AKE v. Oklahoma: The Right to Expert Assistance in a Post-Daubert, Post-DNA World

Paul C. Giannelli

Follow this and additional works at: http://scholarship.law.cornell.edu/clr

Part of the Law Commons

Recommended Citation
Available at: http://scholarship.law.cornell.edu/clr/vol89/iss6/1

This Article is brought to you for free and open access by the Journals at Scholarship@Cornell Law: A Digital Repository. It has been accepted for inclusion in Cornell Law Review by an authorized administrator of Scholarship@Cornell Law: A Digital Repository. For more information, please contact jmp8@cornell.edu.
AKE V. OKLAHOMA: THE RIGHT TO EXPERT ASSISTANCE IN A POST-DAUBERT, POST-DNA WORLD

Paul C. Giannelli†

INTRODUCTION ................................................... 1307
A. Right to Expert Assistance .................................. 1310
B. Post-Ake Developments Concerning Experts ............. 1313
   1. DNA Analysis ........................................... 1313
   2. The Daubert Trilogy .................................... 1316
   3. Scientific Fraud ...................................... 1318
   4. Social Science Experts ................................ 1320
   5. Modus Operandi Experts ................................ 1324
C. Beyond Ake .................................................. 1326
I. PROSECUTION ACCESS TO EXPERT ASSISTANCE .......... 1327
II. DEFENSE ACCESS TO EXPERT ASSISTANCE ............... 1331
   A. Criminal Justice Act .................................... 1332
   1. Purpose of CJA ......................................... 1335
   2. Standard for Appointment .............................. 1336
   3. Scope of the Right ...................................... 1337
   4. Monetary Limit .......................................... 1338
   5. Ex parte Applications .................................... 1338
   B. State Statutes ............................................ 1338
   C. Mental Competency & Insanity Statutes ................ 1340
   D. Court-Appointed Experts ................................ 1341
   E. Post-Conviction Provisions ............................. 1342
   F. Ad Hoc Procedures ...................................... 1343
III. THE ROAD TO AKE .......................................... 1343
   A. United States ex rel. Smith v. Baldi ................... 1344
   B. The Trend Toward Recognition of the Right .......... 1346
      1. Equal Protection ...................................... 1346
      2. Compulsory Process .................................. 1348
      3. Right of Confrontation ................................ 1350
      4. Other Due Process Theories ........................... 1351
         a. Right to Present a Defense ......................... 1351

† Albert J. Weatherhead III & Richard W. Weatherhead Professor of Law, Case Western Reserve University. University of Virginia, J.D., 1970, LL.M., 1975; George Washington University, M.S.F.S., 1973. The author thanks participants in faculty workshops at Brooklyn Law School and Case Western Reserve Law School for helpful comments and suggestions on earlier drafts of this Article.
b. Balance of Resources ......................... 1353

c. Disclosure of Favorable Evidence .......... 1354

d. Duty to Preserve Evidence ................. 1354

e. Right to Independent Testing .............. 1355

5. Right to Counsel ................................ 1356

a. Ineffective Assistance of Counsel ........ 1356

b. Affirmative Right to Expert ............... 1358

c. Supreme Court Cases ........................ 1359

C. Little v. Streater and Barefoot v. Estelle .. 1360

D. Ake v. Oklahoma ............................... 1360

E. Medina v. California .......................... 1363

IV. Scope of the Right to Expert Assistance .... 1365

A. Nonpsychiatric Experts ...................... 1365

B. Noncapital Cases .............................. 1369

C. Other Stages of Criminal Cases ............ 1370

D. "Civil" Proceedings ........................... 1371

V. Applicable Standard ............................ 1374

A. Underlying Myths .............................. 1376

1. Effectiveness of Cross-Examination ......... 1376

2. "Neutral" Prosecution Experts .............. 1378

3. Competence of Examiners .................... 1379

B. Various Formulations of the Standard ...... 1380

C. Relevant Factors .............................. 1382

1. Timeliness & Specificity .................... 1382

2. Preliminary Assessment ...................... 1384

3. Expert as Advisor v. Trial Witness ......... 1385

4. Novelty ....................................... 1386

5. Testimony by Prosecution Experts .......... 1388

6. Absence of Prosecution Experts ............ 1388

7. Centrality of Expert Issue ................. 1390

8. Complexity of Evidence ..................... 1390

9. Routine Tests .................................. 1392

10. Differing Opinions & Subjectivity ......... 1394

11. Admissibility of Expert Testimony ......... 1397

12. Cost ......................................... 1398

13. Summary ...................................... 1398

VI. Role of the Expert ............................ 1399

A. Neutral or Partisan Expert .................. 1399

B. Ex parte Applications ........................ 1402

C. Prosecution Use of Defense Experts ....... 1404

1. Attorney-Client Privilege ................... 1405

2. Work Product Rule ............................ 1408

3. Right to Effective Assistance of Counsel ... 1409

D. Right to Examine Prosecution Witnesses ... 1411

E. Interference with the Right to an Expert ... 1412
INTRODUCTION

In a recent article discussing the expanding role of science in settling legal disputes, Justice Breyer noted the pervasive use of expert witnesses in modern litigation: "Scientific issues permeate the law. Criminal courts consider the scientific validity of . . . DNA sampling or voiceprints, or expert predictions of defendants' 'future dangerousness,' which can lead courts or juries to authorize or withhold the punishment of death." While the extensive use of experts raises a number of concerns, one of the most pressing is the accessibility of expert assistance for indigent defendants.

The use of experts is costly, and prosecutors have an overwhelming advantage on this score. A tactical decision by the federal prosecutors in the Oklahoma City bombing cases illustrates this reality. In that instance, the government faced a significant dilemma regarding its plan to present expert testimony on the composition of the bomb. Prior to trial, the Office of the Inspector General issued a report criticizing the FBI crime laboratory, which included an entire section devoted to improper practices during the bomb debris analysis for the Oklahoma City cases. The prosecutors solved this problem by going outside of the country to obtain a bomb expert from the Ministry of


2 See Williamson v. Reynolds, 904 F. Supp. 1529, 1561–62 (E.D. Okla. 1995) ("As science has increasingly entered the courtroom . . . the importance of the expert witness has also grown. . . . [W]hen forensic evidence and expert testimony are critical parts of the criminal prosecution of an indigent defendant, due process requires the State to provide an expert who is not beholden to the prosecution.")., aff'd sub nom., Williamson v. Ward, 110 F.3d 1508 (10th Cir. 1997); Jack B. Weinstein, Science, and the Challenges of Expert Testimony in the Courtroom, 77 OR. L. REV. 1005, 1008 (1998) ("Courts, as gatekeepers, must be aware of how difficult it can be for some parties—particularly indigent criminal defendants—to obtain an expert to testify. The fact that one side may lack adequate resources with which to fully develop its case is a constant problem.").


4 See United States v. Nichols, 169 F.3d 1255 (10th Cir. 1999) (upholding conviction of Terry Nichols); United States v. McVeigh, 155 F.3d 1166 (10th Cir. 1998) (upholding conviction of Timothy McVeigh).

Defense in England. This was not the first time prosecutors had secured an expert from outside the country. In the trial of serial killer Wayne Williams, Georgia prosecutors retained the services of a hair and fiber expert from the Royal Canadian Mounted Police. The expert examined the evidence for eleven days and then testified without preparing a report, thus avoiding pretrial discovery. In another case, state prosecutors in Washington went to Holland to find an "earprint" expert.

DNA cases offer another illustration of the disparity in laboratory resources. In the O.J. Simpson case, for example, the prosecution presented experts from two separate DNA laboratories, one of which was privately owned. In contrast, access to even one defense expert was foreclosed in an early DNA case "because of a shortage of county funds."

In some cases, the prosecution has the added luxury of shopping for the right expert. Because two police crime laboratories would not declare a positive bootprint match in the infamous Rolando Cruz prosecution, prosecutors sought out a third expert, Dr. Louise Rob-

---

6 See Nichols, 169 F.3d at 1261-62.
7 See Williams v. State, 312 S.E.2d 40, 52 (Ga. 1983); see also State v. Jones, 541 S.E.2d 813, 818 (S.C. 2001) ("A Canadian researcher (Kennedy), who testified for the State at trial, is currently conducting a study following R.C.M.P. troopers and their new boots throughout the training process." (footnote omitted)).
10 For another example of the states' ever-expanding repertoire of scientific techniques, see Ramirez v. State, 810 So. 2d 836, 847-48 (Fla. 2001) (discussing the state's presentation of five experts on the novel technique of matching knives with cartilage wounds).
11 The private laboratory was Cellmark Diagnostics and the public laboratory was operated by the California Department of Justice. See Rachel Nowak, Forensic DNA Goes to Court with O.J., Sci., Sept. 2, 1994, at 1352, 1352 ("If both labs reach the same conclusion, some of the arguments that have been used to keep DNA fingerprinting evidence out of court in other cases would be seriously undermined.").
12 Prater v. State, 820 S.W.2d 429, 439 (Ark. 1991) (holding that the trial court erred when it declined to appoint a defense expert); see also Richard L. Fricker, State Falters in Retrial of Escaped Con, A.B.A. J., June 1995, at 38, 38 ("The court-appointed defense lawyers in the first [capital] trial were denied money for independent forensic tests because the judge said the county could not afford it."); Peter J. Neufeld & Neville Colman, When Science Takes the Witness Stand, Sci. AM., May 1990, at 46, 53.
13 In 1985, Rolando Cruz and Alejandro Hernandez were sentenced to death for the rape and murder of a 10-year-old girl. Stephen Buckley was initially arrested as a third accomplice. Despite the shoeprint evidence, Buckley's trial ended in a hung jury. In 1995, DNA tests showed that neither Cruz nor Hernandez were the contributors of the crime scene semen. They were retried anyway, but a "sheriff's department lieutenant recanted testimony he had provided in previous trials." See Edward Connors et al., Convicted by Juries, Exonerated by Science: Case Studies in the Use of DNA Evidence to Establish Innocence After Trial 46 (1996). The judge directed a verdict for Cruz, and Hernandez's case was dismissed. They had spent eleven years on death row.
bins, who declared a match. A detective, who resigned because he believed the wrong people had been charged, later observed:

"The first lab guy says it's not the boot." . . . "We don't like that answer, so there's no paper [report]. We go to a second guy who used to do our lab. He says yes. So we write a report on Mr. Yes. Then Louise Robbins arrives. This is the boot, she says. That'll be $10,000. So now we have evidence."

Another "shopping" example involved the former head serologist of the West Virginia State Police Crime Laboratory, Fred Zain, who falsified test results in as many as 134 cases from 1979 to 1989. A judicial inquiry concluded that "as a matter of law, any testimonial or documentary evidence offered by Zain at any time in any criminal prosecution should be deemed invalid, unreliable, and inadmissible." Zain was such a treasured witness that even after he left the state to accept a position in a San Antonio crime lab, West Virginia prosecutors sent evidence to him for retesting because the remaining West Virginia serologists apparently could not reach the "right" results.

Even highly suspect testimony is available for the right price. As Justice Breyer noted, the use of expert testimony concerning "future dangerousness" is frequently introduced in capital trials. Dr. James Grigson, formerly a star prosecution witness in Texas, testified about the future dangerousness of defendants in a reported 167 death pen-

---

17 Id. at 520. The West Virginia Supreme Court opinion adopting this report states that Zain's behavior was "shocking and . . . egregious violations," "[a] corruption of [the] legal system," and "mock[ing] the ideal of justice under law." Id. at 508.
18 See Laura Frank & John Hanchette, Convicted on False Evidence?: False Science Often Sways Juries, Judges, USA TODAY, July 19, 1994, at 1A ("In 1989, Zain took his 'pro-prosecution bias' reputation and letter of recommendation from the governor and headed to Texas.").
19 According to Zain's replacement as director of the serology department, "several prosecutors expressed dissatisfaction with the reports they were receiving from serology and specifically requested that the evidence be analyzed by Zain." In re Investigation, 438 S.E.2d at 512 n.16 (summarizing deposition of Ted Smith).
20 See supra note 1 and accompanying text.
ally cases.\textsuperscript{21} Known as "Dr. Death" in the documentary film, \textit{The Thin Blue Line}, he reportedly earned $200,000 a year ($150 an hour) from expert-witness fees and his private practice.\textsuperscript{22} Dr. Grigson’s testimony generated significant controversy—Professor Dix once characterized his methods as resting “at the brink of quackery.”\textsuperscript{23}

The disparity between prosecution and defense resources is further illustrated by several firearms identification (“ballistics”) cases. In these cases, there was even money available for the surgical removal of bullets from suspects’ bodies for comparative purposes.\textsuperscript{24}

A. Right to Expert Assistance

As the above discussion indicates, securing the services of defense experts to examine evidence, to advise counsel, and to testify at trial is frequently critical in modern criminal litigation. Nevertheless, it was not until 1985 that the United States Supreme Court in \textit{Ake v.}

\begin{small}
\textsuperscript{21} Dr. Grigson’s career as a star witness was sharply curtailed in 1995 when he was expelled from the American Psychiatric Association. See Hugh Aynesworth, \textit{Texas ‘Dr. Death’ Retires After 167 Capital Case Trials}, \textit{WASH. TIMES}, Dec. 21, 2003, at A2.

\textsuperscript{22} See \textit{RON ROSENBAUM, TRAVELS WITH DR. DEATH} 206–07, 231 (1991); see also John Bloom, \textit{Doctor for the Prosecution}, \textit{AM. LAW.}, Nov. 1979, at 25, 25 (“[L]ast year [Dr. Grigson] earned more than $67,034 in fees from Dallas County alone, a figure that doesn’t include murder cases in other Texas cities.”).


\end{small}
Oklahoma recognized, for the first time, a constitutional right to expert assistance. In a system in which an overwhelming majority of criminal defendants are indigent, Ake was a landmark case, and, not surprisingly, it spawned much commentary. Some scholarship focused on specific types of experts, such as DNA analysts, psychiatrists, memory experts, and battered woman syndrome specialists, while other discussion was directed at specific issues, such as ex parte proceedings, incompetent experts, harmless error, prosecutorial discovery of reports prepared by defense experts who do not testify, and the rights of indigent civil litigants. Despite this diversity, the commentators have uniformly concluded that the implementation of Ake falls far short of what is needed. This is not surpris-

---

26 See Yale Kamisar et al., Modern Criminal Procedure 22–23 (10th ed. 2002) ("A sampling of felony defendants in the 75 largest counties indicated that approximately 80 receive court appointed attorneys.").
36 See, e.g., Stephen A. Saltzburg & Daniel J. Capra, American Criminal Procedure 802 (6th ed. 2000) ("Generally speaking the courts have read Ake narrowly, and have refused to require appointment of an expert unless it is absolutely essential to the defense."); Carlton Bailey, Ake v. Oklahoma and An Indigent Defendant’s ‘Right’ to an Expert Witness: A Promise Denied or Imagined?, 10 Wm. & Mary Bill Rts. J. 401, 401 (2002) ("Regrettably, an indigent's use of . . . expert assistance has been severely compromised by the Court's failure to clarify Ake, and by the lower federal courts' inability to agree on its purpose.") (footnote omitted)); David A. Harris, Ake Revisited: Expert Psychiatric Witnesses Remain Beyond
ing given the widespread belief that the basic right to counsel under Gideon v. Wainwright has not been fully implemented, especially in capital cases.

The few available investigations support the view that the progeny of Ake have often taken a restrictive approach to the right to expert assistance. In 1990, The National Law Journal published the results of a six-month investigation on the defenses of capital murder defendants in the South. One of the key findings concerned defense experts: “Judges routinely deny lawyers’ requests for expert/investigative fees.”

As part of this investigation, sixty death row trial lawyers were interviewed and “54.2% felt that the court provided inadequate investigation and expert funds.” A 1992 study of indigent defense systems sponsored by the National Center for State Courts noted that the “greatest disparities occur in the areas of investigators and expert witnesses, with the prosecutors possessing more resources than the public defenders.” In addition, a 1993 report commissioned by the


40 Marcia Coyle et al., Fatal Defense: Trial and Error in the Nation’s Death Belt, Nat’l J., June 11, 1990, at 30. One attorney, who was appointed to represent a death row inmate in Georgia, had his request for the appointment of an expert denied. He commented: “There’s an economic presumption of guilt. . . . The district attorney has all the resources of the state crime lab, and we have to go hat in hand to the judge and the DA on every request.” Id. at 38.
41 Id. at 40.
42 Roger A. Hanson et al., Indigent Defenders: Get the Job Done and Done Well 100 (1992) (presenting resource parity findings for three jurisdictions using the public defender system for indigent defense). In contrast, the study concluded that “[t]here is a close approximation of resource parity in terms of attorney compensation, training, and staff support.” Id.
State Bar of Texas concluded that "[t]here is a serious underfunding of essential expert services and other expenses in capital trials and appeals."\textsuperscript{43}

These investigations are consistent with the pre-Ake reports. In their landmark 1966 jury study, Harry Kalven and Hans Zeisel commented: "Again, the imbalance between prosecution and defense appears. In 22 percent of the cases the prosecution has the only expert witness, whereas in only 3 percent of the cases does the defense have such an advantage."\textsuperscript{44} The voiceprint cases offer another illustration. As a National Academy of Sciences report noted in 1979, "[a] striking fact about the trials involving voicegram evidence to date is the very large proportion in which the only experts testifying were those called by the state."\textsuperscript{45}

B. Post-Ake Developments Concerning Experts

Several developments since Ake make the failure to fully implement the right to expert assistance all the more troublesome.

1. DNA Analysis

The first of these developments, the advent of DNA evidence, dramatically changed the legal landscape. Indeed, one judge recognized its potential to represent the "single greatest advance in the 'search for truth' . . . since the advent of cross-examination."\textsuperscript{46} The initial DNA skirmishes over laboratory protocols\textsuperscript{47} quickly morphed into fights over statistical interpretation and population genetics.\textsuperscript{48}


\textsuperscript{44} HARRY KALVEN, JR. & HANS ZEISEL, THE AMERICAN JURY 139 (1966).

\textsuperscript{45} NAT'L RESEARCH COUNCIL, ON THE THEORY AND PRACTICE OF VOICE IDENTIFICATION 49 (1979); see also People v. Chapter, 13 CRIM. L. REP. (BNA) 2479, 2479 (Cal. Super. Ct. Aug. 29, 1973) ("In approximately eighty percent of the twenty-five [voiceprint] cases in which such expert testimony/opinion was admitted there was no opposing expert testimony on the issue of reliability and general acceptability of the scientific community . . . .").

\textsuperscript{46} People v. Wesley, 533 N.Y.S.2d 643, 644 (Sup. Ct. 1988).

\textsuperscript{47} See Eric S. Lander & Bruce Budowle, DNA Fingerprinting Dispute Laid to Rest, 371 NATURE 735, 755 (1994) ("The initial outcry over DNA typing standards concerned laboratory problems: poorly defined rules for declaring a match; experiments without controls; contaminated probes and samples; and sloppy interpretation of autoradiograms. Although there is no evidence that these technical failings resulted in any wrongful convictions, the lack of standards seemed to be a recipe for trouble."); William C. Thompson, Evaluating the Admissibility of New Genetic Identification Tests: Lessons from the "DNA War", 84 J. CRIM. L. & CRIMINOLOGY 22, 24 (1993) ("According to critics, . . . forensic laboratories are lacking in scientific rigor and . . . new [DNA] techniques receive inadequate scientific scrutiny before they are presented in court.").

\textsuperscript{48} In fact, the National Academy of Sciences felt obliged to consider the issue on two separate occasions. See NAT'L RESEARCH COUNCIL, THE EVALUATION OF FORENSIC DNA EVIDENCE (1996); NAT'L RESEARCH COUNCIL, DNA TECHNOLOGY IN FORENSIC SCIENCE (1992)
The fact that no other technique had been as complex or subject to rapid change further complicated matters. New DNA technologies were introduced at the trial level, while cases litigating the older procedures contemporaneously worked their way through the appellate court system. The initial technique, Restriction Fragment Length Polymorphism (RFLP), was soon supplanted by Polymerase Chain Reaction (PCR) involving the DQ-alpha loci, which was followed by Polymarkers (PM) and D1S80. These, in turn, were replaced by Short Tandem Repeats (STR), the current procedure. In addition
to nuclear DNA, mitochondrial DNA analysis\textsuperscript{53} and animal\textsuperscript{54} and plant DNA evidence\textsuperscript{55} have been introduced in criminal cases, raising further evidentiary questions. Finally, the use of DNA databases for "cold hits" has presented its own fundamental issue: whether DNA evidence alone is sufficient to uphold a conviction.\textsuperscript{56}

Few defense attorneys can deal with this type of sophisticated evidence—which raises issues "at the cutting edge of modern law and science"\textsuperscript{57}—without expert assistance. The National Academy of Sciences recommended appointment of defense DNA experts in every


\textsuperscript{54} See Marilyn A. Menotti-Raymond et al., Pet Cat Hair Implicates Murder Suspect, 386 Nature 774 (1997) (discussing STR genotyping used in Canadian case); George Sensabaugh & D.H. Kaye, Non-Human DNA Evidence, 39 Jurimetrics J. 1, 2-3 (1998) ("[N]on-human DNA has played a major role [in criminal cases], ranging from homicide prosecutions to patent infringement litigation, with organisms as diverse as household pets, livestock, wild animals, insects, plants, bacteria, and viruses."); Mark Hansen, Beastly Evidence: Animal DNA Can Put Bite into Criminal Case, A.B.A. J., Mar. 2003, at 20; Richard Willing, Prosecutors' Latest Tool: Animal DNA, USA Today, Nov. 7, 2002, at 24A. But see State v. Leulaialii, 77 P.3d 1192, 1197 (Wash. Ct. App. 2003) ("[W]e are not convinced that forensic canine DNA identification is a theory that has received general acceptance in the scientific community . . . .").


\textsuperscript{56} Unlike the typical case, a cold hit may mean that there is nothing but the DNA evidence to tie a defendant to a crime. For cases upholding the sufficiency of uncorroborated DNA evidence, see People v. Soto, 35 Cal. Rptr. 2d 846, 858-59 (Cal. App. 1994) (rejecting argument that evidence corroborating DNA identification was required to support a conviction), aff’d, 981 P.2d 958 (Cal. 1999); People v. Rush, 672 N.Y.S.2d 362, 363 (App. Div. 1998) (finding defendant’s argument that "DNA evidence cannot serve as the sole evidence supporting [a] conviction ‘not persuasive’ because it is circumstantial in nature and is not absolute or infallible"); Roberson v. State, 16 S.W.3d 156, 170 (Tex. Crim. App. 2000) ("This court is . . . satisfied that the testimony of even one DNA expert that there is a genetic match . . . is legally sufficient to support a guilty verdict.").

case,\textsuperscript{58} as did a British study.\textsuperscript{59} The courts, however, have been far more restrictive.\textsuperscript{60}

2. The Daubert Trilogy

The second post-\textit{Ake} development was the Supreme Court's landmark decision in \textit{Daubert v. Merrell Dow Pharmaceuticals, Inc.},\textsuperscript{61} decided in 1993. If DNA evidence revolutionized forensic science, \textit{Daubert} and its progeny\textsuperscript{62} revolutionized the admissibility of evidence based on forensic science. \textit{Daubert} has been transformed from a case that most courts and commentators believed lowered the barriers to the admissibility of scientific evidence\textsuperscript{63} to one that the Court now describes as imposing an "exacting" standard.\textsuperscript{64} Indeed, some federal courts have read the \textit{Daubert} trilogy as "inviting a reexamination even of 'generally accepted' venerable, technical fields."\textsuperscript{65} As a result, attacks have been launched against handwriting evidence,\textsuperscript{66} hair com-

\begin{flushleft}
\textsuperscript{58} DNA TECHNOLOGY, \textit{supra} note 48, at 147–49 ("When the prosecutor proposes to use DNA typing evidence or when it has been used in the investigation of the case, an expert should be routinely available to the defendant.").

\textsuperscript{59} BEVERLY STEVENTON, ROYAL COMM'N ON CRIMINAL JUSTICE, \textit{THE ABILITY TO CHALLENGE DNA EVIDENCE} 44 (1993) ("Legal Aid should be granted automatically for one expert assessment of the prosecution work. DNA evidence should only be admissible where an appropriate expert is available to the defence.").

\textsuperscript{60} \textit{See infra} text accompanying notes 529–35, 559–68, and 599–02 (discussing DNA experts).

\textsuperscript{61} \textit{509 U.S. 579} (1993).

\textsuperscript{62} The Court followed with \textit{General Electric Co. v. Joiner}, \textit{522 U.S. 136} (1997), and \textit{Kumho Tire Co. v. Carmichael}, \textit{526 U.S. 137} (1999), to make up what is now known as the \textit{Daubert} trilogy.


parisons,\textsuperscript{67} fingerprint examinations,\textsuperscript{68} firearms identification,\textsuperscript{69} bite-mark analysis,\textsuperscript{70} and intoxication testing.\textsuperscript{71} While most of these challenges have been unsuccessful in terms of admissibility, they have ex-

\textsuperscript{67} See Williamson v. Reynolds, 904 F. Supp. 1529, 1558 (E.D. Okla. 1995) ("This court has been unsuccessful in its attempts to locate any indication that expert hair comparison testimony meets any of the requirements of Daubert."); aff'd sub nom. on other grounds, Williamson v. Ward, 110 F.3d 1508, 1522-23 (10th Cir. 1997) (indicating that "[w]hen the admission of evidence in a state trial is challenged on federal habeas, the proper standard for review is due process, not Daubert"); see also Paul C. Giannelli & Emmie West, Forensic Science: Hair Comparison Evidence, 37 CRIM. L. BULL. 514 (2001) (discussing DNA exonerations in which hair evidence had been used to convict the innocent and concluding that hair evidence "should be challenged as a matter of routine").


\textsuperscript{69} See United States v. Santiago, 199 F. Supp. 2d 101, 110-12 (S.D.N.Y. 2002) (concluding that ballistic identification evidence satisfies the Daubert standard); see also Joan Griffin & David J. LaMagna, Daubert Challenges to Forensic Evidence: Ballistics Next on the Firing Line, THE CHAMPION, SEPT./OCT. 2002, at 20; Lisa J. Steele, "All we want you to do is confirm what we already know": A Daubert Challenge to Firearms Identifications, 38 CRIM. L. BULL. 466, 466 (2002) ("The time is ripe for... challenges to firearms identification evidence, which will hopefully result in better scientific studies supporting the theory, better methodology in crime laboratories, and more reliable verdicts.").

\textsuperscript{70} See Howard v. State, 697 So. 2d 415, 429 (Miss. 1997) ("While few courts have refused to allow some form of bite-mark comparison evidence, numerous scholarly authorities have criticized the reliability of this method of identifying a suspect... Suffice it to say that testimony concerning bite marks in soft, living flesh has not been scientifically accredited at this time."); see also I.A. Pretty & D. Sweet, The Scientific Basis for Human Bitemark Analyses—A Critical Review, 41 SCI. & JUST. 85, 86 (2001) ("Despite the continued acceptance of bitemark evidence in European, Oceanic and North American Courts[,] the fundamental scientific basis for bitemark analysis has never been established.").

\textsuperscript{71} See United States v. Horn, 185 F. Supp. 2d 530, 557 (D. Md. 2002) ("I conclude that the [standard field sobriety test] evidence in this case does not, at this time, meet the requirements of Daubert/Kumho Tire and Rule 702 as to be admissible as direct evidence of intoxication or impairment.").
posed the lack of empirical support for many commonly employed forensic techniques. Here, again, defense attorneys are required to cope with a changing landscape of scientific proof.

3. Scientific Fraud

A third development involved the increasing manipulation of scientific evidence.\(^{72}\) Forged fingerprints,\(^{73}\) faked autopsies,\(^{74}\) false laboratory reports,\(^{75}\) and perjured testimony\(^{76}\) (including the falsification of credentials\(^{77}\)) have all been reported. Fred Zain’s conduct at the


\(^{74}\) The saga of former Lubbock, Texas pathologist Ralph Erdmann presents a notorious example. See Roy Bragg, *New Clues May Be Dug from Grave: Fator Touches on Autopsies, Brains*, Houston Chron., Mar. 28, 1992, at 1A (“[C]all him McErdmann[.]’ . . . ‘He's like McDonald's – billions served.’” (quoting Dallam County District Attorney Barry Blackwell)); Chip Brown, *Pathologist Accused of Falsifying Autopsies, Butchering Trial Evidence*, L.A. Times, Apr. 12, 1992, at A24 (“[F]ormer Dallas County assistant medical examiner Linda Norton was quoted as saying [Dr.] Erdmann routinely performs ‘made-to-order autopsies that support a police version of a story.’”); Richard L. Fricker, *Pathologist’s Plea Adds to Turmoil: Discovery of Possibly Hundreds of Faked Autopsies Helps Defense Challenges*, A.B.A. J., Mar. 1993, at 24 (“‘If the prosecution theory was that death was caused by a Martian death ray, then that was what Dr. Erdmann reported.’” (quoting Tommy J. Turner, a judicially appointed investigator in the Erdmann case)).

\(^{75}\) See United States v. Gault, 141 F.3d 1399, 1403 (10th Cir. 1998) (“Defendant sought to question [DEA forensic chemist Barry] Goldston about a former DEA colleague’s submission of falsified reports [in an unrelated case]. The DEA agent, Ann Castillo, had admitted to failing to perform the controlled substance tests upon which [those] reports were based.”); State v. Ruybal, 408 A.2d 1284, 1285, 1287–89 (Me. 1979) (refusing to grant defendants’ motions for new trials where an FBI analyst who had testified at their trials subsequently admitted to “report[ing] results of lab tests that he did not in fact conduct” in connection with an unrelated case); State v. DeFronzo, 59 Ohio Misc. 113, 122 (C.P. Lucas County 1978) (“[T]here is now considerable doubt in the court’s mind who, if anyone, tested the cocaine as well as the date of the [analysis]. Even if [the prosecution’s expert] tested the cocaine, there is doubt in the court’s mind as to the competency of that [analysis].”).

\(^{76}\) See Steve Bailey, *Defense Attorneys Want Prosecutors Disqualified*, Associated Press, Sept. 6, 2002 (“Attorneys for both sides were in court for a hearing in which FBI ballistics expert Kathleen Lundy was scheduled to testify about lying during a preliminary hearing in Shane Raglan’s murder case.”); *see also* Logerquist v. McVey, 1 P.3d 113, 120 (Ariz. 2000) (“It turned out that the witness presenting the [non-scientific] dog-scent evidence in *Roscoe* was a charlatan.”).

\(^{77}\) See Drake v. Portuondo, 321 F.3d 338, 342 (2d Cir. 2003) (“It is now apparent that [prosecution expert] Walter’s testimony concerning his qualifications was perjurious.”); United States v. Gale, 314 F.3d 1, 1 (D.C. Cir. 2003) (“Johnny St. Valentine Brown for years testified as an expert witness in narcotics cases. But it later developed that Brown was something of a con man himself, so much so that he was charged with and pleaded guilty to having committed perjury about his educational background.”); United States v. Williams, 233 F.3d 592, 593–95 (D.C. Cir. 2000) (denying defendant’s motion for a new trial, despite the post-conviction revelation that Johnny St. Valentine Brown, a prose-
West Virginia crime laboratory is probably the most prominent example.\(^7\) A judicial report concluded:

The acts of misconduct on the part of Zain included (1) overstating the strength of results; (2) overstating the frequency of genetic matches on individual pieces of evidence; (3) misreporting the frequency of genetic matches on multiple pieces of evidence; (4) reporting that multiple items had been tested, when only a single item had been tested; (5) reporting inconclusive results as conclusive; (6) repeatedly altering laboratory records; (7) grouping results to create the erroneous impression that genetic markers had been obtained from all samples tested; (8) failing to report conflicting results; (9) failing to conduct or to report conducting additional testing to resolve conflicting results; (10) implying a match with a suspect when testing supported only a match with the victim; and (11) reporting scientifically impossible or improbable results.\(^7\)

Unfortunately, Zain was not alone. Similar cases have arisen in Oklahoma City\(^8\) and Montana.\(^1\) In Houston, both the DNA and toxicology laboratories\(^8\) had to be closed. In *Actual Innocence*, Barry

\(^7\) See supra notes 16-19 and accompanying text.
\(^9\) See *Jim Yardley, Inquiry Focuses on Scientist Employed by Prosecutors*, N.Y. Times, May 2, 2001, at A14 (discussing investigations into the testimony of Oklahoma City police laboratory scientist Joyce Gilchrist); see also *Mitchell v. Gibson*, 262 F.3d 1036, 1064 (10th Cir. 2001) ("Ms. Gilchrist thus provided the jury with evidence implicating Mr. Mitchell in the sexual assault of the victim which she knew was rendered false and misleading by evidence withheld from the defense."); *Pierce v. State*, 786 P.2d 1255, 1261 (Okla. Crim. 1990) ("We find that Gilchrist absolutely violated the terms of a Court Order."); *McCarty v. State*, 765 P.2d 1215, 1218 (Okla. Crim. App. 1988) ("[Ms. Gilchrist’s] forensic report was at best incomplete, and at worst inaccurate and misleading. . . . We find it inconceivable why Ms. Gilchrist would give such an improper opinion, which she admitted she was not qualified to give.").

\(^1\) See *Adam Liptak, 2 States to Review Lab Work of Expert Who Erred on ID*, N.Y. Times, Dec. 19, 2002, at A24 (discussing erroneous hair evidence testimony by the then-director of the Montana state police crime laboratory in the trial of Jimmy Ray Bromgard, who spent 15 years in prison before being exonerated by DNA).

\(^2\) See *Nick Madigan, Houston’s Troubled DNA Crime Lab Faces Growing Scrutiny*, N.Y. Times, Feb. 9, 2003, at A20 ("Police officials suspended DNA testing at the laboratory after an audit completed in December found a host of problems with its methods . . . .").

\(^3\) See *Ralph Blumenthal, Double Blow, One Fatal, Strikes Police in Houston*, N.Y. Times, Oct. 30, 2003, at A25 ("The acting police chief announced . . . that he had shut down the Police Department’s toxicology section after its manager failed a competency test . . . .").
Scheck, Peter Neufeld, and Jim Dwyer reported the findings of a Cardozo Law School Innocence Project study of 62 DNA exonerations secured in the United States; one of the more astounding conclusions was that a third of these cases involved "tainted or fraudulent science."  

The Department of Justice's 1997 report on the FBI laboratory, issued by the Inspector General, graphically described negligence, misconduct, and other shortcomings of the premier crime laboratory in the country. The investigation found scientifically flawed testimony, inaccurate testimony, testimony beyond the competence of examiners, improperly prepared laboratory reports, insufficient documentation of test results, inadequate record management and retention, and failures of management "to resolve serious and credible allegations of incompetence."  

Such cases are beginning to have an impact on admissibility decisions. For example, the Florida Supreme Court has commented on the "rising nationwide criticism of forensic evidence in general" and noted the courts' obligation "to cull scientific fiction and junk science from fact." Defense attorneys can no longer assume (if they ever could) that expert testimony is competent and instead focus on other aspects of a case.

4. Social Science Experts

The fourth development was the increased reliance on social science research. Beginning in the 1980s, the use of social science research has had a significant impact on criminal litigation. Prominent examples of theories based on social science research in-

90 See, e.g., United States v. Young, 316 F.3d 649, 658 (7th Cir. 2002) (admitting expert testimony that victims of domestic violence commonly recant their accusations to protect their attackers); see also Robert F. Schopp et al., Battered Woman Syndrome, Expert Testimony, and the Distinction Between Justification and Excuse, 1994 U. ILL. L. REV. 45, 112 (arguing that “battered woman syndrome bears almost no relevance to rigorously formulated and interpreted self-defense doctrine,” and that “[a] statutory scheme providing justification defenses based on actual necessity and separate excuses for nonculpable mistakes accommodates many of the most troubling circumstances in which battered women kill their batterers in nonconfrontational situations”); Regina A. Schuller & Patricia A. Hastings, Trials of Battered Women Who Kill: The Impact of Alternative Forms of Expert Evidence, 20 LAW & HUM. BEHAV. 167, 174, 181 (1996) (comparing, using mock jurors, the effectiveness of expert testimony concerning battered woman syndrome with a "no expert control" and concluding that participants "rendered more lenient verdicts in the presence as opposed to the absence of the expert testimony").

91 See, e.g., Griffin v. City of Opa-Locka, 261 F.3d 1295, 1302 (11th Cir. 2001) (concluding that district court properly admitted expert testimony concerning “common responses by victims of rape or harassment, such as the failure to resist a perpetrator, bathing immediately after the assault, and the failure to file or a delay in filing a formal report or charge”); Chapman v. State, 18 P.3d 1164, 1172 (Wyo. 2001) (reasoning that court properly admitted expert testimony that it was normal for victims of sexual abuse to delay reporting to rebut a claim of fabrication); Arthur H. Garrison, Rape Trauma Syndrome: A Review of a Behavioral Science Theory and Its Admissibility in Criminal Trials, 23 AM. J. TRIAL ADVOC. 591 (2000); Krista L. Duncan, Note, "Lies, Damned Lies, and Statistics"? Psychological Syndrome Evidence in the Courtroom After Daubert, 71 IND. L.J. 753, 759–63 (1996).

