unprivileged mitigating information known to the prosecutor, except when the prosecutor is relieved of this responsibility by a protective order of the tribunal.” The *ABA Criminal Justice Standards* also provide that a prosecutor should disclose “[a]ny material or information within the prosecutor’s possession or control which tends to negate the guilt of the defendant.” ABA STANDARDS FOR CRIMINAL JUSTICE, DISCOVERY § 11-2.1(a)(viii) (3d ed. 1996).

¹²⁰ *Kyles v. Whitley*, 514 U.S. 419, 438 (1995):

[I]t may be said that no one doubts that police investigators sometimes fail to inform a prosecutor of all they know. But neither is there any serious doubt that “procedures and regulations can be established to carry [the prosecutor’s] burden and to insure communication of all relevant information on each case to every lawyer who deals with it.” Since, then, the prosecutor has the means to discharge the government’s *Brady* responsibility if he will, any argument for excusing a prosecutor from disclosing what he

For example, the California Supreme Court noted that a laboratory examiner “worked closely” with prosecutors and was part of the investigative team. The Court concluded that the “prosecutor thus had the obligation to determine if the lab’s files contained any exculpatory evidence, such as the worksheet, and disclose it to petitioner.”¹²¹

In another case, a federal court wrote that an experienced crime lab technician “must have known of his legal obligation to disclose exculpatory evidence to the prosecutors, their obligation to pass it along to the defense, and his obligation not to cover up a *Brady* violation by perjuring himself.”¹²² While the expert should have been on notice about perjury, it is less clear that the *Brady* obligation would be known to lab personnel — without the prosecutor tutoring the lab. How often do prosecutor’s discharge this duty? Many lab examiners have never heard of *Brady*.

does not happen to know about boils down to a plea to substitute the police for the prosecutor, and even for the courts themselves, as the final arbiters of the government’s obligation to ensure fair trials.

¹²¹ *In re Brown*, 952 P.2d 715, 719 (Cal. 1998).

¹²² *Charles v. City of Boston*, 365 F. Supp. 2d 82, 89 (D. Mass. 2005). *But see* *Villasana v. Wilhoit*, 368 F.3d 976 (8th Cir. 2004) (en banc); *Mowbray v. Cameron County*, 274 F.3d 269, 278 (5th Cir. 2001) (no case has extended *Brady* liability to laboratory technicians).

APPENDIX A: FEDERAL CIVIL RULE 26

Rule 26. Duty to Disclose; General Provisions Governing Discovery

(a) Required Disclosures.

(1) Initial Disclosure. . . .

(2) Disclosure of Expert Testimony.

(A) In General. In addition to the disclosures required by Rule 26(a)(1), a party must disclose to the other parties the identity of any witness it may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 705.

(B) Witnesses Who Must Provide a Written Report. Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report – prepared and signed by the witness – if the witness is one retained or specially employed to provide expert testimony in the case or one whose duties as the party’s employee regularly involve giving expert testimony. The report must contain:

- (i) a complete statement of all opinions the witness will express and the basis and reasons for them;
- (ii) the facts or data considered by the witness in forming them;
- (iii) any exhibits that will be used to summarize or support them;
- (iv) the witness’s qualifications, including a list of all publications authored in the previous 10 years;
- (v) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and
- (vi) a statement of the compensation to be paid for the study and testimony in the case.

(C) Witnesses Who Do Not Provide a Written Report. Unless otherwise stipulated or ordered by the court, if the witness is not required to provide a written report, this disclosure must state:

- (i) the subject matter on which the witness is expected to present evidence under Federal Rule of Evidence 702, 703, or 705; and
- (ii) a summary of the facts and opinions to which the witness is expected to testify.

(D) Time to Disclose Expert Testimony. A party must make these disclosures at the times and in the sequence that the court orders. Absent a stipulation or a court order, the disclosures must be made:

- (i) at least 90 days before the date set for trial or for the case to be ready for trial; or

(ii) if the evidence is intended solely to contradict or rebut evidence on the same subject matter identified by another party under Rule 26(a)(2)(B) or ©, within 30 days after the other party's disclosure.

(4) Trial Preparation: Experts.

(A) Deposition of an Expert Who May Testify. A party may depose any person who has been identified as an expert whose opinions may be presented at trial. If Rule 26(a)(2)(B) requires a report from the expert, the deposition may be conducted only after the report is provided.

