

CHAPTER THREE

A Danger to Society: Fooling the Jury with Phony Experts

What separates the executioner from the murderer is the legal process by which the state ascertains and condemns those guilty of heinous crimes. If that process is flawed because it allows evidence without any scientific validity to push the jury toward condemning the accused, the legitimacy of our legal process is threatened.

Fifth Circuit Court Judge Emilio Garza¹

I. Introduction: Death By “Junk Science”

A completely innocent man is condemned to death in Texas, based on the testimony of an outcast psychiatrist who assures the jury the defendant will kill again. Crucial forensic evidence is misinterpreted or simply fabricated to secure wrongful convictions by “expert” witnesses with no valid expertise. Juries are seduced into error by self-proclaimed medical authorities, who base their damning testimony on outdated or discredited scientific techniques.

More than in any other death penalty state, capital juries in Texas are vulnerable to reaching the wrong conclusions about the guilt of and appropriate sentence for defendants based on misleading or false expert testimony. This perversion of the truth-seeking process is neither rare nor accidental. Fatal miscarriages of justice are the inevitable consequence of a potent mixture of deadly factors: the provisions of the Texas death penalty statute, the careless assessment of experts’ credentials or methods and the effect of their testimony on impressionable jurors, and the win-at-all-costs attitude of law enforcement agencies.

A. Predicting the Unpredictable: Relying on “Dr. Death”

The most widespread symptom of false expert testimony in the Texas death penalty system is the use of so-called “killer shrinks” to justify death sentences by claiming to assess an individual’s potential for committing violent crimes in the future. At least 121 Texas death row inmates were sentenced to death based on psychiatric testimony universally condemned as unreliable.² Although the courts have refused to bar the use of this testimony, predictions of “future dangerousness” have proven no more reliable than the toss of a coin.

In 1972, the United States Supreme Court struck down all existing state death penalty statutes, finding that their provisions failed to meet constitutional safeguards against arbitrary and discriminatory death sentences. As one Justice noted, state procedures at the time failed to

¹ Flores v. Johnson, 210 F.3d 456, 469 (Cir. 5th 2000) (Garza, J., concurring).

² See Appendix Three.

provide any “meaningful basis for distinguishing the few cases in which [the death penalty] is imposed from the many cases in which it is not.”³ Consistent with this view, the Court would later hold that the death penalty could not be made mandatory for any crime; the ultimate punishment must be reserved only for the very worst offenders, justly convicted of the worst offenses.⁴

Almost immediately, Texas and other states began drafting new death penalty statutes intended to provide the safeguards required by the 1972 Supreme Court decision. Texas lawmakers approved a two-part trial process in which juries would first determine the guilt or innocence of the defendant. After guilt was established, a second phase of the trial would commence in which jurors could impose death only on those defendants that they unanimously determined would commit violent acts in the future.⁵ The purpose of the Texas statute was to distinguish those individual defendants whose prior behavior and propensity for violence merited the death penalty, when viewed in the context of the crime itself. Interestingly, however, many defendants charged with capital murder have no prior history of violence, or even a criminal record. It is in those cases where Texas prosecutors most frequently have resorted to the use of psychiatric testimony to meet the statutory requirement for the penalty of death.

For nearly thirty years, prosecutors in Texas have relied on the testimony of paid psychiatrists to establish “future dangerousness.” On closer examination, however, the process of predicting future dangerousness is unreliable and fails to rationally distinguish one offender from another. Even under the most carefully controlled conditions, predictions of this type when applied to a specific individual are alarmingly inaccurate. A number of death row inmates who once were labeled as posing a future danger have gone on to lead productive, law-abiding lives after their sentences were reversed and they were released from prison.

An equally disturbing realization is that psychiatric testimony of this nature is permitted at all. In 1983, the Supreme Court upheld the use of such testimony⁶ over the strong objections of the American Psychiatric Association, which warned that accurate predictions of future dangerousness were beyond a psychiatrist’s ability.⁷ Given the green light by the courts, Texas prosecutors have made tremendous use of the testimony of James Grigson, the notorious “Dr. Death,” and a small cadre of others like him. In the process, at least 121 men have been condemned to die, and many have been executed, based on evidence that is just as likely to be wrong as it is to be right. The current procedure for determining who will be sentenced to death therefore is just as capricious as the flawed process that it replaced.

³ *Furman v. Georgia*, 408 U.S. 238, 313 (1972) (White, J., concurring).

⁴ *Woodson v. North Carolina*, 428 U.S. 280, 303-05 (1976).

⁵ TEX. CODE CRIM. PROC. art. 37.071 (1981).

⁶ *Barefoot v. Estelle*, 463 U.S. 880, 896-906 (1983).

⁷ Brief of Amicus Curiae American Psychiatric Association, *Barefoot v. Estelle*.

B. False from the Outset: The Unreliability of Predicting Dangerousness

Psychiatric testimony of future dangerousness impermissibly distorts the fact-finding process in capital cases.

American Psychiatric Association⁸

At the time Texas lawmakers were drafting the new death penalty statute, the scientific community was deeply skeptical of methods used to predict future behavior. As interest in the field increased, psychiatrists and psychologists developed two general techniques for attempting to predict future violence: clinical predictions and actuarial methods. Clinical predictions are individual assessments based on evaluations of the subject, sometimes including considerations of “predictive criteria” in the person’s life history.⁹ Since the 1970s, studies have demonstrated that psychiatrists and psychologists who used this method were wrong two-thirds of the time, despite their training and experience.¹⁰ Further, even under the most controlled settings, clinical predictions of future dangerousness were wrong 50% of the time.¹¹

Actuarial predictions are based on statistically derived probabilities, comparing an individual with certain traits to a group of persons with similar traits. Aside from the moral questions that arise from decisions based solely on probability,¹² using this type of prediction to make accurate life-or-death sentencing decisions remains problematic. Because such predictions rely on gathered data, actuarial predictions are only as accurate as the underlying statistics. Studies have demonstrated that the rate of recidivism of capital offenders, both in Texas and nationally, is too small to establish reliable data for use in predicting future dangerousness.¹³ Predictions of future violence cannot be accurately made where there are no reliable statistics on

⁸ *Id.*

⁹ See, e.g., R. Hartogs, *Who Will Act Violently: The Predictive Criteria*, in *VIOLENCE: THE CAUSES AND SOLUTION* (R. Hartogs & E. Artzt, eds.) (1970) (listing 48 alleged predictors of violence).

¹⁰ Christopher Slobogin, *Dangerousness and Expertise*, 133 U. PA. L. REV. 97, 111-17 (1984) (citing results of the major studies: Baxstrom study: 20% accuracy; Thornberry Study: 20% accuracy; New York study 14% accuracy; Kozol study: 34.7% accuracy; Paxtuxent study: 41.3% accuracy; Wenk study: 8% accuracy).

¹¹ Randy K. Otto, *On the Ability of Mental Health Professionals to “Predict Dangerousness”*: A Commentary on Interpretations of the “Dangerousness” Literature, 18 L. & PSYCHOLOG. REV. 43, 63 (1994).

¹² For example, if it could be accurately established that 75 out of a hundred people in a class would commit another violent act and the individual subject is in that class, is it appropriate to execute the individual even knowing full well that he could be one of the 25 persons who never recidivate? In the legal framework, the question becomes: is 75% accuracy “beyond a reasonable doubt”?