92 See, e.g., State v. Chauvin, 846 So. 2d 697, 709 (La. 2003) (“We hold that [Post Traumatic Stress Disorder] evidence, like CSAAS-based evidence, should be admissible only for the limited purpose of explaining, in general terms, certain reactions of a child to abuse that would be used to attack the victim/witness’s credibility.”); State v. Foret, 628 So. 2d 1116, 1123–27 (La. 1993) (“[T]his court finds that [CSAAS] evidence is of highly questionable scientific validity, and fails to unequivocally pass the Daubert threshold test of scientific reliability.”); Dara Loren Steele, Note, Expert Testimony: Seeking An Appropriate Admissibility Standard for Behavioral Science in Child Sexual Abuse Prosecutions, 48 DUKE L.J. 933, 961–72 (1999) (examining a variety of state courts’ approaches to the admissibility of social science evidence in child abuse cases).
techniques, Munchausen syndrome by Proxy, and neonaticide syndrome-postpartum psychosis. The use of hypnotically refreshed testimony also produced vigorous debate. This was followed by the related and controversial phenomenon of repressed memory syndrome. Meanwhile, experts testifying on the deficiencies of eyewitness testimony also produced vigorous debate.

See, e.g., Washington v. Schriver, 255 F.3d 45, 57 (2d Cir. 2001) (“An emerging consensus in the case law relies upon scientific studies to conclude that suggestibility and improper interviewing techniques are serious issues with child witnesses, and that expert testimony on these subjects is admissible.” (citations omitted)); State v. Sargent, 738 A.2d 351, 353 (N.H. 1999) (“[E]xpert testimony on the danger of false memory implantation from improper interview techniques may aid a jury in evaluating the reliability of a child’s recollections.”). For a more general discussion on the subject of child interviewing, see Stephen J. Ceci & Richard D. Friedman, The Suggestibility of Children: Scientific Research and Legal Implications, 86 CORNELL L. REV. 33 (2000).

See, e.g., United States v. Shay, 57 F.3d 126, 129–30 & n.1, 133–34 (1st Cir. 1995) (explaining Munchausen’s disease and concluding that the district court improperly barred expert testimony that, “contrary to the common sense assumption, [the defendant] suffered from a recognized mental disorder that caused him to make false statements even though they were inconsistent with his apparent self-interest”); In re C.M., 513 S.E.2d 773, 776 (Ga. Ct. App. 1999) (“[Munchausen Syndrome by Proxy] is a disorder in which a parent, usually a mother, induces or fabricates an illness in a child for the purpose of obtaining medical or some other kind of attention.”); Lynn Holland Goldman & Beatrice Crofts Yorker, Mommie Dearest? Prosecuting Cases of Munchausen Syndrome by Proxy, CRIM. JUST., Winter 1999, at 26.


E.g., Roark v. Commonwealth, 90 S.W.3d 24, 29 (Ky. 2002) (“Perhaps no issue in the law of evidence has been more hotly debated over the past twenty-five years than the admissibility of testimony by a witness who has been previously subjected to hypnotism.”). See generally Paul C. Giannelli, The Admissibility of Hypnotic Evidence in U.S. Courts, 43 INT’L J. CLINICAL & EXPERIMENTAL HYPNOSIS 212 (1995).

See, e.g., Borawick v. Shay, 68 F.3d 597, 598–99 (2d Cir. 1995) (following hypnotic-therapy, plaintiff accused aunt and uncle of sexual abuse that allegedly occurred when she was 4 and 7 years old, respectively, and of which she had no recollection for over twenty years); Logerquist v. McVey, 1 P.5d 113 (Ariz. 2000) (finding erroneous the trial court’s decision to preclude admission of repressed memory testimony in a civil case).
ness identifications and the existence of false confessions became more common. In addition, various types of profile evidence were offered at trial—profiles of battering parents, drug couriers, sex

---

98 See, e.g., United States v. Langan, 263 F.3d 613, 620–25 (6th Cir. 2001) ("The use of expert testimony in regard to eyewitness identification is a recurring and controversial subject."); United States v. Lester, 254 F. Supp. 2d 602, 612 (E.D. Va. 2003) ("[T]he problem of cross-race recognition, the phenomenon of weapon focus, the relationship of different levels of stress on eyewitness perception, and the correlation (or lack thereof) between confidence and accuracy... do seem to fall outside the common sense of the average juror."); United States v. Sullivan, 246 F. Supp. 2d 696, 698 (E.D. Ky. 2003) ("Dr. Fulero opined that a photographic array in which photographs are presented sequentially is more reliable than such an array in which the witness views all of the photographs simultaneously."); Commonwealth v. Christie, 98 S.W.3d 485, 491 (Ky. 2002) ("[T]he particular facts of this case—that (1) eyewitness identification by strangers of a different race was the main and most compelling evidence..., (2) there was no other direct evidence..., and (3) the circumstantial evidence... was weak—make exclusion of [expert testimony about eyewitness identification reliability]... an abuse of discretion.").

99 See, e.g., United States v. Vallejo, 237 F.3d 1008, 1018–19 (9th Cir. 2001) ("The expert was prepared to testify about Vallejo’s long-standing, severe language disorder... and the difficulties he experienced understanding and expressing English. The testimony was offered to explain the discrepancies between Vallejo’s and the Agents’ recollection of the communications which occurred during the interrogation."); State v. Cobb, 43 P.3d 855, 868–69 (Kan. Ct. App. 2002) ("State and federal courts are split on whether to admit expert testimony on false confessions."); Holloman v. Commonwealth, 37 S.W.3d 764, 767 (Ky. 2001) ("The defense sought to introduce [expert] testimony... concerning Holloman’s mental retardation and how that condition affects his ability to understand and to communicate. It maintains that... [Holloman’s] condition... makes him vulnerable to suggestibility, to manipulation and to intimidation."). For more on false confessions, see Morgan Cloud et al., Words Without Meaning: The Constitution, Confessions, and Mentally Retarded Suspects, 69 U. Ch. L. Rev. 495 (2002), Richard A. Leo & Richard J. Ofshe, The Consequences of False Confessions: Deprivations of Liberty and Miscarriages of Justice in the Age of Psychological Interrogation, 89 J. Crim. L. & Criminology 429 (1998), and Richard A. Leo & Richard J. Ofshe, The Truth About False Confessions and Advocacy Scholarship, 37 Crim. L. Bull. 293 (2001).


offenders, and child molesters. Defense attorneys, once again, faced unfamiliar categories of expert knowledge.

5. Modus Operandi Experts

A final development was an explosion of police testimony on the modus operandi of various types of crimes, such as counterfeiting, bookmaking, pickpocketing, fraud, organized crime, gang-related crimes, and other offenses. The most frequent use of this type of testimony occurs in drug trafficking cases. Courts have admitted expert testimony on the operation of clandestine laboratories, the street value of drugs, the amount of drugs seized being consis-

102 See, e.g., People v. Robbie, 112 Cal. Rptr. 2d 479, 486 (Ct. App. 2001) (“[Expert] was asked hypothetical questions assuming certain behavior that had been attributed to the defendant and . . . opined[d] that it was the most prevalent kind of sex offender conduct. The jury was invited to conclude that if defendant engaged in the conduct described, he was indeed a sex offender.”); Commonwealth v. Poitras, 774 N.E.2d 647, 650 (Mass. App. Ct. 2002) (“The expert fatally crossed the line . . . when she testified at length . . . about the typical attributes and characteristics of those most likely to abuse children.”).

103 See, e.g., United States v. Long, 328 F.3d 655, 665–68 (D.C. Cir. 2003) (upholding district court decision to admit general evidence concerning the behavior of preferential sex offenders); United States v. Romero, 189 F.3d 576, 582–85 (7th Cir. 1999) (same). But cf. State v. Hughes, 841 So. 2d 718, 723 (La. 2003) (“[The accused] may not present the opinion of a mental health expert, based either on a ‘profile’ of a child sex abuser or on the results of standardized psychological tests, that the defendant is a moral person without deviant sexual tendencies which might prompt pedophilic behavior.”).


105 See United States v. Scavo, 593 F.2d 837, 843–44 (8th Cir. 1979).


109 See, e.g., People v. Gardeley, 927 P.2d 713, 720–23 (Cal. 1996) (“The subject matter of the culture and habits of criminal street gangs, of particular relevance here, meets [the expert witness] criterion.”); People v. Valdez, 68 Cal. Rptr. 2d 135, 141–44 (Ct. App. 1997) (“In general, where a gang enhancement is alleged, expert testimony concerning the culture, habits, and psychology of gangs is permissible because these subjects are ‘sufficiently beyond common experience that the opinion of an expert would assist the trier of fact.’” (citations omitted)).


112 See, e.g., United States v. Nobles, 69 F.3d 172, 182–84 (7th Cir. 1995) (“[DEA agent] explained that the 774.9 grams of 94% pure cocaine that Nobles was carrying in his bag . . . would sell for roughly $300,000 on the street [after processing]. . . . [The agent] opined
tent with distribution rather than personal use,\(^\text{113}\) strategies of deception,\(^\text{114}\) and other aspects of the drug trade.\(^\text{115}\) In addition, expert testimony on the tools of the drug trade, including the use of beepers,\(^\text{116}\) code words,\(^\text{117}\) weapons,\(^\text{118}\) duct tape,\(^\text{119}\) and the like,\(^\text{120}\) has been used. The expansion of expert testimony to even the most routine drug case\(^\text{121}\) is a recent phenomenon and presents formidable

\(^{113}\) See, e.g., United States v. Valle, 72 F.3d 210, 214–16 (1st Cir. 1995) (explaining how expert testified that “so large a quantity of crack was consistent with distribution as opposed to personal use[, then] listed the visible characteristics of the prototypical crack addict, and noted that the appellant manifested none of these symptoms”); United States v. Cotton, 22 F.3d 182, 184–85 (8th Cir. 1994); United States v. Lipscomb, 14 F.3d 1256, 1259–43 (7th Cir. 1994).

\(^{114}\) See, e.g., United States v. Garcia, 86 F.3d 394, 399–400 (5th Cir. 1996) (“The average juror ... may not be aware that large drug trafficking organizations commonly use ‘car swaps,’ ‘stash houses’ and conduct ‘heat runs.’”); United States v. Penny, 60 F.3d 1257, 1265 (7th Cir. 1995) (holding that the district court properly admitted testimony that “drug dealers place coffee beans in door frames in order to throw off the dogs for the scent of drugs or cocaine”).


\(^{117}\) See, e.g., United States v. Griffith, 118 F.3d 318, 321–22 (5th Cir. 1997) (“Drug traffickers’ jargon is a specialized body of knowledge, familiar only to those wise in the ways of the drug trade, and therefore a fit subject for expert testimony.”); United States v. Hoffman, 832 F.2d 1299, 1309–10 (1st Cir. 1987); United States v. Ramirez, 796 F.2d 212, 216 (7th Cir. 1986).

\(^{118}\) See, e.g., United States v. Conyers, 118 F.3d 755, 758 (D.C. Cir. 1997) (concluding that the trial court’s admission of testimony that “the .357 Magnum is the revolver of choice among local drug dealers” was not an abuse of discretion).

\(^{119}\) See, e.g., United States v. Moore, 104 F.3d 377, 384 (D.C. Cir. 1997) (“[D]uct tape such as that found under the hood of Moore’s car is often used ‘by people in the drug world to bind hands, legs, and mouths of people who are either being robbed in the drug world or who need to be maintained.’”).

\(^{120}\) See, e.g., United States v. Parker, 32 F.3d 395, 400 (8th Cir. 1994) (admitting agent’s testimony that certain entries in a notebook were “drug notes”).

\(^{121}\) See Weinstein, supra note 2, at 1008 ("Much of the so-called expert testimony, such as that of police officers who opine that criminals keep revolvers in glove compartments, or that the mafia is a gang, seems useless. This information really does not help the jury, but rather amounts to preliminary summation.").
problems for defense counsel, who may find it difficult to locate a
defense witness with this type of expertise.\textsuperscript{122}

None of the above developments could have been anticipated by
the \textit{Ake} Court. Nor could that Court have foretold that a successor
Supreme Court would undercut the doctrinal basis for the \textit{Ake}
decision in \textit{Medina v. California}.\textsuperscript{123}

C. Beyond \textit{Ake}

The \textit{Ake} right is far more important today than when the case was
handed down in 1985. At that time, no one could have foreseen the
dramatic increased use of scientific evidence in criminal litigation.
Unfortunately, many courts have adopted a restrictive approach when
interpreting \textit{Ake}. Even commentators, who have generally taken an
expansive view of \textit{Ake}, have failed to look at this right in the context of
the entire criminal justice system and, therefore, neglect the resources
of prosecutors or possible alternative methods of implementing \textit{Ake}.
In addition, they have generally ignored the immense cost of a fully
effective right to expert assistance.

Parts I and II of this Article discuss the availability of expert testi-
mony to prosecutors and defense attorneys, respectively, including
statutory provisions that provide for expert assistance. Part III traces
the Supreme Court’s antecedent decisions and the lower courts’ ap-
proaches prior to \textit{Ake}. In addition to the due process right upon
which \textit{Ake} rests, these courts relied on equal protection, compulsory
process, and right to counsel rationales. A recurring question is
whether these alternative bases support a more extensive right to ex-
pert assistance.

The final sections examine post-\textit{Ake} issues. Part IV explores the
scope of \textit{Ake}—its application beyond capital cases and beyond psychi-
atriac assistance. Part V focuses on the standard for the appointment
of defense experts, the most intractable issue. Part VI examines the
role of the expert (i.e., whether \textit{Ake} requires a “partisan” expert or
only a neutral expert), an issue that has implications for several re-
lated legal questions. Finally, Part VII discusses possible reforms of
the status quo in defendants’ access to expert testimony.

\textsuperscript{122} See, e.g., Kansas v. Call, 760 F. Supp. 190, 192 (D. Kan. 1991) (quashing a defense
subpoena seeking to compel DEA agents to appear as expert witnesses in a state criminal
prosecution of which they had no prior knowledge and reasoning that \textit{Ake} was not
implicated).

\textsuperscript{123} 505 U.S. 437 (1992); see infra notes 376–84 and accompanying text (discussing
\textit{Medina}).
PROSECUTION ACCESS TO EXPERT ASSISTANCE

Obtaining expert assistance generally is not difficult for the prosecution.124 There are over 300 crime laboratories in this country, and state prosecutors typically have access to the services of state, county, regional, or metropolitan crime laboratories.125 Additionally, in homicide cases, Coroner and Medical Examiner Offices provide testimony ranging from time of death determinations to testimony on battered child syndrome,126 sudden infant death syndrome (SIDS),127 and shaken baby syndrome.128 When needed, government-employed experts from sister states are often available.129

124 See ABA STANDARDS FOR CRIMINAL JUSTICE: PROSECUTION FUNCTION AND DEFENSE FUNCTION 3-2.4(b), at 28 (3d ed. 1993) ("[T]he prosecutor should also be provided with funds for the employment of qualified experts as needed for particular cases."). The accompanying commentary states that "[t]he value of a modern crime laboratory such as that maintained by the FBI, in the investigation and solution of crime, is universally recognized."

125 Most states have either established independent crime laboratories or facilitated access to existing laboratories. See, e.g., IOWA CODE ANN. § 691.1 (West 1997); KAN. STAT. ANN. § 21-2502 (1997); LA. REV. STAT. ANN. § 40:2261 (West 1997); MONT. CODE ANN. § 44-3-301 (1997); N.D. CENT. CODE § 19-01-10 (1997); OHIO REV. CODE ANN. § 307.75 (West 1997); TENN. CODE ANN. § 38-6-103 (1982); VA. CODE ANN. § 2.1-426 (Michie 1998); WIS. STAT. ANN. § 165.75 (West 1997); see also President’s Comm’n on Law Enforcement & Admin. of Justice, The Challenge of Crime in a Free Society 255 (1967) (stating that crime laboratories are "the oldest and strongest link between science and technology and criminal justice"); Irving C. Stone, Capabilities of Modern Forensic Laboratories, 25 WM. & MARY L. REV. 659, 659 (1984) (attributing a trend toward specialization in the field of forensic science to a "sophistication of equipment and diversity of applications" and noting that "[a] modern forensic laboratory . . . must include a broad range of scientific disciplines").

126 See, e.g., State v. Heath, 957 P.2d 449, 459 (Kan. 1998) (following autopsy, county coroner concluded that victim suffered from battered child syndrome and later testified at trial that "the major diagnostic feature of battered child syndrome is a discrepancy between the history given by the caretaker and the physical findings, as well as no injury occurring during the time the child is in a protected environment"); State v. Holland, 346 N.W.2d 302, 307-08 (S.D. 1984); State v. Tanner, 675 P.2d 539, 544 (Utah 1983) ("The medical examiner’s expert opinion was that the multiple bruises on [the decedent’s] chin were not consistent with a single fall."). See generally Allan H. McCoid, The Battered Child and Other Assaults Upon the Family: Part One, 50 MINN. L. REV. 1, 18-19 (1965) (describing battered child syndrome); Milton Roberts, Annotation, Admissibility of Expert Medical Testimony on Battered Child Syndrome, 98 A.L.R.3d 306 (1980) (discussing admissibility of expert testimony on Battered Child Syndrome).

127 See, e.g., Wilson v. State, 803 A.2d 1034, 1044-45 (Md. 2002) (concluding that "there is not general agreement in the medical community that multiple SIDS deaths in a single family are genetically unrelated" and holding that admission of expert testimony applying the product rule to calculate the statistical possibility of multiple sudden infant deaths in one family was error).


129 For example, the expert in a majority of the voiceprint cases was Lieutenant Ernest W. Nash of the Michigan State Police. See, e.g., United States v. Baller, 519 F.2d 463, 464-65 (4th Cir. 1975); United States v. Addison, 498 F.2d 741, 742-43 (D.C. Cir. 1974); People v. Kelly, 549 P.2d 1240, 1242-43 (Cal. 1976); Commonwealth v. Topa, 369 A.2d 1277, 1279-80 (Pa. 1977). State experts also testify in federal court. See, e.g., United States
Federal prosecutors have access to several federal crime laboratories. The FBI Crime Laboratory\textsuperscript{130} is the most famous, but other agencies also have laboratories, including the Drug Enforcement Administration (DEA),\textsuperscript{131} Internal Revenue Service (IRS),\textsuperscript{132} Postal Inspection Service,\textsuperscript{133} Secret Service,\textsuperscript{134} Bureau of Alcohol, Tobacco and Firearms (ATF),\textsuperscript{135} Customs Service,\textsuperscript{136} Immigration and Naturalization Service (INS),\textsuperscript{137} Food & Drug Administration (FDA),\textsuperscript{138} Environmental Protection Agency (EPA),\textsuperscript{139} National Institute for

\textsuperscript{130}See, e.g., United States v. Davis, 103 F.3d 660, 675-76 (8th Cir. 1996) (composition analysis of bullet lead). For an in-depth look at the FBI Crime Laboratory, see DAVID FISHER, HARD EVIDENCE: HOW DETECTIVES INSIDE THE FBI'S SCI-CRIME LAB HAVE HELPED SOLVE AMERICA'S TOUGHEST CASES (1995).

\textsuperscript{131}See, e.g., United States v. Gault, 141 F.3d 1399, 1403 (10th Cir. 1998); United States v. Stewart, 104 F.3d 1377, 1383 (D.C. Cir. 1997); United States v. Coleman, 631 F.2d 908, 914 (D.C. Cir. 1980).

\textsuperscript{132}See United States v. Tipton, 964 F.2d 650, 653-55 (9th Cir. 1992) (handwriting analysis of fraudulent documents).


\textsuperscript{134}See United States v. Rosario, 118 F.3d 160, 162 (3d Cir. 1997) (handwriting examination of forged check).

\textsuperscript{135}See United States v. Alson, 112 F.3d 32, 33-34 (1st Cir. 1997) (firearm repair for possible ballistics testing).

\textsuperscript{136}See United States v. Oates, 560 F.2d 45, 63 (2d Cir. 1977) (heroin analysis).


\textsuperscript{138}See United States v. Garnett, 122 F.3d 1016, 1018 (11th Cir. 1997) (chemical analysis of medication in tampering case).

\textsuperscript{139}Cf. United States v. Hrubik, 280 F. Supp. 481, 481 (D. Alaska 1981) ("Defendant Hrubik has moved for an order requiring plaintiff to produce a water sample in its possession for analysis in order to verify or contradict a prior analysis made by plaintiff."). For state cases, see Ex parte Gingo, 605 So. 2d 1237, 1241 (Ala. 1992) and People v. Green, 474 N.Y.S.2d 171, 173 (Sup. Ct. 1984). See also David H. Kaye & George F. Sensabaugh, Jr., DNA Typing, in 3 MODERN SCIENTIFIC EVIDENCE § 25-2.7, at 282 (Faigman et al. eds., 2d ed. 2002) ("In one investigation, the National Fish and Wildlife Forensic Laboratory, using DNA testing, determined that the material offered for export actually came from a pig absolving the suspect of any export violations.").
Occupational Safety and Health, National Highway and Transportation Safety Administration, and the military.

In addition, federal forensic laboratories often provide their services to state law enforcement agencies. The services of the FBI Laboratory are available without charge to "all duly constituted law enforcement agencies . . . which may desire to avail themselves of the service." These services include both the examination of evidence and the court appearance of an expert. It is quite common to find FBI or other federal experts testifying in state criminal proceedings about a diverse array of forensic procedures, including the analysis of drugs, blood, hair, fibers, firearms, fingerprints, gun-

---

140 See United States v. Hansen, 262 F.3d 1217, 1235-36 (11th Cir. 2001) (field and laboratory testing of mercury exposure levels).
141 See United States v. Horn, 185 F. Supp. 2d 530, 549 (D. Md. 2002) ("I cannot agree that the [intoxication] tests, singly or in combination, have been shown to be as reliable as asserted by Dr. Burns, the NHTSA publications, and the publications of the communities of law enforcement officers and state prosecutors.").
143 28 C.F.R. § 0.85(g) (2004); see also FEDERAL BUREAU OF INVESTIGATION, HANDBOOK OF FORENSIC SCIENCE 20 (1994) ("The FBI Laboratory is the only federal full-service forensic science laboratory, serving the law enforcement community."); Marion E. Williams, The FBI Laboratory—Its Availability and Use by Prosecutors from Investigation to Trial, 28 U. KAN. CITY L. REV. 95, 99 (1960) ("The facilities of the FBI Laboratory are available without charge to all duly constituted state, county, and municipal law enforcement agencies of the United States and its territorial possessions."); cf. Gordon v. Thornberg, 790 F. Supp. 374, 375-76, 378 (D.R.I. 1992) (rejecting defendant's Freedom of Information Act request for FBI lab report which had been prepared for the prosecution).
147 See, e.g., Williams v. State, 312 S.E.2d 40, 52 (Ga. 1983) (FBI examiner); Kennedy, 578 N.E.2d at 638 (same); State v. Buell, 489 N.E.2d 795, 804-05 (Ohio 1986) (same); Robinson, 183 S.E.2d at 179-80 (same).
shot residues, shoeprints, voice comparisons, and the like. Most recently, states have turned to federal laboratories for assistance with DNA profiling. In some of these cases, federal laboratories provided services based on analyses that most state and local laboratories could not perform—for example, neutron activation analysis (NAA), compositional analysis of bullet lead, and, when initially introduced, DNA profiling. In one case, Earhart v. State, six different FBI experts testified.

When necessary, prosecutors have also retained private experts. For instance, the experts in bite-mark comparison cases are


151 See, e.g., Patler v. Slayton, 503 F.2d 472, 479 & n.5 (4th Cir. 1974) (FBI examiner in Virginia case testifying concerning the results of a battery of tests conducted on physical evidence, including footprints).

152 See, e.g., State v. Cunningham, 763 S.W.2d 186, 187 (Mo. Ct. App. 1988) (“Steven Cain, a voice print expert from the Department of Treasury, identified appellant, Michael Cunningham as being the person who made six of the seven 911 calls to the police.”).


158 The FBI experts’ testimony concerned bullet composition, firearms identification, hair analysis, fingerprint analysis, blood analysis, and soil testing. Although the soil analysis expert testified for the defense, the state had requested the examination. See id. at 614–15. As noted earlier, prosecutorial access may even extend to other countries. See supra notes 6–9 and accompanying text (discussing British, Dutch, and Canadian experts).

159 Dr. Louise Robbins, for example, testified often for the prosecution. See United States v. Ferri, 778 F.2d 985, 988 (3d Cir. 1985) (testifying that shoes found at scene of arson matched defendants’ shoe and footprint exemplars); People v. Puluti, 174 Cal. Rptr. 597, 603 (Ct. App. 1981) (stating that Robbins “had never before been qualified as an expert to testify about foot imprints left inside of shoes for purposes of identification”); People v.
typically privately employed dentists. The early DNA cases are also
illustrative; private laboratories were the pioneers of this technol-
ogy. Even today, mitochondrial DNA analysis is performed only by
the FBI, Armed Forces Institute of Pathology, and a few private
laboratories.

This does not mean that prosecutors never have problems secur-
ing experts, only that, as discussed below, they have an overwhelming
advantage when compared to defense counsel.

II
DEFENSE ACCESS TO EXPERT ASSISTANCE

Forensic laboratory services are not generally available to crimi-
nal defendants. A survey of approximately 300 crime laboratories re-
vealed that “fifty-seven percent . . . would only examine evidence
submitted by law enforcement officials.” FBI experts have testified
for the defense in some cases, but only pursuant to a subpoena.
If a defendant has sufficient financial resources, there are sources for obtaining expert assistance. O.J. Simpson, for example, hired a number of nationally recognized experts in criminalistics, forensic pathology, blood spatter, and DNA. Similarly, John Hinckley's insanity defense was based on the testimony of a number of experts. In the infamous Leopold and Loeb case, the prosecution hired the best-known psychiatrists in Chicago before the defense could act. Nevertheless, Clarence Darrow retained three of the most prominent psychiatrists in the country.

If the defendant is indigent, however, the picture is altered—often drastically. The Ake Court gave the states some leeway in implementing the right to expert assistance, and a number of statutory provisions—state and federal—attempt to provide this assistance to indigent defendants. In addition, most jurisdictions have provisions for court-appointed experts and special procedures for competency determinations and insanity defenses. These provisions are examined in the following sections.

A. Criminal Justice Act

The Criminal Justice Act of 1964 (CJA) provides expert assistance for indigent defendants in federal trials. Under subsection (e)(1) of the Act, an indigent defendant has the right to expert assistance when “necessary for an adequate representation.” According...
to the reported cases, psychiatrists are the experts most commonly sought pursuant to the CJA.\(^{172}\) Other requests have involved polygraph examiners,\(^{173}\) psychologists for eyewitness identification testi-

Counsel for a person who is financially unable to obtain investigative, expert, or other services necessary for an adequate representation may request them in an ex parte application. Upon finding, after appropriate inquiry in an ex parte proceeding, that the services are necessary and that the person is financially unable to obtain them, the court, or the United States magistrate judge if the services are required in connection with a matter over which he has jurisdiction, shall authorize counsel to obtain the services.


Failure of the defense to make a timely request under the Act constitutes a waiver. See, e.g., United States v. Scott, 48 F.3d 1389, 1396 (5th Cir. 1995) ("[C]ounsel never referred to the statute, or to Scott's financial ability to procure an expert. The request made by counsel was for 'time to employ' [a voice identification] expert, not for permission to employ an expert at government expense."); United States v. Patterson, 438 F.2d 328, 329 (5th Cir. 1971) ("[T]he rights established by 18 U.S.C.A. § 3006A(e) are procedural, and the failure to make a timely motion or request waives the necessity for the court's consideration of an appointment of an expert witness."); see also United States v. Childress, 58 F.3d 693, 751-32 (D.C. Cir. 1995) (denying request that was withdrawn and reinstated two hours before trial).

Circuit courts use an "abuse of discretion" standard when reviewing a trial court's decision concerning the appointment of an expert under the CJA. See, e.g., United States v. Gilmore, 282 F.3d 398, 406 (6th Cir. 2002); United States v. Cravens, 275 F.3d 637, 639 (7th Cir. 2001).

\(^{172}\) See, e.g., United States v. Roman, 121 F.3d 136, 143-44 (3d Cir. 1997) ("[T]he district court did not abuse its discretion by denying Samuel Roman funds to retain a psychiatrist."); United States v. Castro, 15 F.3d 417, 422 (5th Cir. 1994) ("[D]efendant never provided the district court with any evidence, aside from his drug addiction, to support his request for psychiatric evaluation."); United States v. Smith, 987 F.2d 888, 890-91 (2d Cir. 1993); United States v. Rinchack, 820 F.2d 1557, 1563-66 (11th Cir. 1987); United States v. Crews, 781 F.2d 826, 833-34 (10th Cir. 1986) ("[A]n indigent defendant raising an insanity defense is entitled to the aid of a psychiatrist."); United States v. Reason, 549 F.2d 309, 310-11 (4th Cir. 1977); United States v. Bass, 477 F.2d 723, 726 (9th Cir. 1973); United States v. Theriault, 440 F.2d 713, 714 (5th Cir. 1971); United States v. Taylor, 437 F.2d 371, 375 (4th Cir. 1971).


See, e.g., United States v. Penick, 496 F.2d 1105, 1109-10 (7th Cir. 1974) (request granted in part and denied in part). For a more general discussion, see Wanda Ellen Wakefield, Annotation, Right of Indigent Criminal Defendant to Polygraph Test at Public Expense, 11 A.L.R. 4th 733 (1982).
mony, fingerprint experts, handwriting examiners, accountants, and hypnotists. These are the stock-and-trade experts in criminal litigation. Less commonly, criminal defendants

---

174 See, e.g., United States v. Labansat, 94 F.3d 527, 530 (9th Cir. 1996) ("Counsel can easily expose through cross-examination and closing argument the unreliability, if any, of delayed eyewitness identifications."); United States v. Larkin, 978 F.2d 964, 971 (7th Cir. 1992) (finding that it was not error to refuse appointment); United States v. George, 975 F.2d 1431, 1432 (9th Cir. 1992) (same); United States v. Brewer, 783 F.2d 841, 842–43 (9th Cir. 1986) (same); United States v. Purham, 725 F.2d 450, 454 (8th Cir. 1984) (same); United States v. Sims, 617 F.2d 1371, 1375 (9th Cir. 1980) (same); United States v. Fosher, 590 F.2d 381, 382 (1st Cir. 1979) (same).

175 See, e.g., United States v. Walborn, 730 F.2d 192, 194 (5th Cir. 1984) (denying request not error); United States v. Patterson, 724 F.2d 1128, 1131 (5th Cir. 1984) (denying request error); United States v. Durant, 545 F.2d 823, 829 (2d Cir. 1976) (same).


177 See, e.g., United States v. Lefkowitz, 125 F.3d 608, 620 (8th Cir. 1997) (finding no due process violation where court limited accused to “$169,000 in accountant expert fees under the Criminal Justice Act”); United States v. Sloan, 65 F.3d 861, 863–64 (10th Cir. 1995) (finding denial of request for CPA to examine defendant’s financial status to show lack of drug dealing proper where prosecution conceded that defendant had no funds); United States v. Kennedy, 64 F.3d 1465, 1472–73 (10th Cir. 1995) (“[W]e conclude that the court did not abuse its discretion by denying the accounting services because Kennedy did not demonstrate their necessity to his representation.”); United States v. Hope, 901 F.2d 1013, 1021 n.13 (11th Cir. 1990) (finding denial of request not error).


179 Other types of experts have also been requested. See, e.g., United States v. Deering, 179 F.3d 592, 597 (8th Cir. 1999) (“Deering next argues the district court erred in denying him additional funds to test a[n] .. audio tape made by the Cedar Rapids Police Department, .. The district court authorized several thousand dollars for testing of the tape, and we think .. [denying] the additional expert funds [was not error].”); United States v. Bailey, 112 F.3d 758, 767 (4th Cir. 1997) (“About a month or more before trial, Bailey had had made available to him a forensic psychologist, a forensic pathologist and an addictionologist. And at least a week before trial, the court authorized a blood, hair and fiber expert.”); United States v. Cannon, 88 F.3d 1495, 1503–04 (8th Cir. 1996) (upholding denial of request for chemist to testify concerning composition of cocaine and cocaine base); United States v. Manning, 79 F.3d 212, 218–19 (1st Cir. 1996) (concluding that denial of request for retired police officer to testify about inadequacies of police investigation and failure to test broken glass of window for fingerprints and to trace origins of pipe bomb components was not error); Sloan, 65 F.3d at 864 (denying request for medical doctor to show defendant was not a drug user proper where prosecution conceded this fact); United States v. Scott, 48 F.3d 1389, 1395–96 (5th Cir. 1995) (upholding determination that request for voice identification expert had been waived by lack of timely motion); United States v. Greschner, 802 F.2d 373, 376 (10th Cir. 1986) (denying request for penologist not error); United States v. Harris, 542 F.2d 1283, 1315–16 (7th Cir. 1976) (concluding that request for clinical psychologist to assist in jury selection and request for urban sociologist properly denied); Stead v. United States, 67 F. Supp. 2d 1064, 1075 (D.S.D. 1999) ("[I]t appears unlikely that the trial court would have appointed an expert to testify generally on the issue of intoxication if timely application had been made for one.").
request optometrists,\textsuperscript{180} addictionologists,\textsuperscript{181} theologians,\textsuperscript{182} linguists,\textsuperscript{183} sexual offender profilers,\textsuperscript{184} and psychiatrists to examine alleged child sex abuse victims.\textsuperscript{185}

1. \textit{Purpose of CJA}

The CJA, which was enacted two decades before \textit{Ake} was decided, is instructive in many ways. For one thing, the courts cannot agree on the underlying purpose of the Act. The general purpose of the CJA is to "achieve more meaningful and effective representation for defendants in Federal criminal cases."\textsuperscript{186} In interpreting subsection (e), however, the courts have identified three different purposes. First, some courts specify the purpose as "redress[ing] the imbalance in the criminal process when the resources of the United States Government are pitted against an indigent defendant."\textsuperscript{187} This purpose incorporates a due process concern: an imbalance between the prosecution and defense.\textsuperscript{188} Second, other courts speak of "plac[ing] indigent defendants as nearly as may be on a level of equality with nonindigent defendants in the defense of criminal cases."\textsuperscript{189} This reflects an equal protection rationale: an imbalance between indigent and non-indigent defendants.\textsuperscript{190} Third, still other courts refer to "accord[ing] federal prisoners full constitutional rights under Due Process and the Sixth Amendment."\textsuperscript{191} By referring to the Sixth Amendment, these courts focus on an effective-assistance-of-counsel rationale.\textsuperscript{192}

\textsuperscript{180} See United States v. Childress, 58 F.3d 693, 731–32 (D.C. Cir. 1995) (denying request for optometrist not error); United States v. Moss, 544 F.2d 954, 961–62 (8th Cir. 1976) (rejecting argument that district court abused its discretion by deferring appointment of optometrist "pending introduction of evidence that [defendant's] eyesight was material to an adequate defense").

\textsuperscript{181} See Bailey, 112 F.3d at 767.

\textsuperscript{182} See United States v. Bauer, 84 F.3d 1549, 1559 (9th Cir. 1996) (considering request for a theology expert to support defense under the Religious Freedom Restoration Act).

\textsuperscript{183} See United States v. Valverde, 846 F.2d 513, 517 (8th Cir. 1988) (upholding denial of request).

\textsuperscript{184} See United States v. St. Pierre, 812 F.2d 417, 420 (8th Cir. 1987) (denying request for expert to determine whether defendant fit sexual offender profile was not error).

\textsuperscript{185} See United States v. Spotted War Bonnet, 882 F.2d 1360, 1362 (8th Cir. 1989) (holding that district court did not abuse its discretion by denying request for psychiatrist to examine alleged child sex abuse victims).


\textsuperscript{187} United States v. Durant, 545 F.2d 823, 827 (2d Cir. 1976).

\textsuperscript{188} See infra text accompanying notes 300–26 (discussing due process rationales).

\textsuperscript{189} United States v. Tate, 419 F.2d 131, 132 (6th Cir. 1969); accord United States v. Schappel, 445 F.2d 716, 721 n.13 (D.C. Cir. 1971).

\textsuperscript{190} See infra text accompanying notes 263–80 (discussing equal protection rationales).

\textsuperscript{191} Mason v. Arizona, 504 F.2d 1345, 1352 (9th Cir. 1974); accord Proffitt v. United States, 582 F.2d 854, 857 (4th Cir. 1978).

\textsuperscript{192} See infra text accompanying notes 327–52 (discussing right-to-counsel rationale).
2. **Standard for Appointment**

Another issue is the standard used for the appointment of experts. The CJA requires the provision of "expert . . . services necessary for an adequate representation."\(^{193}\) The Fifth Circuit, applying this language, has reasoned that "where the government's case rests heavily on a theory most competently addressed by expert testimony, an indigent defendant must be afforded the opportunity to prepare and present his defense to such a theory with the assistance of his own expert pursuant to section 3006A(e)."\(^{194}\) This standard looks to the prosecution's case in determining necessity, suggesting a due process or right to counsel rationale. In contrast, the Ninth Circuit requires expert services when "a reasonable attorney would engage such services for a client having the independent financial means to pay for them."\(^{195}\) This "private attorney" standard for determining necessity is based on the equal protection rationale. In addition, the relative strictness of the standard is sometimes difficult to discern. The First Circuit requires that the proffered expert testimony be "pivotal" or "critical" to the defense.\(^{196}\) In contrast to this stringent test, the Eleventh Circuit has held that the trial court may reject an application for appointment if the accused "does not have a plausible claim or defense"\(^{197}\)—a far less demanding test.

---

193 18 U.S.C. § 3006A(e)(1) (2000) (emphasis added). The First Circuit has noted: "In 1986, subsection (e) was amended by substituting 'adequate representation' for 'an adequate defense.' Although the legislative history does not provide an explanation for this change, one could infer that the change was meant to broaden the reach of subsection (e)'s provisions." United States v. Abreu, 202 F.3d 386, 389 n.1 (1st Cir. 2000) (citations omitted); see also United States v. Sailer, 552 F.2d 213, 215 (8th Cir. 1977) (stating that a defendant seeking CJA funds must meet a two-pronged test: "(1) The accused must satisfy the court that financial inability prevents him from obtaining the services he requests; and (2) The accused must show need for such services to present an adequate defense." (quoting United States v. Schultz, 431 F.2d 907, 908 (8th Cir. 1970))).