(B) Trial-Preparation Protection for Draft Reports or Disclosures. Rules 26(b)(3)(A) and (B) protect drafts of any report or disclosure required under Rule 26(a)(2), regardless of the form in which the draft is recorded.

(C) Trial-Preparation Protection for Communications Between a Party's Attorney and Expert Witnesses. Rules 26(b)(3)(A) and (B) protect communications between the party's attorney and any witness required to provide a report under Rule 26(a)(2)(B), regardless of the form of the communications, except to the extent that the communications:

- (i) relate to compensation for the expert's study or testimony;
- (ii) identify facts or data that the party's attorney provided and that the expert considered in forming the opinions to be expressed; or
- (iii) identify assumptions that the party's attorney provided and that the expert relied on in forming the opinions to be expressed.

(D) Expert Employed Only for Trial Preparation. Ordinarily, a party may not, by interrogatories or deposition, discover facts known or opinions held by an expert who has been retained or specially employed by another party in anticipation of litigation or to prepare for trial and who is not expected to be called as a witness at trial. But a party may do so only:

- (i) as provided in Rule 35(b); or
- (ii) on showing exceptional circumstances under which it is impracticable for the party to obtain facts or opinions on the same subject by other means.

...

(2) Expert Witness. For an expert whose report must be disclosed under Rule 26(a)(2)(B), the party's duty to supplement extends both to information included in the report and to information given during the expert's deposition. Any additions or changes to this information must be disclosed by the time the party's pretrial disclosures under Rule 26(a)(3) are due.

APPENDIX B: FEDERAL CRIMINAL RULE 16

(a) Government's Disclosure.

(1) Information Subject to Disclosure.

...

(E) Documents and Objects. Upon a defendant's request, the government must permit the defendant to inspect and to copy or photograph books, papers, documents, data, photographs, tangible objects, buildings or places, or copies or portions of any of these items, if the item is within the government's possession, custody, or control and:

- (i) the item is material to preparing the defense;
- (ii) the government intends to use the item in its case-in-chief at trial; or
- (iii) the item was obtained from or belongs to the defendant.

(F) Reports of Examinations and Tests. Upon a defendant's request, the government must permit a defendant to inspect and to copy or photograph the results or reports of any physical or mental examination and of any scientific test or experiment if:

- (i) the item is within the government's possession, custody, or control;
- (ii) the attorney for the government knows--or through due diligence could know--that the item exists; and
- (iii) the item is material to preparing the defense or the government intends to use the item in its case-in-chief at trial.

(G) Expert witnesses. – At the defendant's request, the government must give to the defendant a written summary of any testimony that the government intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence during its case-in-chief at trial. If the government requests discovery under subdivision (b)(1)(C)(ii) and the defendant complies, the government must, at the defendant's request, give to the defendant a written summary of testimony that the government intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence as evidence at trial on the issue of the defendant's mental condition. The summary provided under this subparagraph must describe the witness's opinions, the bases and reasons for those opinions, and the witness's qualifications.

(b) Defendant's Disclosure.

(1) Information Subject to Disclosure.

...

(B) Reports of Examinations and Tests. If a defendant requests disclosure under Rule 16(a)(1)(F) and the government complies, the defendant must permit the government, upon request, to inspect and to copy or photograph the results or reports of any physical or mental examination and of any scientific

test or experiment if:

- (i) the item is within the defendant's possession, custody, or control; and
- (ii) the defendant intends to use the item in the defendant's case-in-chief at trial, or intends to call the witness who prepared the report and the report relates to the witness's testimony.

(C) Expert witnesses. The defendant must, at the government's request, give to the government a written summary of any testimony that the defendant intends to use under Rules 702, 703, or 705 of the Federal Rules of Evidence as evidence at trial, if —

- (i) the defendant requests disclosure under subdivision (a)(1)(G) and the government complies; or
- (ii) the defendant has given notice under Rule 12.2(b) of an intent to present expert testimony on the defendant's mental condition.

This summary must describe the witness's opinions, the bases and reasons for those opinions, and the witness's qualifications.

(C) Continuing Duty to Disclose. A party who discovers additional evidence or material before or during trial must promptly disclose its existence to the other party or the court if:

- (1) the evidence or material is subject to discovery or inspection under this rule; and
- (2) the other party previously requested, or the court ordered, its production.