¹³ James W. Marquart & Jonathon R. Sorensen, *Institutional and Postrelease Behavior of Furman-commuted Inmates in Texas*, 26 CRIMINOLOGY 677, 677-93 (1988); James W. Marquart, Sheldon Ekland-Olson & Jonathan R. Sorensen, *Gazing into the Crystal Ball: Can Jurors Accurately Predict Dangerousness in Capital Cases?*, 23 L. & SOC. REV. 449, 452-56 (1989); Mark D. Cunningham & Thomas J. Reidy, *Integrating Base Rate Data in Violence Risk Assessments at Capital Sentencing*, 16 BEHAV. SCI. & L. 71, 80-81 (1998); Hugo A. Bedau, *Death Sentences in New Jersey, 1907-1960*, 19 RUTGERS L. REV. 1, 1-64 (1964) (finding no problems of violence among 55 inmates who were released from death row); Jonathan R. Sorensen & R.D. Wrinkle, *No Hope for Parole: Disciplinary Infractions Among Death-sentenced and Life-without-parole Inmates*, 23 CRIM. JUST. & BEHAV. 542, 542-55 (1996) (finding prevalence rate of approximately 1.2%).

the likelihood that a given category of prisoners will re-offend.

In summary, neither clinical nor actuarial predictions have proven accurate in assessing the likelihood that a given murderer will be violent in the future. Psychiatric predictions in a Texas death penalty trial are even less reliable than those made under ideal clinical conditions. The psychiatrists who testify for the State rarely collect or review information about the background or mental health of a defendant. Instead, they rely primarily on information provided by the prosecutors at trial, in a hypothetical question relating selective facts of the crime. Such hypothetical testimony is clearly suspect, since it fails to provide the jury with any reasonably accurate way to meet the requirements of the law: distinguishing one individual defendant from another, based on the person's probable future behavior.

C. The "White Coat" Phenomenon: How Expert Medical Testimony Influences Jurors

For nearly three decades, Dr. James Grigson and others like him have testified in Texas courts that certain defendants are "at the highest end of the scale of psychopaths." Incredibly, Dr. Grigson and others have further claimed that they are 100% certain the same defendants will kill again. Several explanations have been offered for Grigson's remarkable longevity. First, the adversarial system tends inevitably to favor experts who will stake out the most extreme position. As one commentator observed:

Why would you, the diligent lawyer, settle for a scientist . . . who will say that 60-cycle electromagnetic fields probably don't injure human health, though one must concede certain small pieces of disquieting evidence to the contrary, if you can find one who will take the Federal Express pledge, and absolutely, positively promise that the fields do no harm, no how? The middle of the road, in law even more so than in politics, belongs to the yellow stripe and the dead armadillos. It is the strength of the expert's support for your position that comes first.¹⁴

Second, Grigson's testimony has proven effective. His personality and his vast experience addressing juries¹⁵ account for some of that effectiveness, but the title of "doctor" has significant impact of its own.¹⁶ When faced with the awesome task of deciding whether another

¹⁴ PETER W. HUBER, *GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM* 17-18 (1991).

¹⁵ In one case, Grigson felt a juror was not going to believe his testimony. Grigson researched the woman's background, found out she had a 14-year-old daughter, and then testified that the defendant was the kind of man who, if released, would rape and kill a 14-year-old girl. Ron Rosenbaum, *Travels With Dr. Death*, VANITY FAIR, May 1990, at 141.

¹⁶ In a well-known study conducted at Yale, for example, persons posing as scientists were able to verbally persuade two-thirds of lay subjects to administer what they believed to be high voltage shocks to subjects who outwardly showed signs of discomfort and pain. In stark contrast, only 20% were convinced to do so by persons acting as fellow lay-people. STANLEY MILGRAM, *OBEDIENCE TO AUTHORITY: AN EXPERIMENTAL VIEW* (1974). See also *White v. Estelle*, 554 F. Supp. 851, 858 (S.D. Tex. 1982) (When an opinion "is proffered by a witness bearing the title of 'Doctor,' its impact on the jury is much greater[.]").

human being should live or die, jurors may rely heavily on the testimony of a medical doctor – even if they are made aware of the untested content of his testimony.¹⁷ As Supreme Court Justice Harry Blackmun stated, “In a capital case, the specious testimony of a psychiatrist, colored in the eyes of an impressionable jury by the inevitable untouchability of a medical specialist’s words, equates with death itself.”¹⁸

Under the Texas sentencing scheme, undue submission by the jury to perceived authority becomes a significant risk factor. One expert noted that “by making dangerousness the key factor in our decision to inflict death, we appoint doctors as the chief decision makers, thus relieving ourselves of the burden of responsibility and of the obligation to continue the painful and endless discussion of values.”¹⁹ Even Dr. Grigson has admitted this disturbing truth: “Just take any man off the street, show him what [the defendant has done], and most of them would say the same things I do. But I think the jurors feel a little better when a psychiatrist says it – somebody that’s supposed to know more than they know.”²⁰

Grigson’s effect on jurors has not gone unnoticed by the appellate courts. A former judge of the Texas Court of Criminal Appeals once remarked:

It seems to me that when Dr. Grigson testifies at the punishment stage of a capital murder trial he appears to the average lay juror, and the uninformed juror, to be the second coming of the Almighty. After having read many records of capital murder cases in which Dr. Grigson testified at the punishment stage of the trial, I have concluded that, as a general proposition, when Dr. Grigson speaks to a lay jury, or an uninformed jury, about a person who he characterizes as a “severe” sociopath, which a defendant who has been convicted of a capital murder always is in the eyes of Dr. Grigson, the defendant should stop what he is then doing and commence writing out his last will and testament – because he will in all probability soon be ordered by the trial judge to suffer a premature death.²¹

On July 9, 1995, the American Psychiatric Association (APA) expelled Grigson from its ranks “for arriving at a psychiatric diagnosis without first having examined the individuals in question, and for indicating, while testifying in court as an expert witness, he could predict with 100% certainty that the individuals would engage in future violent acts.”²² The APA concluded that the hypothetical questions on which Grigson based his diagnosis were “grossly inadequate

¹⁷ “The major danger of scientific evidence is its potential to mislead the jury; an aura of scientific infallibility may shroud the evidence and thus lead the jury to accept it without critical scrutiny.” Paul C. Giannelli, *The Admissibility of Novel Scientific Evidence: Frye v. United States, A Half-Century Later*, 80 COLUM L. REV. 1197, 1237 (1980).

¹⁸ *Barefoot v. Estelle*, 463 U.S. 880, 916 (1983) (Blackmun, J., dissenting).

¹⁹ Claudia M. Worrell, *Psychiatric Prediction of Dangerousness in Capital Sentencing: The Quest for Innocent Authority*, 5 BEHAV. SCI. & L. 433, 437-38 (1987).

²⁰ Bloom, *Doctor for the Prosecution*, AM. LAW. 25, 26 (Nov. 1979).

²¹ *Bennett v. State*, 766 S.W.2d 227, 232 (Tex. Crim. App. 1989) (Teague, J., dissenting).