194 United States v. Patterson, 724 F.2d 1128, 1130 (5th Cir. 1984); see United States v. Williams, 998 F.2d 258, 263–64 (5th Cir. 1993).

195 United States v. Bass, 477 F.2d 723, 725 (9th Cir. 1973). This standard was derived from Judge Wisdom's concurring opinion in United States v. Theriault, 440 F.2d 713, 717 (5th Cir. 1971) (Wisdom, J., concurring); accord United States v. Smith, 987 F.2d 888, 891 (2d Cir. 1993); Brinkley v. United States, 498 F.2d 505, 509–10 (8th Cir. 1974); see also United States v. Labansat, 94 F.3d 527, 530 (9th Cir. 1996) ("Labansat must show that the lack of an expert deprived him of effective assistance of counsel. He must demonstrate both that reasonably competent counsel would have required the assistance of the requested expert for a paying client, and that he was prejudiced by the lack of expert assistance.").

196 United States v. Manning, 79 F.3d 212, 218 (1st Cir. 1996).

197 United States v. Rinchack, 820 F.2d 1557, 1564 (11th Cir. 1987); accord United States v. Gilmore, 282 F.3d 398, 406 (6th Cir. 2002) ("Gilmore's defense was not plausible. The evidence that he was the perpetrator was overwhelming. Gilmore can point to nothing that could have been done by an expert or an investigator that had the potential of helping his case."); United States v. Roman, 121 F.3d 136, 143 (3d Cir. 1997) ("[A] court should first 'satisfy itself that a defendant may have a plausible defense.'" (quoting United
3. **Scope of the Right**

Third, the federal courts have also addressed the scope of assistance provided by the CJA. An adequate defense includes both "pretrial and trial assistance to the defense as well as potential trial testimony."\(^{198}\) Thus, the statutory right is not limited to the trial. The right also includes "preparation for cross-examination of a government expert as well as presentation of an expert defense witness."\(^{199}\) This indicates that the expert may be an advisor in lieu of, or in addition to, a trial witness. Therefore, the admissibility of expert testimony may not be the sole, determinative factor in responding to a request for services.\(^{200}\) In addition, requests for expert assistance in sentencing\(^{201}\) and collateral proceedings have been permitted.\(^{202}\) One court has even held that the Act extends to plea bargaining,\(^{203}\) an important development given the decreasing number of trials.\(^{204}\)

---

\(^{198}\) States v. Alden, 767 F.2d 314, 318 (7th Cir. 1984)); Alden, 767 F.2d at 318–19 (applying "plausible defense" requirement in connection with "private attorney" standard).

\(^{199}\) United States v. Durant, 545 F.2d 823, 827 (2d Cir. 1976).

\(^{200}\) See Sims, 617 F.2d at 1375 n.3 ("While the admissibility or acceptance of a particular type expert's field of study may be a factor in considering the 'necessity' of appointing an expert, to hold that it was the only factor would be inconsistent with the underlying purpose of the Criminal Justice Act." (citations omitted)). But see United States v. Fosher, 590 F.2d 381, 384 (1st Cir. 1979); United States v. Penick, 496 F.2d 1105, 1110 (7th Cir. 1974).

\(^{201}\) See United States v. Abreu, 202 F.3d 386, 390 (1st Cir. 2000) ("[R]ead the [CJA] as a whole, it appears that Congress intended the provisions of subsection (e) to apply to sentencing. . . . [I]t appears that this may be the first circuit opinion to so hold."); United States v. Barney, 55 F. Supp. 2d 1310, 1314 (D. Utah 1999) ("[A]s to whether an expert should be appointed for evaluation sentencing purposes, for a possible downward departure . . . , it would appear this is within the range of authority of the court under 18 USC § 3006A(e)."); see also United States v. Craven, 275 F.3d 637, 639 n.3 (7th Cir. 2001) (assuming without deciding that CJA applies to request for expert in support of motion for downward sentencing departure); United States v. Smith, 987 F.2d 888, 891 (2d Cir. 1993) ("At sentencing, expert testimony would also be relevant because . . . the guidelines allow[ ] a downward departure for an incomplete defense of duress. Testimony as to Smith's unusual susceptibility to coercion would be relevant in determining whether he had an honest but unreasonable belief that he was being coerced."); United States v. Nusz, 809 F. Supp. 814, 816 (D. Kan. 1992) (denying request for psychologist to determine future dangerousness for sentencing purposes), aff'd, 17 F.3d 1437 (10th Cir. 1994).

\(^{202}\) See Lawson v. Dixon, 3 F.3d 743, 750 (4th Cir. 1993) ("[D]efendants who wish to have the assistance of experts at trial or in collateral-attack proceedings may apply for government funds to pay the cost of employing such experts pursuant to section 3006A(e)(1)."").

\(^{203}\) See Barney, 55 F. Supp. 2d at 1313.

\(^{204}\) See Adam Liptak, *U.S. Suits Multiply, But Fewer Ever Get to Trial, Study Says*, N.Y. TIMES, Dec. 14, 2003, at A1 ("The percentage of federal criminal prosecutions resolved by trials . . . declined . . . to less than 5 percent last year from 15 percent present in 1962. The number of prosecutions more than doubled in the last four decades, but the number of criminal trials fell, to 3,574 last year from 5,097 in 1962.").
4. **Monetary Limit**

Fourth, the monetary limits imposed by the CJA are unrealistic, restricting expenses for expert services to $1,000 unless the court certifies that a greater amount is “necessary to provide fair compensation for services of an unusual character or duration...” Until 1986, the maximum had been $300. Even today, however, “[t]he Act’s $1,000 limit for defense experts is far too low... and must be increased if due process is to be afforded defendants.”

5. **Ex parte Applications**

Finally, the CJA addresses an issue that has proved controversial under *Ake* both the application for defense services and the proceedings to determine whether to grant the request are *ex parte*. As one court has noted, “[t]he manifest purpose of requiring that the inquiry be ex parte is to insure that the defendant will not have to make a premature disclosure of his case.” In effect, this provision permits the expert to “be a partisan witness. His conclusions need not be reported in advance of trial to the court or to the prosecution.”

B. **State Statutes**

A number of state statutes and rules also provide expert assistance for indigent defendants. These provisions, however, differ in

---


207 Weinstein, supra note 2, at 1008.

208 See infra text accompanying notes 633–41 (discussing *ex parte* applications).

209 Marshall v. United States, 423 F.2d 1315, 1318 (10th Cir. 1970); accord United States v. Chavis, 476 F.2d 1137, 1141–42 (D.C. Cir. 1973); United States v. Sutton, 464 F.2d 552, 553 (5th Cir. 1972); United States v. Hamlet, 456 F.2d 1284, 1284–85 (5th Cir. 1972); see also United States v. Bailey, 112 F.3d 758, 768 (4th Cir. 1997) (holding that it was not error to unseal *ex parte* motions for experts where the defendant had not properly complied with discovery requests); United States v. Lawson, 653 F.2d 299, 304 (7th Cir. 1981) (rejecting claim that the government improperly participated in *ex parte* proceeding by informing court that defendant seeking appointment of expert had posted a $25,000 surety bond).

210 United States v. Bass, 477 F.2d 723, 726 (9th Cir. 1973); accord United States v. Theriault, 440 F.2d 713, 715 (5th Cir. 1971). Courts have held that a defendant’s failure to object to the presence of a prosecutor or the lack of an *ex parte* hearing is subject to plain error analysis. See United States v. Pofahl, 990 F.2d 1456, 1472 (5th Cir. 1993) (lack of hearing); United States v. Greschner, 802 F.2d 373, 380 (10th Cir. 1986) (prosecutors present).

many respects. Some explicitly provide for the services of experts,\textsuperscript{212} while others mention only investigative services.\textsuperscript{213} Still others refer to the reimbursement of reasonable or necessary expenses incurred by attorneys representing indigent defendants.\textsuperscript{214}

The coverage of the state provisions also varies. Some are limited to capital cases,\textsuperscript{215} while one applies only in drug prosecutions.\textsuperscript{216} Moreover, some statutes provide for the payment of reasonable expenses,\textsuperscript{217} while others specify a maximum amount.\textsuperscript{218} Some of these limits are shamefully low: $250 for each capital defendant in Illinois\textsuperscript{219} and $300 per expert in Nevada\textsuperscript{220} and New Hampshire.\textsuperscript{221} In some instances, statutes that establish maximums do permit reimbursement for expenses above the maximum in extraordinary circumstances.\textsuperscript{222} The procedures specified for obtaining expert assistance also vary. A number of statutes, like the CJA, provide for \textit{ex parte} proceedings,\textsuperscript{223} while other statutes are silent on this point.

\textsuperscript{212} See, e.g., HAW. REV. STAT. ANN. § 802-7 (Michie 2003); IOWA CODE ANN. § 813.2 R. 19(4) (West 1997); KAN. STAT. ANN. § 22-4508 (1995); MASS. GEN. LAWS ch. 261, § 27A & 27C(4) (1992); MINN. STAT. ANN. § 611.21(a) (West 2003); N.H. REV. STAT. ANN. § 604-A:6 (2001); N.Y. COUNTY LAW § 722-c (McKinney 1991); N.C. GEN. STAT. § 7A-454 (2003); OR. REV. STAT. § 135.055(3) (2001); TEX. CRIM. PROC. CODE ANN. § 26.05(a) (Vernon 1989); WASH. SUP. CT. CRIM. R. 3.1(f).

\textsuperscript{213} See, e.g., ALASKA STAT. § 18.85.100(a) (Michie 2002); UTAH CODE ANN. § 77-32-301(3) (2003).

\textsuperscript{214} See, e.g., ALA. CODE § 15-12-21(d) (1995); DEL. CODE ANN. tit. 29, § 4605 (2003); IDAHO CODE § 19-860(b) (Michie 1997); S.C. CODE ANN. § 17-3-80 (Law. Co-op. 2003).

\textsuperscript{215} See, e.g., ARIZ. REV. STAT. ANN. § 13-4018(B) (West 2001); CAL. PENAL CODE § 987.9 (West 1985); 725 ILL. COMP. STAT. ANN. 5/113-9(d) (West 1992); TENN. CODE ANN. § 40-14-207(b) (2003); see Judith Olmstead, Comment, \textit{The Constitutional Right to Assistance in Addition to Counsel in a Death Penalty Case}, 23 DUQUESNE L. REV. 753 (1985).

\textsuperscript{216} See OHIO REV. CODE ANN. § 2925.51(E) (Anderson 2003).

\textsuperscript{217} See, e.g., FLA. STAT. ANN. § 914.06 (West 2001); IOWA CODE ANN. § 813.2 R. 19(4) (West 1997); KAN. STAT. ANN. § 22-4508 (1995); WASH. SUP. CT. CRIM. R. 3.1(f)(3).

\textsuperscript{218} See, e.g., MICH. STAT. ANN. § 611.21(b) (West 2003) ($1000 maximum); S.C. CODE ANN. § 17-3-80 (Law. Co-op. 2000) ($2000 maximum); W. VA. CODE ANN. § 29-21-13a(e) (Michie 2001) (establishing a $1500 maximum for cases other than those \textbf{"}involving felonies for which a penalty of life imprisonment may be imposed\textbf{"}).

\textsuperscript{219} 725 ILL. COMP. STAT. ANN. 5/113-3(d) (West 1992).


\textsuperscript{221} N.H. REV. STAT. ANN. § 604-A:6 (Michie 2001) (establishing $300 limit \textbf{"}unless the court determines that the nature or quantity of [the expert's] services reasonably merits greater compensation\textbf{"}).

\textsuperscript{222} See, e.g., MICH. STAT. ANN. § 611.21(b) (West 2003) (establishing $1,000 limit unless "services [are] of an unusual character or duration"); N.Y. COUNTY LAW § 722-c (McKinney 1991) (establishing $300 maximum absent extraordinary circumstances); W. VA. CODE ANN. § 29-21-13a(e) (Michie 1999) (establishing $1,500 maximum for cases where life imprisonment is not a possible penalty unless "good cause shown").

\textsuperscript{223} See, e.g., KAN. STAT. ANN. § 22-4508 (1995); MICH. STAT. ANN. § 611.21(a) (West 2003); N.Y. COUNTY LAW § 722-c (McKinney 2003); OR. REV. STAT. § 135.055(3)(a) (2001); TENN. CODE ANN. § 40-14-207(b) (2003); see also WIS. STAT. ANN. § 165.79(1) (West 1997) (providing that the results of any state laboratory analysis conducted for the defense in a felony action are privileged); People v. Berryman, 864 P.2d 40, 53 (Cal. 1993) (holding that state statute specifying that application for expert funds be confidential does not pre-
The Virginia statute is somewhat unique because it established a laboratory independent of law enforcement agencies. Defense counsel in Virginia, with court approval, may submit evidence directly to this laboratory. Other states also have statutory provisions which permit the defense to submit evidence for analysis. Prosecution access to the lab results, however, negates the efficacy of such provisions.

C. Mental Competency & Insanity Statutes

Frequently, a specific statute governs the appointment of experts to determine the mental competency of an accused to stand trial and to conduct psychiatric examinations where insanity is raised as a defense. Although both competency and insanity determinations involve psychiatric experts, they present different legal issues. Competency is a due process issue, and either party or, more signif-

---

224 See, e.g., N.D. CENT. CODE § 19-01-10 (1997); Wis. STAT. ANN. § 165.79 (West 1997).
225 Symposium on Science and the Rules of Legal Practice, 101 F.R.D. 599, 646 (1984) (statement of Professor Andre Moenssens). Professor Andre Moenssens stated: Control of the forensic science laboratory in Virginia was transferred about 11 years ago from the Department of Public Safety, where it functioned as a police laboratory, to the Department of General Services, where it operates as part of the consolidated laboratory system of the state. I assure you that this was a change in name only and not in attitude of the personnel. Prosecuting attorneys and other members of the law enforcement community continue to be the main consumers of forensic science services, and the forensic scientists still are in spirit, if no longer in law, members of that police community. A Virginia statute allows defense attorneys to use these services, but only four requests have been submitted in over a decade. As nearly as I have been able to determine, this disappointing response is due to mistrust by defense attorneys of the laboratory personnel, whom they consider to be employees of a police laboratory.

226 For example, a federal district court may order a mental examination to determine competency to stand trial or insanity at the time of the crime under the Insanity Defense Reform Act of 1984, 18 U.S.C. §§ 4241-42 (2000).
227 Mental competency concerns the accused's mental condition at the time of trial, while insanity refers to the defendant's mental condition at the time of the offense. Moreover, the insanity defense raises substantially different policy issues than does competency. Insanity concerns a defendant's culpability for his criminal acts; it is a substantive criminal law issue. In contrast, mental competency is a due process issue. Accordingly, different standards apply in these two contexts. "[T]he 'test [for competency] must be whether [the defendant] has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding—and whether he has a rational as well as factual understanding of the proceedings against him."' Dusky v. United States, 362 U.S. 402, 402 (1960) (per curiam) (quoting Solicitor General).
228 The Supreme Court has held that "the failure to observe procedures adequate to protect a defendant's right not to be tried or convicted while incompetent to stand trial depriv es him of his due process right to a fair trial." Drope v. Missouri, 420 U.S. 162, 172 (1975) (citing Pate v Robinson, 383 U.S. 375, 385 (1966)).
icantly, the court can raise it at any time.\textsuperscript{229} In contrast, insanity is an affirmative defense, governed by substantive law and subject to the adversarial process.\textsuperscript{230} In either case, understanding the role of the expert is critical. As the Fifth Circuit has explained, an expert appointed under a competency statute is not a defense expert:

A psychiatrist appointed under § 4242 at the government's request or on the court's own motion is "expected to be neutral and detached," and reports his findings to the court even if the defendant does not wish him to do so. Under the Criminal Justice Act, 18 U.S.C. § 3006A, by contrast, the mental health expert "fills a different role." The § 3006A expert's conclusions need not be reported either to the court or to the prosecution.\textsuperscript{231}

D. Court-Appointed Experts

A trial court has inherent authority to appoint expert witnesses.\textsuperscript{232} In many jurisdictions, this authority has been codified in statutes and court rules—\textsuperscript{233}—for example, Federal Evidence Rule 706. Here, again, the role of the expert is not that of a defense expert.\textsuperscript{234}

\textsuperscript{229} See Drope, 420 U.S. at 181 ("Even when a defendant is competent at the commencement of his trial, a trial court must always be alert to circumstances suggesting a change that would render the accused unable to meet the standards of competence to stand trial.").

\textsuperscript{230} See Fed. R. Crim. P. 12.2(c) ("If the defendant provides notice [that he will assert the insanity defense], the court must, upon the government's motion, order the defendant to be examined under 18 U.S.C. § 4242.").

\textsuperscript{231} United States v. Williams, 998 F.2d 258, 263 (5th Cir. 1993) (quoting United States v. Theriault, 440 F.2d 713, 715 (5th Cir. 1971)).


\textsuperscript{233} See 2 John Henry Wigmore, Evidence § 563 (James H. Chadbourn ed., 1979) (listing rules and statutes); Joe S. Cecil & Thomas E. Willging, Court-Appointed Experts: Defining the Role of Experts Appointed Under Federal Rule of Evidence 706 (1993); see also Annotation, Trial Court's Appointment, in Civil Case, of Expert Witness, 95 A.L.R. 2d 390 (1964) (examining cases "in which matters pertinent to the trial court's appointment of an expert witness in a civil case have been discussed or mentioned").

\textsuperscript{234} The rule provides:

The court may on its own motion or on the motion of any party enter an order to show cause why expert witnesses should not be appointed, and may request the parties to submit nominations. The court may appoint any expert witnesses agreed upon by the parties, and may appoint expert witnesses of its own selection. An expert witness shall not be appointed by the court unless the witness consents to act. A witness so appointed shall be informed of the witness' duties by the court in writing, a copy of which shall be filed with the clerk, or at a conference in which the parties shall have opportunity to participate. A witness so appointed shall advise the parties of the witness' findings, if any; the witness' deposition may be taken by any
Indeed, Rule 706(d) recognizes the right of the parties to call their own experts, notwithstanding the appointment of an expert by the court.\textsuperscript{235}

E. Post-Conviction Provisions

Some statutes address the use of expert services in post-conviction collateral attacks on federal and state court convictions.\textsuperscript{236} Moreover, the increasing influence of DNA profiling has made post-conviction testing critical.\textsuperscript{237} Illinois was one of the first jurisdictions to specifically authorize post-conviction DNA testing.\textsuperscript{238} In Texas, the relevant statute\textsuperscript{239} provides for a three-step procedure: (1) an initial inquiry in the trial court regarding whether forensic DNA testing is appropriate; (2) in the event testing is ordered, a second hearing in the trial court to determine whether the test results are favorable; and (3) an appeal party; and the witness may be called to testify by the court or any party. The witness shall be subject to cross-examination by each party, including a party calling the witness.

FED. R. EVID. 706(a) (emphasis added).


\textsuperscript{236} E.g., 21 U.S.C. § 848(q)(4)(B) & (q)(9) (2000); see Lawson v. Dixon, 3 F.3d 743, 750–51 (4th Cir. 1995) (concluding that ex parte proceedings are required for the adjudication of appointment requests made under § 848(q)); Owens v. State, 908 S.W.2d 925, 929 (Tenn. 1995) (concluding that Tennessee statute providing for the reimbursement of expert fees incurred by indigent capital defendants applies to post-conviction cases). But see Davis v. State, 912 S.W.2d 689, 695–97 (Tenn. 1995) (concluding that the Tennessee statute does not apply in non-capital post-conviction cases, and finding no constitutional requirement to provide assistance in such circumstances because "[i]n the absence of a Constitutional right to counsel, there can be no Constitutional right to support services at state expense").

\textsuperscript{237} A 1996 Department of Justice DNA report highlights the need for post-conviction proceedings. The report discusses the exoneration of 28 convicts through the use of DNA technology—some of whom had been sentenced to death. See Connors et al., supra note 13, at 34–76.

\textsuperscript{238} 725 ILL. COMP. STAT. ANN. 5/116-3 (West 1997); see Gregory W. O'Reilly, A Second Chance for Justice: Illinois' Post-Trial Forensic Testing Law, 81 JUDICATURE 114, 114 (1997).

\textsuperscript{239} TEX. CRIM. PROC. CODE ANN. §§ 64.01–64.05 (Vernon 1989). Article 64.03(a) permits a convicting court to order post-conviction forensic DNA testing in cases where identity was at issue if two conditions are met. First, the convicting court must find that the evidence remains in a condition that makes DNA testing possible and that the evidence was subjected to a sufficient chain of custody. Second, the convicted person must establish by a preponderance of the evidence both that he would not have been convicted if DNA testing had yielded exculpatory results and that the request for post-conviction testing was not merely a delay tactic. See id. § 64.03(a).
of either determination.\textsuperscript{240} Recently, the Justice Department's Commission on the Future of DNA Evidence addressed the issue, recommending procedures for dealing with these cases.\textsuperscript{241} In situations where statutory authority is absent, some courts have themselves stepped in to provide for DNA testing.\textsuperscript{242}

F. Ad Hoc Procedures

A few courts have been quite inventive in providing for the defendant's right to expert assistance. For example, in \textit{People v. Evans},\textsuperscript{243} the court ordered the New York City Police Department's Auto Crime Division to assign an experienced officer to assist the defense in inspecting vehicles: "Where the government holds a monopoly of expertise on a matter that reasonably bears on a defense in a criminal action, due process requires that a defendant be afforded access to this expertise."\textsuperscript{244} In another case, \textit{People v. Dickerson},\textsuperscript{245} the Illinois Appellate Court ordered the trial court to direct "the Illinois State crime lab [to] perform a handwriting analysis" for an indigent defendant.\textsuperscript{246} In still a third case, a federal district court ordered the government to make laboratory facilities available to the defense.\textsuperscript{247}

III

The Road to Ake

The need for expert assistance was recognized as early as 1929 when Justice Cardozo commented: "[U]pon the trial of certain issues,

\textsuperscript{240} See Gray v. State, 69 S.W.3d 835, 837 (Tex. Crim. App. 2002) (holding that an indigent person has a statutory right to counsel for appeals commenced under these provisions).

\textsuperscript{241} \textsc{Nat'l Comm'n on the Future of DNA Evidence, Nat'l Inst. of Justice, Postconviction DNA Testing: Recommendations for Handling Requests} xiv (1999) (commenting that "[b]ecause of this present state of legal uncertainty, litigating postconviction DNA applications often will be unnecessarily complex, expensive, and time consuming," and suggesting that "prosecutors, defense counsel, and trial courts work cooperatively to assess cases, find the evidence, arrange for DNA testing, and make joint requests for judicial or executive relief when the facts so warrant after a result favorable to the petitioner").

\textsuperscript{242} See Lambert v. State, 777 So. 2d 45, 49 (Miss. 2001) ("[W]e cannot say with definite and firm conviction that a mistake has not been made. The least we can do ... is allow Lambert to apply modern science to the evidence used against him. Accordingly, we remand ... for entry of an order granting DNA analysis of the appropriate evidence."); State v. Hogue, 818 A.2d 325, 327-28 (N.J. 2003) ("A convicted person has the right to request DNA testing. ... 'Thus, the absence of a rule specifically authorizing a post-judgment motion seeking a DNA analysis ... does not deprive the trial court of the right, in appropriate circumstances, to grant the relief requested.'" (quoting State v. Cann, 775 A.2d 773 (N.J. Super. Ct. App. Div. 2001))).

\textsuperscript{243} 534 N.Y.S.2d 640 (Sup. Ct. 1988).

\textsuperscript{244} \textit{Id.} at 642.


\textsuperscript{246} \textit{See id.} at 767-68.

\textsuperscript{247} \textit{See United States v. Bockius, 564 F.2d 1193, 1196 (5th Cir. 1977).}
such as insanity or forgery, experts are often necessary both for prosecution and for defense. . . . [A] defendant may be at an unfair disadvantage, if he is unable because of poverty to parry by his own witnesses the thrusts of those against him.\textsuperscript{248} Judge Jerome Frank made a similar observation in 1956, remarking that "[t]he best lawyer in the world cannot competently defend an accused person if the lawyer cannot obtain existing evidence crucial to the defense, e.g., if the defendant cannot pay the fee . . . of an expert accountant or mining engineer or chemist."\textsuperscript{249} Judge Frank went on to observe: "In such circumstances, if the government does not supply the funds, justice is denied the poor—and represents but an upper-bracket privilege."\textsuperscript{250}

Several early studies reached the same conclusion. In 1968, the first edition of the ABA Criminal Justice Standards observed: "The quality of representation at trial . . . may be excellent and yet valueless to the defendant if his defense requires the assistance of a psychiatrist or handwriting expert and no such services are available."\textsuperscript{251} Even President Nixon's Crime Commission report commented on the issue.\textsuperscript{252} Thus, it is somewhat surprising that the Warren Court, in launching its criminal procedure revolution, never addressed the issue. \textit{Ake} was not decided until 1985, over a decade after the demise of the Warren Court.\textsuperscript{253}

A. \textit{United States ex rel. Smith v. Baldi}

Prior to \textit{Ake}, the Supreme Court had considered an indigent accused's right to expert services only once. In \textit{United States ex rel. Smith v. Baldi},\textsuperscript{254} a murder defendant argued that "the assistance of a psychiatrist was necessary to afford him adequate counsel" in the presentation of his insanity defense, and, thus, the state was obligated to provide such assistance.\textsuperscript{255} In rejecting this argument, the Supreme

\textsuperscript{248} Reilly v. Berry, 166 N.E. 165, 167 (N.Y. 1929).
\textsuperscript{250} \textit{Id.}
\textsuperscript{251} ABA \textsc{Standards for Criminal Justice Relating to Providing Defense Services} 66 (1988); \textit{see also} ABA \textsc{Criminal Justice Mental Health Standard} 7-1.1, at 4–6 (2d ed. 1989) (discussing differences between a consulting and testifying expert).
\textsuperscript{252} \textsc{Nat’l Advisory Comm’n on Criminal Justice Standards and Goals, Nat’l Inst. of Justice, Courts} 280 (1973) (stating that Public Defender budgets should include "[f]unds for the employment of experts and specialists, such as psychiatrists, forensic pathologists, and other scientific experts in all cases in which they may be of assistance to the defense").
\textsuperscript{253} When \textit{Gideon v. Wainwright}, 372 U.S. 335 (1963), was decided, a perceptive law review note connected an indigent’s right to counsel to the right to an expert. Note, \textit{Right to Aid in Addition to Counsel for Indigent Criminal Defendants}, 47 \textsc{Minn. L. Rev.} 1054 (1963).
\textsuperscript{254} 344 U.S. 561 (1953).
\textsuperscript{255} \textit{Id.} at 568. Specifically, the defendant’s claim was that the State was constitutionally required to provide him with the “technical pretrial assistance” of an expert. \textit{Id.}\textsuperscript{252}
Court stated, “[w]e cannot say that the State has that duty by constitutional mandate.”

Smith, however, was not a convincing precedent because it could easily be distinguished on the facts. Two defense psychiatrists had examined the defendant, and the Court’s opinion consequently could be read as rejecting only a right to additional experts.

More importantly, Smith was decided in 1953, and its continued vitality after the Warren Court’s revolution in criminal procedure during the 1960s was suspect. Indeed, the Fifth Circuit noted in 1979 that “[t]he [Smith] decision . . . was severely undercut by the Supreme Court’s decision in Griffin v. Illinois.”

Nevertheless, some courts continued to refuse to recognize a right to expert assistance in criminal cases. In 1967, the Mississippi Supreme Court concluded: “Neither the United States Constitution nor the Mississippi Constitution requires that the Nation or State furnish an indigent defendant with the assistance of a psychiatrist. The only assistance that they require is the assistance of legal counsel.”

Similarly, the Virginia Supreme Court wrote in 1984 that there is “no constitutional right to the appointment, at public expense, of an investigator to assist in [an accused’s] defense. When a trial court employs an investigator at public expense, it is an act of judicial grace not constitutionally required.”

---

256 Id.
257 See id. (“[T]he issue of petitioner’s sanity was heard by the trial court. Psychiatrists testified. That suffices.”); Bush v. McCollum, 231 F. Supp. 560, 564 (N.D. Tex. 1964) (distinguishing Smith on this ground), aff’d, 344 F.2d 672 (5th Cir. 1965).
258 Pedrero v. Wainwright, 590 F.2d 1383, 1390 n.6 (5th Cir. 1979); see United States ex rel. Huguley v. Martin, 325 F. Supp. 489, 493 (N.D. Ga. 1971) (noting, in its discussion of Smith, “intervening decisions by the Supreme Court, which have greatly expanded the rights of the accused under the due process clause”); infra note 263 (discussing Griffin).
259 See Ruby B. Weeks, Annotation, Right of Indigent Defendant in Criminal Case to Aid of State by Appointment of Investigator or Expert, 34 A.L.R. 3d 1256 (1970) (summarizing cases in which an indigent requested expert assistance).
260 Phillips v. State, 197 So. 2d 241, 244 (Miss. 1967).
261 Stockton v. Commonwealth, 314 S.E.2d 371, 382 (Va. 1984) (quoting Quitana v. Commonwealth, 295 S.E.2d 643, 646 (Va. 1982)). The right to expert assistance is closely related to the right to investigative assistance, which several courts recognized. See Mason v. Arizona, 504 F.2d 1345, 1351 (9th Cir. 1974) (“[T]he effective assistance of counsel guarantee . . . requires, when necessary, the allowance of investigative expenses or appointment of investigative assistance for indigent defendants in order to insure effective preparation of their defense by their attorneys.”); Davis v. Coiner, 356 F. Supp. 695, 696–97 (N.D. W. Va. 1973) (granting habeas corpus relief and concluding that state court’s refusal to authorize the expenditure of state funds for defendant’s court appointed attorney to travel to North Carolina to depose a material witness violated the Constitution); United States v. Germany, 32 F.R.D. 421, 423–24 (M.D. Ala. 1963); Lucero v. Superior Court, 176 Cal. Rptr. 62, 64 (Ct. App. 1981) (“The right to effective counsel does include the right of an indigent to have funds allocated for investigative services, but only for necessary investigative services.”); State v. Madison, 345 So. 2d 485, 490 (La. 1977). For a broader discussion of state-paid investigators for indigent defendants, see Thomas J. Ashcraft, Note, Providing Indigent Criminal Defendants State-Paid Investigators, 13 Wake Forest L. Rev. 655 (1977).
B. The Trend Toward Recognition of the Right

Despite these cases, a number of pre-Ake decisions recognized a constitutional right to expert assistance, although they, like the commentators, disagreed on the constitutional basis for this right.262

1. Equal Protection

Prior to Ake, several courts relied on the equal protection guarantee to support an indigent’s right to expert assistance.263 For example, the Fourth Circuit wrote:

It is obvious that only [the defendant’s] inability to pay for the services of a psychiatrist prevented a proper presentation of his case. The Supreme Court has unmistakably held that in criminal proceedings it will not tolerate discrimination between indigents and those who possess the means to protect their rights.264

Similarly, in Williams v. Martin,265 in which an indigent defendant requested the services of a forensic pathologist to evaluate the victim’s


263 The equal protection argument had its genesis in Griffin v. Illinois, 351 U.S. 12 (1956), in which an indigent defendant challenged a state practice of conditioning appellate review upon the availability of a transcript, which the defendant could not afford. The Supreme Court held that failure to provide a free transcript denied the accused due process and equal protection. According to the Court, “[t]here can be no equal justice where the kind of trial a man gets depends on the amount of money he has.” Id. at 19 (plurality opinion). In Douglas v. California, 372 U.S. 353 (1963), the Court extended the Griffin principle to the appointment of counsel for a first appeal as of right. See id. at 357–58 (“There is lacking that equality demanded by the Fourteenth Amendment where the rich man, who appeals as of right, enjoys the benefit of counsel[ ] . . . , while the indigent, already burdened by a preliminary determination that his case is without merit, is forced to shift for himself.”). Other cases also echoed this principle. See Britt v. North Carolina, 404 U.S. 226, 227 (1971) (“Griffin v. Illinois and its progeny establish the principle that the State must, as a matter of equal protection, provide indigent prisoners with the basic tools of an adequate defense or appeal, when those tools are available for a price to other prisoners.”); Roberts v. LaVallee, 389 U.S. 40, 42 (1967) (“Our decisions for more than a decade now have made clear that differences in access to the instruments needed to vindicate legal rights, when based upon the financial situation of the defendant, are repugnant to the Constitution.”).


cause of death in a homicide prosecution, the Fourth Circuit held that the trial court's refusal to appoint an expert "denied [the defendant] equal protection of the law."\textsuperscript{266}

The principal problem with this analysis is the Supreme Court's later cases—in particular, \textit{Ross v. Moffitt}\textsuperscript{267}—which undercut this rationale.\textsuperscript{268} \textit{Ross} involved the appointment of counsel for discretionary appeals. The Court held that a state practice not to appoint counsel in such cases satisfied the equal protection guarantee.\textsuperscript{269} According to the Court, the equal protection clause "'does not require absolute equality or precisely equal advantages.'"\textsuperscript{270} Although the Court recognized the disadvantage an indigent suffered in this context, it reasoned that "[t]he duty of the State . . . is not to duplicate the legal arsenal that may be privately retained by a criminal defendant in a continuing effort to reverse his conviction, but only to assure the indigent defendant an adequate opportunity to present his claims fairly in the . . . appellate process."\textsuperscript{271} Thus, the focus of the Court's analysis was not the disparity between indigent and nonindigent, but whether the indigent had an "adequate opportunity" to present his case.\textsuperscript{272} This approach smacks more of a due process than an equal protection analysis.\textsuperscript{273} Subsequently, the Court acknowledged that "[d]ue process and equal protection principles converge in the Court's analysis in these cases."\textsuperscript{274}

\begin{thebibliography}{99}
\bibitem{266} \textit{Williams}, 618 F.2d at 1027. The court also found a denial of the effective assistance of counsel. \textit{Id.}; see infra note 345 and accompanying text.
\bibitem{267} 417 U.S. 600 (1974).
\bibitem{269} See \textit{Ross}, 417 U.S. at 612 ("[W]e do not believe that the Equal Protection Clause . . . requires North Carolina to provide free counsel for indigent defendants seeking to take discretionary appeals to the North Carolina Supreme Court, or to file petitions for certiorari in this Court.").
\bibitem{270} \textit{Id.} at 612 (quoting San Antonio Indep. Sch. Dist. v. Rodriguez, 411 U.S. 1, 24 (1973)).
\bibitem{271} \textit{Id.} at 616.
\bibitem{272} The notion that equal protection requires only an "adequate opportunity" for a defendant to present his claims was reaffirmed in \textit{United States v. MacCollom}. 426 U.S. 317, 324 (1976); see also Wainwright v. Torna, 455 U.S. 586, 587–88 (1982) (reasoning that because the defendant had no constitutional right to counsel for a discretionary appeal following \textit{Ross}, he could not be deprived of the effective assistance of counsel in connection with such an appeal).
\bibitem{273} See Kamisar, supra note 268, at 1-101. Earlier (in \textit{Ross}) the Court pointed out that equal protection analysis "emphasizes disparity in treatment by a State between classes of individuals whose situations are arguably indistinguishable," whereas due process analysis "emphasizes fairness between the State and the individual dealing with the State, regardless of how other individuals in the same situation may be treated." \textit{Ross}, 417 U.S. at 609.
\bibitem{274} \textit{Bearden v. Georgia}, 461 U.S. 660, 665 (1983). In \textit{Bearden}, the Court held that a sentencing court could not revoke a defendant's probation for failure to pay a fine absent evidence and findings that the defendant was responsible for such failure and that alterna-
Although *Ross* undermines the equal protection argument for expert assistance, some lessons can be drawn from these cases. First, the equal protection rationale was far too utopian. No system could afford to supply indigents with the resources that O.J. Simpson or Leopold and Loeb could afford. Second, several issues in these cases resurface in the post-*Ake* decisions. For example, in *Williams v. Martin* the Fourth Circuit specified the standard for determining when an expert is required as follows: “(a) whether a substantial question requiring expert testimony arose over the cause of death, and (b) whether [the defendant’s] defense could be fully developed without professional assistance.” Significantly, the court held that “[i]t is not incumbent upon [the defendant] to prove . . . that an independent expert would have provided helpful testimony at trial. An indigent prisoner . . . should not be required to present proof of what an expert would say when he is denied access to an expert.” Under *Ake* many courts require a far higher showing than “helpfulness” in determining whether appointment of an expert should be made.

2. *Compulsory Process*

In *Washington v. Texas*, the Supreme Court held that the Compulsory Process Clause applied in state trials. Moreover, the Court adopted a liberal view of the clause; it was not limited to the right to subpoena witnesses but also included the right to present defense evidence: “The right to offer the testimony of witnesses, and to compel their attendance, if necessary, is in plain terms the right to present a defense, the right to present the defendant’s version of the facts . . . to}

---


276 *See Higdon, supra* note 168, at 137 (“The legal bills would exceed $100,000.”); *supra* note 166 and accompanying text (discussing O.J. Simpson case).

277 618 F.2d 1021 (4th Cir. 1980).

278 *Id.* at 1026. The court’s examination of the record revealed that a substantial question about the cause of death had existed and that the absence of an expert witness hampered the development of this defense. *See id.* at 1026–27.

279 *Id.*

280 *See infra* text accompany notes 494–500 (discussing a “second prong” requirement).

281 388 U.S. 14 (1967).