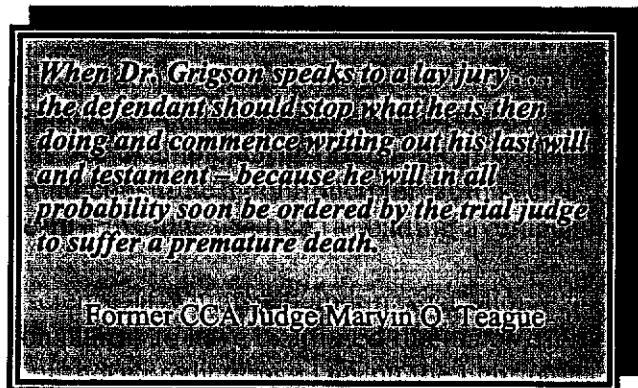
²² News Release from the American Psychiatric Association, July 20, 1995.

to elucidate a competent medical, psychiatric differential diagnostic understanding adequate for diagnosing a mental illness according to current standards.”²³ Rather than attempt to defend or explain his methodology, Grigson attacked the decision and the APA, calling the organization “a bunch of liberals who think queers are normal.”²⁴

Dr. Grigson still testifies for the State of Texas, despite being cited by his own profession for his unreliable and unethical practices, and despite the fact that his hyperbolic predictions are preposterous. In the case of Michael Wayne Evans, for example, Grigson told the jury that there was “about a one thousand percent” chance he would constitute a continued threat to society.²⁵ In another case, he later explained that 1000% meant “absolute . . . like [a] batting average[.]”²⁶

Grigson’s use of numbers, like his use of science, is whimsical and inexact. For example, the number of capital defendants Grigson claims to have examined fluctuates each time he testifies, as does the self-proclaimed accuracy of those predictions. During the February 1990 trial of Adolph Gil Hernandez, Grigson testified that he had examined 391 capital defendants and had predicted that 80 to 82% would be dangerous.²⁷ Later that year, however, in the Colorado trial of Frank Michael Orona, Grigson testified that he had conducted 396 examinations of capital defendants and found only 66% to pose a danger in the future.²⁸ Ironically, Grigson’s predictions of dangerousness often veer to the opposite end of the scale when he appears as a paid witness for the defense. For example, when Grigson testified on behalf of Gustavo Julian Garcia in 1991, he told the jury that he had never seen so much remorse in a defendant.²⁹

Despite widespread criticism of his methods, Texas prosecutors still rely on Grigson. On August 9, 2000, for instance, Grigson was appointed to determine whether Jeffrey Caldwell was competent to be executed, as required under a Supreme Court decision prohibiting the execution of the insane.³⁰ Caldwell had been described as having a “serious mental illness” when examined by another psychiatrist, Phillip Murphy. Dr. Murphy found that Caldwell “suffer[ed] from organic brain damage” and



²³ *Id.*

²⁴ S.F. at 177, Fuller v. State (CCA No. 71,046).

²⁵ S.F. at 1848, Evans v. State (CCA No. 60,016).

²⁶ Deposition of James Grigson, at 51, Oct. 31, 1994, State v. Moody (CCA No. 70,883).

²⁷ S.F. at 150, Hernandez v. State (CCA No. 71,083).

²⁸ Tr. at 372-73, Colorado v. Orona (Colo. Ct. App. No. 91CA0121).

²⁹ S.F. at 1304, Garcia v. State, (CCA No. 71,417).

³⁰ Ford v. Wainwright, 477 U.S. 399 (1986).

that Caldwell's "reality could best be described as psychotic."³¹ Caldwell's lawyer objected to the use of Grigson because of his notorious history, but the Court refused to appoint a different psychiatrist.³² Caldwell refused to talk with Grigson. No psychiatric evaluation was completed, and Caldwell was executed on August 30, 2000.

While the media and some judges have focused attention on Grigson and other notorious "killer shrinks," Texas prosecutors also have found other self-styled experts.³³ At Phillip Tompkins's trial, the prosecutors relied on Jean Matthews as their expert witness. She testified that she had received a doctorate in psychology from Florida State, done postdoctoral work at Harvard and M.I.T., and spent two years with the police department in Virginia. She told the jury that, based on her expertise, Tompkins was so violent and emotionally unstable he would continue to be a future threat. After Tompkins was sentenced to death, investigation revealed that Matthews had never attended Harvard or M.I.T., had never been licensed to practice psychology, and had never worked in Virginia.³⁴ She did, however, have a degree from Florida State – in music and English.³⁵

D. Getting it Wrong: Three Case Studies of Psychiatric Predictions

Randall Dale Adams

The State was guilty of suppressing evidence favorable to the accused, deceiving the trial court during [Adams's] trial, and knowingly using perjured testimony.

Judge M. P. Duncan³⁶

Randall Dale Adams was arrested and charged with capital murder for the 1976 killing of a Dallas police officer. Like many other defendants, however, Adams had no serious criminal past. In fact, his only prior contact with the criminal justice system was a conviction for driving while under the influence.

Before trial, Mr. Adams was interviewed by Dr. Grigson. As Mr. Adams recalled:

³¹ Caldwell v. Johnson, ___ F.3d ___, No. 00-10934 (5th Cir. Aug. 30, 2000).

³² *Id.*

³³ See also Chapter Four, Section IV (discussion of expert testimony on future dangerousness based on the race of the defendant).

³⁴ Kathy Fair, *Murderer's Commutation Urged/Evidence Indicates Witness Lied; DA Seeks Life Sentence*, HOUSTON CHRON., June 9, 1990, at 29.

³⁵ Kathy Fair, *DA, Defense Lawyers Agree to Look into Witness' Credentials*, HOUSTON CHRON., Feb. 10, 1990, at 32.

³⁶ M. RADELET, H. BEDAU, & C. PUTNAM, IN SPITE OF INNOCENCE 71-72 (1992).

Dr. Grigson interviewed me for 15 minutes. He did not ask about the crime, only about my family. The only other thing he wanted to know was my interpretation of: a rolling stone gathers no moss and of a bird in the hand is worth two in the bush. At trial he testified for 2 hours – 1 ½ hours about his background, awards, expertise, etc.; ½ hour about our interview.³⁷

In his testimony before the jury, Dr. Grigson announced that he had “diagnosed [Adams] as being a (sic) sociopathic personality disorder[.]”³⁸ On the scale of sociopathy, Grigson stated, “I would place Mr. Adams at the very extreme, worse or severe end of the scale. You can’t get beyond that.”³⁹ Grigson further claimed that “[t]here is nothing known in the world today that is going to change this man, we don’t have anything.”⁴⁰ He also emphatically announced that Adams would continue to be a “threat to society,”⁴¹ after asserting that Mr. Adams would have no regard for the lives or property of others, wherever they might be: “It wouldn’t matter where it was [or whose life], you or a guard or a janitor or whoever it might be.”⁴² Not surprisingly, the jury found that Adams represented a danger to society and sentenced him to death.

The court judge stated at my death sentencing hearing “may God have mercy on your soul.” I will leave it to God to judge Dr. Grigson and the State of Texas.