282 *See id.* at 17–19.
the jury so it may decide where the truth lies."^{283} Although Washington did not involve expert witnesses, "it is scarcely conceivable that defendants could be constitutionally denied the opportunity to call experts to give opinion evidence about such matters as fingerprints, bloodstains, sanity, and other matters that routinely arise in criminal litigation."^{284}

Prior to Ake, a number of courts had based the right to expert assistance on the compulsory process guarantee.\(^{285}\) The most significant decision was People v. Watson,\(^{286}\) in which an indigent forgery defendant requested the appointment of a handwriting expert.\(^{287}\) The Illinois Supreme Court held that refusal to appoint the expert violated the compulsory process guarantee:

The court recognizes that there is a distinction between the right to call witnesses and the right to have these witnesses paid for by the government, but in certain instances involving indigents, the lack of funds with which to pay for the witness will often preclude him from calling that witness and occasionally prevent him from offering a defense. Thus, although the defendant is afforded the shadow of the right to call witnesses, he is deprived of the substance.\(^{288}\)

The court went on to indicate that "whether it is necessary to subpoena expert witnesses in order to assure a fair trial will depend upon the facts in each case."\(^{289}\) Watson was such a case, the court concluded, because the "issue of handwriting goes to the heart of the

---

\(^{283}\) Id. at 19; see also United States v. Nixon, 418 U.S. 683, 709 (1974) ("To ensure that justice is done, it is imperative to the function of courts that compulsory process be available for the production of evidence needed either by the prosecution or by the defense."). In Taylor v Illinois, 484 U.S. 400 (1988), the Court further explained that "[t]he right to compel a witness' presence in the courtroom could not protect the integrity of the adversary process if it did not embrace the right to have the witness' testimony heard by the trier of fact." Id. at 409. Therefore, "[t]he right to offer testimony is . . . grounded in the Sixth Amendment even though it is not expressly described in so many words." Id.


\(^{285}\) In Flores v. Estelle, 492 F.2d 711 (5th Cir. 1974), for example, the defendant attempted to elicit expert opinion testimony from a state toxicologist who had been subpoenaed by the defense. The expert refused to express an opinion because he had not been retained as an expert witness, and the trial court declined to require him to testify. See id. at 712. The reviewing courts agreed "that the trial court erred in refusing to require [the expert] to testify, thereby depriving Flores of effective compulsory process for obtaining witnesses in his favor." Id.; see English v. Missildine, 311 N.W.2d 292, 293 (Iowa 1981); State v. Sims, 52 Ohio Misc. 31, 42 (C.P. Cuyahoga County 1977).

\(^{286}\) 221 N.E.2d 645 (Ill. 1966).

\(^{287}\) See id. at 646.

\(^{288}\) Id. at 648.

\(^{289}\) Id.
defense” and the expert’s testimony “may have been crucial” to that defense.290

The compulsory process rationale does not seem to provide any more protection than Ake does under the banner of due process.291 Watson was decided prior to Ake, but in a subsequent case, the Illinois Supreme Court concluded that its analysis in Watson “pose[d] no conflict” with the Ake decision.292 Moreover, as with equal protection, the Supreme Court has cut back on the compulsory process guarantee. According to the Court, a violation of the Compulsory Process Clause “requires some showing that the evidence lost would be both material and favorable to the defense.”293 Of course, materiality in this context means outcome determinative, a stringent standard.

3. Right of Confrontation

One commentator argued that the right of confrontation also supports a right to expert assistance.294 This right would apply to “confronting” prosecution experts, and would have to be supplemented with the compulsory process rationale to cover the affirmative use of defense experts.295 Although research has not found cases endorsing this rationale, the Supreme Court has repeatedly cited the right to cross-examination in its scientific evidence cases. In Daubert, for example, the Court rejected the argument that its new reliability standard would necessarily lead to cases in which “befuddled juries are confounded by absurd and irrational pseudoscientific assertions.”296 According to the Court, this represents an “overly pessimis-

290 Id. at 649. The Illinois courts have interpreted and applied Watson on numerous occasions. See People v. Walker, 292 N.E.2d 387, 393 (Ill. 1973) (finding no error in refusal to provide expert because no showing had been made that the requested assistance was “sufficiently related to the defendant’s theory of defense”); People v. Glover, 273 N.E.2d 367, 370 (Ill. 1971) (ruling that Watson requires the defendant to show that the requested assistance is “necessary to prove a crucial issue”); People v. Nichols, 388 N.E.2d 984, 988 (Ill. App. Ct. 1979) (concluding that the trial court’s failure to appoint psychiatrist violated the Watson rule); People v. Vines, 358 N.E.2d 72, 74 (Ill. App. Ct. 1976) (ruling that defendant had made an insufficient showing to implicate Watson); People v. Clay, 311 N.E.2d 384, 386 (Ill. App. Ct. 1974) (same).

291 In order to be complete, the compulsory process rationale would have to be augmented by a right of confrontation analysis. See David A. Harris, supra note 36, at 473 (“[C]ourts should look to the Confrontation and Compulsory Process Clauses of the Sixth Amendment and to the constitutional right to present a defense [when deciding when expert assistance is required].”); Hoeffel, supra note 284, at 1307 (“The right to confrontation and the right to compulsory process are intimately related, as each is the sister clause of the other. Together, the two rights make the presentation of a defense at trial complete.”).


294 See Bowman, supra note 262, at 642–43.

295 See supra note 291 and accompanying text.

tic" view of the "capabilities of the jury and of the adversary system." The Court noted that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." This theory, however, requires another (and significant) step: finding that cross-examination of a prosecution expert necessitates the assistance of a defense expert.

4. Other Due Process Theories

As the Court has recognized on more than one occasion, the term "due process" is not self-defining. Not surprisingly, then, there are several lines of due process cases that may support the right to a defense expert.

a. Right to Present a Defense

The leading case on this topic is Chambers v. Mississippi, in which the Supreme Court held that state evidentiary rules that precluded the admission of critical and reliable evidence denied the de-

---

297 Id. at 596.
298 Id. (emphasis added). Here, the Court cited Rock v. Arkansas, 483 U.S. 44 (1987), which dealt with hypnotically-refreshed testimony. See id. at 61 (holding that Arkansas's per se rule excluding the testimony of accused whose memory had been hypnotically-refreshed violated accused's right to testify); see also California v. Trombetta, 467 U.S. 479, 490 (1984) (noting defendant's right to introduce evidence to show possible interference with a breath analyzer's measurements and the right to cross-examine the police concerning operator error); United States v. Wade, 388 U.S. 218, 227-28 (1967) ("Knowledge of the techniques of science and technology is sufficiently available, and the variables in techniques few enough, that the accused has the opportunity for a meaningful confrontation of the Government's case . . . through the ordinary processes of cross-examination . . . and the presentation of the evidence of his own experts.").
299 Some support for this view can be found in Justice Blackmun's concurring opinion in Pennsylvania v. Ritchie, 480 U.S. 39 (1987), which involved a subpoena for state youth services agency records in an incest case. See id. at 39 (Blackmun, J., concurring). Justice Blackmun reasoned that "there might well be a confrontation violation if, as here, a defendant is denied pretrial access to information that would make possible effective cross-examination of a crucial prosecution witness." Id. at 61-62 (Blackmun, J., concurring). The plurality, however, rejected the view that the right of confrontation was a pretrial right, remarking that "the right to confrontation is a trial right, designed to prevent improper restrictions on the types of questions that defense counsel may ask during cross-examination." Id. at 52. The plurality concluded that "[t]he ability to question adverse witnesses . . . does not include the power to require the pretrial disclosure of any and all information that might be useful in contradicting unfavorable testimony." Id. at 53.
300 See Lassiter v. Dep't of Soc. Servs., 452 U.S. 18, 24 (1981) ("For all its consequence, 'due process' has never been, and perhaps can never be, precisely defined. . . . [T]he phrase expresses the requirement of 'fundamental fairness,' a requirement whose meaning can be as opaque as its importance is lofty.").
fendant due process. One of the evidentiary rules at issue in Chambers was the hearsay rule. According to the Court, "where constitutional rights directly affecting the ascertainment of guilt are implicated, the hearsay rule may not be applied mechanistically to defeat the ends of justice." Even though Chambers rests on due process grounds, it obviously echoes Washington v. Texas, a compulsory process case.

In California v. Trombetta, the Court recognized a qualified right to preservation of evidence in the government's control, observing: "We have long interpreted [the due process] standard of fairness to require that criminal defendants be afforded 'a meaningful opportunity to present a complete defense.'" Although Ake was decided the next year and spoke of providing a defendant "a fair opportunity to present a defense," it did not rely on this line of authority.

After Ake the Court broadened the constitutional basis of this right in Crane v. Kentucky, writing that "[w]hether rooted directly in

---


304 410 U.S. at 302. In a later case, the Court again overturned a conviction because the application of the hearsay rule at trial precluded the admission of defense evidence. See Green v. Georgia, 442 U.S. 95, 97 (1979). The Court commented:

Regardless of whether the proffered testimony comes within Georgia's hearsay rule, under the facts of this case its exclusion constituted a violation of [due process]. The excluded testimony was highly relevant to a critical issue in the punishment phase of the trial and substantial reasons existed to assume its reliability.

Id. (citations omitted).

305 See Hoeffel, supra note 284, at 1299 ("While the [Chambers] Court relied on due process, the case clearly involved a violation of the Compulsory Process Clause . . . ."); see also Peter Westen, Confrontation and Compulsory Process: A Unified Theory of Evidence for Criminal Cases, 91 HARV. L. REV. 567, 607 n.108 (1978) (noting that the accused in Chambers objected only on due process, not compulsory process, grounds).


307 Id. at 485.

308 Ake v. Oklahoma, 470 U.S. 68, 76 (1985) ("This Court has long recognized that when a State brings its judicial power to bear on an indigent defendant in a criminal proceeding, it must take steps to assure that the defendant has a fair opportunity to present his defense.").


310 476 U.S. 683 (1986). The defendant moved to suppress a confession on the ground that it had been coerced in violation of due process. The trial court determined that the confession was voluntary and denied the motion. See id. at 684. At trial, the defendant sought to introduce evidence concerning the psychological and physical environment in which the confession was obtained to show its unreliability. The trial court excluded the evidence because it related to the due process voluntariness issue. See id. The Supreme Court stated that the circumstances surrounding the taking of a confession may be relevant to two separate issues, one legal and one factual. See id. at 688–89. The legal issue con-
the Due Process Clause of the Fourteenth Amendment, or in the Compulsory Process or Confrontation clauses of the Sixth Amendment, the Constitution guarantees criminal defendants 'a meaningful opportunity to present a complete defense.' Nevertheless, in its latest case in this area, the Court took a restrictive view of the right to present a defense.

b. Balance of Resources

A different due process argument is based on the state's provision of expert assistance to the prosecution and not the defense—a "balance of resources" rationale. In other contexts, the Supreme Court has noted that due process "speak[s] to the balance of forces between the accused and his accuser." Thus, in discussing the right to expert assistance under the Criminal Justice Act, one court noted that "[i]f the fairness of our system is to be assured, indigent defendants must have access to minimal defense aids to offset the advantage presented by the vast prosecutorial and investigative resources available to the Government." Similarly, in the leading neutron activation case, the Sixth Circuit wrote: "[I]f the government sees fit to use this time consuming, expensive means of fact-finding, it must both allow time for a defendant to make similar tests, and in the instance of an indigent defendant, a means to provide for payment for same." It should be recognized, however, that while this line of cases reinforces the right-to-present-a-defense cases, it does not supplant those cases.

Concerns the constitutional issue of voluntariness, which the trial court must decide. The factual issue concerns the reliability of the confession, a jury issue. See id. at 689.

311 Id. at 690 (citations omitted) (quoting Trombetta, 467 U.S. at 485).

312 In United States v. Scheffer, 523 U.S. 303 (1998), the Supreme Court upheld the military's per se rule excluding polygraph results as evidence in court-martial proceedings in the face of a constitutional challenge. See id. at 305; Hoeffel, supra note 284, at 1306 ("With Scheffer, then, the Court left the Compulsory Process Clause with an uncertain status. If the Court were to follow this course, then an accused's right to present a defense would be meaningless.").

313 Wardius v. Oregon, 412 U.S. 470, 474-76 (1973) (discussing an imbalance in Oregon's pretrial discovery rules); see also Lassiter v. Dep't of Soc. Servs., 452 U.S. 18, 28 (1981) ("[T]he adversary system presupposes [that] accurate and just results are most likely to be obtained through the equal contest of opposed interests . . . ."); Ross v. Moffitt, 417 U.S. 600, 609 (1974) ("'Due Process' emphasizes fairness between the State and the individual dealing with the State . . . .").

314 United States v. Hartfield, 513 F.2d 254, 258 (9th Cir. 1975); see also State v. Johnson, 333 So. 2d 223, 225 (La. 1976) ("Due process and fundamental fairness require that a defendant charged with homicide be given the right to choose his own ballistics expert to examine the alleged murder weapon and bullet in order to rebut testimony by the State's expert witnesses.").

c. Disclosure of Favorable Evidence

Still another due process argument centers on the prosecutor's duty to disclose favorable evidence to the defense under *Brady v. Maryland*.

Some cases regard the failure of the state to provide expert assistance as a denial of the right to exculpatory defense evidence. For example, the Seventh Circuit wrote: "[T]he denial of a reasonable request to obtain the services of a necessary psychiatric witness is effectually a suppression of evidence violating the fundamental right of due process." One problem with this analysis is determining, pretrial, whether the requested expert testimony will be *exculpatory*.

Moreover, defendants often need expert assistance to attack the prosecution's *incriminating* evidence, something not covered by *Brady*.

d. Duty to Preserve Evidence

Courts have recognized that *Brady*’s due process disclosure requirement sometimes includes the right to have evidence preserved. In *California v. Trombetta*, the Supreme Court ruled that such a due process right is extremely limited. As part of its analysis,

---

316 373 U.S. 83, 87 (1963) ("[T]he suppression by the prosecution of evidence favorable to an accused upon request violates due process where the evidence is material either to guilt or to punishment, irrespective of the good faith or bad faith of the prosecution."). Thus, in order to establish a *Brady* violation, the defendant must show that (1) the prosecution failed to disclose evidence, (2) the evidence was favorable to the defense, and (3) the evidence was material. See id.

317 United States ex rel. Robinson v. Pate, 345 F.2d 691, 695 (7th Cir. 1965); accord Bowen v. Eyman, 324 F. Supp. 339, 340 (D. Ariz. 1970) ("[The state's] refusal to run the tests [requested by the accused] is tantamount to a suppression of evidence such as there was in *Brady* . . ."); see also Little v. Streater, 452 U.S. 1, 6 (1981) (characterizing indigent's due process claim for financial assistance in funding a blood test as "premised on the unique [quality] of blood grouping tests as a source of exculpatory evidence" in paternity actions); State v. Hanson, 278 N.W.2d 198, 200 (S.D. 1979) (citing *Brady* in finding a right to an independent expert).

318 See Hanson, 278 N.W.2d at 200 ("If [the independent test [requested by the accused] were to show that the substance is not marijuana, the results would be both material and exculpatory. On the other hand, if the independent test were in agreement with that conducted by the State, any benefit to defendant would be minimal.").


321 According to the Court:

Whatever duty the Constitution imposes on the States to preserve evidence, that duty must be limited to evidence that might be expected to play a significant role in the suspect's defense. To meet this standard of constitutional materiality, evidence must both possess an exculpatory value that was
the Court considered the availability of alternative methods of attacking the results of breath analysis tests conducted by the state without requiring the state to preserve breath samples for independent testing by the defense. The Court noted that the defendant had the right under state law to inspect the breath analyzer, the right to introduce evidence to show possible interference with the machine's measurements, and the right to cross-examine the police concerning operator error. Of course, an expert would be needed to establish interference with the "machine's measurements." Here, again, this line of cases supplements, rather than replaces, the right-to-present-a-defense cases.

**e. Right to Independent Testing**

Another line of cases recognized the right of a defendant to retest physical evidence. In one case, a defendant's request for independent inspection of a murder weapon and bullet was denied by a state court. The Fifth Circuit granted habeas relief, observing that "[f]undamental fairness is violated when a criminal defendant . . . is denied the opportunity to have an expert of his choosing, bound by appropriate safeguards imposed by the Court, examine a piece of critical evidence whose nature is subject to varying expert opinion." The right to retest necessarily means the right to have an expert appointed, if indigent, to do the retesting.

---

apparent before the evidence was destroyed, and be of such a nature that the defendant would be unable to obtain comparable evidence by other reasonably available means.

Id. at 488-89 (citation omitted). The Court held that neither of these conditions were satisfied. See id. at 489-90. As to the first condition, the Court reasoned that, given the reliability of the breath analyzer used by the state, "[preserved] breath samples were much more likely to provide inculpatory [rather] than exculpatory evidence." Id. at 489.

322 See id. at 490.

323 Indeed, Trombetta was also discussed above as a right to present a defense case. See id at 488.

324 See Barnard v. Henderson, 514 F.2d 744, 746 (5th Cir. 1975).


Many courts have denied an accused's request to independently examine tangible evidence. See, e.g., Gray v. Rowley, 604 F.2d 382, 384 (5th Cir. 1979) (finding that requested evidence not "critical"); State v. Koennecke, 545 P.2d 127, 133 (Or. 1976) (requiring preliminary showing that results will be favorable to defendant); State v. Faraone, 425 A.2d 523, 526 (R.I. 1981) (concluding that proposed testing conditions did not include appropriate safeguards).
However, like the other alternative due process rationales, these cases do not provide protection beyond the right-to-present-a-defense cases. Nevertheless, they are instructive. These “right to test” cases raised an issue that would later be resurrected in the *Ake* cases; in rejecting a due process right to retest, several courts reasoned that the defendant’s opportunity to cross-examine the prosecution’s expert witnesses provides sufficient protection for an accused.\(^{326}\)

5. **Right to Counsel**

Several pre-*Ake* courts grounded the right to expert assistance in the right to counsel. In *Gideon v. Wainwright*,\(^ {327}\) the Supreme Court held the Sixth Amendment right to counsel applicable to the states. In an oft-quoted passage, the Court wrote that “in our adversary system of criminal justice, any person haled into court, who is too poor to hire a lawyer, cannot be assured a fair trial unless counsel is provided for him.”\(^ {328}\)

a. **Ineffective Assistance of Counsel**

The right to counsel includes the right to effective assistance of counsel,\(^ {329}\) and ineffectiveness claims involving expert testimony are becoming more common as the use of scientific evidence increases.\(^ {330}\) For example, a court found ineffectiveness where defense counsel knew that gunshot residue testimony was “critical,” but “[n]evertheless, [the lawyer] neither deposed . . . the State’s expert witness, nor bothered to consult with any other expert in the field.”\(^ {331}\)

---


\(^ {327}\) 372 U.S. 335 (1963).

\(^ {328}\) Id. at 344; see also Argersinger v. Hamlin, 407 U.S. 25 (1972) (extending the right to counsel to all trials, including misdemeanor cases, in which imprisonment is imposed). *But cf.* Scott v. Illinois, 440 U.S. 367 (1979) (declining to extend *Argersinger* to cases where imprisonment is authorized but not imposed).

\(^ {329}\) See Strickland v. Washington, 466 U.S. 668, 685–86 (1984); United States v. Cronic, 466 U.S. 648, 658 (1984); Powell v. Alabama, 287 U.S. 45, 71 (1932); *see also* Evitts v. Lucey, 469 U.S. 387, 396 (1985) (“[A] party whose counsel is unable to provide effective representation is in no better position than one who has no counsel at all.”).

\(^ {330}\) See, e.g., Driscoll v. Delo, 71 F.3d 701, 709 (8th Cir. 1995) (“[D]efense counsel’s failures to prepare for the introduction of the serology evidence, to subject the state’s theories to the rigors of adversarial testing, and to prevent the jury from retiring with an inaccurate impression [of the serology test results] fall short of reasonableness under the prevailing professional norms.”); State v. Glass, 488 N.W.2d 432, 433 (Wis. Ct. App. 1992) (finding that defense counsel “rendered constitutionally defective assistance” by failing to call “a state crime laboratory employee who would have testified that tests he conducted on vaginal swabs from the alleged [sexual assault] victim were negative for semen” and instead stipulated that the test results were “inconclusive”).

For present purposes, cases finding ineffectiveness due to a failure to consult or call an expert are most germane. As one court commented, "[t]he failure of defense counsel to seek such assistance when the need is apparent deprives an accused of adequate representation in violation of his sixth amendment right to counsel." These cases include the failure to secure or properly employ the services of experts in psychiatry, handwriting comparison, forensic pathology, gunshot residue analysis, serology, DNA profiling,

---

332 See, e.g., Pavel v. Hollins, 261 F.3d 210, 223 (2d Cir. 2001); Lindstadt v. Keane, 239 F.3d 191, 201–02 (2d Cir. 2001); United States v. Tucker, 716 F.2d 576, 581 (9th Cir. 1983) (reasoning that, in a complex fraud case, "it should have been obvious to a competent lawyer that the assistance of an accountant [was] necessary"); Spencer v. Donnelly, 193 F. Supp. 2d 718, 733 (W.D.N.Y. 2002); see also Knott v. Mabry, 671 F.2d 1208, 1212–13 (8th Cir. 1982) (noting that, in appropriate cases, counsel may be found ineffective for failing to consult an expert where "there is substantial contradiction in a given area of expertise," or where counsel is not sufficiently "versed in a technical subject matter . . . to conduct effective cross-examination").

333 See, e.g., Proffitt v. United States, 582 F.2d 854, 857 (4th Cir. 1978).

334 See, e.g., Glenn v. Tate, 71 F.3d 1204, 1209–11 (6th Cir. 1995); Wood v. Zahradnick, 578 F.2d 980, 982 (4th Cir. 1978); United States v. Fessel, 531 F.2d 1275, 1279 (5th Cir. 1976) ("[W]hen an insanity defense is appropriate and the defendant lacks funds to secure private psychiatric assistance, it is the duty of his attorney to seek such assistance through the use of [the Criminal Justice Act]."); Halton v. Hesson, 803 F. Supp. 1279, 1277–78 (M.D. Tenn. 1992). But see Bonin v. Vasquez, 794 F. Supp. 957, 962–64 (C.D. Cal. 1992) (finding that counsel’s decision not to call a court-appointed psychiatric witness at penalty phase of capital murder trial was based on valid strategic considerations).

335 See, e.g., United States v. Tarricone, 996 F.2d 1414, 1417–19, 1425 (2d Cir. 1993) (remanding case to district court with instructions to hold an evidentiary hearing to determine whether counsel’s failure to consult a handwriting expert constituted inadequate assistance).

336 See Rogers v. Israel, 746 F.2d 1288, 1295 (7th Cir. 1984) ("Although we decline to rule that the defense counsel was required to contact a [forensic] pathologist, we hold . . . that the defense counsel owed a duty to the petitioner to ask a qualified expert whether [the victim] would have been immediately incapacitated by his wound.").

337 See Sims v. Livesay, 970 F.2d 1575, 1580–81 (6th Cir. 1992) (failure to have quilt examined for gunshot residue).


339 See State v. Hicks, 536 N.W.2d 487, 491–92 (Wis. Ct. App. 1995) ("Before the trial, [defense counsel] knew that the root tissue of hair specimens could be subject to DNA testing . . . . He did not discuss this with his client or with the district attorney, or petition the court to have this test performed . . . ."); see also People v. Smith, 645 N.E.2d 313, 315, 318–19 (Ill. App. Ct. 1994) (finding that counsel’s failure to investigate possible alternative DNA testing methods may have constituted ineffective assistance, where the expert initially consulted by the defense indicated that the sample size was too small to conduct standard DNA test, but that it may have sufficed for alternative procedure available in California).
polygraph testing,340 battered woman syndrome,341 and other subject areas.342

b. Affirmative Right to Expert

If failure to secure expert assistance may constitute ineffective assistance of counsel, it requires but a short step to recognize that the Sixth Amendment places an affirmative duty upon the state to provide expert services to indigent defendants upon request.343 A number of courts have taken that step.344 According to one court, “the right to counsel is meaningless if the lawyer is unable to make an effective defense because he has no funds to provide the specialized testimony which the case requires.”345 Under a Sixth Amendment theory, an expert should be appointed whenever necessary for counsel to render

342 See, e.g., Foster v. Lockhart, 9 F.3d 722, 726 (8th Cir. 1993) (failure to adequately pursue an impotency defense in a rape case); People v. Ackerman, 282 Cal. Rptr. 312, 319 (Ct. App. 1991) ("Defense counsel’s reliance on . . . a psychiatrist with no asserted expertise in the scientific testing of blood, to advise him concerning the feasibility of testing the available blood sample was a fatal lapse.").
343 See Lecy v. State, 827 P.2d 824, 826 (Nev. 1992) (“If failure to request a psychological examination constitutes grounds for a finding of ineffective counsel, it logically follows that a defendant facing charges of sexual assault of a minor should be afforded an expert psychiatric witness.”).
345 Bush v. McCollum, 231 F. Supp. 560, 565 (N.D. Tex. 1964), aff'd, 344 F.2d 672 (5th Cir. 1965). In Williams v. Martin, 618 F.2d 1021 (4th Cir. 1980), a leading pre-Ake case, an indigent murder defendant requested the appointment of an independent forensic pathologist to determine the victim’s cause of death. The request was denied by the state trial court. See id. at 1023–24. In granting habeas relief, the Fourth Circuit based its decision on the equal protection guarantee and the right to counsel, see id. at 1027, and observed that "[t]here can be no doubt that an effective defense sometimes requires the assistance of an expert witness," id. at 1025.
effective assistance\textsuperscript{346}—"whenever the [expert] services are 'necessary to the preparation and presentation of an adequate defense.'"\textsuperscript{347}

c. Supreme Court Cases

The Supreme Court has never gone so far, using the right to effective assistance as a "sword" rather than a "shield." Nevertheless, indirect support for the right to counsel argument can be found in the Court's lineup cases. In \textit{United States v. Wade},\textsuperscript{348} the Court held that the right to counsel applied to postindictment eyewitness identification procedures. In the Court's view, counsel was required at the lineup to "assure a meaningful confrontation at trial."\textsuperscript{349} Significantly, the \textit{Wade} Court distinguished eyewitness identification procedures from the scientific analysis of physical evidence,\textsuperscript{350} reasoning that "[k]nowledge of the techniques of science and technology is sufficiently available, and the variables in techniques few enough, that the accused has the opportunity for a meaningful confrontation of the Government's case . . . through the ordinary processes of cross-examination . . . and the presentation of the evidence of his own experts."\textsuperscript{351}

\textsuperscript{346} See \textit{United States v. Fessel}, 531 F.2d 1275, 1278 (5th Cir. 1976).
\textsuperscript{347} Id. at 1279 (quoting \textit{United States v. Chavis}, 476 F.2d 1137, 1141 (D.C. Cir. 1973)).
\textsuperscript{348} 388 U.S. 218 (1967). The case also has strong confrontation aspects; indeed, they may dominate the opinion. See 2 \textit{LAFAVE ET AL., supra} note 319, § 7.3(a), at 646 ("Such language gave support to an interpretation of \textit{Wade} as being grounded in the Sixth Amendment right of confrontation and cross-examination, with counsel being required simply to give sufficient protection to that other right.").
\textsuperscript{349} \textit{Wade}, 388 U.S. at 236. The Court also wrote:

Insofar as the accused's conviction may rest on a courtroom identification in fact the fruit of a suspect pretrial identification which the accused is helpless to subject to effective scrutiny at trial, the accused is deprived of that right of cross-examination which is an essential safeguard to his right to confront witnesses against him.

\textit{Id.} at 235.
\textsuperscript{350} According to the Court:

The Government characterizes the lineup as a mere preparatory step in the gathering of the prosecution's evidence, not different—for Sixth Amendment purposes—from various other preparatory steps, such as systemized or scientific analyzing of the accused's fingerprints, blood sample, clothing, hair, and the like. We think there are differences which preclude such stages being characterized as critical stages at which the accused has the right to the presence of his counsel.

\textit{Id.} at 227.
\textsuperscript{351} \textit{Id.} at 227–28 (emphasis added). The Court concluded that "[t]he denial of a right to have . . . counsel present at such analyses does not therefore violate the Sixth Amendment; they are not critical stages since there is minimal risk that . . . counsel's absence at such stages might derogate from [the] right to a fair trial." \textit{Id.} at 228.

In \textit{Gilbert v. California}, 388 U.S. 263 (1967), a companion case to \textit{Wade}, the defendant contended that his right to counsel had been violated when he was compelled to provide handwriting exemplars in the absence of an attorney. See \textit{id.} at 265–67. While \textit{Wade} focused on the time of analysis, see \textit{Wade}, 388 U.S. at 228, \textit{Gilbert} focused on the time the evidence was obtained from the suspect. See \textit{Gilbert}, 388 U.S. at 267 (concluding that "[t]he taking of exemplars was not a 'critical' stage of the criminal proceedings"). Nevertheless,
As explained later, a right-to-counsel rationale would solve some, but not all, post-Ake issues.\textsuperscript{352}

C. Little v. Streater and Barefoot v. Estelle

After Smith, but before Ake, the Supreme Court decided two cases which, in hindsight, presaged the Ake decision. In 1981, the Court in Little v. Streater\textsuperscript{353} ruled that an indigent defendant in a civil paternity action, which the Court labeled a “quasi-criminal” proceeding, had the right to a blood grouping test at state expense.\textsuperscript{354} In 1983, the Court in Barefoot v. Estelle\textsuperscript{355} upheld the admissibility of expert testimony of future dangerousness in capital cases.\textsuperscript{356} In so ruling, the Court wrote that the “jurors should not be barred from hearing the views of the State’s psychiatrists along with opposing views of the defendant’s doctors.”\textsuperscript{357} In a footnote, the Court made the passing comment that there was no “contention that, despite petitioner’s claim of indigence, the court refused to provide an expert for petitioner.”\textsuperscript{358} Ake came two years later.

D. Ake v. Oklahoma

Ake was charged with capital murder.\textsuperscript{359} At arraignment, his conduct was “so bizarre” that the trial judge ordered, sua sponte, a mental evaluation.\textsuperscript{360} He was found incompetent to stand trial, but later recovered due to antipsychotic drugs. When the prosecution resumed, Ake’s attorney requested a psychiatric evaluation at state expense to prepare an insanity defense. Citing Smith, the trial court refused.

the result was the same—the right to counsel did not apply. See id. As in Wade, the Court in Gilbert found significant differences between conducting a lineup and obtaining exemplars:

\begin{quote}
If, for some reason, an unrepresentative exemplar is taken, this can be brought out and corrected through the adversary process at trial since the accused can make an unlimited number of additional exemplars for analysis and comparison by government and defense handwriting experts. Thus, “the accused has the opportunity for a meaningful confrontation of the State’s case at trial through the ordinary processes of cross-examination of the State’s expert [handwriting] witnesses and the presentation of the evidence of his own [handwriting] experts.”
\end{quote}

Id. (emphasis added) (alterations in original) (quoting Wade, 388 U.S. at 227–28).

\textsuperscript{352} See infra text accompanying notes 617–701.
\textsuperscript{353} 452 U.S. 1 (1981).
\textsuperscript{354} See id. at 10, 16–17.
\textsuperscript{355} 463 U.S. 880 (1983).
\textsuperscript{356} See id. at 896–905.
\textsuperscript{357} Id. at 898–99.
\textsuperscript{358} Id. at 899 n.5.
\textsuperscript{360} See Ake, 470 U.S. at 71.
Thus, although insanity was the only contested issue at trial, no psychiatrist testified for either the defense or prosecution on this issue, and Ake was convicted. In seeking the death penalty, the prosecution relied on state psychiatrists, who testified that Ake was "dangerous to society." This testimony stood unrebutted because Ake could not afford an expert.

In an opinion authored by Justice Thurgood Marshall, the Supreme Court overturned Ake's conviction, quickly dismissing the precedential value of Smith. The Court's due process analysis relied on a three-pronged test derived from Mathews v. Eldridge.

Three factors are relevant to this determination. The first is the private interest that will be affected by the action of the State. The second is the governmental interest that will be affected if the safeguard is to be provided. The third is the probable value of the additional or substitute procedural safeguards that are sought, and the risk of an erroneous deprivation of the affected interest if those safeguards are not provided.

Applying these factors, the Court found that a defendant's interest in the accuracy of a criminal trial that "places [his] life or liberty at risk is almost uniquely compelling." In contrast, the state's only interest is economic. Although the state claimed that the cost of providing expert assistance would result in "a staggering burden to the State," the Court dismissed this argument, pointing out (1) that many other jurisdictions provided psychiatric assistance to indigent defendants and (2) that its holding was limited to "one competent psychiatrist." Finally, the Court considered the probable value of the assistance sought and the risk of error if it was not provided. On this point, the Court concluded that the need for expert assistance was critical and that the risk of error would be "extremely high" if the assistance was not provided.

The Court used different formulae to state its holding. In one passage, the Court wrote that "when a State brings its judicial power to

---

361 See id. at 73.
362 Id. at 84–85. Since defense psychiatrists had testified in Smith, the Court held that Smith did not stand for the broad proposition that there was no constitutional right to a psychiatric examination, but at most "supports the proposition that there is no constitutional right to more psychiatric assistance than the defendant in Smith had received." Id. at 85. More importantly, the Court recognized that Smith had been decided "at a time when indigent defendants in state courts had no constitutional right to even the presence of counsel." Id. Thus, according to the Court, Smith did not preclude consideration of "whether fundamental fairness . . . require[d] a different result." Id.
364 Ake, 470 U.S. at 77.
365 Id. at 78.
366 Id.
367 See id. at 78–79.
368 Id. at 82.
bear on an indigent defendant in a criminal proceeding, it must take steps to assure that the defendant has a fair opportunity to present his defense. This notion of fair opportunity, in the Court's view, mandates that an accused be provided with the "basic tools of an adequate defense." In another passage, the Court elaborated on what it meant by a "fair opportunity" and the "basic tools of an adequate defense," holding that when a defendant has made a preliminary showing that his sanity at the time of the offense is likely to be a significant factor at trial, the Constitution requires that a State provide access to a psychiatrist's assistance on this issue if the defendant cannot otherwise afford one.

The facts met this standard: (1) Ake's only defense was insanity; (2) his bizarre behavior at the arraignment, just four months after the crime, prompted the trial court to order sua sponte a mental examination; (3) a state psychiatrist declared Ake incompetent to stand trial; (4) he was found competent six weeks later, provided that he continue to receive Thorazine, an antipsychotic drug; (5) the state's psychiatric testimony acknowledged the severity of Ake's mental illness, as well as the possibility that it "might have begun many years earlier"; and (6) the burden of producing evidence of insanity rested, under state law, with the defendant. In a footnote, however, the Court commented: "We express no opinion as to whether any of these factors, alone or in combination, is necessary to make this finding."

This footnote was one of the ways that uncertainty was introduced into the Ake opinion.

Significantly, the Court also found a due process violation as a result of the denial of expert assistance at the death penalty hearing, at which state experts testified about Ake's "future dangerousness." Here, the Court extended the right to expert assistance to the sentencing phase (albeit in a death penalty case) and to an issue other than insanity.

While the Ake decision settled the core issue by recognizing a right to expert assistance, it left numerous important issues unresolved for the lower courts to grapple with. The post-Ake issues

---

369 Id. at 76.  
370 Id. at 77 (quoting Britt v. North Carolina, 404 U.S. 226, 227 (1971)).  
371 Id. at 74.  
372 See id. at 86.  
373 Id. at 86 n.12.  
374 See id. at 86–87.  
375 The question of establishing indigence does not appear to have produced much litigation. For example, it appears settled that a defendant who has the resources to hire an attorney may nevertheless request state funds to hire an expert. See Ex parte Sanders, 612 So. 2d 1199 (Ala. 1993) (private attorney retained by third party); State v. Huchting, 927 S.W.2d 411, 419 (Mo. Ct. App. 1996) ("[A] defendant who spends down his resources in the middle of his defense or who relies on the largesse of friends and family for initial
can be divided into several categories. The first involves the scope of the right to expert assistance, including (1) whether the right to expert assistance extends to nonpsychiatric experts and (2) whether Ake applies to noncapital trials or other proceedings, such as juvenile transfer hearings and sex offender commitments. The second issue is the standard for appointing an expert. If the standard is too demanding, the right is gutted. If the standard is lax, the costs skyrocket. Finally, a cluster of post-Ake issues revolve around the role of the expert, particularly whether Ake mandates a partisan rather than neutral expert. The expert’s role also affects procedural issues, such as whether there is a right to an ex parte proceeding when requesting a defense expert, whether the prosecution may call a nontestifying defense expert as a government witness, and whether Ake requires a “competent” expert. These issues are discussed in subsequent Parts of this Article. However, before examining them, another case must be considered.

E. Medina v. California

In Medina v. California, the Court stated that the Mathews v. Eldridge test, the linchpin of the Ake right, was not the appropriate standard in criminal proceedings:

In our view, the Mathews balancing test does not provide the appropriate framework for assessing the validity of state procedural rules, which, like the one at bar, are part of the criminal process. . . . The Bill of Rights speaks in explicit terms to many aspects of criminal procedure, and the expansion of those constitutional guarantees under the open-ended rubric of the Due Process Clause invites undue interference with both considered legislative judgments and the careful balance that the Constitution strikes between liberty and order.

The Court noted that it had applied the Mathews balancing test in criminal cases only twice. One was Ake. The other was United States v. Raddatz, which rejected a due process challenge to a provision in the Federal Magistrates Act authorizing magistrates to make proposed findings of fact and issue recommendations concerning suppression

---

defense expenses is no less entitled to due process and fundamental fairness than is a defendant who enters the judicial system penniless.); State ex rel. Rojas v. Wilkes, 455 S.E.2d 575, 578 (W. Va. 1995) (“[F]inancial assistance provided by a third party which enables an indigent criminal defendant to have the benefit of private counsel is not relevant to the defendant’s right to have expert assistance provided at public expense.”).