Randall Dale Adams, Oct. 4, 2000

Randall Dale Adams was an innocent man. The epic documentary about his case, *The Thin Blue Line*, exposed the prosecutor’s official misconduct and the Texas Court of Criminal Appeals reversed his conviction in 1989. After 12 years in prison, Adams was finally released. He returned to Ohio to be with his family and to “pick up the threads of [his] life and move on.”⁴³ As Mr. Adams describes:

I never received monetary compensation from the State of Texas nor even an apology. For the past ten years, I have spoken out about the death penalty across America and overseas. I have testified before Congress, spoken on behalf of many death row inmates and authored a book, *Adams v. Texas*. In 1998 I returned to Texas for the *Journey of Hope . . . From Violence to Healing* where I met my future wife. I currently reside in Texas and continue to speak out against the death penalty and our gravely flawed criminal justice system. I am employed

³⁷ Statement of Randall Dale Adams (Oct. 4, 2000) (on file with author).

³⁸ Tr. at 1407, *Adams v. State* (CCA No. 60,037).

³⁹ *Id.* at 1409.

⁴⁰ *Id.* at 1410.

⁴¹ *Id.* at 1411.

⁴² *Id.* at 1410.

⁴³ Statement of Randall Dale Adams (Oct. 4, 2000) (on file with author).

and happily married and have had no added arrests or violence in my life since my release. It appears Dr. Grigson's analysis of me was grossly incorrect. I wonder how many others he "misdiagnosed"? The court judge stated at my death sentencing hearing "may God have mercy on your soul." I will leave it to God to judge Dr. Grigson and the State of Texas.⁴⁴

Joe Lee Guy

In March 1993, Joe Lee Guy, Thomas Howard, and Richard Springer planned to rob a grocery store in Plainview, Texas. Guy remained outside during the shooting. When the cash registers would not open, Springer grabbed one of the registers and fled. Howard, meanwhile, shot the owners of the store, killing one and wounding the other.

Guy's defense was an embarrassment to the legal profession. The defense investigator developed a secret relationship with the surviving victim, a wealthy widow. After the woman died, it was discovered that she had made Guy's investigator her primary beneficiary. Guy's lawyer, who has been suspended from the practice of law at least five times, reportedly took cocaine to prepare himself for court.⁴⁵ In April 1994, Guy was convicted of capital murder.

Like Randall Adams, Guy had no history of violent criminal behavior. To overcome this deficiency in its case, the State called two hired guns: Dr. Clay Griffith and Dr. Richard Coons.⁴⁶ Griffith (who once testified that examining a person was "a hindrance in comparison to a hypothetical question")⁴⁷ did not hesitate in condemning Guy, even though he had never spoken with him. Griffith told the jury that "[Guy's] type of people" have been called "psychopath[s]" and "moral imbeciles" who cannot be changed.⁴⁸ Even though Guy had no violent history and was not in the store during the killing, Griffith told the jury that the probability that he would be violent in the future was "ninety-nine, a hundred percent."⁴⁹ Dr. Coons agreed with Griffith. He added that "there is a lot of violence in the penitentiary" and implied that Guy would be "conscripted into some gang-type activity."⁵⁰ In closing argument, the prosecutor, realizing the power of the title "doctor," appealed to the jury for a death sentence, asking "Will you do what the doctor says?"⁵¹

Richard Springer, who took the cash register, and Thomas Howard, who shot both

⁴⁴ *Id.*

⁴⁵ Dan Malone & Steve McGonigle, *Questions of Competence Arise in Death Row Appeal*, DALLAS MORNING NEWS, Sept. 11, 2000, at 12A.

⁴⁶ The State also called witnesses who claimed Guy had a "bad reputation." *Guy v. State*, CCA No. 71, 913, at 3 (Tex. Crim. App. Dec. 18, 1996) (unpub.).

⁴⁷ *Flores v. Johnson*, 210 F.3d 456, 467 (5th Cir. 2000).

⁴⁸ S.F. Vol. 19 at 174, *Guy v. State* (CCA No. 71,913).

⁴⁹ *Id.* at 175.

⁵⁰ *Id.* at 196.

⁵¹ *Id.* at 38.

victims, are both serving life sentences. Joe Lee Guy was sentenced to death and remains on death row.

Stanley Faulder

In October 1977, Canadian national Joseph Stanley Faulder was convicted and sentenced to die for the robbery and murder of Inez Phillips, a wealthy oil baroness.⁵² After his conviction was reversed on appeal because his confession had been obtained illegally, special prosecutors hired by the victim's son once again sought the death penalty.

Faulder had no violent criminal history and no record of disciplinary problems during his incarceration prior to the second trial. However, the prosecution hired three psychiatrists to testify that Faulder posed a grave danger, even in custody. Without interviewing Faulder, Drs. Griffith, Grigson, and James Hunter told the jury that he would commit violent acts in the future. Griffith described Faulder as a "sociopathic personality criminal"⁵³ and suggested he would be unable to learn from punishment.⁵⁴

Grigson also branded Faulder a sociopath: "Faulder is at the very extreme of your extremely severe sociopath. He can't become any more severe except in terms of numbers."⁵⁵ Continuing his formulaic testimony, Grigson stated there was no cure for Faulder's condition. "There is absolutely nothing we have in medicine or psychiatry, nothing that is known in terms of rehabilitation that has ever worked. We don't have anything."⁵⁶

In response to this damning portrayal, the jury heard nothing from the defense. Faulder's court-appointed attorney called no witnesses on his behalf during the penalty phase of the trial and presented no mitigating evidence of any kind. In the minds of the jurors who sentenced him to die, there seemingly was little doubt that Stanley Faulder was a remorseless and dangerous sociopath.

However, a very different picture of Faulder would later emerge. At an evidentiary hearing eleven years after the trial, the testimony of more than a dozen friends and family members from Canada revealed that Faulder was a gentle and well-respected man who had never displayed a capacity for violence. After suffering a massive head injury as a young child, Faulder had experienced bouts of memory loss and blackouts during his youth and displayed other symptoms of brain damage – well documented medical evidence that was inconsistent with

⁵² Jim Henderson, *Albright Joins Effort to Spare Canadian's Life/Texas inmate's execution scheduled for next week*, HOUSTON CHRON., Dec. 2, 1998, at 1.

⁵³ S.F. Vol. 5 at 893, *Faulder v. State* (CCA No. 69,077).

⁵⁴ *Id.* at 884.

⁵⁵ *Id.* at 1126-27.

⁵⁶ *Id.* at 1127-28.

Grigson's diagnosis of sociopathy.⁵⁷

One affidavit described how Faulder had stopped to rescue a motorist injured in a car accident, risking his own life by driving her to a hospital through a blinding blizzard: "I believe that I would have bled to death on the highway that night if Stanley hadn't stopped. Since that incident, I've always felt that I owed Stanley my life."⁵⁸

A skilled mechanic, Faulder had spent his time on death row repairing typewriters and fans for the other inmates, often free of charge. One former death row inmate who had been released on grounds of innocence described Faulder as "one of the most respected individuals [on death row]. . . everyone liked Stanley."⁵⁹

The Fifth Circuit Court did not find error with the abject failure of Faulder's attorney to present this testimony to the jury.⁶⁰ On June 17, 1999, after 22 peaceable and uneventful years on death row, Stanley Faulder was executed.