505 U.S. 437 (1992) (holding that allocating the burden of persuasion to the accused in connection with the determination of mental competency to stand trial does not violate due process).

See supra notes 363–68 and accompanying text.

Medina, 505 U.S. at 443 (citations omitted).

The Medina Court quickly commented, however, that "[w]ithout disturbing the holdings of Raddatz and Ake, it is not at all clear that Mathews was essential to the results reached in those cases." More specifically, the Court reasoned that "[t]he holding in Ake can be understood as an expansion of earlier due process cases holding that an indigent criminal defendant is entitled to the minimum assistance necessary to assure him 'a fair opportunity to present his defense' and 'to participate meaningfully in [the] judicial proceeding.'" Here, somewhat enigmatically, the Court was quoting a passage in Ake that referred to due process but was followed by citations to cases based, at least in part, on equal protection and the right to counsel.

In effect, Medina severed Ake from its moorings, leaving it a virtual orphan. Because the Court in Ake had rested its decision on due process grounds, it noted that there was "no occasion to consider the applicability of the Equal Protection Clause, or the Sixth Amendment," to Ake's request. As a result, the Court did not address whether these theories might provide a more expansive right to expert assistance, or at least provide a framework to answer some of the more vexing post-Ake issues. Moreover, the Court subsequently passed over several opportunities to clarify the Ake opinion.

Meanwhile, courts continue to cite equal protection and right to counsel grounds in connection with the right to expert assistance.

---

380 See id. at 680–81.
381 Medina, 505 U.S. at 444.
382 Id. at 444–45 (second alteration in original) (quoting Ake v. Oklahoma, 470 U.S. 68, 76 (1985)).
385 Ake, 470 U.S. at 87 n.13.
386 See Vickers v. Arizona, 497 U.S. 1033, 1033 (1990) (Marshall, J., dissenting from denial of certiorari) (contending that Court should accept the case "to decide whether the Constitution requires a State to provide an indigent defendant access to diagnostic testing necessary to prepare an effective defense based on his mental condition, when the defendant demonstrates that his sanity at the time of the offense will be a significant issue at trial"); Johnson v. Oklahoma, 484 U.S. 878, 880 (1987) (Marshall, J., dissenting from denial of certiorari) (contending that Court should accept the case to decide the "important questions [of] whether and when an indigent defendant is entitled to non-psychiatric expert assistance").
387 See, e.g., Ex parte Moody, 684 So. 2d 114, 120 (Ala. 1996) (holding that "an indigent criminal defendant is entitled to an ex parte hearing on whether expert assistance is necessary, based on the Fifth, Sixth, and Fourteenth Amendments" and citing equal protection cases); State v. Apelt, 861 P.2d 634, 650 (Ariz. 1993) (en banc) (concluding that neither due process nor equal protection require an ex parte hearing); Husske v. Commonwealth, 476 S.E.2d 920, 925 (Va. 1996) ("[M]ost courts . . . have held that the Due Process and
For example, an Iowa court cited the Sixth Amendment in ruling that a trial court erred in failing to appoint an accident reconstruction expert in a vehicular homicide case, remarking that "[e]ffective representation of counsel includes the right to an expert witness." Likewise, the Alabama Supreme Court wrote that the right to effective assistance of counsel "includes access to expert witnesses where it is appropriate." While a right-to-counsel rationale would not necessarily alter the result of many Ake issues, such as the scope of the right or the applicable standard, it more effectively supports the argument that a neutral expert does not satisfy Ake—an issue discussed later.

IV
SCOPE OF THE RIGHT TO EXPERT ASSISTANCE

As noted above, the Supreme Court left the scope of the right to expert assistance undefined. Consequently, several important issues needed resolution: the applicability of Ake (1) to nonpsychiatric experts, (2) to noncapital trials (including pretrial and sentencing hearings), and (3) to other proceedings, such as juvenile court transfer hearings, sex offender procedures, and civil commitments.

A. Nonpsychiatric Experts

Ake involved psychiatric experts in an insanity case, and although expert psychiatric testimony in that type of trial played a significant role in the decision, the Court's rationale extends to other types of experts. Indeed, the Court not only held that Ake had a right to expert assistance with respect to his insanity defense in the guilt phase, but also to the "future dangerousness" issue raised in the death pen-
ally stage. In a later case, *Caldwell v. Mississippi*, the Court declined to consider a trial court’s refusal to appoint fingerprint and ballistics experts because the defendant had not made a sufficient showing of need. Importantly, however, the Court gave no indication that fingerprint or ballistic experts were beyond the scope of *Ake*. In addition, the Court in *Little v. Streater*, a pre-*Ake* case, ruled that an indigent defendant in a civil (“quasi-criminal”) paternity action had the right to a blood grouping test at state expense.

Nevertheless, some early cases attempted to limit *Ake* in non-psychiatric contexts. For example, the Alabama Supreme Court rejected a defense request for the appointment of a forensic pathologist by noting that “there is nothing contained in the *Ake* decision to suggest that the United States Supreme Court was addressing anything other than psychiatrists and the insanity defense.” This position continues to find support. For example, the Fourth Circuit expressed this view in 1999.

---

392 See id. at 84 (“[D]ue process requires access to a psychiatric examination on relevant issues, to the testimony of the psychiatrist, and to assistance in preparation at the sentencing phase.”); see also Tuggle v. Netherland, 79 F.3d 1386, 1395–96 (4th Cir. 1996) (holding that while trial court’s refusal to provide psychiatric expert to rebut future dangerousness testimony offered in sentencing phase violated *Ake*, the error was harmless); Castro v. Oklahoma, 71 F.3d 1502, 1514 (10th Cir. 1995) ("The *Ake* duty was triggered here by the State’s presentation of any evidence of Mr. Castro’s future dangerousness or continuing threat to society. There is no necessity for the State to offer psychiatric testimony or evidence during the sentencing phase of a capital trial for its *Ake* duty to apply." (citation omitted)); Brewer v. Reynolds, 51 F.3d 1519, 1529 (10th Cir. 1995) (rejecting "a narrow construction of *Ake*.") Some jurisdictions specify future dangerousness as a relevant factor in determining whether the death penalty should be imposed. E.g., OKLA. STAT. tit. 21, § 7-1/12(b)(7) (2002) (including "existence of a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society" in factors to consider when imposing death penalty); TEX. CRIM. PROC. CODE ANN. § 37.071(b)(1) (Vernon 2003) (allowing courts to consider "whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society"); VA. CODE ANN. § 19.2-264.4(C) (Michie 2000) (including as a relevant consideration whether defendant is likely to "commit criminal acts of violence that would constitute a continuing serious threat to society").


394 See id. at 323 n.1; see also Johnson v. Oklahoma, 484 U.S. 878, 880 (1987) (Marshall, J., dissenting from denial of certiorari) (contending that Court should accept the case to decide “the important questions [of] whether and when an indigent defendant is entitled to non-psychiatric expert assistance”).

395 See supra notes 353–54 and accompanying text.


397 See Weeks v. Angelone, 176 F.3d 249, 255–66 (4th Cir. 1999) (arguing that Supreme Court in *Caldwell* “flatly declined to resolve the question of what, if any, showing would entitle an indigent defendant to private non-psychiatric assistance as a matter of federal constitutional law”); see also Lorenzer, supra note 33, at 544–45 (arguing *Ake* “was couched specifically in terms of the provision of psychiatric services” and that “an extension [to non-psychiatric expert services] was probably not intended by the Court”).
In contrast, the Eighth Circuit has ruled that:

[T]here is no principled way to distinguish between psychiatric and nonpsychiatric experts. The question in each case must be not what field of science or expert knowledge is involved, but rather how important the scientific issue is in the case, and how much help a defense expert could have given. 398

Other cases have recognized a right to assistance outside of the insanity defense, extending Ake to toxicologists, 399 pathologists, 400 fingerprint experts, 401 hypnotists, 402 DNA analysts, 403 serologists, 404

---

398 Little v. Armontrout, 835 F.2d 1240, 1243–45 (8th Cir. 1987) (en banc) (finding that it was error to fail to appoint hypnotist); see also State v. Mason, 694 N.E.2d 932, 943 (Ohio 1998) ("While Ake involved the provision of expert psychiatric assistance only, the case now is generally recognized to support the proposition that due process may require that a criminal defendant be provided other types of expert assistance when necessary to present an adequate defense."); Rey v. State, 897 S.W.2d 333, 338 (Tex. Crim. App. 1995) (en banc) (finding that "Ake is not limited to psychiatric experts"); Husske v. Commonwealth, 476 S.E.2d 920, 925 (Va. 1996) ("[M]ost courts . . . have applied the rationale articulated in Ake, and . . . have held that the Due Process and Equal Protection clauses require the appointment of non-psychiatric experts to indigent defendants [upon a proper showing]").

399 See Bright v. State, 455 S.E.2d 37, 50–51 (Ga. 1995) (finding that failure to appoint toxicologist to assist at death penalty sentencing hearing violated Ake).

400 See, e.g., Terry v. Rees, 985 F.2d 283, 284 (6th Cir. 1993); State v. Ballard, 428 S.E.2d 178, 180 (N.C. 1993) (listing cases applying Ake to requests for pathologists, medical experts, fingerprint examiners, and investigators); Rey, 897 S.W.2d at 338–39; see also Sommers v. Commonwealth, 843 S.W.2d 879, 882–85 (Ky. 1992) (holding that failure to appoint defense pathologist violated state statute designed to implement due process right "to present an effective defense").


402 See Little, 835 F.2d at 1243–45.

403 See, e.g., Ex parte Dubose, 662 So. 2d 1189, 1192–94 (Ala. 1995); Prater v. State, 820 S.W.2d 429, 439 (Ark. 1991) (concluding that trial court erred when it declined to appoint a defense expert "because of a shortage of county funds"); Cade v. State, 382 So. 2d 550, 555 (Fla. Dist. Ct. App. 1985); Polk v. State, 612 So. 2d 381, 393–94 (Miss. 1992) (providing, in appendix to opinion, guidelines for future DNA cases); see also DNA TECHNOLOGY, supra note 48, at 147–50 (recommending that "[d]efense counsel . . . have access to adequate expert assistance . . . to review the quality of the laboratory work and the interpretation of results" and that "authorities . . . make funds available to pay for expert witnesses"). But see People v. Leonard, 569 N.W.2d 683, 689 (Mich. Ct. App. 1997) ("[O]nly two courts have held that whenever the prosecution intends to introduce DNA evidence against a defendant at trial, the defendant has a due process right to an appointment of a DNA expert to assist in his defense."); State v. Huchting, 927 S.W.2d 411, 419–20 (Mo. Ct. App. 1996); Husske, 476 S.E.2d at 926 (concluding that indigent defendant had failed to show a "particularized need" for the services of a DNA expert).

404 See Carmouche, 527 So. 2d at 307.
ballistics experts,\textsuperscript{405} handwriting examiners,\textsuperscript{406} blood spatter specialists,\textsuperscript{407} forensic dentists for bite-mark comparisons,\textsuperscript{408} psychologists on the battered wife syndrome,\textsuperscript{409} as well as other types of experts.\textsuperscript{410} The Alabama Supreme Court even reversed its original position,\textsuperscript{411} ruling in 1995 that an indigent was entitled to a DNA expert under \textit{Ake}.\textsuperscript{412}

A pattern that will repeat itself on other issues is discernable here: some courts give a cramped reading of \textit{Ake} to limit its scope, while others appreciate that the opinion cannot be so easily cabined. Restricting \textit{Ake} to psychiatry would have made it a case of negligible significance because most states had recognized a right in this context before \textit{Ake} was decided;\textsuperscript{413} Oklahoma was a distinct minority.\textsuperscript{414} On the other hand, the more expansive (and correct) reading greatly increases the cost of implementing \textit{Ake}.

\textsuperscript{405} See \textit{Ex parte Sanders}, 612 So. 2d 1199, 1201 (Ala. 1993) (indicating that "[t]he error was to deny the request [for a ballistics expert] because the defendant was indigent").


\textsuperscript{409} See \textit{Dunn v. Roberts}, 963 F.2d 308, 313 (10th Cir. 1992); \textit{see also Doe v. Superior Court}, 45 Cal. Rptr. 2d 888, 892–93 (Ct. App. 1995) ("The record in this case is that the request is for someone with experience in [battered woman syndrome and post-traumatic stress syndrome].").


\textsuperscript{411} See supra note 396 and accompanying text.

\textsuperscript{412} \textit{Ex parte Dubose}, 662 So. 2d 1189, 1192–94 (Ala. 1995) (concluding that "the principles enunciated in \textit{Ake}, and grounded in the due process guarantee of fundamental fairness, apply in a case of nonpsychiatric expert assistance"); \textit{see also Ex parte Moody}, 684 So. 2d 114, 119 (Ala. 1996) (noting that "Alabama Courts have extended \textit{Ake} to other types of expert witnesses necessary to the defense" and citing cases involving DNA and ballistic experts).

\textsuperscript{413} \textit{Ake v. Oklahoma}, 470 U.S. 68, 78 (1985) ("Many States, as well as the Federal Government, currently make psychiatric assistance available to indigent defendants, and they have not found the financial burden so great as to preclude this assistance.").

\textsuperscript{414} See \textit{id.} at 78 n.4 (listing 42 states recognizing the right).
B. Noncapital Cases

The extent to which the *Ake* right applies to proceedings other than capital cases was immediately raised by Chief Justice Burger in his concurring opinion, which emphasized that *Ake* was a death penalty case: "The facts of the case and the question presented confine the actual holding of the Court. In capital cases the finality of the sentence imposed warrants protections that may or may not be required in other cases."\(^{415}\) In one of the first appellate decisions interpreting *Ake*, the Court of Criminal Appeals of Alabama seized on this point, writing that "*Ake* does not reach noncapital cases."\(^{416}\)

Although *Ake* involved a capital defendant, nothing in the majority opinion suggested that the newly-recognized right to expert assistance was limited to death penalty cases.\(^{417}\) Justice Rehnquist, the lone dissenter, acknowledged that the majority opinion was not so restricted. He criticized the majority for fashioning too broad a constitutional rule, and instead advocated "limit[ing] the rule to capital cases."\(^{418}\) Also instructive is the Court's decision in *Little v. Streater*, the pre-*Ake* civil case that the Court labeled "quasi-criminal," which established that an indigent defendant in a paternity action had the right to a blood grouping test at state expense.\(^{419}\)

Most courts assume that *Ake* applies to noncapital cases. As the Eighth Circuit has noted, "we [do not] draw a decisive line for due-process purposes between capital and noncapital cases."\(^{420}\) This position is easy to justify in terms of the *Ake* rationale, and it would be difficult, if not impossible, to reconcile *Little* with a capital case limitation. However, extending *Ake* to felony cases does not end the matter. One commentator has argued that the right to expert assistance should encompass misdemeanor cases in which imprisonment is imposed,\(^{421}\) the triggering standard for the right to counsel.\(^{422}\) But the extension of *Ake* to all felony cases significantly enlarges the scope of

\(^{415}\) Id. at 87 (Burger, C.J., concurring).

\(^{416}\) Isom v. State, 488 So. 2d 12, 13 (Ala. Crim. App. 1986); accord McCord v. State, 507 So. 2d 1030, 1033 (Ala. Crim. App. 1987); see also Lorenger, supra note 33, at 545 (rejecting extension of *Ake* to noncapital cases).

\(^{417}\) At one point in the *Ake* opinion, the Court spoke of the "interest in the accuracy of a criminal proceeding that places an individual's life or liberty at risk." 470 U.S. at 78 (emphasis added).

\(^{418}\) Id. at 87 (Rehnquist, J., dissenting).

\(^{419}\) See supra notes 353-54 and accompanying text.

\(^{420}\) Little v. Armontrout, 835 F.2d 1240, 1243 (8th Cir. 1987) (en banc); see also State v. Barnett, 909 S.W.2d 423, 427-28 (Tenn. 1995) ("Certainly, there is no explicit language in the *Ake* decision limiting its application to capital cases. . . . The due process principle of fundamental fairness applies to all criminal prosecutions, and does not rest upon the severity of the sanction sought or imposed.").

\(^{421}\) West, supra note 36, at 1342-45.

the right and increases (perhaps exponentially) the funds necessary for its implementation.

C. Other Stages of Criminal Cases

The applicability of Ake to pretrial hearings also needs to be addressed. Experts often provide valuable assistance on pretrial issues, including change of venue motions, race bias in jury selection, death-qualified juries, and other issues. Is there a right to a jury consultant, for example? What if the prosecution uses one? Sentencing proceedings raise similar issues. In addition to the insanity defense, Ake involved the penalty stage of a capital case on the issue of future dangerousness. That issue, however, is peculiar to only a few states. There are, however, numerous other issues in death penalty cases that may be addressed by experts. For instance, mental condition is often a mitigating factor and mitigation experts are often

---

423 See United States v. Barney, 55 F. Supp. 2d 1310, 1313 (D. Utah 1999) (reporting that "research has not disclosed a case where an appointment of an expert has been authorized under 18 U.S.C. § 3006A(e) for plea negotiation purposes where the expert would not function as a source of evidence for trial" but reasoning that the statutory language "would seem to be broad enough, that on a proper showing of necessity, such an appointment may be allowed").

424 See Mason v. Mitchell, 95 F. Supp. 2d 744, 776 (N.D. Ohio 2000) (rejecting claim that trial court improperly refused to provide funding "for a mass media expert to assist counsel in demonstrating that a change of venue was necessary because the jury pool had been tainted by pre-trial publicity").


426 See Moore v. Johnson, 225 F.3d 495, 503 (5th Cir. 2000) ("While the wealthiest of defendants might elect to spend their defense funds on jury consultants, indigent defendants are not privileged to force the state to expend its funds on this exercise in bolstering an attorney's fundamental skills."); United States v. Harris, 542 F.2d 1283, 1315–16 (7th Cir. 1976) (holding that denial of CJA request for clinical psychologist to assist in jury selection was not error); Jackson v. Anderson, 141 F. Supp. 2d 811, 853–55 (N.D. Ohio 2001) (denying funds).

427 See Kevin Sack, Research Guided Jury Selection in Bombing Trial, N.Y. TIMES, May 3, 2001, at A12 (reporting that, at the suggestion of a jury consultant retained for the trial of a former Klansman, "[p]rosecutors organized two focus groups and polled nearly 500 residents of the Birmingham area this year to help them understand community attitudes about racial issues in general and about the church bombing in particular").

428 See supra note 74 and accompanying text (noting the future dangerousness "roots" of Ake).

429 See Starr v. Lockhart, 23 F.3d 1280, 1287–89 (8th Cir. 1994) (finding that failure to appoint mental health expert to assist defendant's claim of mental retardation at death penalty hearing violated Ake); James v. State, 613 N.E.2d 15, 21 (Ind. 1993) ("In cases where a defendant faces the death penalty, we also have held that the failure to allow the defendant appropriate resources to retain an expert who would give an opinion concerning the statutory mitigator, may require reversal of the death penalty."). But see Wainwright v. Norris, 872 F. Supp. 574, 587 (E.D. Ark. 1994) (concluding that refusal to appoint expert sociologist to testify about prison life at capital sentencing did not violate due process).

sought. In a recent case, Wiggins v. Smith, the Supreme Court found counsel’s conduct during the mitigation phase of a capital case deficient. Standard practice in Maryland capital cases included the preparation of a social history report, and even though funds were available for the retention of a forensic social worker, counsel chose not to commission such a report. Similarly, in State v. Bocharski, the defendant eventually gave up trying to obtain funds for hiring a mitigation specialist, which typically requires between $20,000 to $100,000. In remanding for resentencing, the court wrote: “It is clear that the defendant struggled to obtain funding during the entire presentencing period, including an eight-week hiatus in which he was essentially prevented from continuing the mitigation investigation because of the county’s reluctance to pay for it.” Finally, Ake’s application to post-conviction proceedings is only beginning to be litigated.

D. “Civil” Proceedings

Other proceedings closely related to criminal prosecutions but designated as “civil” may also require expert assistance. Sexual

431 See John M. Fabian, Death Penalty Mitigation and the Role of the Forensic Psychologist, 27 LAW & PSYCHOL. REV. 73 (2003); Pamela Blume Leonard, A New Profession for an Old Need: Why a Mitigation Specialist Must Be Included on the Capital Defense Team, 31 HOFSTRA L. REV. 1143 (2003); Jonathan P. Tomes, Damned If You Do, Damned If You Don’t: The Use of Mitigation Experts in Death Penalty Litigation, 24 AM. J. CRIM. L. 359 (1997). But see Moore, 225 F.3d at 503 (“[Defendant] provides no explanation of how a mitigation expert might have provided ‘critical’ assistance to a defense team already including a lawyer and psychiatrist, both cognizant of the role of mitigating evidence in staying off the death penalty.”); Mason v. Mitchell, 95 F. Supp. 2d 744, 776 (N.D. Ohio 2000) (“In this case, the state did not present any evidence of Petitioner’s future dangerousness. Therefore, the court’s denial of a mental health expert at the sentencing phase would not constitute an Ake violation.”).

432 See id. at 522.

433 See 22 P.3d 43 (Ariz. 2001) (en banc).

434 See id. at 52-53.

435 Id. at 52.

436 Id. at 503.

437 See Stubbs v. Gomez, 189 F.3d 1099, 1107 (9th Cir. 1999) (rejecting argument “that the district court abused its discretion in denying [petitioner’s] request for funding to retain an expert to testify about whether the prosecutor’s explanations for his peremptories were race-based or pretextual” and affirming denial of petition for habeas corpus); Hoffman v. Arave, 73 F. Supp. 2d 1192, 1201 (D. Idaho 1998) (“[T]he indigent’s right to psychiatric assistance has never been extended beyond the trial and sentencing level to include post-conviction relief proceedings. The petitioner has not cited . . . a single case which so extends the right to expert psychological or psychiatric assistance under Ake.”).

predator proceedings are a prominent recent example. Other possibilities are probation and parole revocation hearings, as well as prison disciplinary hearings. Furthermore, juvenile court delinquency and transfer cases often require experts.

439 In Kansas v. Hendricks, 521 U.S. 346 (1997), the Supreme Court upheld the Kansas Sexually Violent Predator Act in the face of challenges on substantive due process, double jeopardy, and ex post facto grounds. See id. at 350. The Court held that the Act's definition of "mental abnormality" satisfied the substantive due process requirements for civil commitment. See id. at 356. The statute provided indigents with counsel and an examination by a mental health expert. See id. at 355. Significantly, individuals were afforded the opportunity to present and cross-examine witnesses and review documentary evidence. See id.

440 In Commonwealth v. Dube, 796 N.E.2d 859 (Mass. App. Ct. 2003), the court held that the lack of expert testimony on sexual dangerousness doomed a commitment petition. See id. at 868–69; see also In re Kortte, 738 N.E.2d 983, 988 (Ill. App. Ct. 2000) (holding that principle of Ake applies to civil proceedings under the Illinois Sexually Violent Persons Commitment Act); State v. Eppinger, 743 N.E.2d 881, 886 (Ohio 2001) (holding that an expert must be appointed to an indigent defendant in a sexual offender civil commitment proceeding "if the court determines . . . that such services are reasonably necessary to determine whether the offender is likely to engage in [sexually oriented offenses in] the future").


442 In a 1985 case, a federal district court wrote that "[a] part of the due process guarantee is that an individual not suffer punitive action as a result of an inaccurate scientific procedure." Higgs v. Wilson, 616 F. Supp. 226, 230–32 (W.D. Ky. 1985) (concluding that using EMIT urinalysis drug test without a confirmatory test in prison disciplinary proceedings violates due process and granting preliminary injunction), vacated and remanded sub nom., Higgs v. Bland, 793 F.2d 1291 (6th Cir. 1986), appeal following remand, 888 F.2d 443 (6th Cir. 1989) (affirming denial of preliminary injunction).

443 In In re Gaul, 387 U.S. 1 (1967), the Supreme Court held that due process safeguards applied to juvenile court delinquency hearings. See id. at 30–31. Specifically, the Court held that due process in this context included the right to notice, counsel, confrontation and the privilege against compelled self-incrimination. See id. at 31–57. In subsequent cases, the Court held that the standard of proof in criminal cases was constitutional in nature and applied in delinquency proceedings against juveniles, see In re Winship, 397 U.S. 358 (1970), as did the prohibition against double jeopardy, see Breed v. Jones, 421 U.S. 519 (1975). The Court, however, refused to extend the right to jury trial to juvenile cases. McKeiver v. Pennsylvania, 403 U.S. 528 (1971). Despite the holding in McKeiver, however, there seems little reason to believe that the Ake right would not apply in juvenile delinquency hearings. See id. at 543 ("All the litigants here agree that the applicable due process standard in juvenile proceedings, as developed by Gaul and Winship, is fundamental fairness.").

444 Transfer of jurisdiction refers to the process by which a juvenile court relinquishes jurisdiction and refers a juvenile case to the criminal courts for prosecution. This process, variously described as waiver, certification, or bind-over, has been a unique part of the
In addition to delinquency jurisdiction, juvenile courts adjudicate neglect, dependency, and abuse cases, and the Supreme Court has held that due process applies in this context as well.\textsuperscript{445} Testimony by psychologists, caseworkers, and counselors is often admitted in dependency and neglect cases.\textsuperscript{446} Medical testimony concerning the battered child syndrome and shaken baby syndrome has similarly been admitted in physical abuse cases.\textsuperscript{447} Not surprisingly, several courts have extended \textit{Ake} to permanent custody proceedings.\textsuperscript{448} Finally, civil commitment proceedings frequently involve expert testimony,\textsuperscript{449} and juvenile court system since the establishment of the first juvenile court. See \textit{Kempen v. Maryland}, 428 F.2d 169, 175 (4th Cir. 1970) ("There is no proceeding for adults comparable directly to the juvenile jurisdiction waiver hearing."). In \textit{Kent v. United States}, 383 U.S. 541 (1966), the Supreme Court invalidated a transfer proceeding. According to the Court, transfer is a "critically important" stage of the juvenile process, \textit{id}. at 556, and "there is no place in our system of law for reaching a result of such tremendous consequences without ceremony—without hearing, without effective assistance of counsel, without a statement of reasons," \textit{id}. at 554. Experts testify often in these cases. See, e.g., \textit{State v. Waston}, 547 N.E.2d 1181, 1183 (Ohio 1989) ("At the hearing, the court clinic psychiatrist . . . testified that appellant showed 'no evidence of any psychiatric disorder.'"). Nevertheless, some courts have held \textit{Ake} inapplicable in this context. See \textit{State ex rel. a Juvenile v. Hoose}, 539 N.E.2d 704, 706 (Ohio Ct. App. 1988) ("This court is of the view that \textit{Ake} does not establish that petitioner is entitled at this [waiver proceeding] to the appointment of a private psychiatric examiner at the expense of the state." (citation omitted)); \textit{accord State v. Whisenant}, 711 N.E.2d 1016, 1026 (Ohio Ct. App. 1998).

\textsuperscript{445} See \textit{Santosky v. Kramer}, 455 U.S. 745, 758 (1982) ("In parental rights termination proceedings, the private interest affected is commanding; the risk of error from using a preponderance standard is substantial; and the countervailing governmental interest favoring that standard is comparatively slight."); \textit{Lassiter v. Dep't of Soc. Servs.}, 452 U.S. 18, 27, 31-32 (1981) (finding a parent's interest in a termination proceeding to be "a commanding one" and holding that due process may, in some cases, require the appointment of counsel for indigent parents).

\textsuperscript{446} See, e.g., \textit{In re Webb}, 581 N.E.2d 570, 574 (Ohio Ct. App. 1989) (admitting physician's clinical impression that children had been sexually abused was not error); \textit{In re Brown}, 573 N.E.2d 1217, 1220 (Ohio Ct. App. 1989) (admitting social worker's testimony about mother's "past parenting history and her ability to comply with prior reunification plans regarding her other children" was not error); \textit{In re Green}, 480 N.E.2d 492, 493 (Ohio Ct. App. 1984) ("[The] juvenile court granted appellant's motion requesting the court to order a psychological evaluation of her by a psychologist named by the appellant, at county expense, due to appellant's indigency."); \textit{see also} \textsc{Martin R. Gardner}, \textsc{Understanding Juvenile Law} § 4.03[A], at 68 (1997) ("Expert testimony is often essential in proving child abuse.").

\textsuperscript{447} See supra notes 126-28 and accompanying text (discussing medical examiners and coroners).


\textsuperscript{449} Because the typical civil commitment proceeding may result in the loss of liberty, it is subject to due process safeguards. For example, in \textit{Addington v. Texas}, 441 U.S. 418 (1979), the United States Supreme Court ruled that a person committed to a mental institution in a civil proceeding must be shown to be dangerous by clear and convincing evidence, \textit{see id}. at 432-33.
Ake has also been cited in this context. These decisions clearly bring Ake out of the criminal context. Here, again, the Ake Court did not seem to appreciate the implications of its decision.

V

APPLICABLE STANDARD

There is no question that the defendant has the burden of establishing the need for expert assistance. According to Ake, the accused must make a "preliminary showing" that an issue requiring expert assistance is "likely to be a significant factor at trial." In a later case, Caldwell v. Mississippi, the Supreme Court declined to consider a trial court's refusal to appoint fingerprint and ballistics experts because the defendant had "offered little more than undeveloped assertions that the requested assistance would be beneficial." The precise dimensions of the threshold showing, however, are not clear. As the Fifth Circuit noted, "the Ake decision fails to establish a bright line test for determining when a defendant has demonstrated that sanity at the time of the offense will be a significant factor at the time of trial." Likewise, after surveying the cases, a Florida court wrote that this issue "typically boil[s] down to an ad hoc exercise of intuition by the appellate court that there was a substantial risk that the failure to supply the defendant with an expert deprived the defendant of a fair trial."

450 See Goetz v. Crosson, 41 F.3d 800, 803 (2d Cir. 1994) (citing Ake and indicating that due process requires the "provision of an independent psychiatric evaluation" for civil commitment proceedings in certain circumstances).

451 The Supreme Court's decision in Little v. Streater further supports the Ake argument in this context. There, the Court held that an indigent defendant in a paternity action had a right to a blood test at state expense. See supra notes 353-54 and accompanying text.


454 Id. at 323 n.1; see also Volson v. Blackburn, 794 F.2d 173, 176 (5th Cir. 1986) (applying Ake's preliminary showing requirement); Bowden v. Kemp, 767 F.2d 761, 764 (11th Cir. 1985) (same).

455 Volson, 794 F.2d at 176; see also United States v. Kennedy, 64 F.3d 1465, 1472-73 (10th Cir. 1995) (indicating that "the need for expert accounting was . . . unclear" and concluding that the district court's denial of resources violated neither the CJA nor Ake).

456 Cade v. State, 658 So. 2d 550, 553-54 (Fla. Dist. Ct. App. 1995) ("Since there has been no clear guidance given by the United States Supreme Court in constitutional terms, the approach taken by state courts varies. . . . The federal courts have been no more precise.").
Someplace between a defense expert "on demand" and a showing that an expert is "absolutely necessary," a line must be drawn. A reasonable threshold showing is needed because the system cannot afford defense experts on "demand." Moreover, litigation incentives tend to make motions for expert assistance somewhat routine. First, failure to make an Ake request waives the issue for appeal and may also result in a claim of ineffective assistance of counsel in subsequent proceedings. Second, the issue may give the defense leverage in plea bargaining. Third, denial of the request provides another issue for an appeal in the event of conviction. In short, because the defense does not pay, there is no downside to making an Ake request. State v. Mason, a capital case, is illustrative. The defendant received state funds for the services of a private investigator, forensic psychiatrist, forensic pathologist, and for DNA and other blood testing services. He requested, but did not receive, money for experts in the following fields: soils and trace evidence, shoeprints, eyewitness identifications, homicide investigations, mass media, forensic psychology, DNA statistics, and firearms.

Conversely, if the threshold standard is too high, the defendant is placed in a "Catch-22" situation, in which the standard "demand[s] that the defendant possess already the expertise of the witness sought." Courts have adopted different standards for determining when an expert should be appointed. Before examining them, however, several myths about the use of experts in criminal litigation should be addressed, because they often inform court decisions on this subject.

---

457 Moore v. Kemp, 809 F.2d 702, 712 (11th Cir. 1987) (en banc) ("[D]ue process does not require the government automatically to provide indigent defendants with expert assistance upon demand.").
458 Ex parte Moody, 684 So. 2d 114, 119 (Ala. 1996) ("To meet this standard, the indigent defendant must show, with reasonable specificity, that the expert is absolutely necessary to answer a substantial issue or question raised by the state or to support a critical element of the defense.").
459 The Fifth Circuit has ruled that "neither the bare assertion that the defendant was insane at the time of the offense, nor evidence of mental problems generally is sufficient to make the threshold showing required by Ake." Williams v. Collins, 989 F.2d 841, 845 (5th Cir. 1993). Instead, Ake requires "a factual showing sufficient to give the trial court reasonable ground to doubt his sanity at the time of the offense." Id.; see also Yohey v. Collins, 985 F.2d 222, 227 (5th Cir. 1993) (denying habeas relief because request for ballistics expert was based on speculative theory and defense presented no evidence that autopsy results were inaccurate or subject to disagreement between experts); Scott v. Louisiana, 934 F.2d 631, 633 (5th Cir. 1991) (indicating that appointment of nonpsychiatric experts is proper only if the evidence is critical to conviction and open to differing opinions).
460 See People v. Redd, 670 N.E.2d 583, 598 (Ill. 1996).
461 See supra notes 329-42 and accompanying text (discussing ineffectiveness claims).
463 See id. at 943.
A. Underlying Myths

1. Effectiveness of Cross-Examination

Appellate courts often cite the fact that the cross-examination of the prosecution expert was effective as a reason why a defense expert was not needed.\(^4\) For example, one court wrote that "defense trial counsel exhibited an understanding of the scientific evidence, and effectively and comprehensively cross-examined the prosecution's experts."\(^5\) Another court went further, declaring:

\[\text{[W]}\text{e disagree with [the] contention that the average attorney is ill-equipped to defend against [DNA] evidence. To the contrary, law libraries—i.e., law journals, practitioners' guides, annotated law reports, CLE materials, etc.—are teeming with information and advice for lawyers preparing to deal with DNA evidence in trial. Even a cursory perusal of the literature in this area reveals copious lists of questions for defense attorneys to use in cross-examinations and other strategies for undermining the weight of DNA evidence.}^{16}\]

This statement borders on the incredulous. First, the same reasoning applies when prosecutors seek a psychiatric evaluation of an accused who has raised an insanity defense. There are likewise numerous texts and CLE materials on that subject,\(^6\) and yet virtually every jurisdiction has procedures recognizing the prosecution's right to have the accused examined by a state psychiatrist—a prosecution expert.\(^7\) The rationale for this procedure is obvious: the adversary system would be undermined if the prosecution was deprived of its own expert.

Second, effective cross-examination of a prosecution expert frequently requires the advice of a defense expert. For example, a British DNA study found that "94 per cent of defence lawyers who consulted an expert felt that they had been assisted by that expert, either in their evaluation of the case and the advice they gave to their client or in presenting their case in court."\(^8\)

\(^4\) See, e.g., Plunkett v. State, 719 P.2d 834, 839 (Okla. Crim. App. 1986). In rejecting a due process right to retest, several courts have reasoned that the defendant's opportunity to cross-examine the prosecution's expert witnesses provides sufficient protection. See supra note 326 and accompanying text (providing examples).

\(^5\) People v. Leonard, 569 N.W.2d 663, 671 (Mich. Ct. App. 1977) (noting that "[d]efense counsel's undergraduate degree is in chemistry with a minor in biophysics").


\(^7\) Indeed, the Ake decision itself is replete with citations to such texts. See ABA CRIMINAL JUSTICE MENTAL HEALTH STANDARDS (1989).

\(^8\) See, e.g., FED. R. CRIM. P. 12.2(c) (describing the procedure for obtaining a court-ordered psychiatric examination to determine sanity at time of offense). As the drafters note, "[t]his is a common provision of state law, the constitutionality of which has been sustained." FED. R. CRIM. P. 12.2 advisory committee's note.

\(^9\) Steventon, supra note 59, at 43.
Third, there is a significant difference between attacking the opinion of an opponent's expert through cross-examination and attacking that opinion through the testimony of your own expert. In Daubert, the Supreme Court noted that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." In 1983, the Court upheld the admissibility of expert testimony concerning future dangerousness in capital cases. In so ruling, the Court noted that "jurors should not be barred from hearing the views of the State’s psychiatrists along with opposing views of the defendant’s doctors." Similarly, the 1992 report of the National Academy of Sciences observed that "[m]ere cross-examination by a defense attorney inexperienced in the science of DNA testing will not be sufficient." A forensic scientist agrees, remarking that "[i]f cross-examination is to be the only way to discover misleading or inadequate testimony by forensic scientists, then too much is being expected from it." Some courts have also recognized this point. For instance, in De Freece v. State, the Texas Court of Criminal Appeals rejected the notion that an "admirable" cross-examination of the prosecution expert justified the failure to appoint an expert for the defense.

Finally, if this factor is relevant at all, it would only be so on appellate review under a harmless error analysis. After all, a trial court can-
not wait to review the defense counsel's cross-examination before appointing a defense expert.

2. "Neutral" Prosecution Experts

Courts may assume that cross-examination is adequate because government experts are unbiased scientists. For example, the Indiana Supreme Court upheld a trial judge's denial of funds for a DNA expert because "the neutral . . . experts here were testifying to the results of a test 'involving precise, physical measurements and chemical testing'".  

Eighty percent of crime laboratories, however, are controlled by the police, and most examine only evidence submitted by the prosecution.  