E. The U.S. Supreme Court: Changing Course on Expert Testimony

Over strenuous objections from the psychiatric profession, the United States Supreme Court upheld the use of predictions of dangerousness in 1983.⁶¹ According to the Court, juries should be the ultimate safeguard against unreliable and untrustworthy evidence. If the testimony is unreliable, the defense could always discredit that testimony through its own experts.⁶²

In the decade that followed, judges became increasingly skeptical of the multitude of proclaimed "experts" testifying for both sides in the lower courts. The Chief Judge of the Seventh Circuit, for instance, complained that there is "hardly anything, not palpably absurd on its face, that cannot be proved by some so-called 'experts.'"⁶³ Large corporations began to fear liability based on the admitted testimony of an unscrupulous "expert."⁶⁴ Under the oversight of Vice President Quayle, the Bush administration sought to reduce untrustworthy expert testimony and "exclude fringe theories," by recommending that courts mandate a judicial finding of reliability before allowing the testimony.⁶⁵

⁵⁷ The hearing testimony is summarized in Faulder's clemency application to the Texas Board of Pardons and Paroles. *In re Joseph Stanley Faulder, Application for Reprieve and Petition for Commutation of Death Sentence* (1998).

⁵⁸ *Id.* (Affidavit of Jeannine Janusz).

⁵⁹ *Id.* (Affidavit of John Clifford Skelton).

⁶⁰ *Faulder v. Johnson*, 81 F.3d 515, 519 (5th Cir. 1996).

⁶¹ *Barefoot v. Estelle*, 463 U.S. 880 (1983).

⁶² *Id.* at 900-01.

⁶³ *Caulk v. Volkswagen of Am., Inc.*, 808 F.2d 639, 644 (7th Cir. 1986) (Posner, J., dissenting).

⁶⁴ See HUBER, *GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM* (1991).

⁶⁵ Dan Quayle, *Agenda for Civil Justice Reform in America*, 60 U. CIN. L. REV. 979 (1992).

In 1993, the Supreme Court revisited the admissibility of expert testimony. In *Daubert v. Merrell-Dow Pharmaceuticals, Inc.*, the Court held that expert testimony should not be admitted unless it is both relevant and reliable.⁶⁶ To evaluate reliability, the Court requires judges to act as “gatekeepers,” preventing juries from hearing expert testimony not grounded “in the methods and procedures of science.”⁶⁷

Many types of expert testimony previously common are now subject to exclusion by trial judges.⁶⁸ The testimony of psychiatrists like Dr. Grigson is not among them. Although Texas courts officially have embraced the standards of *Daubert*,⁶⁹ nothing has changed in the state’s capital sentencing proceedings. Nevertheless, one Fifth Circuit judge recently noted that “it appears that the use of psychiatric evidence to predict a murderer’s ‘future dangerousness’ fails all five *Daubert* factors.”⁷⁰

II. Other Forms of Dubious Expertise in Texas Trials

Psychiatric predictions of future violence are not the only examples of questionable scientific testimony in capital cases. Prosecutors in the Lone Star State frequently have relied on other kinds of suspect science, including shoe print comparison, experts claiming the ability to identify bullets by metal composition, and hypnosis.

Moreover, even results based on scientifically accepted methods are of little use if the person testing the evidence is unqualified or unreliable. In this regard, the use of two types of suspect evidence in Texas death penalty trials is particularly notable: hair comparison and bite mark analysis.

A. Hair Comparison

Texas prosecutors have relied on hair comparison testimony to provide the jury with a crucial link to an accused. Hair evidence, although highly subjective, is presented with the weight of science behind it and can have a powerful effect on juries. After hearing hair comparison testimony, one juror described it as “kind of like [the defendant’s] hair was his

⁶⁶ 509 U.S. 579 (1993).

⁶⁷ *Id.* at 590-94 (according to the Court four “flexible” guidelines should be examined: testability, error rate, peer review and publication, and general acceptance).

⁶⁸ In *Williamson v. Reynolds*, 904 F. Supp. 1529 (E.D. Okla. 1995), for example, the District Court refused to admit expert testimony about hair comparison. Even recognizing the longstanding history of admitting such evidence, the District Court found that hair comparison testimony was “imprecise and speculative, and its probative value was substantially outweighed by its prejudicial effect.” *Id.* at 1158.

⁶⁹ *E.I. Dupont de Nemours & Co. v. Robinson*, 923 S.W.2d 549 (Tex. 1995); *Hartman v. State*, 946 S.W. 2d 60 (Tex. Crim. App. 1997).

⁷⁰ *Flores v. Johnson*, 210 F.3d 456, 464 (5th Cir. 2000) (Garza, J., concurring)..

fingerprints . . . he wore his fingerprints in his hair.”⁷¹ Unfortunately, hair comparison evidence has little in common with fingerprints and is far less reliable and accurate.⁷² In fact, some courts refuse to allow a conviction to stand on hair comparison evidence alone.⁷³

As practiced by most law enforcement agencies, hair identification is based on visual comparison with the aid of a microscope. The analyst is given a hair from the suspect, called the “known standard,” and is asked to compare it to a hair recovered from the crime scene. Some crime labs purport to obtain detailed information from such visual observation, including not only the identification of the suspect, but also the person’s sex, race, and general age.⁷⁴

Despite such assurances, visual hair comparison remains an inexact procedure. Unlike fingerprints, human hair is not individualized and varies within each person. Because the characteristics of a particular hair may differ from another hair taken from the same head, results of a comparison rely heavily on the judgment of the examiner.⁷⁵ Ronald Singer, Chief Criminalist of the Tarrant County Medical Examiner’s Office and private consultant in forensic science, describes the correct use of hair evidence as follows:

Recent advances in technology have shown that many “experts” wandered far beyond what could reasonably be concluded when comparing hairs microscopically. The rightful place of the microscopic evaluation of hairs is as a screening tool, from which only preliminary conclusions can be drawn.⁷⁶

Hair comparison is an extremely subjective procedure, as a number of studies have shown. The Law Enforcement Assistance Administration, for instance, created a testing program in various forensic sciences, including hair comparison. The results showed that hair analysis was the least reliable of all techniques, with error rates as high as 67%. The majority of the surveyed crime laboratories nationwide made mistakes in four of five hair samples examined.⁷⁷

Despite this level of inaccuracy, hair comparison testimony has played a key role in

⁷¹ Holly Becka & Howard Swindle, *Forensics Put under the Microscope*, DALLAS MORNING NEWS, Aug. 20, 2000, at 1J.

⁷² Clive Stafford Smith & Patrick D. Goodman, *Forensic Hair Comparison Analysis: Nineteenth Century Science or Twentieth Century Snake Oil*, 27 COLUM. HUM. RIGHTS L. REV. 227 (1996) (general discussion).

⁷³ See, e.g., *State v. Faircloth*, 394 S.E.2d 198 (N.C. Ct. App. 1990); *State v. Stallings*, 334 S.E.2d 485, 486 (N.C. Ct. App. 1985).

⁷⁴ See discussion in PAUL C. GIANNELLI & EDWARD J. IMWINKLERIED, *SCIENTIFIC EVIDENCE* §24 (3d ed. 1999).

⁷⁵ Larry Miller, *Procedural Bias in Forensic Hair Examinations of Human Hair*, 2 L. & Human Behav. 157, 158 (1987).

⁷⁶ Statement of Ronald L. Singer, Chief Criminalist, Tarrant County Medical Examiner’s Office and private consultant in forensic science (Oct. 3, 2000) (on file with author).