The "pro-prosecution" bias of lab experts has often been criticized, both in this country and abroad.  

Along a similar vein, the Eighth Circuit rejected the notion that the right to subpoena state experts is an appropriate consideration.

\footnotetext{479} Harrison v. State, 644 N.E.2d 1243, 1253 (Ind. 1995) (quoting James v. State, 613 N.E.2d 15, 21 (Ind. 1993)).  
\footnotetext{480} See Peterson, supra note 163, at 11.  
\footnotetext{481} A 1970 federal grand jury, investigating the deaths of Black Panther leaders in a Chicago police raid, noted that the "testimony of the firearms examiner that he could not have refused to sign what he believed was an inadequate and preliminary report on pain of potential discharge is highly alarming. If true, it could undermine public confidence in all scientific analysis performed by this agency."  
\footnotetext{482} See Andre A. Moenssens, Novel Scientific Evidence in Criminal Cases: Some Words of Caution, 84 J. CRIM. L. & CRIMINOLOGY 1, 6 (1993) (noting that crime labs "may be so imbued with a pro-police bias that they are willing to circumvent true scientific investigation methods for the sake of 'making their point'"; James E. Starrs, The Seamy Side of Forensic Science: The Mephitic Stain of Fred Salem Zain, 17 SCI. SLEUTHING REV. 1, 8 (1993) ("The inbred bias of crime laboratories affiliated with law enforcement agencies must be breached."); Symposium on Science and the Rules of Legal Procedure, 101 F.R.D. 599, 642 (1983) (Statement of Professor Joseph L. Peterson) (noting that "the police agency controls the formal and informal system of rewards and sanctions for the laboratory examiners" and that "[m]any of these laboratories make their services available only to law enforcement agencies" before concluding that there exists "a legitimate issue regarding the objectivity of laboratory personnel").

\footnotetext{483} See David E. Bernstein, Junk Science in the United States and the Commonwealth, 21 YALE J. INT'L L. 123, 171 (1996) ("Many reformers in the United Kingdom believe that a large percentage of the problems that have arisen in the forensic science context are attributable to the fact that English forensic science is almost solely the province of the state."); see also Ian Freckelton, Science and the Legal Culture, in 2 EXPERT EVIDENCE 107, 112 (Ian Freckelton & Hugh Selby eds., 1993) (citing "unequivocal evidence that the pro-prosecution orientation of government scientists . . . had not adequately been countered in England"); Paul Wilson, Lessons from the Antipodes: Successes and Failures of Forensic Science, 67 FORENSIC SCI INT'L 79, 82 (1994) ("The 'independence' of forensic science is often largely mythical. A series of case records suggests that scientific testimony is frequently distorted or moulded to fit preconceived misassumptions about the nature of the crime or the guilt or innocence of the accused.").
According to the court, "the ability to subpoena a state examiner and to question that person on the stand does not amount to the expert assistance required by Ake."\footnote{Starr v. Lockhart, 23 F.3d 1280, 1289 (8th Cir. 1994); see also Williamson v. Reynolds, 904 F. Supp. 1529, 1561–62 (E.D. Okla. 1995) ("[W]hen forensic evidence and expert testimony are critical parts of the criminal prosecution of an indigent defendant, due process requires the State to provide an expert who is not beholden to the prosecution.")., aff'd sub nom. on other grounds, Williamson v. Ward, 110 F.3d 1508, 1522 (10th Cir. 1997); De Freece v. State, 848 S.W.2d 150, 159 (Tex. Crim. App. 1993) ("We reject the notion that a 'court's expert' necessarily fulfills the role of psychiatric assistant to the indigent accused envisioned by Ake. . . . In [this] context the phrase 'court's expert' is an oxymoron.").}

3. Competence of Examiners

If government examiners were always competent, the need for defense experts would arguably decrease. Such an assumption, however, is unwarranted. In 1989, molecular biologist Eric Lander could correctly note: "At present, forensic science is virtually unregulated—with the paradoxical result that clinical laboratories must meet higher standards to be allowed to diagnose strep throat than forensic labs must meet to put a defendant on death row."\footnote{Eric Lander, DNA Fingerprinting on Trial, 339 Nature 501, 505 (1989); see also Randolph N. Jonakait, Forensic Science: The Need for Regulation, 4 Harv. J. L. & Tech. 109, 191 (1991) ("All available information indicates that forensic science laboratories perform poorly. . . . Current regulation of clinical labs indicates that a regulatory system can improve crime laboratories. . . . [F]orensic facilities should at least be required to undergo mandatory, blind proficiency testing, and the results of this testing should be made public.").} Although important reforms have been undertaken, only a few states require the accreditation of crime laboratories.\footnote{See N.Y. Exec. Law § 995-b(1) (McKinney 1996); Okla. Stat. Ann. tit. 74, § 150.37(A)(3) (West Supp. 2004); Tex. Crim. Proc. Code Ann. § 38.35(d) (Vernon Supp. 2004).} There are voluntary programs, such as the American Society of Crime Lab Directors/Laboratory Accreditation Board (ASCLD/LAB), but many laboratories remain unaccredited.\footnote{The President of the American Academy of Forensic Sciences observed: Unfortunately, while the ASCLD/LAB program has been successful in accrediting over 200 laboratories, a large number of forensic laboratories in the U.S. remain unaccredited by any agency. A similar situation exists with death investigation agencies accredited by the National Association of Medical Examiners (NAME); forty such medical systems have been accredited, covering only about 25% of the U.S. population. The same dichotomy exists in certification programs for the practicing forensic scientist, even though forensic certification boards for all the major disciples have been in existence for over a decade. Why have forensic laboratories and individuals been so reluctant to become accredited or certified?}
Proficiency testing in the forensic sciences dates back to 1978, and later studies demonstrated its feasibility. Nevertheless, some courts have criticized current proficiency testing in fingerprint and handwriting comparisons as not being sufficiently rigorous. In short, we do not know much about competence, and proficiency testing, which is designed to be an indicator of competence, will affirmatively mislead if it is not rigorous enough. Thus, competence cannot be assumed under current conditions.

B. Various Formulations of the Standard

Courts have construed Ake in diverse ways. Some courts define the standard as whether there is a reasonable probability or necessity that an expert would aid in the defense. Other courts require a showing of "particularized need." It is not clear that these two for-

---

488 See Joseph L. Peterson et al., Crime Laboratory Proficiency Testing Research Program 251 (1978) (reporting that 71.2% of the crime laboratories tested provided unacceptable results in a blood test, 51.4% made errors in matching paint samples, 35.5% erred in a soil examination, and 28.2% made mistakes in firearms identifications); D. Michael Risinger et al., Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification "Expertise," 137 U. PA. L. REV. 731, 748 (1989) (reviewing five handwriting comparison proficiency tests that showed that, at best, "[d]ocument examiners were correct 57% of the time and incorrect 43% of the time").

489 See Joseph L. Peterson & Penelope N. Markham, Crime Laboratory Proficiency Testing Results, 1978–1991, 40 J. FORENSIC SCI. 994, 1009 (1995) (reviewing the ability of laboratories to determine if there was a common origin shared by an unknown and a known sample for evidence ranging from firearms, to hair, to questioned documents).

490 See, e.g., United States v. Crisp, 324 F.3d 261, 274 (4th Cir. 2003) (Michael, J., dissenting) ("Proficiency testing is typically based on a study of prints that are far superior to those usually retrieved from a crime scene."); United States v. Llera Plaza, 188 F. Supp. 2d 549, 565 (E.D. Pa. 2002) ("On the record made before me, the FBI [fingerprint] examiners got very high proficiency grades, but the tests they took did not. . . . [O]n the present record I conclude that the proficiency tests are less demanding than they should be.").

491 See, e.g., Crisp, 324 F.3d at 279 (Michael, J., dissenting) ("Moreover, although the government's expert here testified to his success on proficiency tests, the government provides no reason for us to believe that these tests are realistic assessments of an examiner's ability to perform the tasks required in his field."); United States v. Lewis, 220 F. Supp. 2d 548, 554 (S.D. W. Va. 2002) ("There were aspects of Mr. Cawley's testimony that undermined his credibility. . . . Mr. Cawley said that his peers always agreed with each others' results and always got it right. Peer review in such a 'Lake Woebegone' environment is not meaningful.").

492 See, e.g., State v. Williams, 800 P.2d 1240, 1247 (Ariz. 1987) ("[A] criminal defendant is entitled to a mental examination by court-appointed psychiatrists if he can establish 'that reasonable grounds for an examination exist.'" (quoting Ariz. R. Crim. P. 113)); Sommers v. Kentucky, 843 S.W.2d 879, 882 (Ky. 1992) ("finding the denial of the defendant's motions for funds to provide expert assistance constituted prejudicial error where the defendant had demonstrated "reasonable necessity").

493 See Husske v. Commonwealth, 476 S.E.2d 920, 925 (Va. 1996) ("Our research reveals that most courts which have considered the question . . . have held that the Due Process and Equal Protection clauses require the appointment of non-psychiatric experts to indigent defendants depending upon whether the defendants made a particularized showing of the need for the assistance of such experts.").
mulations differ in result. A reasonable probability standard is defen-
sible—albeit, often unhelpful in specific cases.

A number of courts, however, have added a second requirement. For example, the Eleventh Circuit has stated "that a defendant must show the trial court that there exists a reasonable probability both [1] that an expert would be of assistance to the defense and [2] that de-
nial of expert assistance would result in a fundamentally unfair trial."494 The second prong erects a formidable and unjustifiable obstacle to the appointment of experts. It is one thing to make a pretrial showing that assistance is needed; it is quite another to make a pretrial showing that the trial would be fundamentally unfair without the expert. This becomes more obvious as the court spells out the requisite showing:

Thus, if a defendant wants an expert to assist his attorney in con-
fronting the prosecution’s proof—by preparing counsel to cross-ex-
amine the prosecution’s experts or by providing rebuttal testimony—he must inform the court of the nature of the prosecu-
tion’s case and how the requested expert would be useful. At the very least, he must inform the trial court about the nature of the crime and the evidence linking him to the crime.495

One problem with this demanding standard is the lack of ade-
quate defense discovery. The court acknowledged this problem in a footnote496 but appeared unaware that such discovery is often not available.497

The two-pronged approach also affects the harmless error analy-
sis in a way that disadvantages the accused.498 Under a single-pronged

494 Moore v. Kemp, 809 F.2d 702, 712 (11th Cir. 1987) (emphasis added).
495 Id. (adding that “[b]y the same token, if the defendant desires the appointment of an expert so that he can present an affirmative defense, such as insanity, he must demon-
strate a substantial basis for the defense,” and that to do so, his “showing must also include a specific description of the expert or experts desired [and] . . . should inform the court why the particular expert is necessary.”); see also State v. Touchet, 642 So. 2d 1213, 1216 (La. 1994) (“To meet [the Moore] standard, a defendant must ordinarily establish, with a reasonable degree of specificity, that the assistance is required to answer a substantial issue or question that is raised by the prosecution’s case or to support a critical element of the defense.”).
496 Moore, 809 F.2d at 712 n.10 (“In a jurisdiction still employing 'trial by ambush,' the defendant might have to ask the court to make the prosecutor disclose the theory of his case and the results of any tests that may have been performed by government experts or at the government's request.”).
497 See infra text accompanying notes 708–13 (discussing discovery issues).
498 Courts have divided over whether an Ake violation may be deemed harmless error. Certain violations are “regarded as so elemental that their existence abrogates the basic structure of a constitutional trial, and which are therefore not subject to harmless error analysis.” Starr v. Lockhart, 23 F.3d 1280, 1291 (8th Cir. 1994) (citing the following rights as not subject to harmless error analysis: “the right to counsel, trial by a biased judge, exclusion of members of the defendants’ race from the grand jury, deprivation of the right to self-representation, and denial of the right to a public trial”). However, the Lockhart court ruled that an Ake violation is subject to harmless error analysis. Id. at 1292; see also Castro v. Oklahoma, 71 F.3d 1502, 1514–16 (10th Cir. 1995) (holding that the trial court's
test, once an *Ake* violation has been found (there is a reasonable probability that an expert would aid in the defense), an appellate court determines whether the error was harmless. The prosecution would have the burden of showing harmless error beyond a reasonable doubt.499 In contrast, under the two-pronged approach, the defendant has the burden of showing an unfair trial.500

C. Relevant Factors

Instead of parsing the various formulations of the *Ake* standard, a more informative approach focuses on the factors that are relevant to the appointment decision.

1. *Timeliness & Specificity*

The threshold showing should include procedural requirements such as timeliness501 and reasonable specificity.502 How specific the denial of funds to the defendant was not harmless error); Brewer v. Reynolds, 51 F.3d 1519, 1529 (10th Cir. 1995) (agreeing that harmless error analysis should apply, but struggling to decide which standard for harmless is appropriate).

In contrast, the Texas Court of Criminal Appeals held that an *Ake* violation is a “structural” error, and therefore not subject to a harmless error analysis. See Rey v. State, 897 S.W.2d 333, 345 (Tex. Crim. App. 1995) (“We can conceive of few errors that are more structural in nature than one which eliminates a basic tool of an adequate defense and in doing so dramatically affects the accuracy of the jury’s determination.”); see also Lorenger, *supra* note 33, at 541–64 (arguing that harmless error analysis should not apply to either the guilt phase or the sentencing phase of a capital case where the defendant was denied a psychiatrist).

In *Tuggle v. Netherland*, 516 U.S. 10 (1995), the Supreme Court did not decide this issue, but remanded the case for a determination of “whether harmless-error analysis is applicable to this case.” *Id.* at 14. On remand, the Fourth Circuit ruled that an *Ake* error is indeed subject to harmless error analysis. See *Tuggle v. Netherland*, 79 F.3d 1386, 1392 (4th Cir. 1996).


500 The “fair trial” prong seems to function much like the “materiality” requirement in *Brady* or the “prejudice” requirement in the ineffective assistance of counsel cases. See 5 *LAFAVE ET AL.*, supra note 319, § 27.6(d), at 947 (“An additional group of violations were destined not be analyzed under the *Chapman’s* harmless error test because they were harmful by definition . . . . Examples include a finding that counsel’s representation was ineffective . . . or that undisclosed exculpatory evidence was material . . . .”).

501 See, e.g., *Cade v. State*, 658 So. 2d 550, 555 (Fla. Dist. Ct. App. 1995) (finding prejudicial error where the trial court refused to provide expert assistance for the defendant, because the defendant’s request was timely and specific: he identified the expert he was seeking, the tasks the expert was going to perform, and the experts hourly rate was provided); Finn v. State, 558 S.E.2d 717, 720 (Ga. 2002) (“[T]he defendant’s right was contingent on ‘a motion timely made.’ . . . The record shows that Finn had ample time within which to investigate the possibilities of DNA testing and that he failed to act diligently until after his procedurally deficient motion was denied.”).

502 See, e.g., *Ex parte Moody*, 684 So. 2d 114, 119 (Ala. 1996) (“To meet this standard, the indigent defendant must show, with reasonable specificity, that the expert is absolutely necessary to answer a substantial issue or question raised by the state or to support a critical element of the defense.”).
request needs to be is open to debate.\textsuperscript{503} As one court stated: “De-
fense counsel should not have to attempt to train himself in the tech-
nical subject before being allowed the assistance of an expert; 
nevertheless, just by virtue of the lawyer’s role, some level of under-
standing is expected.”\textsuperscript{504} The court went on to observe:

Counsel should be able to articulate a basis for requiring an expert 
behind telling the judge that the subject is “complicated.” This 
would seem to be especially true of forensic sciences commonly in-
volved in criminal cases, such as fingerprinting, ballistics, handwrit-
ing and DNA identification. Counsel should be expected at least to 
know what is in the legal literature and in case law about the 
topic.\textsuperscript{505}

The Illinois Supreme Court has held that the defendant is not 
required to identify a specific expert or estimate that expert’s fees, 
finding that it would be a constitutional violation when the expert was 
“necessary to proving a crucial issue in the case.”\textsuperscript{506} Because finding 
qualified defense experts is often difficult,\textsuperscript{507} unrealistic specificity 
should not be demanded.

\textsuperscript{503} According to two commentators, a motion for the appointment of an expert 
should include:

(1) The type of expert necessary; (2) The assistance the expert will provide 
to the defense; (3) The name, qualifications, fees, etc. of the desired ex-
pert; (4) The reasonableness of the expert’s fees and other costs; (5) The 
objective bases for the request (specific factual reasons for why an expert is 
necessary); (6) The subjective bases for the request (personal observations 
of your client such as possible emotional problems or drug addiction, etc. 
about which you wish to have an expert testify); (7) The legal necessity for 
the expert’s testimony, \textit{i.e.}, what element will it attack; (8) The legal entitle-
ment to an independent expert; and, (9) The inadequacy of available gov-
ernment experts.

Nancy Hollander & Lauren M. Baldwin, \textit{Expert Testimony in Criminal Trials: Creative Uses, 

\textsuperscript{504} \textit{Cade}, 658 So. 2d at 555.

\textsuperscript{505} \textit{Id. at} 555. See, also, the Georgia Supreme Court’s instructions that:
\[A]n indigent defendant must disclose “with a reasonable degree of preci-
sion” (1) the reason the evidence to be examined is critical; (2) the type of 
scientific testimony needed; (3) what the expert proposes to do with the 
evidence; and (4) the projected cost of retaining the expert. Without de-
tailed information, neither the trial court, nor an appellate court, can de-
termine whether the funds are necessary to protect the defendant’s due 
process rights.

\textit{Finn}, 558 S.E.2d at 720.

\textsuperscript{506} People v. Lawson, 644 N.E.2d 1172, 1191 (Ill. 1994).

\textsuperscript{507} Judge Weinstein has observed: “Courts, as gatekeepers, must be aware of how diffi-
cult it can be for some parties—particularly indigent criminal defendants—to obtain an 
expert to testify. The fact that one side may lack adequate resources with which to fully 
develop its case is a constant problem.” Jack B. Weinstein, \textit{Science, and the Challenges of 
2. Preliminary Assessment

Some courts have denied Ake requests because they were either exploratory or speculative. A valid exploratory request should be distinguished from one that is merely a shot in the dark. There are times when an Ake request, of necessity, must be exploratory—an attorney may need an expert to determine if there is a meritorious scientific evidence issue in the case. For example, faced with blood spatter evidence for the first time, a lawyer may not be able to assess whether there is a basis for challenging such evidence. Thus, despite the exploratory nature of the request, an expert should be provided.

Similarly, in Harrison v. State, a bite-mark case in which the accused received the death penalty for the murder of a seven-year-old girl, the prosecution expert testified that the defendant had bitten the victim more than forty times, but the trial court nevertheless rejected a defense request for an expert. To demonstrate a “particularized need” for a defense expert, the trial judge required that the expert first review the evidence and write an affidavit. This puts the defense in a difficult position, because without compensation most experts will not review evidence or prepare an affidavit. In Harrison, by the time of the appeal, an expert had been found; not only did he dispute the “match,” he concluded that the “marks were not from bites.”

A limited Ake right should be recognized for a preliminary analysis if a good faith showing is made. Here, a two-step process should

---

508 See James v. State, 613 N.E.2d 15, 21 (Ind. 1993) (listing as one factor for a trial court to consider in determining whether a defendant is entitled to funds for an expert is "whether the purpose of the expert is exploratory only").

509 See, e.g., Yohey v. Collins, 985 F.2d 222, 227 (5th Cir. 1993) (denying habeas relief because the defendant’s request for a ballistics expert was based on his first counsel’s speculation that "more than one bullet may have penetrated more than one person.").

510 See James, 613 N.E.2d at 21 ("Knowledge concerning cross-examination of blood spatter experts is not the kind of experience that defense counsel would normally be expected to possess."). But see Stewart v. Commonwealth, 427 S.E.2d 394, 405 (Va. 1993) ("Stewart cites no cases that indicate . . . assistance [from a blood spatter expert] is required in order to provide the constitutionally required 'basic tools of an adequate defense.'").

511 635 So. 2d 894 (Miss. 1994).

512 See id. at 895–97.


514 See id.

515 See id.

516 One pre-Ake court commented:

In the nature of things it may be difficult, in advance of trial, for counsel representing an indigent defendant to demonstrate an undoubted need for such funds. However, he can at least advise the court as to the general lines of inquiry he wishes to pursue, being as specific as possible.
be adopted. Enough money for an initial assessment should be au-
thorized, with the understanding that further funds may be forthcom-
ing based on the expert’s affidavit that a significant issue is
involved.\footnote{Puett v. Superior Court, 158 Cal. Rptr. 266, 267 (Ct. App. 1979).}

3. Expert as Advisor v. Trial Witness

In some situations an expert is needed as an advisor both pretrial
and during trial for the cross-examination of prosecution witnesses. The Court in \textit{Ake} recognized this point when it wrote that the expert
would “conduct a professional examination on issues relevant to the
... defense, to help determine whether the insanity defense is viable,
to present testimony, and \textit{to assist in preparing the cross-examination} of a
State’s psychiatric witnesses.”\footnote{\textit{Ake} v. Oklahoma, 407 U.S. 68, 82 (1985).} Thus, courts recognize that \textit{Ake} en-
compasses more than a \textit{testifying} defense expert; it requires a \textit{consulting}
expert.\footnote{\textit{FED. R. EVID. 615 advisory committee’s note; see, e.g., Malek v. Fed. Ins. Co., 994
F.2d 49, 54 (2d Cir. 1993) (finding that the district court erred in sequestering the plaint-
iff’s expert where the defense expert’s testimony differed from his reports, and those dif-
ferences included important conclusions bearing on the question of arson, making the
presence of the plaintiff’s expert during this testimony necessary to the presentation of the
plaintiff’s case); see also 1 \textit{McCormick on Evidence} § 50, at 190 (John William Strong ed.,
4th ed. 1992) ("An example of a witness whose presence may be essential is an expert
witness."); 6 \textit{JOHN HENRY WIGMORE, EVIDENCE} § 1841, at 475–76 n.4 (1976) (referencing a
variety of jurisdictions that had decided to omit prospective witnesses from sequestration
on the grounds their assistance in the management of the case would be indispensable).}

Federal Rule of Evidence 615, which governs the sequestration of
witnesses, recognizes the need for consulting experts in this circum-
stance—the rule recognizes an exception for witnesses “whose pres-
ence is shown ... to be essential to the presentation of the party’s
cause.”\footnote{\textit{FED. R. EVID.} 615.} This category “contemplates such persons as an agent who
handled the transaction being litigated or an expert needed to advise
counsel in the management of the litigation.”\footnote{\textit{6JOHN}
HENRY WIGMORE, EVIDENCE} § 1841, at 475–76 n.4 (1976) (referencing a
variety of jurisdictions that had decided to omit prospective witnesses from sequestration
on the grounds their assistance in the management of the case would be indispensable).
4. Novelty

There is a special need for outside experts when novel scientific evidence is introduced. Paradoxically, there is often a lack of defense experts in these cases precisely because the procedure is new. With novel techniques, there is often a delay before independent experts appreciate how science is being used in the courtroom. For instance, "voiceprint" evidence was introduced in the early 1970s, but in 1979 a National Academy of Sciences report noted that a "striking fact about the trials involving voicegram evidence to date is the very large proportion in which the only experts testifying were those called by the state." The report also concluded that the reported estimates of error rates were generally an inadequate basis for forensic applications and not "valid over the range of conditions usually met in practice." Numerous cases, however, had admitted voiceprint evidence in the decade before the report was issued.

522 See Chao v. State, 780 A.2d 1060, 1067 (Del. 2001) ("[I]n an unusual case, an indigent defendant may be entitled to public funds to retain an expert on complex or novel technical issues . . . ").

523 One of the justifications for the Frye rule, Frye v. United States, 293 F. 1013 (D.C. Cir. 1923), which requires that the scientific technique gain "general acceptance" in the scientific community as a prerequisite to admissibility, focuses on this point: the Frye test guarantees that "a minimal reserve of experts exists who can critically examine the validity of a scientific determination in a particular case." United States v. Addison, 498 F.2d 741, 743-44 (D.C. Cir. 1974); see Paul C. Giannelli, The Admissibility of Novel Scientific Evidence: Frye v. United States, A Half-Century Later, 80 COLUM. L. REV. 1197, 1208-23 (1980) (looking at the parameters courts applying Frye's general acceptance standard have established).

524 Voice identification by spectrographic examination of speech samples was often referred to as "voiceprint" evidence. See, e.g., United States v. Williams, 583 F.2d 1194, 1197 n.5 (2d Cir. 1978). It is a graphic display of sound that is dispersed "into an array of its time, frequency, and intensity components." Id. at 1197.

525 NAT'L RESEARCH COUNCIL, ON THE THEORY AND PRACTICE OF VOICE IDENTIFICATION 49 (1979) [hereinafter VOICE IDENTIFICATION]; see also People v. Chapter, 13 CRM. L. REP. (BNA) 2479 (Cal. Super. 1973) ("In approximately eighty percent of the twenty-five [voiceprint] cases in which such expert testimony/opinion was admitted there was no opposing expert testimony on the issue of reliability and general acceptability of the scientific community . . . ").

526 VOICE IDENTIFICATION, supra note 525, at 60 ("Estimates of error rates now available pertain to only a few of the many combinations of conditions encountered in real-life situations. These estimates do not constitute a generally adequate basis for a judicial or legislative body to use in making judgments concerning the reliability and acceptability of aural-visual voice identification in forensic applications.").

527 Id. at 58 ("The presently available experimental evidence about error rates consists of results from a relatively small number of separate, uncoordinated experiments."). The Report also commented that "[a]ll the scientific results and forensic experiences to date, taken together, do not constitute an adequate objective basis for determining the error rates to be expected for voice identification testimony given in forensic cases generally." Id. at 68-69.

528 See, e.g., Williams, 583 F.2d at 1200 (holding that, where the court used "all of the safeguards to ensure reliability, and to prevent a misleading of the jury," the voiceprint evidence was admissible); United States v. Baller, 519 F.2d 463, 466-67 (4th Cir. 1975) (finding that the trial court did not abuse its discretion in admitting voiceprint evidence, as
The early DNA cases repeated this pattern. There was no defense expert in *Andrews v. State*, the first reported appellate case considering the admissibility of DNA evidence. Nor was there a defense expert in *Spencer v. Commonwealth*, the first DNA execution case. At trial, a prosecution expert "testified unequivocally that there was no disagreement in the scientific community about the reliability of DNA print testing" and "the record [was] replete with uncontradicted expert testimony that 'no dissent whatsoever [exists] in the scientific community' concerning the reliability of the DNA printing technique." Later events completely undermined these statements. It took two National Academy of Science reports to sort out the disagreements in DNA analysis.
5. Testimony by Prosecution Experts

The prosecution’s use of expert testimony is, of course, a relevant factor in determining whether to appoint a defense expert, for, as Justice Cardozo noted, “a defendant may be at an unfair disadvantage, if he is unable because of poverty to parry by his own witnesses the thrusts of those against him.” Several cases illustrate this point.

In Washington v. State, a capital case, the Oklahoma Court of Criminal Appeals ruled that a defendant was not entitled to the appointment of a defense expert, even though a prosecution expert had testified that the defendant had made the bite mark found on the murder victim. Moreover, the prosecution expert conceded that he had used a novel method of comparison that no one else had ever used, and he also testified that only “one in a billion people” had a particular characteristic shared by the defendant. The basis for this astounding statistic was not revealed and was obviously something a defense expert should have carefully scrutinized.

In Sommers v. Commonwealth, the Kentucky Supreme Court ruled that the trial court erred by failing to appoint a defense pathologist and arson expert, while the prosecution called six experts. The court cited a number of factors to support its holding, including the defense’s indication that the state’s witnesses had demonstrated an unwillingness to cooperate with the defense.

The presence of a prosecution expert, however, should not automatically require the appointment of a defense expert. For example, in virtually every homicide case a forensic pathologist or other expert will testify on the cause of death. If the accused asserts an alibi defense, the cause of death may not be disputed and thus a defense pathologist would not be needed.

6. Absence of Prosecution Experts

In one case, the Eighth Circuit indicated that the absence of a prosecution expert is a relevant factor in deciding the appointment issue, and it may have been in that case. The absence of a prosecu-

538 See id. at 676–77.
539 Id. at 678 (Parks, J., concurring in part, dissenting in part).
541 See id. at 884–85.
542 See id. at 884.
543 See Mendoza v. Leapley, 5 F.3d 341, 342 (8th Cir. 1993) (“The State did not present psychological evidence, so Mendoza did not need an expert in order to respond to damaging evidence of the same type.”); see also Mason v. Mitchell, 95 F. Supp. 2d 744, 775 (N.D. Ohio 2000) (finding no error in the trial court’s denial of a soils expert where “[p]etitioner does not dispute that the state never argued that soil from the crime scene
tion expert, however, does not necessarily indicate that there is no need for a defense expert. The most obvious examples involve affirmative defenses, such as insanity (as in Ake), battered woman syndrome in self-defense, and psychological experts in entrapment cases. Cases in which a prosecution witness has been hypnotized pretrial are another example. In these circumstances, a defense expert may be needed to explain how hypnosis affects lay witness testimony. The same is true with repressed memories.

was found on Petitioner’s person, clothing, or shoes after the murder, and that Petitioner repeatedly made that point during the trial").

See Schultz v. Page, 313 F.3d 1010, 1016 (7th Cir. 2002):

[T]he State’s decision to order a psychiatric examination of a defendant [raising an insanity defense] has little to do with an indigent defendant’s right under Ake to have a mental health expert assist in the preparation of his defense. . . . The absence of such an examination by the State, however, cannot be used by a court to determine that an indigent defendant is not entitled to an examination when the defendant initiates the request for one.

See Dunn v. Roberts, 963 F.2d 308, 313 (10th Cir. 1992) (holding that, where the trial judge was on notice that “evidence of battered woman syndrome would likely have bearing on whether Petitioner had the state of mind necessary to commit the crime,” his refusal of Petitioner’s request for expert assistance would deny her “an adequate opportunity to prepare and present her defense”); Doe v. Superior Court, 45 Cal. Rptr. 2d 888, 892 (Ct. App. 1995):

The problem in this case is that the record is insufficient to determine whether Jane has access to a “competent” psychiatrist or psychologist. . . . [T]his is not a run-of-the-mill case and the request is for someone with experience in [battered woman syndrome and post-traumatic stress syndrome]. . . . [I]f none of the panel members has the required expertise, Jane is entitled to the appointment of someone who does . . . .

See, e.g., United States v. Nunn, 940 F.2d 1148, 1149 (8th Cir. 1991) (“Expert testimony of a psychiatrist or psychologist is admissible to prove a defendant’s unusual susceptibility to inducement.”); United States v. Newman, 849 F.2d 156, 165 (5th Cir. 1988) (holding that, when an entrapment defense is raised, a defense expert may testify to any mental disease or defect that shows the defendant is particularly susceptible to inducement or persuasion); United States v. Hill, 655 F.2d 512, 516 (3d Cir. 1981) (“Testimony by an expert concerning a defendant’s susceptibility to influence may be relevant to an entrapment defense.”); United States v. Benveniste, 564 F.2d 335, 339 (9th Cir. 1977) (recognizing the authority for the proposition that expert testimony on the issue of predisposition as it relates to an entrapment defense should be admissible, but reviewing the trial court’s refusal to allow that testimony under an abuse of discretion standard and finding no such abuse). See generally State v. Shuck, 953 S.W.2d 662 (Tenn. 1997) (holding that a neuropsychologist’s testimony concerning a defendant’s acute susceptibility to inducement in support of an entrapment defense was admissible).

See, e.g., Little v. Armontrout, 835 F.2d 1240, 1243–44 (8th Cir. 1987) (deciding that, where the victim, after an alleged rape, was hypnotized by a police officer trying to get an identification of her assailant, an expert in hypnosis should have been provided to the defendant to “explain the limitations of hypnosis [and] theories of memory”).

See supra note 96 (citing authorities).

See supra note 97 (citing authorities).
We see no rational reason that a defendant be allowed an *Ake* expert only if the prosecution is relying on an opposing expert. Often, one party needs expert testimony to explain that conditions are other than they superficially seem to be, while the opposing party is content with the lay person’s unaided assessment of the situation.\(^{550}\)

7. **Centrality of Expert Issue**

Courts often focus on whether the requested expert testimony concerns an issue that is “crucial,”\(^{551}\) “critical,”\(^{552}\) “central,”\(^{553}\) or the like.\(^{554}\) For instance, the Illinois Supreme Court found a constitutional violation because a shoeprint and fingerprint expert was “necessary to proving a crucial issue in the case.”\(^{555}\) Perhaps the best description of this factor is the “relative importance”\(^{556}\) of the issue because the above terms set the bar too high. *Ake* itself used the phrase “likely to be a significant factor at trial.”\(^{557}\)

8. **Complexity of Evidence**

The complexity of a scientific technique often supports the appointment of a defense expert. In a leading neutron activation analy-

\(^{550}\)  Starr v. Lockhart, 23 F.3d 1280, 1290 n.8 (8th Cir. 1994); see also Castro v. Oklahoma, 71 F.3d 1502, 1514 (10th Cir. 1995) (finding that the *Ake* duty was triggered “by the State’s presentation of any evidence of Mr. Castro’s future dangerousness or continuing threat to society[,]” regardless of whether the State presented psychiatric testimony during the sentencing phase).

\(^{551}\)  See, e.g., Sommers v. Commonwealth, 843 S.W.2d 879, 884–85 (Ky. 1992) (holding that the trial court’s failure to appoint a defense pathologist and arson expert constituted prejudicial error where the cause of death and the genesis of the fire were matters of crucial dispute, “resolvable only through circumstantial evidence and expert opinion”).

\(^{552}\)  See, e.g., Scott v. Louisiana, 934 F.2d 631, 633 (5th Cir. 1991) (explaining that non-psychiatric experts would be appointed only if the evidence is “both ‘critical’ to conviction and subject to varying expert opinion”); *Ex parte Dubose*, 662 So. 2d 1189, 1194–95 (Ala. 1995) (holding that an *Ake* expert is required only when the evidence is “‘critical’,—the only evidence linking the accused with the crime or proving an element of the corpus delicti”).


\(^{554}\)  See, e.g., *Ex parte Moody*, 684 So. 2d 114, 119 (Ala. 1996) (“To meet this standard, the indigent defendant must show, with reasonable specificity, that the expert is absolutely necessary to answer a substantial issue or question raised by the state or to support a critical element of the defense.”); Scott v. State, 593 N.E.2d 198, 200 (Ind. 1992) (adding that the trial court should consider whether the expert will help answer “a substantial question or simply an ancillary one. For example, if the State’s principal evidence linking the defendant to the crime is sufficiently technical that it is commonly the subject of expert testimony, the trial court should strongly consider providing an expert.” (citations omitted)).

\(^{555}\)  People v. Lawson, 644 N.E.2d 1172, 1191 (Ill. 1994).

\(^{556}\)  See, e.g., Harrison v. State, 635 So. 2d 894, 901 (Miss. 1994) (“The relative importance of the testimony offered by the State’s experts is one factor to consider in assessing the fairness of the trial.”).

sis case, the Sixth Circuit noted: "[I]f the government sees fit to use this time consuming, expensive means of fact-finding, it must both allow time for a defendant to make similar tests, and in the instance of an indigent defendant, a means to provide for payment for same." DNA profiling also exemplifies this factor. In *Dubose v. State*, the court wrote: "Given the complexity of DNA technology, it is doubtful that a defense attorney will have the requisite knowledge to effectively examine [such evidence] without expert assistance." Another court identified the "highly technical" nature of DNA evidence as a factor in the appointment decision. Other courts and commentators as well as the 1992 National Academy of Sciences report, recognize the need for defense experts in this context. The Report states: "Defense counsel must have access to adequate expert assistance, even when the admissibility of the results of analytical techniques is not in question, because there is still a need to review the quality of the laboratory work and the interpretation of the results."

This view is not universally accepted, however. The Michigan Court of Appeals has observed that "only two courts have held that whenever the prosecution intends to introduce DNA evidence against a defendant at trial, the defendant has a due process right to an appointment of a DNA expert to assist in his defense." This position is problematic even as the admissibility of DNA analysis becomes more

---

558 United States v. Stifel, 433 F.2d 431, 441 (6th Cir. 1970); see also Chao v. State, 780 A.2d 1060, 1067 (Del. 2001) ("[I]n an unusual case, an indigent defendant may be entitled to public funds to retain an expert on complex or novel technical issues . . . .").
559 662 So. 2d 1189 (Ala. 1995).
560 Id. at 1196; see also Rey v. State, 897 S.W.2d 333, 343 (Tex. Crim. App. 1995) (holding that, once the defense had established that the cause of death would be a significant factor at trial, the defense was entitled to the assistance of a pathologist, who would not only testify on the defendant's behalf, but would also provide technical assistance, evaluate the strength of the defense, and identify weaknesses in the State's case by preparing counsel to cross-examine the opposing experts).
562 See, e.g., Polk v. State, 612 So. 2d 381, 393–94 (Miss. 1992) (including in the appendix guidelines for future DNA cases, such as the "imperative that no defendant have [DNA] evidence admitted against him without the benefit of an independent expert witness to evaluate the data on his behalf").
563 See supra note 27 (listing authorities).
564 DNA TECHNOLOGY, supra note 48, at 147. The Report also states: "Because of the potential power of DNA evidence, authorities must make funds available to pay for expert witnesses[]."
565 People v. Leonard, 569 N.W.2d 663, 669 (Mich. Ct. App. 1997); accord State v. Huchting, 927 S.W.2d 411, 420 (Mo. Ct. App. 1996) (disagreeing with the argument that the average attorney is unable to defend against DNA evidence, because "[e]ven a cursory perusal of the literature in this area reveals copious lists of questions for defense attorneys to use in cross-examinations and other strategies for undermining the weight of DNA evidence"); Huske v. Commonwealth, 476 S.E.2d 920, 925 (Va. 1996) (recognizing that *Ake* guarantees the "basic tools of an adequate defense[]" [which] may include the appointment of non-psychiatric experts[] but requiring the defendant to show that the assistance of the expert is "likely to be a significant factor in his defense" and that he will be
common. The importance of defense DNA experts is illustrated by the O.J. Simpson trial, where a prosecution expert, a leading population geneticist, made a simple computation mistake that was revealed during cross-examination. Moreover, there are still significant interpretative issues in DNA profiling.

9. Routine Tests

The recognition of complexity as an appropriate Ake factor does not mean that defense experts are not needed when the prosecution offers the results of routine tests. As illustrated by several fingerprint cases, even the most basic techniques are subject to error. For example, in *Imbler v. Craven*, the expert failed to observe an exculpatory fingerprint in a murder case in which the death penalty was imposed. In another murder case, *State v. Caldwell*, the court wrote: "The fingerprint expert's testimony was damning—and it was false."

Several firearms identification cases are also instructive. In 1989, the L.A. Police arrested Rickey Ross for the murder of three prostitutes. A detective who worked as an examiner in the Department's firearms laboratory made a positive match between the bullets that had killed the prostitutes and a bullet fired from Ross's 9-millimeter

---

566 The novelty of DNA evidence is a distinct factor and was discussed earlier. See supra notes 522-35 and accompanying text; see also Prater v. State, 820 S.W.2d 429, 439 (Ark. 1991) (holding that the trial court may not refuse to appoint a defense expert, even "because of a shortage of county funds," for the accused's expert must have the chance "to examine the evidence, procedures, and protocol").


568 As several commentators have noted:

---


570 See id. at 810.

571 322 N.W.2d 574 (Minn. 1982).

572 Id. at 586. See generally James E. Stairs, *A Miscue in Fingerprint Identification: Causes and Concerns*, 12 J. POLICE SCI. & ADMIN. 287 (1984) (discussing the "fingerprint fiasco" that affected the Caldwell trial due to error committed by both the prosecution and defense experts, which ultimately led to the revocation of their certification).

Smith & Wesson. Based on the same evidence, however, a defense expert reached the opposite conclusion—Ross's gun could not have fired the fatal bullets. Two independent experts came to yet another conclusion: there was insufficient evidence to draw any conclusions. The case against Ross was dropped. In In re Kirschke, a prosecution expert testified that an evidence bullet had been fired by a particular firearm and that "no other in the world was the murder weapon." However, in post-conviction proceedings court-appointed experts testified that a positive identification could not be made. Although the court found that the expert had "negligently presented false demonstrative evidence in support of his ballistics testimony," it denied post-conviction relief because the defendant had failed to challenge the testimony at trial, even though he had the opportunity to do so.

Further, post-Daubert cases have unmasked the lack of empirical support for many common techniques. A recent editorial in the prestigious scientific journal, Science, is entitled: "Forensic Science: Oxymoron?" This sentiment has been echoed by commentators for the National Academy of Sciences.

Further, post-Daubert cases have unmasked the lack of empirical support for many common techniques. A recent editorial in the prestigious scientific journal, Science, is entitled: "Forensic Science: Oxymoron?" This sentiment has been echoed by commentators for the National Academy of Sciences.

---

574 See id.
575 See id. at 18.
576 See id. ("[T]he points of identity [between the murder bullets and the test bullets] that were noted by the LAPD were attributable to chance or random correspondence.").
577 See id. This was not the first time that the Los Angeles crime laboratory had stumbled. A prior misidentification occurred in the investigation of Sirhan Sirhan for the assassination of Bobby Kennedy:

In People v. Sirhan seven independent examiners were appointed by the presiding judge of the Superior Court of Los Angeles County to reexamine the purported firearms bullet comparison post trial. The examiners were unanimous in their findings that the identification testified to at the grand jury indictment and in the trial were misrepresented in that the purported identification of bullets lodged in victim Kennedy... with Sirhan's gun were non-existent. In both of these cases discovery and cross examination were lacking.

579 Id. at 683.
580 See id. at 684.
581 Id. at 682.
582 Donald Kennedy, Editorial, Forensic Science: Oxymoron?, 302 Sci. 1625 (2003) (discussing the cancellation of a National Academy of Sciences project designed to examine various forensic science techniques because the Departments of Justice and Defense insisted on a right of review that the Academy had refused to other grant sponsors).
583 See, e.g., Donald Kennedy & Richard A. Merrill, Assessing Forensic Science, Issues in Sci. & Tech., Fall 2003, at 33, 34:

The increased use of DNA analysis, which has undergone extensive validation, has thrown into relief the less firmly credentialed status of other forensic science identification techniques (fingerprints, fiber analysis, hair analysis, ballistics, bite marks, and tool marks). These have not undergone the type of extensive testing and verification that is the hallmark of science.
Courts, however, have often been obtuse to these issues, as illustrated by several judicial notice cases. Under current practice, judicial notice is limited to indubitable facts such as the law of thermodynamics. Nevertheless, courts have taken judicial notice of the reliability of hair comparisons even though this evidence lacks empirical support. Similarly, the validity of bite-mark evidence has been judicially noticed, but despite this acceptance, "the fundamental scientific basis for bitemark analysis has never been established." 

10. Differing Opinions & Subjectivity

Several courts emphasize that appointment of defense experts is more appropriate when the subject area tends to involve differing elsewhere. These techniques rely on the skill of the examiner, but since the practitioners have not been subjected to rigorous proficiency testing reliable error rates are not known.

584 The paraffin test for gunshot residues is an example. The test is supposed to detect nitrite and nitrate deposits on the hand of a person who has fired a gun, but the problem with the test is its nonspecificity—"a significant number of substances other than gunpowder residues contain nitrates and therefore also produce positive results." See Giannelli, supra note 523, at 1227.

585 See Fed. R. Evid. 201(b) ("A judicially noticed fact must be one not subject to reasonable dispute ... ").

586 See, e.g., Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 593 n.11 (1993) ("[T]heories that are so firmly established as to have attained the status of scientific law, such as the laws of thermodynamics, properly are subject to judicial notice under Federal Rule of Evidence 201.").

587 See, e.g., Johnson v. Commonwealth, 12 S.W.3d 258, 263 (Ky. 2000) ("Based upon the overwhelming acceptance of this evidence by other jurisdictions, as well as our own history of routine admission of this evidence at trial, trial courts in Kentucky can take judicial notice that this particular method or technique is deemed scientifically reliable.").

588 See Williamson v. Reynolds, 904 F. Supp. 1529, 1558 (E.D. Okl. 1995) ("This court has been unsuccessful in its attempts to locate any indication that expert hair comparison testimony meets any of the requirements of Daubert."); Clive A. Stafford Smith & Patrick D. Goodman, Forensic Hair Comparison Analysis: Nineteenth Century Science or Twentieth Century Snake Oil?, 27 COLUM. HUM. RTS. L. REV. 227, 231 (1996) ("If the purveyors of this dubious science cannot do a better job of validating hair analysis than they have done so far, forensic hair comparison analysis should be excluded altogether from criminal trials."); generally Paul C. Giannelli & Emmie West, Forensic Science: Hair Comparison Evidence, 37 CRIM. L. BULL. 514 (2001) (discussing DNA cases in which hair evidence was used to convict the innocent).


opinions, something also noted in Ake. For example, in a DNA case, the Indiana Supreme Court upheld a trial judge’s denial of funds for a DNA expert, writing: “Psychiatry is an extremely uncertain field dealing with the mysteries of the human mind where expert opinions can be expected to and do differ widely. In contrast, the neutral [DNA] experts here were testifying to the results of a test ‘involving precise, physical measurements and chemical testing.’”

One aspect of this argument is problematic. Courts often do not appreciate the amount of subjectivity associated with scientific evidence. Firearms identification is an example. Even though based on objective data (striation marks on a bullet), the conclusion about a match comes down to the examiner’s subjective judgment. Ques-

---

591 See, e.g., Yohey v. Collins, 985 F.2d 222, 227 (5th Cir. 1993) (upholding the trial court’s denial of funding for forensic and ballistic experts where there was no suggestion that the autopsy reports were “inaccurate or in any manner subject to disagreement between experts”); Scott v. Louisiana, 934 F.2d 631, 633 (5th Cir. 1991) (concluding that the trial court did not err in denying a defense motion for a ballistics expert where the defendant failed to show that “the ballistic evidence would have been open to varying expert interpretation”); James v. State, 613 N.E.2d 15, 21 (Ind. 1993) (citing as one of the factors a court should consider in deciding whether a defendant is entitled to an expert “whether the nature of the expert testimony involves precise physical measurements and chemical testing, the results of which were not subject to dispute”).

592 See Ake v. Oklahoma, 470 U.S. 68, 81 (1985) (“Psychiatry is not, however, an exact science, and psychiatrists disagree widely and frequently on what constitutes mental illness, on the appropriate diagnosis to be attached to given behavior and symptoms, on cure and treatment, and on likelihood of future dangerousness.”).

593 See Ake v. Oklahoma, 470 U.S. 68, 81 (1985) (“Psychiatry is not, however, an exact science, and psychiatrists disagree widely and frequently on what constitutes mental illness, on the appropriate diagnosis to be attached to given behavior and symptoms, on cure and treatment, and on likelihood of future dangerousness.”).

595 See Joseph L. Peterson et al., Crime Laboratory Proficiency Testing Research Program 207 (1978) (“Ultimately, unless other issues are involved, it remains for the examiner to determine for himself the modicum of proof necessary to arrive at a definitive opinion.”).
tioned documents, bite marks, and even fingerprints fall into the same category.

Subjectivity may be a problem even when instrumentation is employed. Several commentators have noted that “although current DNA tests rely heavily on computer-automated equipment, the interpretation of the results often requires subjective judgment. When faced with an ambiguous situation, where the call could go either way, crime lab analysts frequently slant their interpretations in ways that support prosecution theories.”

Mixture samples, degradation, allelic dropout, spurious peaks, and false peaks must be evaluated in interpreting some DNA electropherograms. A British study (albeit small) found that “38 per cent of defence lawyers who had obtained an independent analysis” of DNA evidence received reports that “differed from those of the prosecutions’ expert.” In addition, the presentation of DNA evidence raises other issues, such as whether juries should be informed of the probability of false positives in addition to the conventional approach of giving only the coincidental (random) match probability.

596 See, e.g., United States v. Lewis, 220 F. Supp. 2d 548, 554 (S.D. W. Va. 2002) (noting that the handwriting expert was unable to offer any “explanation of the standards used in handwriting analysis[,]” and that the only reason why he used twenty-five samples to compare the handwriting was because that was the number typically used); United States v. Saelee, 182 F. Supp. 2d 1097, 1104 (D. Alaska 2001) (“The technique of comparing known writings with questioned documents appears to be entirely subjective and entirely lacking in controlling standards.”).

597 See 1 PAUL C. GIANNELLI & EDWARD J. IMWINKELRIED, SCIENTIFIC EVIDENCE § 13-4, at 588 (3d ed. 1999 & Supp. 2003) (“Although the expert’s conclusions are based on objective data, the opinion is essentially a subjective one. There is no accepted minimum number of points of identity required for a positive identification.” (citations omitted)).

598 See, e.g., United States v. Crisp, 324 F.3d 261, 276 (4th Cir. 2003) (Michael, J., dissenting) (“In short, the government did not establish that there are objective standards in the fingerprint examination field to guide examiners in making their comparisons.”); United States v. Llera Plaza, 188 F. Supp. 2d 549, 555 (E.D. Pa. 2002) (“While there may be good reason for not relying on a minimum point standard—or for requiring a minimum number, as some state and foreign jurisdictions do—it is evident that there is no one standard ‘controlling the technique’s operation.’” (quoting Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 594 (1993))).

599 William C. Thompson et al., Evaluating Forensic DNA Evidence: Essential Elements of a Competent Defense Review, CHAMPION, May 2003, at 16, 18. This was also true of earlier DNA techniques, such as RFLP. See William C. Thompson & Simon Ford, DNA Typing: Acceptance and Weight of the New Genetic Identification Tests, 75 VA. L. REV. 45, 81-89 (1989) (“There are currently no formal standards for determining what constitutes a match between two DNA prints. Whether a match is declared between two prints is a subjective judgment for the forensic expert.”).

600 See Thompson, Essential Elements, supra note 599, at 18-24.

601 STEVENTON, supra note 59, at 42.

602 See William C. Thompson et al., How the Probability of a False Positive Affects the Value of DNA Evidence, 48 J. FORENSIC SCI. 47, 47 (2003) (“A false positive might occur due to error in the collection or handling of samples, misinterpretation of test results, or incorrect reporting of test results.”).
A high degree of subjectivity does not render an analysis invalid, but it does mean that there may be room for disagreement—the more subjectivity, the more chance for error. Moreover, under current practice, external information provided to lab analysts may taint their conclusions. For example, "Peter DeForest has described investigators who responded to inconclusive results by saying to forensic examiners: 'Would it help if I told you we know he's the guy who did it?'"603

11. Admissibility of Expert Testimony

If the testimony is not admissible, there is often no need for a defense expert,604 especially where the evidence lacks scientific support. However, admissibility should not always be determinative. For example, requests for defense polygraph experts are not uncommon.605 The majority of courts606 still exclude polygraph results, although a few post-Daubert cases may represent an evolving trend toward admissibility.607 The polygraph is nevertheless used extensively in criminal practice, albeit on the periphery of the trial. "Courts have admitted polygraph evidence in . . . suppression hearings, sentencing hearings, motions for new trial proceedings, . . . and prison disciplinary hearings."608 Moreover, some courts have enforced plea bargains based on polygraph evidence.609 In this situation, it is the use

---

604 Sometimes the testimony is not admissible because it is not beyond the ken of the jury. In Scott v. State, the Court wrote:
   Asking whether a particular service is "necessary" to assure an adequate defense begs the question. In attempting to decide what is necessary, a trial court should determine whether the proposed expert's services would bear on an issue which is generally regarded to be within the common experience of the average person, or on one for which expert opinion would be necessary. If the requested services could be performed by counsel, an expert need not be provided. An expert need not be appointed if it is improbable that the proposed expert could demonstrate that which the defendant desires. The appointing of an expert is not necessary when the purpose of the expert appears to be exploratory only.
593 N.E.2d 198, 200 (Ind. 1992) (citations omitted).
605 See supra note 175 (citing cases).
606 Further, many jurisdictions admit polygraph evidence upon stipulation. See 1 Gianelli & Imwinkelried, supra note 597, § 8-4(C) (discussing the rationale behind the conditions necessary for admission of polygraph evidence upon stipulation of the parties).
607 See Paul C. Giannelli, Polygraph Evidence: Post-Daubert, 49 Hastings L.J. 895, 896-98 (1998) (looking at the effect Daubert has had on some federal courts in pushing them to at least remove the per se barrier against the admissibility of polygraph evidence).
608 1 Gianelli & Imwinkelried, supra note 597, § 8-6.
609 In some cases prosecutors have gone beyond stipulating to the admissibility of test results and have agreed to dismiss charges if the defendant passes a polygraph examination. See id. § 8-4(C) (discussing pretrial agreement cases); see also United States v. Santiago-Gonzalez, 66 F.3d 3, 6-7 n.1 (1st Cir. 1995) (citing United States v. Swinehart, 614 F.2d 853 (3d Cir. 1980), for the proposition that the government can condition a plea agreement on the defendant passing a polygraph test).
of polygraphs, not their admissibility, that should determine whether appointment of an expert is appropriate.

12. Cost

In Ex parte Moody, the court cited the "anticipated costs of such an expert" as relevant. Although some cases mention cost, few explicitly state that it is a germane factor. This may be because the Ake Court summarily dismissed cost. As a society, we often state that cost should not be a factor in criminal cases, but this is obviously an ideal. The cost can be quite high. For example, in United States v. Yee, a defense DNA expert received $28,000 in compensation. A judge faced with an appointment request for an expert that involved $500 as opposed to $20,000 will, in all probability, take this factor into account. If so, it is far better to acknowledge that cost is a factor than it is to pretend that it is not.

13. Summary

Determining when a defense expert should be appointed is the most intractable issue left unresolved by Ake. Before the standard can be defined, the myths about litigation—the effectiveness of cross-examination in this context, the neutrality of prosecution experts, and their competence—must be understood. Moreover, the standard should not require the accused to establish that the trial would be unfair in addition to showing a reasonable probability that expert assistance is needed. Finally, although defining the standard is important, the factors outlined above may be more so.

---

610 684 So. 2d 114 (Ala. 1996).
611 Id. at 122.
612 See, e.g., Wainwright v. Norris, 872 F. Supp. 574, 584–87 (E.D. Ark. 1994) (holding that the trial court did not prejudice the defendant when it awarded $500 for an expert in ballistics and gunshot residue, even though the defense requested another $1000); Dubose v. State, 662 So. 2d 1156, 1170–72 (Ala. Crim. App. 1993) (referring to an affidavit submitted to the trial court that estimated expected fees for expert witnesses to range from $10,000 to $30,000); Cade v. State, 658 So. 2d 550, 554 (Fla. Dist. Ct. App. 1995) (noting that the expert’s estimated fees were in the $3,000 range).
613 See supra text accompanying note 366 (discussing state’s economic interest).
615 Interview with James Wooley, former Assistant U.S. Attorney who tried the case (Mar. 16, 2004). See also People v. Wilkerson, 463 N.E.2d 139, 144–45 (Ill. App. Ct. 1984) (denying the defendant’s request for the court to order the surgical removal of bullet from his buttocks because it was an elective surgery, and because it cost over $350 more than the amount that could be paid for a “defendant’s necessary expert witnesses”); State v. Gonderman, 531 N.W.2d 11, 12 (N.D. 1995) (upholding the trial court’s failure to appoint a “nocturnal penile study” expert to establish the accused’s impotence because that fact was neither an element of the case nor a defense thereto).
616 In addition to the above factors, the Florida Court of Appeals noted that the cases had suggested other factors: whether “the remaining evidence against the defendant was ... overwhelming, ... [whether the] scientific evidence ... is impressive to a jury, ... [and
A. Neutral or Partisan Expert

*Ake* failed to specify clearly the role of the expert. It is uncertain from *Ake* whether the appointment of a neutral expert (who reports to the court) is sufficient or whether a "partisan" defense expert is required.617 At one point in the opinion, the Court stated that the defendant has the right to "one competent psychiatrist" when insanity is raised618 and later observed that this did not include the "right to choose a psychiatrist of his personal liking or to receive funds to hire his own."619 Neither of these passages, however, is conclusive, and other parts of the opinion point toward a partisan role. For example, the Court also wrote that the accused is guaranteed "access to a competent psychiatrist who will conduct an appropriate examination and assist in evaluation, preparation, and presentation of the defense."620 This expert would "conduct a professional examination on issues relevant to the defense, to help determine whether the insanity defense is viable, to present testimony, and to assist in preparing the cross-examination of a State's psychiatric witnesses."621

The lower courts are split on this issue. The Fifth Circuit held that "a court-appointed psychiatrist, whose opinion and testimony is available to both sides, satisfies [the accused's] rights."622 In contrast, the Texas Court of Criminal Appeals ruled that the appointment of a "disinterested" expert does not satisfy the demands of *Ake*, arguing that "the phrase 'court's expert' is an oxymoron in this context."623

As the court explained:

In an adversarial system due process requires at least a reasonably level playing field at trial. In the present context that means more than just an examination by a "neutral" psychiatrist. It also means the appointment of a psychiatrist to provide technical assistance to the accused, to help evaluate the strength of his defense, to offer his

---

617 See *Ake v. Oklahoma*, 470 U.S. 68, 92 (Rehnquist, J., dissenting) ("I see no reason why the defendant should be entitled to an opposing view, or to a 'defense' advocate.").

618 *Id.* at 79.

619 *Id.* at 83.

620 *Id.* at 92.

621 *Id.* at 82 (emphasis added).

622 Granviel v. Lynaugh, 881 F.2d 185, 191-92 (5th Cir. 1989) ("The state is not required to permit defendants to shop around for a favorable expert. . . . [The defendant] has no right to the appointment of a psychiatrist who will reach biased or only favorable conclusions."); see also Commonwealth v. Reid, 642 A.2d 453, 457 (Pa. 1994) (holding that the trial court satisfied *Ake* when it offered the defendant the "opportunity to be examined by a neutral court-appointed psychiatrist").

own expert diagnosis at trial if it is favorable to that defense, and to identify the weaknesses in the State's case, if any, by testifying himself and/or preparing counsel to cross-examine opposing experts. We recognize that the accused is not entitled to a psychiatrist of his choice, or even to one who believes the accused was insane at the time of the offense. Ake makes this much clear. But even a psychiatrist who ultimately believes the accused was sane can prove invaluable by pointing out contrary indicators and exposing flaws in the diagnoses of [the] State's witnesses.624

624 Id. Similarly, the Tenth Circuit has observed:
That duty [to appoint a psychiatrist] cannot be satisfied with the appointment of an expert who ultimately testifies contrary to the defense on the issue of competence. The essential benefit of having an expert in the first place is denied the defendant when the services of the doctor must be shared with the prosecution. In this case, the benefit sought was not only the testimony of a psychiatrist to present the defendant's side of the case, but also the assistance of an expert to interpret the findings of an expert witness and to aid in the preparation of his cross-examination. Without that assistance, the defendant was deprived of the fair trial due process demands.

United States v. Sloan, 776 F.2d 926, 929 (10th Cir. 1985); accord Dunn v. Roberts, 963 F.2d 308, 312 (10th Cir. 1992) (“[D]enying access to the assistance of a psychiatric expert to perform an examination relevant to defense issues and to assist in developing the defense would be a deprivation of due process.”); Liles v. Saffle, 945 F.2d 333, 340 (10th Cir. 1991) (allowing the defendant to assert a due process challenge to the trial court's refusal to appoint a psychiatrist, even though he did not raise an insanity defense, because the right to psychiatric assistance includes the right to help in deciding not to raise mental impairment claims); United States v. Austin, 933 F.2d 833, 841 (10th Cir. 1991) (citing Sloan).
Other decisions, both federal\textsuperscript{625} and state,\textsuperscript{626} support this view. The Supreme Court later declined to address the issue in one case,\textsuperscript{627} but in another wrote: "The \textit{Ake} error prevented petitioner from developing his own psychiatric evidence to rebut the Commonwealth's evidence and to enhance his defense in mitigation. As a result, the Commonwealth's psychiatric evidence went unchallenged, which may have unfairly increased its persuasiveness in the eyes of the jury."	extsuperscript{628}

The different passages in \textit{Ake} are reconcilable by analogy to the right-to-counsel cases. An indigent defendant has the right to counsel, who is obviously partisan, but not the unqualified right to choose who that counsel will be.\textsuperscript{629} As the Alabama Supreme Court has rec-

\textsuperscript{625} See, e.g., Powell v. Collins, 332 F.3d 376, 391–92 (6th Cir. 2003) (joining with some of its sister circuits to hold "that an indigent criminal defendant's constitutional right to psychiatric assistance in preparing an insanity defense is not satisfied by court appointment of a 'neutral' psychiatrist—i.e., one whose report is available to both the defense and the prosecution"); Castro v. Oklahoma, 71 F.3d 1502, 1515 (10th Cir. 1995) ("Dr. Hamilton's refusal to testify on Mr. Castro's behalf in and of itself makes his assistance inadequate. In explicating the right to expert psychiatric assistance at sentencing, the Court in \textit{Ake} specifically noted part of the expert's role included taking the stand."); Cowley v. Stricklin, 929 F.2d 640, 643 (11th Cir. 1991) (instructing that the trial court should not have refused the defendant's request for psychiatric assistance, simply because it had some evidence that the defendant was sane at the time of the crime, because the defendant made the necessary showing that "psychiatric expertise would aid his defense significantly"); Smith v. McCormick, 914 F.2d 1153, 1157 (9th Cir. 1990) ("The right to psychiatric assistance does not mean the right to place the report of a 'neutral' psychiatrist before the court; rather it means the right to use the services of a psychiatrist in whatever capacity defense counsel deems appropriate."); Buttrum v. Black, 721 F. Supp. 1268, 1312–13 (N.D. Ga. 1989) ("\textit{Ake} contemplates a psychiatrist who will work closely with the defense by conducting an independent examination, testifying if necessary, and preparing for the sentencing phase of the trial.").

\textsuperscript{626} See, e.g., Binion v. Commonwealth, 891 S.W.2d 383, 386 (Ky. 1995) ("[T]here must be an appointment of a psychiatrist to provide assistance to the accused to help evaluate the strength of his defense, to offer his own expert diagnoses at trial, and to identify weaknesses in the prosecution's case."); Harrison v. State, 635 So. 2d 894, 902 (Miss. 1994) ("Due process and fundamental fairness required the lower court to allow the defense access to an independent pathologist."); Polk v. State, 612 So. 2d 381, 394 (Miss. 1992) (holding that due process requires that a defendant "be allowed reasonable funds for access to an expert who can independently evaluate the evidence presented against him by the State, analyze it, and present that analysis at trial").

\textsuperscript{627} See Vickers v. Arizona, 497 U.S. 1033, 1036 (1990) (Marshall, J., dissenting) ("\textit{Ake} requires the appointment of a psychiatrist who will assist in the preparation of the defense, not one who will merely give an independent assessment to the judge or jury.").


\textsuperscript{629} See Caplin & Drysdale, Chartered v. United States, 491 U.S. 617, 624 (1989) ("A defendant has no Sixth Amendment right to spend another person's money for services rendered by an attorney even if those funds are the only way that that defendant will be able to retain the attorney of his choice."); Wheat v. United States, 486 U.S. 153, 162 (1988) ("Where a court justifiably finds an actual conflict of interest, there can be no doubt that it may decline a proffer of waiver, even from one of the defendants himself, and insist that defendants be separately represented."). See generally 2 \textit{Lafave et al., supra} note 319, at 549–50 ("The indigent has no right to counsel of his choice even though that attorney is available and his appointment would not be more costly to the state than the appointment of the attorney that the trial court would otherwise select.").
ognized, "an indigent defendant is not entitled to legal counsel of his choice, when counsel is to be paid by public funds, but rather is entitled to competent legal representation." The court also held that "an indigent defendant is not entitled to the expert of his particular choice, but is entitled to a competent expert in the field of expertise that has been found necessary to the defense." Here, as elsewhere in this Part, the right-to-counsel rationale brings this issue into sharp relief and makes it clear that a neutral expert is incompatible with the Ake right.

B. Ex parte Applications

A related procedural issue is whether the application for a defense expert must be ex parte. The answer turns on which view of the expert's role is adopted. If the accused has a right to a partisan expert, then the proceedings seeking appointment should be ex parte, as they are under the Criminal Justice Act. The Ake decision does not explicitly address this issue, although at one point the Court spoke in passing of an "ex parte threshold showing." After that reference, several lower courts have directly ruled that an accused has the right to an ex parte hearing.

---

630 Ex parte Moody, 684 So. 2d 114, 121-22 (Ala. 1996).
631 Id. at 121.
632 If a neutral expert does not satisfy Ake, neither will a prosecution expert. See Starr v. Lockhart, 23 F.3d 1280, 1289 (8th Cir. 1994) ("[T]he ability to subpoena a state examiner and to question that person on the stand does not amount to the expert assistance required by Ake.").
633 See supra text accompanying notes 208-10.
635 See, e.g., Moody, 684 So. 2d at 120 ("[A]n indigent criminal defendant is entitled to an ex parte hearing on whether expert assistance is necessary, based on the Fifth, Sixth, and Fourteenth Amendments . . ."); Brooks v. State, 385 S.E.2d 81, 84 (Ga. 1989) ("[I]n making the requisite showing defendant could be placed in a position of revealing his theory of the case. He therefore has a legitimate interest in making the showing ex parte."); McGregor v. State, 733 P.2d 416, 416-17 (Okla. Crim. App. 1987) (ordering an evidentiary hearing on whether defendant falls within Ake to be conducted ex parte because the presence or participation of the state would "thwart the Supreme Court's attempt to place indigent defendants . . . on a level of equality with nonindigent defendants"); State v. Barnett, 909 S.W.2d 423, 428 (Tenn. 1995) (reading Ake to require an ex parte hearing because "[i]ndigent defendants who must seek state-funding to hire a psychiatric expert should not be required to reveal their theory of defense when their more affluent counterparts . . . are not required to reveal their theory of defense, or the identity of experts"); Williams v. State, 958 S.W.2d 186, 192-93 (Tex. Crim. App. 1997) (explaining that, "while the Supreme Court's suggestion that the threshold showing should be made ex parte is dicta, it is consistent with [Ake's] due process principles" because otherwise, the defendant would either have to reveal his theories for his defense and other items of his work product or forfeit the appointment of an expert).
Other courts, however, have rejected the constitutional argument.\textsuperscript{636} The Louisiana Supreme Court, for instance, has noted that in criminal cases "ex parte treatment is not the rule, but rather the exception, and that, in order to deviate from the general rule of open and contradictory hearings, there must be a showing of good cause."\textsuperscript{637} The court then concluded that "although the initial application for funding for expert services will be considered ex parte, unless the defendant demonstrates some particularized prejudice to him by state participation in the hearing, the hearing on the funding will be conducted in a contradictory manner."\textsuperscript{638}

This argument is unpersuasive. While most court business should be open, it is not rare to conduct either in camera hearings\textsuperscript{639} or ex parte proceedings.\textsuperscript{640} More importantly, the court does not specify the prosecutor's role in this context. On what basis could a prosecutor oppose appointment? This is simply not an adversarial proceeding, and a prosecutor's responsibility does not extend to protecting the

\textsuperscript{636} See, e.g., State v. Apert, 861 P.2d 634, 650 (Ariz. 1993) ("[W]e do not believe that the Fourteenth Amendment's guarantees of due process and equal protection encompass such a right [to an ex parte hearing]."); Ramdass v. Commonwealth, 437 S.E.2d 566, 571 (Va. 1993) ("We perceive no reason to depart from our previous holding that there is no constitutional right to [an ex parte] hearing."); State v. Floody, 481 N.W.2d 242, 254-56 (S.D. 1992) (explaining that, although distributing the reports of defense experts would reveal the defendant's trial strategy, it would not violate his due process rights).

\textsuperscript{637} State v. Touchet, 642 So. 2d 1213, 1220 (La. 1994) (emphasis added).

\textsuperscript{638} Id.

\textsuperscript{639} See, e.g., United States v. Zolin, 491 U.S. 554, 568 (1989) (holding trial judge could conduct an in camera review of allegedly privileged communications to determine whether they fell within the crime-fraud exception to attorney-client privilege); United States v. Spires, 3 F.3d 1234, 1238 (9th Cir. 1993) ("Our precedents demonstrate that in [confidential informant] disclosure cases an in camera hearing is favored procedure. Other circuits have also noted the advantages of that procedure." (citations omitted)).

\textsuperscript{640} See, e.g., FED. R. CRIM. P. 4 (giving the judge the authority to issue an arrest warrant on the request of the prosecuting attorney); FED. R. CRIM. P. 6(d)(2) (disallowing the presence of defense attorneys while the grand jury is in session).
public coffers. Further, the prosecutor's presence intrudes into defense counsel's ability to develop a defense.641

C. Prosecution Use of Defense Experts

Another issue concerns the prosecution’s use of a defense expert at trial if the defense declines to call that expert as a witness. For the most part, these cases developed independently of Ake but should be informed by that decision.642 Two different uses of experts must be distinguished. First, an expert may be retained for the purpose of testifying at trial. In this situation, any privilege is waived.643 Second, an expert may be retained for consultation; that is, to provide the attorney with information needed to determine whether a scientific defense is feasible. If such an expert provides an adverse opinion, the question arises whether the attorney-client privilege, the work product privilege, or the right to counsel precludes the prosecution from calling the defense-retained expert as a government witness.644

641 See, e.g., United States v. Abreu, 202 F.3d 386, 388 (1st Cir. 2000) (“Because the government was present [at a hearing to determine whether the defendant should be afforded an evaluation by a licensed psychologist before sentencing], defense counsel declined to place on the record certain confidential matters that formed part of the basis for the application.”).

642 There are some exceptions. See, e.g., Smith v. McCormick, 914 F.2d 1153, 1159–60 (9th Cir. 1990) (citing attorney-client privilege in rejecting neutral expert approach); Van White v. State, 990 P.2d 253, 270 (Okla. Crim. App. 1999) (“[T]he attorney-client privilege is applicable where defense counsel is provided a court-appointed expert to aid in his client’s defense. This privilege is maintained whether or not the defense calls that expert at trial.”). But see State v. McDaniel, 485 N.W.2d 630, 633 (Iowa 1992) (holding that the prosecution’s use of a court-appointed defense expert did not violate the defendant’s right to due process or effective assistance of counsel). See generally Elizabeth F. Maringer, Note, Witness for the Prosecution: Prosecutorial Discovery of Information Generated by Non-Testifying Defense Psychiatric Experts, 62 FORDHAM L. REV. 653 (1993) (looking at the constitutional questions still left to be answered after Ake, including whether the prosecution can, and should, have access to court-appointed defense expert reports).

643 See United States v. Nobles, 422 U.S. 225, 239 (1975) (“Respondent, by electing to present the investigator as a witness, waived the [work product] privilege with respect to matters covered in his testimony.”); United States v. Alvarez, 519 F.2d 1036, 1046–47 (9th Cir. 1975) (explaining that an expert’s disclosures to an attorney are privileged “at least until he is placed on the witness stand”); Pouncy v. State, 353 So. 2d 640, 642 (Fla. Dist. Ct. App. 1977) (recognizing that the attorney-client privilege, as applied to the defendant’s psychiatrists, had not been waived where the defense had not called them as witnesses); State v. Mingo, 392 A.2d 590, 595 (N.J. 1978) (“[B]y signifying an intention to use the expert as a trial witness, the defense waives the confidentiality which otherwise attaches to the reports to which his contemplated testimony will relate.”); see also Jack H. Friedenthal, Discovery and Use of an Adverse Party’s Expert Information, 14 STAN. L. REV. 455, 464–65 (1962) (“A party ought not to be permitted to thwart effective cross-examination of a material witness whom he will call at trial merely by invoking the attorney-client privilege to prohibit pretrial discovery.”).

644 See generally Stephen A. Saltzburg, Privileges and Professionals: Lawyers and Psychiatrists, 66 VA. L. REV. 597 (1980) (laying out the various communication privileges, their reach to non-lawyers, and the question of whether those privileges prevent a defense-retained expert from testifying against the defendant); Dan Nelson, Comment, Discovery of Attorney-
1. Attorney-Client Privilege

Numerous courts have held that the attorney-client privilege covers communications made to an attorney by an expert retained for the purpose of providing information necessary for proper representation. This appears to be the majority view, and the one favored by the drafters of the Federal Rules of Evidence. The argument

---


645 See, e.g., Alvarez, 519 F.2d at 1046-47 (deciding that disclosures made by a defense-retained psychiatrist to the attorney are protected under the privilege, unless and until the psychiatrist takes the stand); United States v. Kovel, 296 F.2d 918, 922 (2d Cir. 1961) (holding that the presence of an accountant, "while the client is relating a complicated tax story to the lawyer," does not destroy the privilege); United States v. Layton, 90 F.R.D. 520, 525 (N.D. Cal. 1981) ("[E]ven if the psychotherapist-patient privilege is made inapplicable by defendant's assertion of a psychiatric defense, the attorney-client privilege shields these communications."); Bailey v. Meister Brau, Inc., 57 F.R.D. 11, 13 (N.D. Ill. 1972) (extending the privilege to a financial expert, but finding that the privilege was waived); Houston v. State, 602 P.2d 784, 791 (Ala. 1979) (addressing the possibility that a claim of attorney-client privilege might be sustained vis-à-vis a psychiatrist); People v. Lines, 531 P.2d 793, 802–03 (Cal. 1975) (protecting communications between a court-appointed psychiatrist and the defendant); Miller v. District Court, 737 P.2d 834, 836–38 (Colo. 1987) (following "a majority of the courts" to hold that communications between a defendant and his defense-retained psychiatrist are protected); Pouncey, 355 So. 2d at 642 (applying privilege to psychiatrist); People v. Knippenberg, 362 N.E.2d 681, 684 (Ill. 1977) (applying the privilege to statements the defendant made to a defense investigator); State v. Pratt, 398 A.2d 421, 423–25 (Md. 1979) (concluding that communications made by the defendant to his psychiatrist are protected, even when the defendant pleads insanity as a defense); People v. Hilliker, 185 N.W.2d 831, 833 (Mich. Ct. App. 1971) ("[S]ince the privilege clearly extends to confidential communications made directly by the client to the attorney, there is nothing to dictate a different result where that communication is made to the attorney by an agent on behalf of the client, such as a doctor or psychiatrist."); State v. Kociolek, 129 A.2d 417, 423–25 (N.J. 1957) (explaining that the attorney-client privilege extends to communications between the attorney and a scientific expert, such as a psychiatrist, who is aiding in the preparation of a defense); State v. Hitopoulus, 309 S.E.2d 747, 748–49 (S.C. 1983) (protecting defendant-psychiatrist communications that were made to aid in the preparation of a defense). See generally Michael G. Walsh, Annotation, Applicability of Attorney-Client Privilege to Communications Made in Presence of or Solely to or by Third Person, 14 A.L.R.4th 594, § 2(a) (1982) (summarizing the general judicial trends in the application of the attorney-client privilege when a third party is involved).