⁷⁷ See Edward J. Imwinkelried, *Forensic Hair Analysis: the Case Against Underemployment of Scientific Evidence*, 39 WASH. & LEE L. REV. 41, 44 (1982); *Williamson v. Reynolds*, 904 F. Supp. 1529, 1556 (E.D. Okla. 1995).

many Texas capital trials. One such case is that of Michael Blair. On September 4, 1993, seven-year-old Ashley Estell went to a playground near where her brother was playing soccer.⁷⁸ She was found the next day in a ditch several miles away, apparently strangled. Josh Foster immediately became a suspect. He had refereed one of the soccer games and disappeared at approximately the same time as Ashley. Police later discovered that he was known by at least ten aliases and had pending charges for sexual offenses against children.⁷⁹ Police excluded Foster as a suspect, however, because his prior offenses were against young boys.⁸⁰ Michael Blair, who also previously had been convicted of a sexual offense, was charged with the murder.

At Mr. Blair's trial, forensic examiner Charles Linch (whose questionable qualifications are discussed *infra*) took the stand and told the jury that hair taken from Blair's car had a "strong association" with the hair of the deceased, although he could not make an absolute identification.⁸¹ He also testified that a clump of hair found in the park contained two hairs "similar" to Blair's, and 15-20 "similar" to the victim's.⁸² In closing argument, the prosecutor emphatically described Linch's results as proof the hairs were "a match":⁸³ "Mr. Linch . . . told you that those hairs in all fine microscopic characteristics are identical to Ashley Estell."⁸⁴ No other evidence directly linked Blair to the crime. He was convicted and sentenced to death.

In June 2000, an independent laboratory tested the DNA of several of the hairs described by the prosecution as "identical" to the victim's and Blair's.⁸⁵ These tests established that, contrary to Linch's testimony, hair discovered in Blair's car did *not* belong to the victim. A test of a second hair showed that it "could not have originated from Ashley Estelle, Michael Blair or any of their maternal relatives."⁸⁶ Michael Blair remains on death row.

B. Bite Marks

Bite mark evidence also has been used to secure convictions in Texas capital cases. The practice of comparing bite marks, known as forensic odontology, relies upon the theory that dental characteristics are unique and identifiable among individuals.⁸⁷ This principle undergirds the familiar and accepted practice of identifying the corpses of accident victims and war

⁷⁸ Blair v. State, CCA No. 72,009 (Tex. Crim. App. Sept. 25, 1996) (unpub.).

⁷⁹ S.F. at 1811, Blair v. State (CCA No. 72,009); Holly Becka & Howard Swindle, *Tests Casting Doubt on Girl's Death*, DALLAS MORNING NEWS, June 17, 2000, at 1A.

⁸⁰ *Id.*

⁸¹ S.F. at 771-73, Blair v. State (CCA No. 72,009).

⁸² *Id.* at 747.

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ Holly Becka & Howard Swindle, *DNA Test Doesn't Link Condemned Man to Girl*, DALLAS MORNING NEWS, June 21, 2000, at 1A.

⁸⁶ *Id.*

⁸⁷ Sweet, *Human Bitemarks: Examination, Recovery, and Analysis*, in MANUAL OF FORENSIC ODONTOLOGY 148 (3d ed. 1997) (C. Bowers & G. Bell eds.).

casualties. In the context of a criminal investigation, however, the accuracy of bite mark comparison fails to carry the same measure of reliability. In a criminal investigation, the evidence sought comes not from an examination of the victim's teeth, but rather from bite marks on the victim's body.

The accuracy of a comparison depends upon the clarity of the bite mark. Because it is rarely possible to retrieve a complete, clean bite mark from a victim's body, reliable comparisons are difficult to make.⁸⁸ Moreover, bite marks made by a single individual vary greatly depending on the angle of the bite, what part of the mouth (lips, tongue, cheek) was involved in the bite, and the surface from which the bite mark is retrieved.⁸⁹ Although attempts have been made to create standards for examining bite marks,⁹⁰ accurate comparison remains elusive. Not only do opposing experts consistently disagree about the source of questioned bite marks, but experts frequently disagree about whether the disputed marks are even caused by teeth.⁹¹ In one case, after the prosecution's experts testified to a definitive match with the defendant's teeth, a pathologist and a dental consultant created an indistinguishable injury using a small pocket-knife.⁹²

Notwithstanding the defects in bite mark comparison, this type of evidence has been admitted and upheld almost uniformly in Texas, based on the authority of a case decided in 1954.⁹³ That case, however, hardly establishes a foundation of scientific reliability: the court allowed a firearms examiner to testify about matching bite marks on a piece of cheese.⁹⁴

In contrast to other forensic fields, little research has been done to improve or authenticate bite mark analysis. As Ronald Singer observed:

When there are regular disagreements regarding not only whether a bitemark was made by a particular individual but also whether the impression in question is a bitemark at all, it's time to step back and reevaluate the entire technique. To my knowledge, the "science" of bitemarks has never been validated through a large scale systematic study to determine if, in fact, the people performing this type of

⁸⁸ Allen P. Wilkinson & Ronald M. Gerugthy, *Bite Mark Evidence: Its Admissibility is Hard to Swallow*, 12 W. ST. U. L. REV. 519, 541-42 (1985).

⁸⁹ Steven Weigler, *Bite Mark Evidence: Forensic Odontology and the Law*, 2 HEALTH MATRIX: J. L. & MED. 303, 307 (1992).

⁹⁰ See, e.g., Am. Bd. of Forensic Odontology, *Guidelines For Bite Mark Analysis*, 112 J. AM. DENTAL ASS'N 383 (1986).

⁹¹ See, e.g., *People v. Smith*, 468 N.E.2d 879, 886 (N.Y. 1984) (four experts identified marks as bite marks, three others testified the marks were not made by teeth).

⁹² Kris Sperry & Homer R. Campbell, *An Elliptical Incised Wound of the Breast Misinterpreted as a Bite Injury*, 35 J. FORENSIC SCI. 1226, 1231 (1990).

⁹³ See, e.g., *Spence v. State*, 795 S.W.2d 743, 751 (Tex. Crim. App. 1990); *Patterson v. State*, 509 S.W.2d 857, 863 (Tex. Crim. App. 1974).

⁹⁴ *Doyle v. State*, 263 S.W.2d 779, 779 (Tex. Crim. App. 1954).

testing have a common ground at all.⁹⁵

One review of the available studies led its authors to conclude that “what little scientific evidence that does exist clearly supports the conclusion that crime-related bite marks are grossly distorted, inaccurate, and therefore unreliable as a method of identification.”⁹⁶

David Wayne Spence

David Wayne Spence was executed on April 3, 1997, after being convicted in connection with the brutal rapes and murders of three teenagers. He was implicated in the crime by suspect testimony and bite mark evidence. The bites were attributed to Spence by the prosecution’s forensic odontologist, Dr. Homer Campbell, who told the jury he had examined impressions of Spence’s teeth and compared them to photographs of the female victims.⁹⁷ Based on his comparison with the photographs, Campbell concluded to “a reasonable degree of medical certainty” that the marks on the victims were made by David Spence.⁹⁸

No sooner was Spence convicted than the State’s proof evaporated. Snitches who were instrumental in convicting Spence admitted that they had “fabricated [their] accounts of Mr. Spence confessing in order to try to get a break from the state on [their] cases.”⁹⁹ Spence’s attorneys also discovered that Dr. Campbell had claimed to identify “to a medical certainty” the body of “Melody Cutlip,” who apparently was buried before the real Melody Cutlip was found alive and well in Florida.¹⁰⁰

Spence’s appellate attorneys assembled a panel of five forensic odontologists for a blind study of the purported bite mark evidence. None of the five agreed with Dr. Campbell’s results. Indeed, one nationally respected expert found that it was not medically possible to demonstrate that the marks were bite marks at all, much less that they belonged to David Spence. He characterized Dr. Campbell’s testimony as “border[ing] on the unbelievable.”¹⁰¹

By the time Spence was executed, even some law enforcement officers involved in the investigation doubted his guilt. Marvin Horton, the lieutenant who supervised the police investigation, gave a sworn statement that he “[did] not think David Spence committed this crime.”¹⁰² Ramon Salinas, the homicide detective who investigated the murders agreed: “My

⁹⁵ Statement of Ronald L. Singer, Chief Criminalist, Tarrant County Medical Examiner’s Office and private consultant in forensic science (Oct. 3, 2000) (on file with author).

⁹⁶ Allen P. Wilkinson & Ronald M. Gerugthy, *Bite Mark Evidence: Its Admissibility is Hard to Swallow*, 12 W. ST. U. L. REV. 519, 560 (1985).

⁹⁷ S.F. at 5031-35, *Spence v. State* (CCA No. 69,341).

⁹⁸ *Id.* at 5042-44.

⁹⁹ Bob Herbert, *Was an Innocent Man Executed*, N.Y. TIMES, July 28, 1997.

¹⁰⁰ Petition for Writ of Habeas Corpus, Exhibit M, *Spence v. Scott* (W.D. Tex. No. 94-20212).

¹⁰¹ *Id.*, Exhibit A (Report of Dr. Souviron) at 2.

¹⁰² Bob Herbert, *Was an Innocent Man Executed*, N.Y. TIMES, July 28, 1997.

opinion is that David Spence was innocent.”¹⁰³

C. Deadly Lies: The False Testimony of Ralph Erdmann

Former Lubbock County pathologist Ralph Erdmann was a frequent witness in Texas capital trials. At least 40 Texas counties relied upon his work¹⁰⁴ and Erdmann earned \$171,000 conducting as many as 400 autopsies per year.¹⁰⁵ Erdmann testified in numerous cases in which the defendants were sentenced to death. At least four of those defendants have been executed.¹⁰⁶

In 1992, the reliability of Erdmann’s procedures was questioned. After reading an autopsy report, the family of one deceased man was surprised to learn that Erdmann claimed to have examined and weighed the spleen, even though that organ had been surgically removed years before. During the subsequent inquiry, the man’s body was exhumed and no autopsy incisions were discovered.¹⁰⁷

Tommy Turner, an attorney from Lubbock, was appointed as a special prosecutor to examine Erdmann’s work. The resulting investigation uncovered a nightmare of bungled investigations and falsified evidence. Turner concluded that Erdmann’s results were significantly unreliable: “Out of 100 autopsies we sampled, we have good reason to believe at least 30 were false.”¹⁰⁸ Erdmann had mixed up tissue samples, placed body parts with the wrong bodies, and changed numbers on tissue slides to aid the prosecution’s theories.¹⁰⁹ He permitted his 13-year-old son to probe wounds during autopsies¹¹⁰ and allowed his wife to sell bones from the corpses.¹¹¹

In case after case, Erdmann simply told the jurors what the prosecutors wanted them to hear. As a local judge remarked, even the police were no longer sending bodies to Erdmann because “he wouldn’t do the autopsy. He would ask what was the police theory and recite results to coincide with their theories.”¹¹² Special prosecutor Turner concluded that if “the prosecution theory was that death was caused by a Martian death ray then that was what Dr.

¹⁰³ *Id.*

¹⁰⁴ *Lawyer Testifies in Erdmann Case*, DALLAS MORNING NEWS, Feb. 18, 1993, at 14D.

¹⁰⁵ Wood, *Justice – Texas Style: a Texas Coroner Mishandles Vital Evidence*, MACLEAN’S, Jan. 18, 1993.

¹⁰⁶ See *Boyle v. State*, 820 S.W.2d 122 (Tex. Crim. App. 1989); *Stoker v. State*, 788 S.W.2d 1 (Tex. Crim. App. 1989); *Garrett v. State*, 682 S.W.2d 301 (Tex. Crim. App. 1984); and *Fuller v. State*, (CCA No. 71,046). Because such testimony might not be reported in a judicial opinion, it is not within the scope of this study to identify the total number of cases in which Erdmann testified and the outcomes in those cases.

¹⁰⁷ Roy Bragg, *Doubts Arise About Autopsy Cases*, HOUSTON CHRON., Feb. 29, 1992, at 1.

¹⁰⁸ Wood, *Justice – Texas Style: a Texas Coroner Mishandles Vital Evidence*, MACLEAN’S, Jan. 18, 1993.

¹⁰⁹ *Id.*

¹¹⁰ *Lawyer Testifies in Erdmann Case*, DALLAS MORNING NEWS, Feb. 18, 1993, at 14D.

¹¹¹ Lee Hancock, *Lubbock Sets up Shop for Medical Examiner*, DALLAS MORNING NEWS, Sept. 11, 1994, at 48A.

¹¹² *Id.*

Erdmann reported.”¹¹³

Erdmann pled guilty to seven felonies relating to the faked autopsies and was stripped of his medical license in 1992.¹¹⁴ Prosecutors, defense attorneys, and courts have yet to completely uncover the effects of Erdmann’s lies.

D. A Trail of Incompetence: The Testimony of Fred Zain

Fred Zain came to Texas with glowing recommendations from both law enforcement agencies and the governor of West Virginia.¹¹⁵ Between 1989 and 1993, he was the head of serology at the Bexar County Medical Examiner’s Office in San Antonio. As chief serologist, he was called to testify about blood sample evidence in hundreds of cases, including numerous capital trials.

However, back in West Virginia, a judicially mandated investigation revealed that his test results frequently were unreliable. The West Virginia Supreme Court wrote that Zain had fabricated or lied about evidence in at least 134 criminal cases and 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[.]”¹¹⁶

After Zain’s arrival in Texas, his co-workers began to express concerns over Zain’s work. One former assistant stated that Zain rarely kept adequate work records and at least 50% of the time would fill in results on reports without having done the actual tests.¹¹⁷ An independent serologist from the Southwestern Institute of Forensic Sciences reviewed a random sampling of Zain’s work and found errors in every single case.¹¹⁸

Zain’s negligence nearly cost Jack Davis his life. In November 1989, while investigating odd noises in the apartment complex where he served as caretaker, Davis discovered a mortally wounded woman and summoned help.¹¹⁹ When officers arrived, they arrested Davis and charged him with the murder. At trial, Zain told the jury that DNA testing had proven that blood on Davis’s pant leg came from the victim and that blood on the victim’s carpet came from Davis. The jury convicted Davis of capital murder, but because the jury could not agree on a death

¹¹³ Richard L. Fricker, *Pathologist’s Plea Adds to Turmoil*, AM. BAR ASS’N J., Mar. 1993, at 24.

¹¹⁴ Lee Hancock, *Erdmann Pleads No Contest; He Receives Probation in 6 Faked Autopsies*, DALLAS MORNING NEWS, Sept. 22, 1992, at 1A.

¹¹⁵ Laura Frank & John Hanchette, *Wrongful Prosecution Hides Behind the Mask of Science*, DETROIT NEWS, July, 24, 1994, at 8.