646 See Pratt, 398 A.2d at 423 ("[T]he information gathered by [the accident reconstructionist] should be protected by the attorney work product doctrine and the attorney-client privilege."); see also Edward J. Imwinkelried, The Applicability of the Attorney-Client Privilege to Non-Testifying Experts: Reestablishing the Boundaries Between the Attorney-Client Privilege and the Work Product Protection, 68 Wash. L.Q. 19, 21–25 (1990) (surveying the recent trend in favor of extending the attorney-client privilege to expert information).

647 The drafters proposed a rule that would extend the privilege to nontestifying experts. See Fed. R. Evid. 503 (proposed 1971) (including "one employed to assist the lawyer in the rendition of professional legal services" in the ambit of those protected by the privilege).
supporting this rule rests on the attorney’s need to obtain expert advice. As one court has stated: “Only a foolhardy lawyer would determine tactical and evidentiary strategy in a case with psychiatric issues without the guidance and interpretation of psychiatrists and others skilled in this field.” An attorney, however, might not seek such assistance if an expert’s adverse opinion could be introduced by the prosecution:

Breaching the attorney-client privilege . . . would have the effect of inhibiting the free exercise of a defense attorney’s informed judgment by confronting him with the likelihood that, in taking a step obviously crucial to his client’s defense, he is creating a potential government witness who theretofore did not exist.

Other courts have rejected the extension of the attorney-client privilege in this context, although their reasons vary. First, some courts limit the privilege to communications between the attorney and client. Under this view, experts and other agents are not covered by the privilege. Second, other courts hold that the privilege extends only to confidential communications and thus does not apply to experts who do not rely on the client’s confidential communications in reaching their opinions. Under this view, the privilege may

The ABA has adopted the same position. See ABA Criminal Justice Mental Health Standards 7–3.3 (b) (1989) (restricting prosecutorial access to the results of defense-initiated mental health evaluations of the defendant whenever the defendant does not intend to call the expert as a witness).


649 Pratt, 398 A.2d at 426.

650 See, e.g., State v. Riddle, 8 P.3d 980, 990 (Or. 2000) (disqualifying a party’s expert from testifying for the opposing party only if “his or her opinion discloses, either directly or indirectly, or is based on, any confidential communication between the lawyer, the client, and/or the expert[,]” and it is not possible to segregate the expert’s opinion from that confidential communication).

651 See, e.g., State v. Schaaf, 819 P.2d 909, 918 (Ariz. 1991) (“[W]e find it to be within the trial court’s broad discretion to determine whether an expert witness will be required to testify, even if it was the other party who initially retained the expert witness.”); State v. Carter, 641 S.W.2d 54, 57 (Mo. 1982) (“The privilege is limited to communications between the attorney and the client. It operates only to render the attorney incompetent to testify to confidential communications made to him by a client.” (citation omitted)); State v. Hamlet, 944 P.2d 1026, 1031 (Wash. 1997) (finding that the attorney-client privilege and the Sixth Amendment are not violated when the court orders “disclosure of the name of the nontestifying expert retained by the defense for purposes of a diminished capacity defense” or when the state calls “that expert as a State’s witness to rebut evidence of a diminished capacity defense”).
extend to a psychiatrist, but not a fingerprint analyst, scientific expert, or medical examiner. Third, still other courts hold that the privilege is waived when the defense introduces scientific evidence. Accordingly, a defendant who raises an insanity defense waives the privilege with respect to all psychiatrists who have examined the defendant.

The applicability of the privilege in this context is problematic, for the privilege protects attorney-client communications, and that is not the issue here. Indeed, Professor Imwinkelried has argued that the privilege should not be extended to experts because such an ap-

---

652 See, e.g., People v. Knuckles, 650 N.E.2d 974, 978 (Ill. 1995) (distinguishing the denial of the privilege to a fingerprint expert’s testimony on the ground that a psychiatrist’s opinion as to the defendant’s sanity “will almost invariably result in large part from confidential communications with the defendant which would be directly or indirectly revealed if the psychiatrist testified on behalf of the State” (quoting lower court)).

653 See, e.g., People v. Speck, 242 N.E.2d 208, 221 (Ill. 1968) (rejecting the attorney-client privilege as applied to a fingerprint expert because “there was no testimony as to any conversations between [the expert] and the defendant or defendant’s attorney”).

654 See, e.g., United States v. Pipkins, 528 F.2d 559, 563–64 (5th Cir. 1976) (declining to hold that handwriting exemplars were confidential communications within ambit of the attorney-client privilege); Morris v. State, 477 A.2d 1206, 1211 (Md. Ct. Spec. App. 1984) (refusing to extend the attorney-client privilege to communications made by the defendant to an expert in order to provide him with information necessary to his examination of a shirt worn by the defendant).

655 See, e.g., Rose v. State, 591 So. 2d 195, 197 (Fla. Dist. Ct. App. 1991) (holding that autopsy information, which related to the infant that defendant was charged with killing and which the defense attorney turned over to the defendant’s pathologist, was not privileged).

656 See Cray v. District Court, 884 P.2d 286, 293 (Colo. 1994) (holding that, when a defendant puts his mental condition at issue, he “waives the right to claim the attorney-client and physician/psychologist-patient privileges, and a prosecution’s use of testimony of a defense-retained psychiatrist, who is not called by the defendant to testify at trial, is admissible at trial”); State v. Carter, 641 S.W.2d 54, 57 (Mo. 1982); People v. Edney, 350 N.E.2d 400, 402–03 (N.Y. 1976) (finding no reason to protect communications made to a psychiatrist when the defendant puts his sanity in issue); Hamlet, 944 P.2d at 1030 (by asserting a defense of diminished capacity or insanity, defendant waives attorney-client privilege as to evidence concerning his mental state); State v. Pawlyk, 800 P.2d 338, 345 (Wash. 1990) (“If defendant asserts an insanity defense, evidence pertaining to that defense must be available to both sides at trial.”); Trusky v. State, 7 P.3d 5, 10 (Wyo. 2000) (“[A defendant] may not argue a deficient mental condition and, at the same time, claim protection by privilege.”); see also Woods v. Superior Court, 30 Cal. Rptr. 2d 182, 187 (Ct. App. 1994) (“[W]hile communications with an expert retained to assist in the preparation of a defense may initially be protected by the attorney-client privilege, the privilege is waived where . . . the expert is identified, a substantial portion of his . . . evaluation is disclosed in his report, and the report is released.”). But see United States v. Alvarez, 519 F.2d 1036, 1046 (3d Cir. 1975) (“If the expert is later used as a witness on behalf of the defendant, only then does the cloak of [the attorney-client] privilege ends.”); Houston v. State, 602 P.2d 784, 791 (Alaska 1979) (protecting statements made by the defendant to the psychiatrist, even when the insanity defense was raised, unless the psychiatrist took the stand); State v. Pratt, 398 A.2d 421, 424–25 (Md. 1979) (rejecting the argument that the interposition of an insanity defense waives the attorney-client privilege over a defendant’s statements to his psychiatrist on the grounds that such a result would lead to a chilling effect on defendant-expert communications).
proach would convert the narrow privilege into a broad rule of incompetency. Instead, he contends that the work product rule should preclude access to a defense expert's opinion unless a substantial showing of need is demonstrated.

2. **Work Product Rule**

A federal district court has applied the work product rule to preclude a defense ballistics expert from being called as a prosecution witness. Although the court acknowledged that it was entering “relatively uncharted waters and the case-law is an insufficient and contradictory navigational aid,” it found that the opinions that the prosecution sought to introduce in its case-in-chief “were developed at the request of, and in consultation with, the defendants’ attorneys for use within those attorney’s [sic] internal strategic processes.” The court also noted that “exhaustive research has disclosed no criminal case in which a federal court has permitted the government to elicit testimony from a defendant’s consultative expert concerning that expert’s efforts or opinions undertaken or developed at the request of a defense attorney in preparation for a criminal trial.”

Not only is the work product rationale more cogent than the attorney-client privilege, it also leaves room for exceptional cases. For instance, in *State v. Cosey*, the defense exhausted, during DNA testing, the remaining testable crime scene semen specimen, which precluded the prosecution from performing additional, more

---

657 See Imwinkelried, supra note 646, at 31-48 (arguing that the courts should distinguish between the client’s communications and the expert’s information that falls outside of that limited area of protection, and highlighting the problems that occur if the courts refuse to do so).

658 See id. at 37-38; see also Robert P. Mosteller, Discovery Against the Defense: Tilting the Adversarial Balance, 74 CAL. L. REV. 1567, 1657-64 (1986) (advocating that the work product doctrine be used to protect the defense expert’s preparation from prosecutorial discovery if it is not going to be used at trial).

659 See United States v. Walker, 910 F. Supp. 861, 864 (N.D.N.Y. 1995) (precluding the government from questioning defense experts on their investigation, opinions, or conclusions “unless the government first makes a showing of substantial need of that testimony and inability to obtain the substantial equivalent of that testimony without undue hardship”).

660 Id. at 866.

661 Id. at 865.

662 Id. at 864; see also State v. Dunn, 571 S.E.2d 650, 660 (N.C. Ct. App. 2002) (concluding that “the trial court erred when it allowed the State to compel testimony from employees of Lab Corp that defendant did not plan to call as witnesses. We believe that in so doing, the trial court infringed upon the defendant’s Sixth Amendment right to effective assistance of counsel, and unnecessarily breached the work-product privilege.”). But see State v. Riddle, 8 P.3d 980, 989 (Or. 2000) (“We conclude that there is no absolute privilege . . . that prevents an expert whom a litigant has employed to investigate a factual problem from testifying for the other side as to the expert’s thoughts and conclusions that are segregated from confidential communications.”).

663 652 So. 2d 993 (La. 1995).
sophisticated DNA testing similar to that performed by the defense. The defendant neither intended to use the DNA tests at trial nor call the analyst as a witness. The Louisiana Supreme Court ruled that "fundamental fairness and the extraordinary circumstances presented by this case dictate that the prosecution be allowed to obtain copies of the test results in question."  

3. Right to Effective Assistance of Counsel

In addition to the attorney-client and work product privileges, defendants have argued that the Sixth Amendment right to effective assistance of counsel precludes the use of defense-retained experts by the prosecution. Several courts have accepted this argument:

A defense attorney should be completely free and unfettered in making a decision as fundamental as that concerning the retention of an expert to assist him. Reliance upon the confidentiality of an expert's advice itself is a crucial aspect of a defense attorney's ability to consult with and advise his client. If the confidentiality of that advice cannot be anticipated, the attorney might well forgo seeking such assistance, to the consequent detriment of his client's cause. Similarly, Professor Mosteller has argued that a "rule allowing any incriminating information developed during defense preparation to be used against the defendant would impair both a vigorous defense effort, which is central to the adversary system, and the defendant-counsel relationship."  

---

664 Id. at 994.
665 State v. Mingo, 392 A.2d 590, 595 (N.J. 1978); see also Pawlyk v. Wood, 248 F.3d 815, 828-29 (9th Cir. 2001) (Canby, J., dissenting) ("In my view, a psychiatrist retained to assist the defense is not to be treated as a run-of-the-mill witness; due process requires recognition of his or her position as a member of the defense team. Defense counsel should be able to employ the services of such a psychiatrist in preparing an insanity defense without running the risk of involuntarily creating evidence for the prosecution."); United States v. Alvarez, 519 F.2d 1036, 1047 (3d Cir. 1975) ("The attorney must be free to make an informed judgment with respect to the best course for the defense without the inhibition of creating a potential government witness."); Hutchinson v. People, 742 P.2d 875, 881 (Colo. 1987) ("[W]e cannot sanction the prosecution's decision . . . to offer the defense's handwriting expert as a witness in its case-in-chief. Absent compelling justification or waiver, we believe that such a practice violates a defendant's right to effective assistance of counsel."); People v. Knippenberg, 362 N.E.2d 681, 684-85 (Ill. 1977) (protecting statements given by the defendant to an investigator for the Illinois Defender Project that the defense attorney had contacted for assistance with the case).
666 Mosteller, supra note 658, at 1668; see also 4 LAFAVE ET AL., supra note 319, § 20.4(f), at 908 ("The basic rationale of the Sixth Amendment objection to required pretrial disclosure of such information is that the disclosure has a chilling effect upon the investigative efforts of counsel and therefore undermines the defendant's right to the effective assistance of counsel.").
Notwithstanding the persuasiveness of this argument, many courts have rejected it. Ake implicitly addresses this issue and should protect defendants in this context. Nevertheless, only a few cases have recognized the relevance of Ake to this issue. In Taylor v. State, at the defendant’s request, the trial court appointed a DNA expert only to examine semen in a rape case. The expert reported that the defendant’s DNA fell within a class of persons (one chance in a twelve million random match) that could have deposited the semen. The report was also sent to the prosecutor, who immediately made the expert a prosecution witness. On these grounds, the Taylor court held that the scientist had not been acting as a defense expert to the extent Ake demanded: “[The expert] furnished her inculpatory scientific conclusions to all parties, including the prosecution. . . . If [the expert] was genuinely appellant’s DNA expert, then her conclusions were the work-product of defense counsel and would never have been provided to the prosecutor.” Therefore, the court remanded the case for a determination of whether the defendant had met the threshold burden required for securing a court-appointed ex-

667 See, e.g., Noggle v. Marshall, 706 F.2d 1408, 1414–15 (6th Cir. 1983) (“[It] seems undesirable at this time to canonize the majority rule on the attorney-psychotherapist-client privilege and freeze it into constitutional form not amenable to change by rule, statute, or further case-law development.”); Granviel v. Estelle, 655 F.2d 673, 683 (5th Cir. 1981) (denying the defendant’s request for habeas corpus relief under its view that the right to effective assistance of counsel does not require that psychiatric testimony be excluded on the basis of the defendant’s attorney-client privilege); United States ex rel. Edney v. Smith, 425 F. Supp. 1038, 1054 (E.D.N.Y. 1976) (holding that the state’s interest in “accurate fact-finding” outweighed any possible prejudice that admission of the defendant’s statements to his psychiatrist may have caused, where those statements were used for the limited purpose of establishing the basis for the psychiatrist’s evaluation of the defendant’s sanity); People v. Spiezer, 735 N.E.2d 1017, 1026 (Ill. App. Ct. 2000) (“Upon consideration of the holding in Noggle, we are not persuaded that the sixth amendment guard against undue interference . . . necessarily applies to discovery issues regarding expert witnesses.”); State v. Craney, 347 N.W.2d 668, 676–77 (Iowa 1984) (holding that there is no “constitutionalized attorney-client privilege for a defendant’s communications to a mental expert”); State v. Dodis, 314 N.W.2d 233, 240–41 (Minn. 1982) (finding that it would be a constitutionally anomalous result if the defense was allowed to prohibit the prosecution from calling the defense psychiatrist to testify); State v. Carter, 641 S.W.2d 54, 59 (Mo. 1982) (“The physician-patient privilege and the attorney-client privilege are to be used for preserving legitimate confidential communications, not for suppressing the truth after the privileged one lets the bars down.”); Haynes v. State, 739 P.2d 497, 503 (Nev. 1987) (opting to follow those courts that hold that a defense expert’s testimony on the defendant’s sanity is admissible); State v. Richey, 595 N.E.2d 915, 922 (Ohio 1992) (“The prosecutor’s use of a defense expert does not violate an accused’s Sixth Amendment right to counsel.”); Pawlyk, 800 P.2d at 347 (holding that, where the defendant raises an insanity defense, the trial court may order the defense to turn over written reports prepared by defense psychiatrists on the issue of the defendant’s sanity).
pert. Significantly, the court also recognized that Ake encompasses more than a testifying defense expert; it requires a consulting expert, for "due process, at a minimum, requires expert aid in an evaluation of a defendant's case in an effort to present it in the best possible light to the jury."

D. Right to Examine Prosecution Witnesses

Many state discovery provisions and constitutionally-based decisions recognize a right to test or retest evidence. Ake reinforces these cases.

A more difficult issue concerns whether the right to an expert includes the right to require an alleged victim to be examined by that expert. Courts have taken different approaches to this issue. The

---

673 Id. at 153.
674 Id. The court also observed that due process does "not require a defendant to be furnished with a testifying expert who would unequivocally support an exculpatory theory of the defense. Thus, a defendant is not entitled to 'shop' for experts—at the State's expense—until he unearths a person who supports his theory of the case." Id. at 152.
675 See, e.g., IOWA CODE ANN. § 813.2 R. 2.14(2)(b) (West 2003) (allowing for the defendant to move to inspect or subject to testing evidence seized by the state in relation to the crime); LA. CODE CRIM. PROC. ANN. art. 718 (West 2003) (authorizing courts to order the district attorney to permit the defendant to examine and test evidence within the custody of the state planned for use at trial and favorable to the defendant); N.C. GEN. STAT. § 15A-903(e) (2001) (giving the defendant the right to move for an order allowing the defense to inspect the state's evidence, including the results of physical and mental examinations and physical evidence); OHIo REV. CODE ANN. § 2925.51(F) (West 2001) (stating that the accused in a drug case may perform an independent analysis of the substance that is the basis of the allegation); Wis. STAT. ANN. § 971.23(5) (West 1998) ("[T]he court may order the production of any item of physical evidence which is intended to be introduced at the trial for scientific analysis . . ."); see also James v. Commonwealth, 482 S.W.2d 92, 94 (Ky. 1972) (requiring the Commonwealth to furnish chemist reports and drug samples to the defendant); State v. Cloutier, 302 A.2d 84, 89 (Me. 1973) (evaluating the conditions under which a court should grant a defense motion for independent drug analysis); People v. White, 358 N.E.2d 1031, 1032 (N.Y. 1976) (holding that the defendant was entitled to pretrial discovery that would allow him to conduct his own tests on the drugs which gave rise to his indictment); State v. Gaddis, 530 S.W.2d 64, 69 (Tenn. 1975) (interpreting a state statute as giving a defendant the right to an independent inspection by his own expert of a sample of a controlled substance); Terrell v. State, 521 S.W.2d 618, 618 (Tex. Crim. App. 1975) (discussing a defendant's motion for discovery of marihuana samples for independent chemical testing). See generally Annotation, Right of Accused in State Courts to Have Expert Inspect, Examine, or Test Physical Evidence in Possession of Prosecution—Modern Cases, 27 A.L.R.4th 1188 (1984) (surveying the "general trend among state courts toward the expansion of criminal discovery.") Id. § 2(a).
676 See supra text accompanying notes 324–26.
677 Courts have adopted several approaches to physical examinations. Some courts recognize a due process right to such an examination, while others allow an examination if the defendant can demonstrate a compelling need. See Montoya, supra note 325, at 884–88 (using the hypothetical of a sexual assault prosecution in which the state puts the victim's physical condition in issue to analyze the merit of these divergent rationales); Troy Andrew Eid, Comment, A Fourth Amendment Approach to Compulsory Physical Examinations of Sex Offense Victims, 57 U. CHI. L. REV. 873, 880–89 (1990) (surveying the state courts that hold that accused sex defendants have a due process right to compulsory physical examinations
strongest argument in favor of a defense examination is a case in which the prosecution has conducted an examination. For example, the Nevada Supreme Court has held that "it is error to deny a defendant the assistance of a defense psychologist or psychiatrist to examine the child-victim and testify at trial when the State is provided such assistance." Although this issue developed independently of Ake, Ake informs its resolution. Citing Ake, the Illinois Supreme Court wrote that "it is fundamentally unfair that the State was able to present the testimony of an examining expert but the defendant was limited to the testimony of a nonexamining expert."

E. Interference with the Right to an Expert

Several Ake-type decisions raise state-interference issues that are similar to right-to-counsel issues. Citing Ake, the New York Court of Appeals in People v. Santana ruled that precluding defense counsel from consulting with his own expert during the cross-examination of the prosecution expert was reversible error. In a prior case, the Supreme Court had held that an order precluding a defendant and

of the alleged victim, and the various findings they require in order to trigger that entitlement. A similar diversity of opinion exists concerning involuntary psychological or psychiatric examinations. See Montoya, supra note 325, at 887 nn.277-80 (citing cases going both ways from various jurisdictions that decide the issue based either on a recognition of the trial court's discretion, a finding that there are no constitutional requirements to order such an examination, or an equitable variation that disallows the prosecution to present testimony based on the examination of the alleged victim if the defendant could not present comparable testimony).

Lickey v. State, 827 P.2d 824, 826 (Nev. 1992); see also State v. Bronson, 779 A.2d 95, 97 (Conn. 2001) ("The dispositive issue is whether the defendant was entitled to a court-appointed expert's examination of the alleged child victim when, during the child's testimony, her ability to testify reliably in the presence of the defendant suddenly came into question. We conclude that, under the circumstances of this case, the defendant was entitled to such an examination.").

People v. Wheeler, 602 N.E.2d 826, 833 (Ill. 1992); see also State v. Maday, 507 N.W.2d 365, 372 (Wis. Ct. App. 1993) ("When the state manifests an intent during its case-in-chief to present testimony of one or more experts, who have personally examined a victim of an alleged sexual assault, and will testify that the victim's behavior is consistent with the behaviors of other victims of sexual assault, a defendant may request a psychological examination of the victim.").

Cases on ineffective assistance of counsel can be grouped into several broad categories, one of which involves state interference with the right to counsel. See generally Herring v. New York, 422 U.S. 853 (1975) (refusing to recognize as constitutional a state statute that gave trial judges authority to deny defense counsel the opportunity to make a closing summation); Brooks v. Tennessee, 406 U.S. 605 (1972) (finding unconstitutional a state law that limited defense counsel's right to choose when the defendant should testify); Ferguson v. Georgia, 365 U.S. 570 (1961) (holding that a state statute that prevented defense counsel from eliciting the defendant's testimony through direct examination unconstitutionally impinged on the defendant's Sixth Amendment right to assistance of counsel). The other categories involve (1) conflicts of interest and (2) incompetence. See 3 LAFAVE ET AL., supra note 319, § 11.7(d) (discussing the three categories of ineffective assistance).


See id. at 205.
his attorney from discussing evidence during an overnight recess violated the right to effective assistance of counsel.\textsuperscript{683}

In \textit{Prince v. Superior Court},\textsuperscript{684} the trial judge ordered that a DNA sample be divided between the prosecution and defense for testing and that a representative of the state be present at the defense testing.\textsuperscript{685} The California Court of Appeals reversed, holding such an order violated the defendant's right to effective assistance of counsel.\textsuperscript{686} The court commented that "[e]ffective assistance of counsel includes the assistance of experts in preparing a defense and communication with them in confidence."\textsuperscript{687}

In \textit{State v. DeMarco},\textsuperscript{688} a New Jersey appellate court ruled that the prosecution may not compel discovery of DNA reports prepared by the defendant's expert witness for other clients in unrelated cases.\textsuperscript{689} Therefore, the court issued a protective order:

> Although we do not determine the applicability of the privileges or Mingo's Sixth Amendment analysis, their underlying policies inform our view of the issue. Dr. Blake's reports contain private and critical information which should be shielded from undue public exposure. Moreover, litigators, public and private, should have access to the assistance of retained experts with a minimum of risk that their reports, which otherwise have not been placed in the public domain, will surface in unrelated litigation.\textsuperscript{690}

Here, again, there is a confluence of \textit{Ake} and right-to-counsel principles.

\textbf{F. Right to an Effective Expert}

Several defendants have argued that \textit{Ake} includes the right to \textit{effective} expert assistance. As mentioned previously, the Court in \textit{Ake} did refer to the right to "one competent psychiatrist."\textsuperscript{691} Nevertheless, the lower courts have rejected this argument. According to the Fourth Circuit: "To inaugurate a constitutional or procedural rule of an ine-
ective expert witness in lieu of the constitutional standard of an ineffective attorney ... is going further than the federal procedural demands of a fair trial and the constitution require." Similarly, the Seventh Circuit objected that such a rule would require federal courts "to engage in a form of 'psychiatric medical malpractice' review." The Ninth Circuit also declined to become enmeshed in such "a psycho-legal quagmire."

These opinions dismiss the issue too quickly. First, rejecting the "right to an effective expert" argument often means the issue will simply be converted into an ineffective assistance of counsel claim—based on the defense attorney's failure to obtain the appointment of a competent expert. An expert's views may be so incompatible with service as a defense expert that the right to an expert is undermined. For example, a mental health expert's personal views in *Ramdass v. Angelone* made it impossible for him to aid in presenting mitigating factors at a capital sentencing hearing. Indeed, he would have made a great prosecution witness:

---

692 Waye v. Murray, 884 F.2d 765, 767 (4th Cir. 1989) (claim that a psychiatrist should have performed better on the witness stand); see also Wilson v. Greene, 155 F.3d 396, 401 (4th Cir. 1998) ("The Constitution does not entitle a criminal defendant to the effective assistance of an expert witness. ... Although Ake refers to an 'appropriate' evaluation, we doubt that the Due Process Clause prescribes a malpractice standard for a court appointed psychiatrist's performance. Rather, the decision in Ake reflects primarily a concern with ensuring a defendant access to a psychiatrist or psychologist, not with guaranteeing a particular substantive result.").

693 Silagy v. Peters, 905 F.2d 986, 1013 (7th Cir. 1990).

694 Harris v. Vasquez, 943 F.2d 930, 951 (9th Cir. 1991); accord Bloom v. Vasquez, 840 F. Supp. 1362, 1375 (C.D. Cal. 1993) ("Ake does not provide a legal basis for challenging in a federal habeas corpus proceeding the competency of the defense psychiatrist used at trial. ... The Constitution does not recognize a right to the effective assistance of a psychiatrist or the effective assistance of a witness."); see also Gordon B. Burns, *The Right to the Effective Assistance of a Psychiatrist Under Ake v. Oklahoma*, 30 CRIM. L. BULL. 429, 456 (1994) ("[I]f the psychiatrist's assistance proves ineffective, due process allows the defendant to obtain another psychiatrist upon making an adequate showing to the trial court. If the defendant fails to make such a showing, the due process clause offers no refuge.").

695 See, e.g., Pruett v. Thompson, 996 F.2d 1560, 1573–74 (4th Cir. 1993) (ruling that defendant failed to prove ineffectiveness when he claimed that his lawyer should have known that the psychiatrist's examination of the defendant was flawed); Poyner v. Murray, 964 F.2d 1404, 1418–19 (4th Cir. 1992) (rejecting the proposition that "if a defense attorney has not produced a witness who would agree with the after-the-fact diagnosis . . . , then the attorney is ineffective"); Washington v. Murray, 952 F.2d 1472, 1481 (4th Cir. 1991) (denying defendant's ineffectiveness claim that counsel should have obtained a psychiatrist who would give an independent opinion of his mental capacity, rather than relying on the opinion of the state psychologist).

696 187 F.3d 396 (4th Cir. 1999).

697 Id. at 410–11 n.1 (Murnaghan, J., concurring in part and dissenting in part) ("Dr. Stanton Samenow's professed and public views make him incompetent to aid a defendant in finding and presenting mitigating factors at a defendant's sentencing phase . . . . Dr. Samenow's published works state that circumstances have nothing to do with criminal violations and that 'providing the criminal with an opportunity to present excuses deferred him and us further and further from change.' . . . Dr. Samenow's views obviate his ability
Dr. Samenow has publicly stated that criminals are a “different breed of person,” who seek to manipulate the system for their own ends. He has abandoned sociologic, psychologic, and mental illness explanations for criminal behavior and holds the view that “most diagnoses of mental illness [in criminals] resulted from the criminal’s fabrications.”

The concurring opinion goes on to state that while “Ake does not require ‘effective assistance of a psychiatric expert[,]… the Supreme Court requires more than just a warm body with a prefix attached to his name” and that “competence and appropriateness, based on objective professional criteria, are entirely different than effectiveness.”

Second, the appointment of an expert in the wrong field does not satisfy Ake. For example, in Castro v. Oklahoma, the Tenth Circuit declined to decide the competence issue but nevertheless remarked:

We believe a serious question whether Dr. Hamilton was competent to provide expert psychiatric assistance exists. Dr. Hamilton’s specialties in child and geriatric psychiatry probably render him unqualified to offer an expert opinion on many of the issues raised in a capital murder trial. A forensic psychiatrist or psychologist is the proper specialist for such a task.

It is also worth noting that Dr. Samenow has been at the center of other constitutional challenges. See, e.g., Wright v. Angelone, 151 F.3d 151, 161 (4th Cir. 1998) (“Wright’s claim that his counsel was constitutionally ineffective for failing to conduct a reasonable investigation before recommending Dr. Stanton Samenow to the court as a mental health expert is also without merit.”).

Ramdass, 187 F.3d at 410–11 n.1 (Murnaghan, J., concurring) (citation omitted) (alteration in original).

Id.

700 71 F.3d 1502 (10th Cir. 1995).

701 Id. at 1515; see also Powell v. Collins, 332 F.3d 376, 396 (6th Cir. 2003) (“Dr. Schmidtgoessling testified that she was not qualified to conduct the type of examination necessary for mitigation. As a result, Petitioner was denied the very type of assistance for which Ake provides—‘an appropriate examination’—even if we were to have agreed that Dr. Schmidtgoessling’s assignment to Petitioner’s case was enough.”); Wilson v. Greene, 155 F.3d 396, 409 n.1 (4th Cir. 1998) (Michael, J., concurring) (“[N]one of our cases control the narrow issue raised by Wilson, whether an indigent defendant has a right to an appropriate examination that meets the standard of care set by the psychiatric profession.”).
As noted earlier, *Ake* left the implementation of the right to a defense expert to the states. Several systemic reforms, if fully implemented, could provide a better approach to the issue than the current system of ad hoc judicial appointment.

One suggestion is a public defender organization responsible for contracting all defense experts, including those needed by appointed counsel. This would avoid having a judge protect the public fisc, which a motion for appointment implicitly involves. This is an uncomfortable position for a neutral judicial officer; it is not like the appointment of counsel where determining indigency is the only issue. The drawback with this proposal is the funding. The widespread failure of the criminal justice system to implement the right to counsel casts doubt on the feasibility of this approach. Texas executed over 300 prisoners before a state-wide defender system was even enacted.

Other approaches focus on crime laboratories—defense laboratories, independent government laboratories, or private laboratories. Creation of a defense crime laboratory would also raise funding issues. The underfunding of police crime laboratories in this country is chronic. There is no reason to expect greater resources would be devoted to a defense lab. The Illinois Governor's Commission on

---

702 *Ake* v. Oklahoma, 470 U.S. 68, 83 (1985) ("[A]s in the case of the provision of counsel we leave to the State the decision on how to implement this right.").

703 See, e.g., OHIO REV. CODE ANN. § 120.04(C)(1) (Anderson 2004) (giving the public defender the responsibility, in providing legal representation, of obtaining expert testimony).

704 See Rodney Ellis & Hanna Liebman Dershowitz, *Slouching Toward Fair Defense in Texas*, CHAMPION, Jan./Feb. 2003, at 52, 52 ("Not very long ago, Texas was 40 years behind in how it provided representation to poor people accused of crimes. We were, in fact, the national poster child for how not to provide indigent defense services.").

705 In 1967, President Johnson's Crime Commission noted that "the great majority of police department laboratories have only minimal equipment and lack highly skilled personnel able to use the modern equipment now being developed." PRESIDENT’S COMM’N ON LAW ENFORCEMENT AND ADMIN. OF JUSTICE, THE CHALLENGE OF CRIME IN A FREE SOCIETY 255 (1967). In 1973, President Nixon’s Crime Commission commented: "Too many police crime laboratories have been set up on budgets that preclude the recruitment of qualified, professional personnel." NAT’L ADVISORY COMM. ON CRIMINAL JUSTICE STANDARDS AND GOALS, REPORT ON POLICE 304 (1973). Twenty years later, a report on Washington State crime labs revealed that a “[s]taggering backlog of cases hinders investigations of murder, rape, arson, and other major crimes[.]” Tomas Guillen & Eric Nalder, *Overwhelming Evidence: Crime Labs in Crisis*, SEATTLE TIMES, Jun. 19, 1994, at A1. At any time, "thousands of pieces of evidence collected from crime scenes sit unanalyzed and ignored on shelves in laboratories and police stations across the state." Id. at A14. A *USA Today* survey reached the same conclusion: "Evidence that could imprison the guilty or free the innocent is languishing on shelves and piling up in refrigerators of the [nation’s] overwhelmed and underfunded crime labs." Becky Beaupre & Peter Eisler, *Crime Lab Crisis: Evidence Backlog Imperils Justice*, USA TODAY, Aug. 20, 1996, at 1A. In one case a suspected serial rapist was released:
Capital Punishment recommended the creation of an independent state laboratory as a way to provide access to forensic services.\footnote{706} While independent crime labs are a possibility, they may not be politically viable. Although private crime laboratories have apparently had some success in Britain,\footnote{707} it is not clear that they would be feasible in this country.

Two less expensive reforms are realistic. First, public defenders can hire forensic science experts—someone with a scientific background whose job it is to stay current with recent developments and act as a resource for defense attorneys. Hopefully, this person could develop contacts with independent experts who could function as defense experts. A minority in the Illinois Governor’s Commission on Capital Punishment recommended the hiring of defense forensic scientists by public defender offices as a less expensive but equally effective reform.

The second reform is expanded discovery.\footnote{708} Discovery in criminal cases is far less extensive than it is in civil cases.\footnote{709} There are no

\footnote{706}{See Report of the Governor’s Commission on Capital Punishment 22 (Ill. 2002) (“An independent state forensic laboratory should be created, operated by civilian personnel, with its own budget, separate from any police agency or supervision.”). See generally Giannelli, Abuse, supra note 14, at 439 (using a variety of recent cases to illustrate the abuse of scientific evidence at trial, such as experts’ police-prosecution bias, and arguing that laboratories should therefore be transferred from police control to the control of independent medical examiner offices).}

\footnote{707}{The British have experimented with a “market system” provided by nongovernment experts: “The [Forensic Science Service] predicts that, in the medium term, 20 per cent of the market will go to non-FSS sources.” Mike Redmayne, Expert Evidence and Criminal Justice 27 (2001).}

\footnote{708}{See Giannelli, Criminal Discovery, supra note 8, at 800–02 (highlighting the limitations on discovery during criminal trials).}

\footnote{709}{In civil cases, discovery includes the automatic identification of experts, comprehensive written reports, and a special deposition provision for experts. See Fed. R. Civ. P. 26(a)(2)(A)-(C) (directing litigants to disclose the identity of any expert they may use at trial, along with a written report, at least ninety days before trial). Opponents of liberal discovery in criminal cases have argued that it will encourage perjury, lead to the intimidation of witnesses, and, because of the Fifth Amendment, “be a one-way street.” See, e.g., 2 Charles Alan Wright, Federal Practice and Procedure § 252, at 63 (3d ed. 2000). With scientific evidence, however, the 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.” Commentary, ABA Standards for Criminal Justice Relating to Discovery and Procedure Before Trial 67 (Approved Draft 1970). Also, there is no evidence that experts have been intimidated, probably because the evidence could be retested or another expert could testify about the examination. See 4 LAFAVE ET AL., supra note 319, § 20.3(f), at 861 (“Once the report is prepared, the scientific expert’s position is
discovery depositions in most jurisdictions.\textsuperscript{710} In some, there is no requirement that the defense even be notified that an expert will testify for the prosecution.\textsuperscript{711} In others, laboratory notes need not be disclosed.\textsuperscript{712} And, in others, laboratory reports are woefully uninformative.\textsuperscript{713}

Determining whether defense counsel should seek the appointment of a defense expert often requires a preliminary assessment by an expert.\textsuperscript{714} An expert might be willing to review several documents but not want to become further involved in a case without compensation. Comprehensive reports are a better solution than defense counsel not being able to make a sufficient showing for the appointment of an expert when one should have been appointed, or appointing an expert when one is not needed.

**CONCLUSION**

In 1985, the *Ake* Court could not have anticipated how the advent of DNA evidence would revolutionize forensic science or how the *Daubert* trilogy would alter the judicial approach to scientific evidence. It could not have foreseen the scientific fraud cases or the expanded use of social science and modus operandi experts. All of these developments have increased the need for defense experts.

While *Ake* settled the core issue by recognizing a right to expert assistance, significant issues were left unresolved. *Ake*'s rationale ex-

---

\textsuperscript{710} See Gianelli, *Criminal Discovery*, supra note 8, at 800 n.56.

\textsuperscript{711} See, e.g., United States v. Shue, 766 F.2d 1122, 1135 (7th Cir. 1985) (holding that the defendant was not entitled to the oral report that an FBI photographic expert provided to the government); United States v. Johnson, 713 F.2d 654, 659 (11th Cir. 1983) (“A criminal defendant has no absolute right to a list of the government’s witnesses in advance of the trial.”). This changed in federal, but not state, practice with the adoption of Federal Rule 16(a)(1)(G), which requires a pretrial summary of an expert’s opinion.

\textsuperscript{712} Spencer v. Commonwealth, 384 S.E.2d 785, 791 (Va. 1989) (explaining that the discovery rules did not allow for the discovery of documents connected to the investigation or prosecution of the case).

\textsuperscript{713} 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 in 1989. One article discussed a number of laboratory reporting practices, including “[1.] ‘The preparation of reports containing minimal information in order not to give the ‘other side’ ammunition for cross-examination’... [2.] ‘The 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.] ‘Omitting some significant point from a report to trap an unsuspecting cross-examiner...’” Douglas M. Lucas, *The Ethical Responsibilities of the Forensic Scientist: Exploring the Limits*, 34 J. FORENSIC SCI. 719, 724 (1989).

\textsuperscript{714} See supra text accompanying notes 508–17.
tends to nonpsychiatric experts, to noncapital trials, and to other proceedings such as juvenile transfer hearings and sex offender commitments. Developing a useful standard for the appointment decision remains critical; courts have often applied a far too demanding standard. Finally, the role of the expert should be viewed as grounded in the right to counsel—i.e., a defense rather than neutral expert should be provided.

In sum, although the need for defense experts is more important today than when Ake was decided, the cases demonstrate that the right to expert assistance has not been effectively implemented.