¹¹⁶ Matter of Investigation of West Virginia State Police Crime Laboratory, Serology Division, 438 S.E.2d 501, 506 (W. Va. 1993).

¹¹⁷ Audrey Duff, *Trial and Error*, TEXAS MONTHLY, October 1994, at 39.

¹¹⁸ Stanley Schneider, *Falsified Lab Tests Affect Alarming Number of Convictions*, VOICE FOR THE DEFENSE, Vol. 23, no. 5, June 1994, at 20.

¹¹⁹ *Davis v. State*, 831 S.W.2d 426, 429-30 (Tex. Crim. App. 1992).

sentence, the Court sentenced him to life imprisonment. Davis's conviction later was reversed because of prosecutorial misconduct and a Fourth Amendment violation.¹²⁰

Zain eventually acknowledged that his testimony at Davis's trial was a lie. After the victim's family sued the apartment complex where she lived, Zain admitted he did not do a DNA test on the carpet sample and that the blood on the carpet was from the victim and not Davis.¹²¹

Davis petitioned the Court to prevent the State from re-prosecuting him. The Court made specific findings that Zain was unreliable and not credible.¹²² Moreover, the judge stated that it was "highly probable that Zain committed aggravated perjury" by claiming he conducted DNA tests when he did no such testing and when he testified that Davis's blood matched recovered samples.¹²³ The Court concluded that "Zain's conduct was intentional and outrageous and shocked the conscience of the Court," but declined to prohibit re-prosecution.¹²⁴

Fred Zain was fired in July 1993, but the lethal effects of his years as a witness still linger. As many as 5,000 cases could have been tainted by his unreliable testimony.¹²⁵ The total number of convictions supported by Zain's testimony, like those based on Erdmann's, is unknown, since judicial opinions do not always name witnesses and discuss such testimony. The full extent of the impact of their testimony remains unknown.

E. Hanging by a Hair: The Dubious Testimony of Charles Linch

Charles Linch, a hair and fiber analyst for Dallas County's Southwestern Institute of Forensics Sciences (SWIFS), was relied upon by the State to provide evidence of guilt in numerous criminal trials. In 1994, he testified in the case of Kenneth McDuff, a capital defendant charged with raping and murdering a woman abducted from an Austin car wash. Although no one saw McDuff with the woman and her body was never found, McDuff and another man, Worley, had been seen at the car wash at the approximate time she disappeared. At trial, Worley testified against McDuff. Worley admitted that he raped the victim but claimed he was dropped off at home before McDuff killed her.¹²⁶

Small drops of blood and five hairs were recovered from McDuff's car. The results of the blood tests were inconclusive and could not establish that the woman had been in McDuff's

¹²⁰ The appellate Court found that the prosecutors in Davis's trial had suborned the perjury of another witness. *Id.* at 434-41.

¹²¹ Debbie Hiott, *Examiner Expected to Recount Role in Murder Case*, AUSTIN AM. STATESMAN, Aug. 3, 1993, at B1.

¹²² *Ex parte Davis*, 893 S.W.2d 252, 258 (Tex. Crim. App. 1995).

¹²³ *Id.* at 258.

¹²⁴ *Id.*

¹²⁵ Stanley Schneider, *Falsified Lab Tests Affect Alarming Number of Convictions*, VOICE FOR THE DEFENSE, Vol. 23, no. 5, June 1994, at 20.

¹²⁶ *McDuff v. State*, 939 S.W.2d 607, 611 (Tex. Crim. App. 1997).

car. The hair, therefore, was the sole physical evidence linking McDuff to the crime. A state serologist testified he had examined the hair and found it to have the same "microscopic characteristics" as that of the missing victim.¹²⁷ To secure a death sentence, the prosecution called Linch to testify in the punishment phase. He told the jury McDuff's hair matched that found on another murder victim in Waco.¹²⁸

Despite the critical importance of Linch's testimony, the State failed to reveal a crucial fact: at the time of his testimony, Linch was under committal to a Dallas mental hospital for psychiatric problems. Linch later described the effects of his medication. He recounted that one drug "made me run around like a rabbit."¹²⁹ Another drug affected his memory, causing a lack of recall of events.¹³⁰

On the day of McDuff's trial, however, Linch was permitted to fly to San Antonio, rent a car, and drive to the courthouse to testify as a forensic expert.¹³¹ After giving his testimony, Linch returned to the mental hospital.¹³²

Kenneth McDuff was convicted, sentenced to death, and executed.

III. Conclusion: No Justice Without Truth

Should a jury have erred by believing a lying witness, or by drawing an attractive but misleading inference, there is nothing to appeal.

F. Lee Bailey¹³³

Reliability, accuracy, and fairness are cornerstones of the criminal justice system. In death penalty cases, these prerequisites are even more essential; the United States Supreme Court has long recognized that the "qualitative difference between death and other penalties calls for a greater degree of reliability when the death sentence is imposed."¹³⁴

The current imposition of the death penalty in Texas permits a conviction and death

¹²⁷ *Id.* at 612.

¹²⁸ Holly Becka & Howard Swindle, *Analyst Left Psych Ward to Testify: County Forensic Expert Crucial in Murder Trials*, DALLAS MORNING NEWS, June 18, 2000, at 1A

¹²⁹ Holly Becka & Howard Swindle, *Analyst Left Psych Ward to Testify: County Forensic Expert Crucial in Murder Trials*, DALLAS MORNING NEWS, May 7, 2000, at 1A.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² Holly Becka & Howard Swindle, *Tests Casting Doubt on Girl's Death*, DALLAS MORNING NEWS, June 18, 2000, at 1A.

¹³³ James McCleskey, *Buried and Forgotten*, ANGOLITE, July/August 1990.

¹³⁴ *Lockett v. Ohio*, 438 U.S. 586, 604 (1978) (plurality opinion).

sentence based on allegedly scientific information that has no real foundation. Psychiatrists are allowed to give absolute assurances about defendants they have never met, contrary to their professional code of ethics and the overwhelming scientific evidence contradicting those assurances. Sentences of death hang in the balance by a single hair. Prosecutors rely on the perjured testimony of so-called experts, who falsify reports to secure convictions.

The burden of creating and enforcing standards to ensure that only reliable evidence is presented to the jury does not lie solely in the hands of trial judges. Prosecutors must strive to embody the oath of their office – to seek the truth rather than merely a conviction – by refusing to use evidence and experts they know to be untruthful and unreliable. The higher courts must provide critical and thoughtful appellate review of expert testimony, if the fair administration of justice is to be more than an empty phrase. The State of Texas must provide adequate resources to defend capital cases and qualified defense attorneys must thoroughly investigate and vigorously attack questionable scientific evidence. Lastly, Texas lawmakers must critically re-examine the entire concept of determining future dangerousness as a reliable method for guiding the discretion of death penalty jurors.

The State of Texas must guarantee that the scientific facts and expert testimony that underlie every capital conviction are subjected to the heightened scrutiny required by the Supreme Court. The evolving evidentiary standards reflected in the Daubert decision demand the best that contemporary science can offer. These standards must be applied in Texas capital cases, where hair comparison, bite mark evidence, and psychiatric predictions based on hypothetical situations sometimes bear more resemblance to medieval fortune-telling than to modern scientific techniques.